Eau Claire City-County
Health Department

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Eau Claire City-County Board of Health Orientation
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Impacts of Repeal of Affordable Care Act (ACA) – ECCCHD Summary
02/21/2017

TOPICS	Talking Points	Resource
FUNDING - CDC	• The CDC has many programs supported by the Prevention and Public Health Fund – 12% of the overall CDC budget is contained in the ACA Prevention and Public Health Fund (PPHF) • The PPHF provides funds to the following:	National Association of County and City Health Officials (NACCHO) Trust for America's Health

CDC Programs Supported by PPHF ($ in millions)	Nationally FY 2016	Wisconsin FY 2016
Preventive Health and Health Services Block Grants	160.0	12.8
Million Hearts	4.0	1.7
Tobacco Prevention (Media and Quitlines), Office Smoking and Health	126.0	
Diabetes Prevention (Section 10501)	20.0	
Heart Disease and Stroke Prevention	73.0	
Racial and Ethnic Approaches to Community Health (REACH)	50.9	
Section 317 Immunization Program	324.4	2.9
Breastfeeding promotion and support grants	8.0	
National Early Care Collaboratives	4.0	
Lead Poisoning Prevention	17.0	
Epidemiology and Laboratory Capacity Grants	40.0	
Healthcare-Associated Infections	12.0	1.1
Maternal, Infant and Early Childhood Home Visitation Program (Section 2951)	400.0	
Fellowship Training in Public Health	36.0	
Clinical and Community Preventive Services	12.0	
Oral Health Activities (Section 4102)	18.0	
Total	1.31 Billion Dollars	64 Million Dollars

- ECCCHD receives pass through dollars from the Federal CDC funding including:
  -Prevention Block Grant - $10,000
  -Immunization - $24,200
  -Fluoride Mouth rinse Program - $1,500
  -Public Health Training Fellowships – CDC Fellow (Maggie Whitacre)

- ECCCHD benefits from additional CDC funded PPHF work including:
  -Epi-Lab Capacity grants – support work with State Lab of Hygiene
  -National Diabetes Prevention program – best practice resources from state Diabetes Program

	-Clinical and Community Preventive Service Guidelines – used directly to inform best practices -Chronic Disease Block Grant – supports state staff who provide best practices for LHD -Prevention Block Grant – supports regional office staff who provide LHD technical assistance on broad topics	
SERVICES	These are current services/policy provisions from the ACA for ALL Americans: • Free preventive services-such as immunizations, cancer screenings, contraception and mammograms (all 2.8 million insured people in WI) • Coverage for adult children up to the age of 26 (estimated at 41,000 young adults in WI) • No Annual/life time limits on insurance policies • No limitations for pre-existing conditions (estimated at 2.5 million people in WI) • Equal premiums between women and men • Tax credits on premiums for low income households. (The Average tax credit is $332 in WI supporting 190,542 people) • The uninsured rate for non-elderly adults declined nationally from 16.4% to 8.3% between 2013 and 2016	NACCHO Familiesusa.org Enroll America
QUAILTY OF SERVICES	Under the ACA currently, The 80-20 rule applies, which states insurance companies must put 80% of premiums towards care and quality of care vs. administrative costs and 20% towards administrative costs. Under ACA health insurance companies are required to use the Clinical Preventive Services Guidelines which assure us that best practices are utilized in clinical settings.	
WISCONSIN	• 431,000 would lose health coverage • $13 billion in federal dollars for Medicaid, CHIP, and financial assistance for the ACA • In 2016, the average premium tax credit was $332. • Uninsured in Wisconsin declined from 12.2% to 8.6% from 2013 to 2015 increasing to 10.4% in 2016 • 1 million people in WI rely on Medicaid (17% of the population) • 2.8 million private insured and 1.1 seniors will access to free preventive services	Familiesusa. Org- What is at stake for Wisconsin -CMS.org Enroll America

Impacts of Repeal of Affordable Care Act (ACA) – ECCCHD Summary
02/21/2017

EAU CLAIRE	*Currently its estimated 4,200 in Eau Claire enrolled in the ACA for 2017			Kff.org (The Henry J. Kaiser Family Foundation) -CMS.org
	Number of Residents enrolled in Marketplace Insurance by Zip Code			
	ZIP CODE	Number enrolled in this ZIP CODE 2014	Number enrolled this ZIP CODE 2016	
	54701 - Southern Eau Claire City	992	1425	
	54703 - Northern Eau Claire City	1217	1521	
	54722 - Augusta	94	147	
	54726 - Small portion in Northern EC County	138	121	
	54727 - Small portion of this Northern EC County	208	259	
	54729 - Small portion in Northern EC County	1063	1299	
	54738 - South EC County	89	148	
	54741 - Fairchild area/this zip is not all in EC CO	54	58	
	54742 - Fall Creek	147	188	
	54755 - Small portion in Southwest EC County	314	444	
	54758 - Small portion in South EC County	145	187	
	54768 - Small portion in Northeast EC County	262	232	

Getting America Covered: Tracking Gains in Health Insurance Coverage, 2013-2016

***By Molly Warren* | January 2017**

Three years ago to the month, the major coverage expansions under the Patient Protection and Affordable Care Act (ACA) went into effect. Since then, the uninsured rate in the United States has been nearly halved, and the percent of Americans without health insurance is at a historic low. Furthermore, the coverage gains have benefited Americans across virtually all demographic groups and geographies.

This issue brief describes the increases in health insurance coverage rates, including the magnitude and breadth of the coverage gains between 2013 and 2016 using Enroll America/Civis Analytics' uninsured estimates, as well as providing background on the policies underlying the coverage expansions and the impact of coverage on enrollees. Highlights include:

- **The uninsured rate for non-elderly adults declined nationally by nearly half, from 16.4 to 8.3 percent between 2013 and 2016.**
- **Uninsured rates in all 50 states and the District of Columbia have declined since 2013, and about 90 percent of counties saw their rate drop by a quarter or more.**
- **The uninsured rate declined across every demographic group accounted for in our methodology, including for all racial/ethnic groups, all ages and age groups, men and women, and for residents of metro as well as non-metro areas.**

Policies Driving the Coverage Expansions

On March 23, 2010, President Barack Obama signed the ACA into law. The ACA includes reforms on a wide range of subjects in the health coverage and delivery system, with different parts phasing in over several years. One of the ACA's major goals was to expand coverage to uninsured Americans and add consumer protections and financial help to ensure access to comprehensive coverage no matter an individual's health, income, sex, or location.

The ACA's coverage expansions were designed to build upon the existing patchwork of private and public health coverage, providing targeted help to Americans with disproportionally high uninsured rates. One of the first permanent expansions of coverage, starting at the end of 2010, focused on young adults and required private health insurance plans (both employer-sponsored and via the individual market) to allow

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Best Practices in Outreach and Enrollment

Heading into 2014, uninsured Americans and those with health insurance from the individual market had new coverage options available to them and the possibility of getting financial help for the first time. Many of the individuals eligible for new coverage, however, were not aware of these changes and what they may qualify for.[1] Enroll America, created after the ACA became law with the sole mission of maximizing enrollment, launched the Get Covered America national grassroots campaign in 2013 to tackle this issue, aiming to educate consumers about these options and connect them with the information and resources they needed to enroll in health coverage.

Mathematica Policy Research has done several evaluations of Enroll America's efforts and found evidence that a robust data-driven outreach campaign can meaningfully boost enrollment. Specifically, they found that states where Enroll America focused its efforts had 20 percent higher enrollment relative to enrollment estimates during the first open enrollment period (2013-2014) and 15 percent higher enrollment during the second open enrollment period (2014-2015) compared to other states.[2]

Over the years, Enroll America has tested and refined its outreach strategies, finding several core components to success:

1. **Financial help messaging**: Most consumers want health insurance but have found it unaffordable in the past, and assumptions about insurance being unaffordable are persistent. Continuing a regular drumbeat promoting the availability of financial help is key to gaining consumers' interest in investigating their options and ultimately enrolling.

2. **Personalized information**: When possible, quickly providing consumers with personalized information about their specific situation and what they may qualify for is very helpful in moving them to take the next step and apply for coverage (even more so than providing broad "financial help is here" or "people like you saved $X" messages). Enroll America created the consumer-facing online "Get Covered Calculator", which estimates program eligibility, financial help, and premium on a large scale efficiently and found that one in four consumers immediately moved to enrollment after seeing their personalized estimates.[3]

3. **List-building and repeated follow-up**: A critical component of successful outreach efforts has been collecting consumer information and engaging in repeated follow-up to urge consumers to take action. Enrollees interested in getting coverage who were reminded to sign up during open enrollment are more likely to enroll.[4]

4. **In-person application assistance**: Many uninsured individuals, particularly those less likely to enroll, have little experience with health insurance and want help applying for coverage. In fact, Enroll America found that in the first year of marketplace enrollment, consumers who reported having in-person assistance were roughly twice as likely to successfully enroll in a health plan as those who attempted to enroll online without any help. Connecting consumers to local, in-person, culturally appropriate assistance has been critical to helping the most vulnerable enroll in and retain coverage.[5]

5. **Empowering trusted messengers at the local level**: Partnering with community organizations and businesses that serve or employ potential enrollees is the most effective way to reach these individuals, and is particularly effective when the organization/business is a trusted messenger. Coordinating work with community organizations and enrollment assisters by developing and leading city or statewide coalitions, proved to be critical to have continued investment in year-long outreach activities and education.

6. **Culturally competent outreach**: Communities of color and LGBT individuals have historically had unique barriers to enrollment. In order to increase access to enrollment in these communities integrating culturally specific resources and strategies to mobilize and engage leaders, partners, and trusted messengers within various constituency groups proved most successful.

adult children to remain on their parents' plans until the age of 26.

The more sweeping coverage expansions took effect in January 2014, and focused on making coverage affordable for low and middle income consumers and opening up the health insurance market to all Americans, even if they were previously unable to get coverage due to pre-existing conditions or other disqualifying characteristics. The main coverage initiatives were:

- Expanded Medicaid coverage for low-income adults.[6]
- Financial help for middle income Americans to help them purchase private health coverage on the new health insurance marketplaces.
- Guaranteed access to health insurance for all Americans regardless of health status or sex.

Important to these coverage expansions are several underlying reforms to the individual health insurance market nationwide that also went into effect in 2014. Health insurance is primarily regulated at the state level, but the ACA set minimum national standards for coverage, added consumer protections, and instituted policies to encourage healthy Americans to get and maintain coverage, including:

- Creating uniform standards for covered benefits and cost-sharing.
- Setting a nationwide annual enrollment period for the individual market and establishing a requirement for all Americans to have health insurance.

Coverage Gains Since 2013

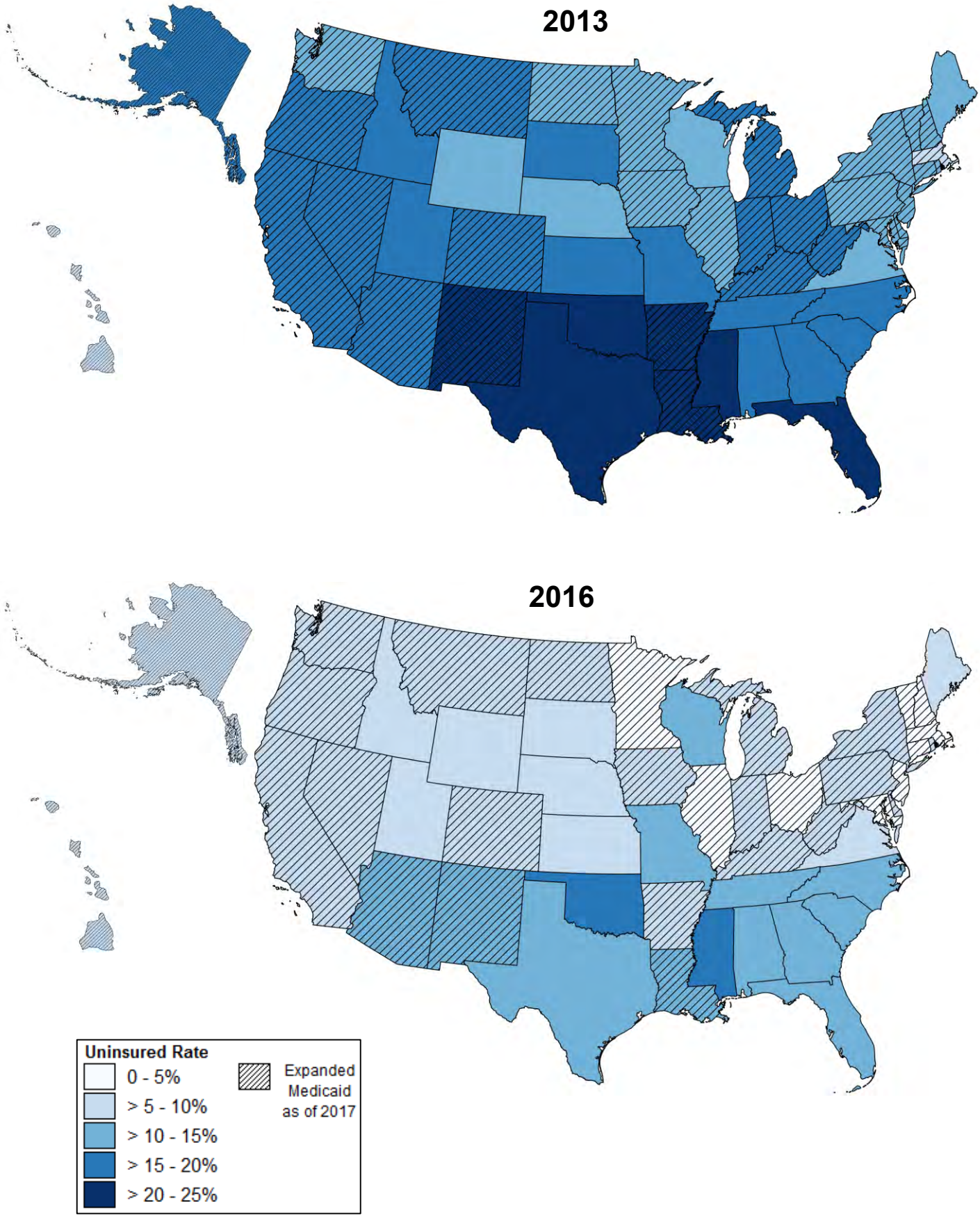
In 2013, before the health insurance marketplaces opened and Medicaid expansion fully went into effect, Enroll America/Civis Analytics' uninsured model estimated that 16.4 percent of non-elderly adult Americans lacked health insurance.[7] When the model was last updated in the summer of 2016, the non-elderly uninsured rate was 8.3 percent uninsured, a historic low for the United States. This decline of 8.1 percentage points means that the uninsured rate was nearly halved in just four years. In contrast, the uninsured rates for non-elderly adults remained stagnant in the years prior to 2014.[8]

Enroll America/Civis Analytics' uninsured model estimates uninsured rates only; it does not estimate the number of people who are uninsured nor factor in eligibility to enroll in coverage. According to the latest estimates from the U.S. Census Bureau, which does estimate raw numbers, 25.8 million non-elderly adults were uninsured in 2015. The states with the largest number of uninsured are those with large populations, led by Texas with 3.9 million uninsured, California with 2.9 million uninsured, and Florida with 2.3 million uninsured.[9]

The uninsured model does produce uninsured rates for specific demographic groups and geographic areas. Beyond the magnitude of the drop in the uninsured rate, the universality of the gains is notable. Between 2013 and 2016, the uninsured rate declined across all geographies (regardless of states' policy decisions) and for all demographic groups. Generally, areas and demographic groups with higher uninsured rates in 2013 saw higher percentage-point declines in uninsured rates, with the exception of states (and counties within states) without Medicaid expansion.

The rest of this section describes the changes in the uninsured landscape between the summers of 2013 and 2016 for various geographic areas and demographic groups using Enroll America/Civis' uninsured model. For additional data, see Appendix I for national uninsured estimates and demographic and geographic breakdowns for 2013-2016, Appendix II for state-level uninsured estimates for 2013-2016, , and Appendix III for selected county-level uninsured estimates for 2013 and 2016.

Figure 1. Estimated Uninsured Rates for Non-Elderly Adults by State in 2013 and 2016



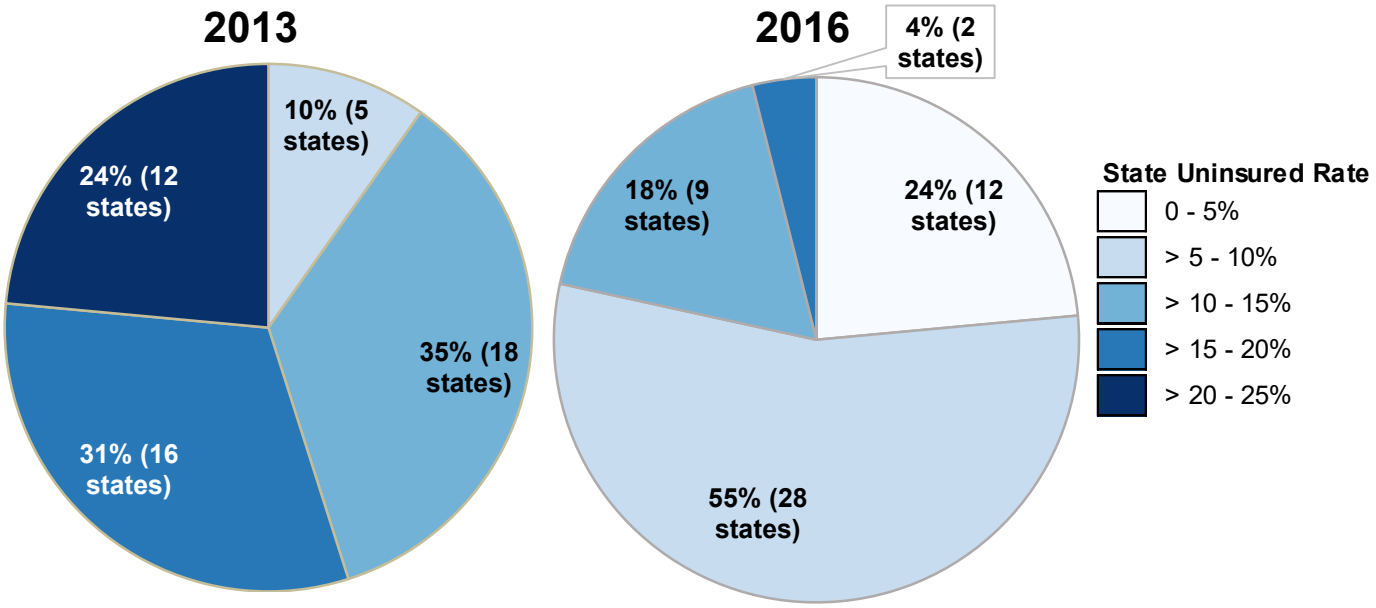
Geography

Across the nation, uninsured rates fell between 2013 and 2016 in every region and state, and nearly all counties. Key findings:

- *Region*: The uninsured rate declined substantially in every region. The West saw the greatest percentage point (10.1 percentage points) and proportional declines (59 percent) with its uninsured rate dropping from 17.1 to 7.0 percent. The Midwest and Northeast had nearly as high proportional declines (47 and 55 percent, respectively). The South saw a sizable percentage point decline (7.9 percentage points) but lags in its proportional declines (41 percent).[10]
- *State*: All 50 states and the District of Columbia saw declines in uninsured rates between 2013 and 2016, ranging from a 1.8 percentage point decline in Wisconsin to 13.1 percentage point declines in Kentucky and West Virginia. (See Figure 1.) In fact, in 2013, 28 states had uninsured rates at 15 percent or higher, while in 2016, just two states still had uninsured rates that high (Mississippi and Oklahoma). Conversely, the number of states with uninsured rates of 10 percent and under went from five to 37 states between 2013 and 2016. (See Figure 2.)
- *County:* The uninsured rate dropped in 98 percent of the more than 3,000 counties in the United States between 2013 and 2016, including 90 percent of counties that had a decline of more than one-quarter. More than one-third of counties saw 10 percentage point or greater declines in uninsured rates and more than half saw between 5 and 10 percentage point declines. Looking at this in another way, in 2013, 2,506 counties had uninsured rates of 15 percent or higher, while in 2016, that was true in just 665 counties. The number of counties with uninsured rates of 10 percent and under grew from a mere 145 counties in 2013 to 1,834 counties in 2016.

"In 2013, 2,506 counties had uninsured rates of 15 percent or higher, while in 2016, that was true in just 665 counties. The number of counties with uninsured rates of 10 percent and under grew from a mere 145 counties in 2013 to 1,834 counties in 2016."

Figure 2. Distribution of State Non-Elderly Adult Uninsured Rates in 2013 and 2016

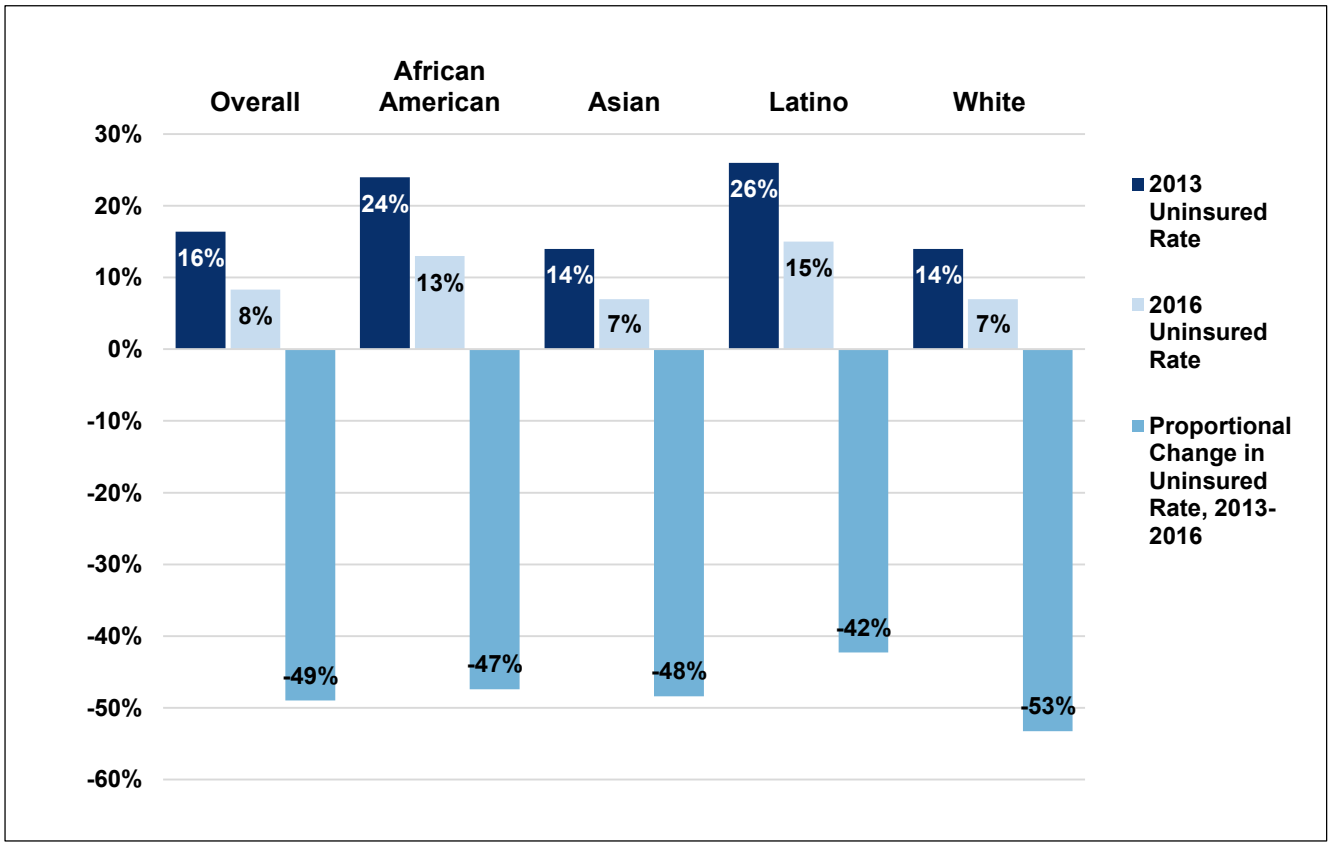


Demographic groups

Uninsured rates declined between 2013 and 2016 for all racial/ethnic groups that are accounted for by the model (White, African American, Latino, and Asian), all ages from 18 to 64 and age groups (18-34, 35-44, 45-54, 55-64), both men and women, and for metro and non-metro residents. (See Figure 3.) Key findings:

- *Race/ethnicity:* The uninsured rate declined across all racial/ethnic groups. The largest percentage point decline in uninsured rate from 2013 to 2016 was among African Americans, with a reduction of 11.4 percentage points (from 24.0 to 12.6 percent), followed closely by Latinos with a reduction of 11.1 percentage points (from 26.2 to 15.1 percent). When looking at proportional declines, Whites saw the largest decline in their uninsured rate with a 53 percent reduction (from 14.1 to 6.6 percent).
- *Age*: The uninsured rate declined among every age and age group. Young adults age 18-34 years had by far the largest percentage point and proportional declines among all age groups. Young adults' uninsured rate dropped from 21.6 to 7.1 percent, a decline of 12.6 percentage points and a 58 percent reduction in their rate.
- *Metro/non-metro:* Uninsured rates declined across both metro and non-metro regions. Non-metro residents saw slightly larger percentage point declines in their uninsured rate between 2013 and 2016 compared with metro residents (8.7 and 8.3 percentage point declines, respectively), while metro residents had higher proportional declines (44 vs. 52 percent declines).[11]

Figure 3. Estimated Uninsured Rate by Race/Ethnicity in 2013 and 2016, and the Proportional Change in Uninsured Rate from 2013 to 2016



State Policy Decisions

States' policy decisions affect enrollment, including the decisions surrounding Medicaid eligibility and degree of involvement in the marketplace, as well as numerous other, often unseen decisions. Generally, states that embraced coverage expansion, through the Medicaid expansion and election of a state or partnership marketplace, saw greater declines in uninsured rates. Key findings:

- *Medicaid expansion:* While all states saw declines, states that expanded Medicaid saw significantly higher percentage point and proportional declines in uninsured rates on average compared with non-expansion states, although non-expansion states (which tended to have higher uninsured rates to begin with) still made substantial gains.[12]
- *Type of marketplace:* States with marketplaces of all types saw declines in uninsured rates. Partnership marketplaces had the largest percentage point and proportional declines, followed very closely by state-based marketplaces.[13]

The Impact of Coverage

Health insurance provides more affordable access to health care as well as financial security in case of serious illness or injury and the intangible peace of mind that comes from these protections. Already there is mounting evidence that those who have gained coverage in recent years are benefiting from expanded coverage in all of these ways. Studies consistently show significant positive changes in a variety of measures related to access to care, affordability, and reduction in bankruptcy, including specifically:

- A Journal of the American Medical Association (JAMA) study found that in 2015 non-elderly adults experienced improvements in the share of individuals who have a personal physician and easy access to medicine, as well as decreases in the share who are unable to afford care and report fair or poor health relative to before the coverage expansions.[14]
- The Centers for Disease Control and Prevention's National Health Interview Survey found that the number of non-elderly Americans having difficulty paying medical bills declined by more than 20 percent between 2011 and 2015.[15]
- The Commonwealth Fund found decreases between 2012 and 2014 in the percentage of adults who reported that costs stopped them from visiting a doctor or clinic when they had a medical issue, filling a prescription, seeing a specialist, or skipping a recommended medical test, treatment, or follow-up visit between.[16]

Other research has looked at the effects of coverage from Medicaid expansion specifically. These studies found that Medicaid expansion was associated with increased access to primary care and prescriptions, as well as higher rates of diagnosis of chronic conditions.[17] Another study found that Medicaid expansion likely improved the financial situation of those who gained Medicaid coverage due the ACA, including reducing unpaid bills and debt.[18]

Conclusion

For decades prior to the enactment of the ACA, federal health reform eluded lawmakers, and the national uninsured rate was stagnant. The ACA has imperfections and has experienced its shares of bumps during implementation, including being dogged by extreme politicization. However, as decisions about the future of the law play out, it is critical not to lose sight of the very real benefits it has brought to the millions of Americans who have been able to enroll in high quality, affordable health coverage because of it. Between 2013 and 2016, the uninsured rate in the United States fell significantly across geographies and demographics leading to improved access to care, affordability, and financial security for millions of Americans. Preserving these gains and institutionalizing the best practices in outreach and enrollment that have been identified is a core part of the work the lies ahead for enrollment stakeholders.

Acknowledgments

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Appendix I

Enroll America/Civis Analytics' National Uninsured Rates for Non-Elderly Adults, 2013-2016

Group	2013	2014	2015	2016	Percentage point change 2013 to 2016	Proportional change 2013 to 2016
United States	16.4%	11.3%	10.7%	8.3%	-8.1	-49%
Region						
Northeast	11.6%	9.1%	6.5%	5.2%	-6.4	-55%
Midwest	15.2%	10.4%	8.9%	6.6%	-8.6	-57%
South	19.1%	13.7%	13.8%	11.2%	-7.9	-41%
West	17.1%	10.1%	10.6%	7.0%	-10.1	-59%
Race/ethnicity						
African American	24.0%	16.1%	15.0%	12.6%	-11.4	-47%
White	14.1%	10.0%	9.3%	6.6%	-7.5	-53%
Latino	26.2%	16.5%	16.5%	15.1%	-11.1	-42%
Asian	13.7%	9.7%	9.2%	7.1%	-6.6	-48%
Age						
18-34	21.6%	14.2%	15.5%	9.01%	-12.6	-58%
35-44	16.4%	11.1%	9.6%	7.58%	-8.8	-54%
45-54	15.0%	10.6%	9.5%	8.36%	-6.6	-44%
55-64	12.7%	9.1%	8.2%	7.60%	-5.1%	-40%
Sex						
Male	17.7%	13.0%	11.4%	8.7%	-9.0	-51%
Female	15.3%	9.8%	10.0%	7.7%	-7.6	-49%
Metro v. Non-Metro						
Metro	16.0%	11.0%	10.3%	7.7%	-8.3	-52%
Non-Metro	19.6%	12.8%	12.9%	10.9%	-8.7	-44%
Medicaid Expansion Status						
Medicaid Expansion	14.7%	9.1%	8.5%	5.9%	-8.8	-60%
No Expansion	18.7%	14.0%	14.0%	11.6%	-7.1%	-38%
Late Expansion	16.5%	12.1%	9.2%	6.7%	-9.8	-59%
Marketplace Type						
Federally facilitated	17.7%	13.0%	12.6%	10.1%	-7.6	-43%
Partnership	16.1%	9.7%	8.2%	5.5%	-10.6	-66%
State-based	14.2%	9.0%	8.2%	5.7%	-8.5	-60%
Supported state-based	18.2%	10.1%	11.0%	7.8%	-10.4	-57%

Appendix II

Enroll America/Civis Analytics' Uninsured Rates for Non-Elderly Adults By State, 2013-2016

State	2013	2014	2015	2016	Percentage point change 2013 to 2016	Proportional change 2013 to 2016
United States	16.4%	11.3%	10.7%	8.3%	-8.1	-49%
Alaska	15.8%	10.6%	13.4%	9.9%	-5.9	-37%
Alabama	19.9%	14.8%	13.8%	10.9%	-9.0	-45%
Arkansas	20.9%	10.9%	11.2%	8.9%	-12.0	-57%
Arizona	16.3%	9.6%	13.7%	11.1%	-5.2	-32%
California	17.9%	10.5%	10.6%	6.2%	-11.7	-65%
Colorado	15.8%	8.6%	9.4%	6.3%	-9.5	-60%
Connecticut	10.2%	7.4%	5.3%	4.6%	-5.6	-55%
District of Columbia	8.0%	7.0%	5.0%	5.7%	-2.3	-29%
Delaware	13.2%	8.6%	7.6%	5.9%	-7.3	-55%
Florida	21.5%	15.2%	16.9%	13.2%	-8.3	-39%
Georgia	19.7%	14.5%	13.0%	10.4%	-9.3	-47%
Hawaii	9.2%	6.6%	4.5%	5.6%	-3.6	-39%
Iowa	13.6%	8.7%	6.2%	5.1%	-8.5	-62%
Idaho	17.9%	12.8%	11.8%	8.8%	-9.1	-51%
Illinois	14.8%	9.1%	7.7%	4.7%	-10.1	-68%
Indiana	17.3%	13.5%	10.3%	7.2%	-10.1	-58%
Kansas	16.0%	12.7%	12.0%	8.2%	-7.8	-49%
Kentucky	19.2%	10.9%	9.8%	6.1%	-13.1	-68%
Louisiana	21.3%	15.0%	13.3%	12.3%	-9.0	-42%
Massachusetts	6.7%	6.1%	4.9%	3.6%	-3.1	-46%
Maryland	11.3%	7.8%	6.6%	4.0%	-7.3	-65%
Maine	13.1%	11.8%	10.1%	7.3%	-5.8	-45%
Michigan	17.3%	10.4%	8.5%	5.6%	-11.7	-67%
Minnesota	10.3%	7.2%	6.0%	4.5%	-5.8	-56%
Missouri	17.1%	13.1%	13.1%	10.8%	-6.3	-37%
Mississippi	22.3%	15.6%	17.3%	16.8%	-5.5	-25%
Montana	19.4%	12.9%	14.1%	8.7%	-10.7	-55%
North Carolina	18.2%	14.6%	14.6%	11.2%	-7.0	-39%
North Dakota	13.0%	7.5%	6.9%	7.9%	-5.1	-39%
Nebraska	14.3%	11.5%	9.2%	7.3%	-7.0	-49%
New Hampshire	11.6%	7.1%	5.8%	4.2%	-7.4	-64%
New Jersey	12.3%	7.9%	6.3%	4.3%	-8.0	-65%
New Mexico	22.4%	11.5%	13.4%	10.1%	-12.3	-55%
Nevada	19.8%	10.7%	14.1%	9.6%	-10.2	-51%

New York	11.7%	8.7%	6.3%	6.2%	-5.5	-47%
Ohio	15.4%	9.4%	8.9%	5.0%	-10.4	-68%
Oklahoma	20.5%	13.9%	15.4%	16.8%	-3.7	-18%
Oregon	17.8%	10.1%	9.5%	6.1%	-11.7	-66%
Pennsylvania	13.8%	12.4%	7.6%	5.2%	-8.6	-63%
Rhode Island	13.5%	8.6%	7.2%	5.1%	-8.4	-63%
South Carolina	19.7%	15.0%	13.9%	11.9%	-7.8	-40%
South Dakota	16.4%	12.0%	11.2%	9.9%	-6.5	-39%
Tennessee	16.4%	13.8%	13.7%	10.6%	-5.8	-35%
Texas	21.3%	14.8%	16.0%	14.1%	-7.2	-34%
Utah	16.4%	12.6%	11.1%	7.6%	-8.8	-54%
Virginia	12.1%	11.0%	8.5%	6.1%	-6.0	-49%
Vermont	10.9%	7.4%	5.4%	4.4%	-6.5	-59%
Washington	14.0%	8.6%	7.8%	5.7%	-8.3	-59%
Wisconsin	12.2%	10.7%	8.6%	10.4%	-1.8	-15%
West Virginia	19.9%	10.8%	11.5%	6.8%	-13.1	-66%
Wyoming	13.3%	10.1%	11.1%	9.7%	-3.6	-27%

Appendix III

Enroll America/Civis Analytics' Uninsured Rates for Non-Elderly Adults for Selected Counties, 2013 and 2016

County	State	2013	2016	Percentage point change 2013 to 2016	Proportional change 2013 to 2016
Top 50 Counties with the Highest Percentage Point Change in Uninsured Rate					
San Miguel County	NM	31%	9%	-22	-71%
Guadalupe County	NM	29%	8%	-21	-72%
Mora County	NM	27%	7%	-21	-78%
Hidalgo County	NM	31%	11%	-20	-65%
Owsley County	KY	26%	6%	-20	-77%
Robertson County	KY	25%	5%	-20	-80%
Willacy County	TX	43%	24%	-19	-44%
Dimmit County	TX	37%	18%	-19	-51%
McCreary County	KY	26%	7%	-19	-73%
Gilmer County	WV	26%	7%	-19	-73%
Breathitt County	KY	25%	6%	-19	-76%
Wolfe County	KY	25%	6%	-19	-76%
Knott County	KY	24%	5%	-19	-79%
Jim Hogg County	TX	36%	18%	-18	-50%
Cibola County	NM	33%	15%	-18	-55%
Taos County	NM	28%	10%	-18	-64%
Conejos County	CO	26%	8%	-18	-69%
Fulton County	KY	26%	8%	-18	-69%
Knox County	KY	26%	8%	-18	-69%
Carter County	KY	24%	7%	-18	-75%
Magoffin County	KY	24%	7%	-18	-75%
Pike County	KY	24%	7%	-18	-75%
Floyd County	KY	25%	7%	-18	-72%
Letcher County	KY	24%	6%	-18	-75%
Martin County	KY	24%	6%	-18	-75%
Clay County	GA	32%	15%	-17	-53%
Lee County	AR	31%	14%	-17	-55%
Chicot County	AR	29%	13%	-17	-59%
Rio Arriba County	NM	28%	11%	-17	-61%
Socorro County	NM	28%	11%	-17	-61%
Nevada County	AR	27%	10%	-17	-63%
Otero County	CO	27%	10%	-17	-63%
Clay County	KY	27%	10%	-17	-63%

Chattahoochee County	GA	26%	9%	-17	-65%
Grant County	NM	26%	9%	-17	-65%
Clinton County	KY	25%	8%	-17	-68%
Harlan County	KY	25%	8%	-17	-68%
Jackson County	KY	25%	8%	-17	-68%
Adair County	KY	24%	7%	-17	-71%
Bath County	KY	24%	7%	-17	-71%
Cumberland County	KY	24%	7%	-17	-71%
Lee County	KY	24%	7%	-17	-71%
Perry County	KY	24%	7%	-17	-71%
Johnson County	KY	23%	6%	-17	-74%
Menifee County	KY	23%	6%	-17	-74%
Morgan County	KY	23%	6%	-17	-74%
Rowan County	KY	23%	6%	-17	-74%
Hopkins County	KY	22%	5%	-17	-77%
Elliott County	KY	21%	4%	-17	-81%
Brooks County	TX	38%	22%	-16	-42%
Top 50 Counties with the Highest Proportional Change in Uninsured Rate					
Elliott County	KY	21%	4%	-17	-81%
Robertson County	KY	25%	5%	-20	-80%
Oldham County	KY	10%	2%	-8	-80%
Knott County	KY	24%	5%	-19	-79%
Putnam County	IL	14%	3%	-11	-79%
Mora County	NM	27%	7%	-21	-78%
Jessamine County	KY	18%	4%	-14	-78%
Medina County	OH	9%	3%	-7	-78%
DuPage County	IL	9%	2%	-7	-78%
McHenry County	IL	9%	2%	-7	-78%
Hopkins County	KY	22%	5%	-17	-77%
Owsley County	KY	26%	6%	-20	-77%
Oakland County	MI	13%	4%	-10	-77%
Marion County	KY	21%	5%	-16	-76%
Breathitt County	KY	25%	6%	-19	-76%
Wolfe County	KY	25%	6%	-19	-76%
Carter County	KY	24%	7%	-18	-75%
Magoffin County	KY	24%	7%	-18	-75%
Pike County	KY	24%	7%	-18	-75%
Letcher County	KY	24%	6%	-18	-75%
Martin County	KY	24%	6%	-18	-75%
Madison County	KY	20%	6%	-15	-75%
Nelson County	KY	20%	5%	-15	-75%

Huron County	OH	16%	5%	-12	-75%
Cambria County	PA	16%	5%	-12	-75%
De Witt County	IL	16%	4%	-12	-75%
Bullitt County	KY	16%	4%	-12	-75%
Kenton County	KY	16%	4%	-12	-75%
Grand Traverse County	MI	16%	4%	-12	-75%
Baltimore County	MD	12%	4%	-9	-75%
Grundy County	IL	12%	3%	-9	-75%
Boone County	KY	12%	3%	-9	-75%
Clermont County	OH	12%	3%	-9	-75%
Fairfield County	OH	12%	3%	-9	-75%
Somerset County	NJ	8%	3%	-6	-75%
Kendall County	IL	8%	2%	-6	-75%
Sussex County	NJ	8%	2%	-6	-75%
Bucks County	PA	8%	2%	-6	-75%
Johnson County	KY	23%	6%	-17	-74%
Menifee County	KY	23%	6%	-17	-74%
Morgan County	KY	23%	6%	-17	-74%
Rowan County	KY	23%	6%	-17	-74%
Otsego County	MI	19%	6%	-14	-74%
Hamilton County	IL	19%	5%	-14	-74%
Gratiot County	MI	19%	5%	-14	-74%
Keweenaw County	MI	19%	5%	-14	-74%
Lucas County	OH	19%	5%	-14	-74%
Monongalia County	WV	19%	5%	-14	-74%
Calaveras County	CA	15%	4%	-11	-73%
Nevada County	CA	15%	4%	-11	-73%

End notes

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[3] *Cost Information More Important Than Fine Language among Calculator Users,* Enroll America, March 2015. Available online: https://www.enrollamerica.org/cost-information-more-important-than-fine-language-among-calculator-users/.

[4] *State of Enrollment: Lessons Learned from Connecting America to Coverage, 2013-2014,* Enroll America, June 2014. Available online: https://s3.amazonaws.com/assets.getcoveredamerica.org/20140613_SOEReportPDFlr.pdf.

[5] In-Person Assistance Maximizes Enrollment Success, Enroll America, March 2014. Available online: https://www.enrollamerica.org/in-person-assistance-maximizes-enrollment-success/.

[6] The ACA as drafted intended for all states to expand their Medicaid coverage to include adults with incomes below 133 percent of the federal poverty level (FPL). In 2012, however, the U.S. Supreme Court ruled that the Medicaid expansion had to be optional with states deciding to opt in or not. As of January 1, 2017, 32 states and the District of Columbia have expanded Medicaid coverage and 19 states have opted out. Individuals with incomes below 100 percent FPL are not eligible for financial help for marketplace plans and often find themselves ineligible for any financial assistance in states that have not expanded Medicaid (often called the "coverage gap").

[7] Each year over the last four years, Enroll America partnered with Civis Analytics create a model to predict the likelihood that an individual is uninsured. This model is then applied to Enroll America's consumer database of 180 million non-elderly adult Americans. Each individual in the database is given an uninsured score between 0 and 100, representing the probability that the individual is uninsured. This score can be used to rank individuals in order of who is most likely to be uninsured, enabling prioritization of outreach efforts. This scoring procedure also allows us to estimate uninsured rates by demographic and geographic subgroups. Our model estimates the uninsured rate; it does not estimate the number of people who are uninsured nor factor in eligibility to enroll in coverage. For more information: https://www.enrollamerica.org/research-maps/maps/changes-in-uninsured-rates-by-county/detailed-background/.

[8] The American Community Survey 1-Year Estimates put the uninsured rate for 18-64 year old at 20.6 percent in 2009, 21.4 percent in 2010, 21.0 percent 2011, 20.6 percent in 2012, and 20.3 percent in 2013. Available online: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_1YR_S2701&prodType=table.

[9] *Health Insurance Coverage Status and Type of Coverage by State and Age for All People*, 2015 American Community Survey, U.S. Census Bureau, September 2016. Available online: https://www2.census.gov/programs-surveys/demo/tables/health-insurance/2016/acs-hi/hi05_acs.xls.

[10] We used the U.S. Census' definition for regions: Northeast includes CT, ME, MA, NH, NJ, NY, PA, RI, VT; Midwest includes IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI; South includes AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV; and West includes AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY. Online at http://www2.census.gov/geo/docs/maps-data/maps/reg_div.txt.

[11] In defining metro/non-metro area, we used the U.S. Department of Agriculture's (USDA) Rural-Urban Continuum Codes, which categorizes counties as metro or non-metro as defined by the Office of Management and Budget based on population and commuting criteria. For more information on these measures, see: http://www.ers.usda.gov/data-products/ruralurban-continuum-codes/documentation.aspx.

[12] States that adopted the Medicaid expansion as of January 1, 2014 include: AZ, AR, CA, CO, CT, DE, DC, HI, IL, IA, KY, MD, MA, MN, NV, NJ, NM, NY, ND, OH, OR, RI, VT, WA, WV; states that have adopted Medicaid expansion late (after January 2014) include: MI, NH, PA, IN, AK, MT, LA; states that have not adopted Medicaid expansion as of January 1, 2017 include: AL, FL, GA, ID, KS, ME, MS, MO, NE, NC, OK, SC, SD, TN, TX, UT, VA, WI, WY.

[13] Every state has a health insurance marketplace where residents can purchase health insurance and qualified individuals can get financial help. Some states choose to operate their own marketplaces (called state-based marketplaces), some operate their own marketplace but use the federal Healthcare.gov platform, (supported state-based marketplaces), some operate certain aspects of the marketplace in partnership with the federal government (partnership marketplaces), and some are operated by the federal government (federally facilitated marketplaces). As of 2017, state-based marketplaces include: CA, CO, CT, DC, ID, MD, MA, MN, NY, RI, VT, WA; supported state-based marketplaces include: HI, KY, NV, NM, OR; partnership marketplaces are: AR, DE, IA, IL,

MI, NH, WV; and federally facilitated marketplaces include: AL, AK, AZ, FL, GA, IN, KS, LA, ME, MS, MO, MT, NE, NJ, NC, ND, OH, OK, PA, SC, SD, TN, TX, UT, VA, WI, WY.

[14] Benjamin Sommers, Munira Gunja, Kenneth Finegold, et al, *Changes in Self-reported Insurance Coverage, Access to Care, and Health Under the Affordable Care Act*, Journal of the American Medical Association, July 2015. Available online: http://jamanetwork.com/journals/jama/fullarticle/2411283.

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NACCHO
National Association of County & City Health Officials
The National Connection for Local Public Health

NACCHO Analysis of the Future of the Affordable Care Act

ACA Repeal and Replace
House and Senate leadership have publicly announced their intent to repeal or significantly alter the Affordable Care Act (ACA). House Speaker Paul Ryan (R-WI) is expected to take the lead in crafting the path forward. (To understand the policy proposals that are likely to be considered, see Speaker Ryan's 37-page "A Better Way" proposal and the Trump Health Plan)

There are a variety of ways and vehicles to unwind the law – legislation to alter or repeal, defunding pieces through the appropriations process, and Executive branch action or inaction. Given that a total repeal would result in a loss of coverage for 20 million people, there is likely to be a phased approach or transition period. It's unclear how the public will respond to taking health care away from millions of people — the first time in American history that such a broad societal benefit enacted by Congress would be repealed.

Is Past, Prologue?
While Senate Democrats likely would use the filibuster to try to block any drastic changes in the law, Republicans have devised a plan to sidestep a filibuster and make the changes through the budget reconciliation process. (The ACA was passed in 2010 using the reconciliation process.) Congressional Republicans already have experience crafting and passing a budget reconciliation bill to dismantle key parts of the law, which was vetoed by President Obama in 2015. The reconciliation process is a complicated budget tool that only requires a simple majority to pass the Senate and not the 60 vote threshold. The repeal plan would have to go through elaborate review to make sure it complies with intricate budget rules and Democrats can challenge the results. However, the 2015 bill already vetted for compliance with reconciliation requirements could serve as a model for ACA repeal.

That reconciliation bill would have repealed the individual and employer mandates, the exchange subsidies, expansion of Medicaid coverage for adults up to 138 percent of the federal poverty level, presumptive eligibility, maintenance of effort, benchmark plans for Medicaid, and the taxes on medical devices and high-cost health plans. But even though it passed with strong support from Republicans, they knew at the time it wouldn't become law because Obama would veto it. That dynamic creates skepticism among some now that it could pass again in 2017 when a president could actually sign it — and take away a health benefit from people.

In addition, there will likely be a push to eliminate ACA insurance reforms such as minimum essential benefit packages and scrapping the Centers for Medicare and Medicaid Services Innovation Center and the Medicare Independent Payment Advisory Board. Repeal also ends popular ACA provisions, like the guaranteed issue of insurance, allowing young adults to remain on their parents' health plans until the age of 26, and filling in the Medicare Part D donut hole.

Mandatory spending in the ACA is also in jeopardy. This includes the Prevention and Public Health Fund, which is 13% of CDC's budget (See chart of current CDC allocation). Mandatory funding for Community Health Centers, the Maternal and Child Health Nurse Home Visiting Program, and the State Children's Health Insurance Program was also authorized in the ACA and has been extended through separate legislation, which expires in 2017. If mandatory funding is eliminated, there will be increasing pressure on discretionary spending to continue these programs.

CDC Programs Supported by PPHF	FY2016
Preventive Health and Health Services Block Grants	160.0
Million Hearts	4.0
Tobacco Prevention (Media and Quitlines), Office of Smoking and Health	126.0
Racial & Ethnic Approaches to Community Health (REACH)	50.9
Section 317 Immunization Program	324.4
Breastfeeding promotion and support grants	8.0
Diabetes Prevention	73.0
Heart Disease & Stroke Prevention	73.0
National Early Care Collaboratives	4.0
Lead Poisoning Prevention	17.0
Epidemiology and Laboratory Capacity Grants	40.0
Healthcare-Associated Infections	12.0
CDC Total	892.3

Replace with What?

The Republicans are still far apart on specifically what kind of alternative to enact. Trump and Speaker Ryan have given only broad outlines of what that replacement would look like. They're relatively similar plans: Individuals would get tax credits to help them buy insurance, tax-favored Health Savings Accounts would be encouraged, insurers would be allowed to sell policies across state lines. Trump has also indicated that he favors Ryan's preferred approach of covering people with pre-existing medical conditions through state high-risk pools rather than requiring insurers to accept all applicants regardless of health status. These proposals would only marginally reduce the ACA coverage losses.

A replacement plan could not be implemented overnight. Regulations would have to be written and published for comment and mechanisms set up to handle the deductions or credits, particularly if they were provided in advance. Even a two year delay might not be enough to get a program in place.

Given that hospitals, drug makers and even some insurers have benefited from ACA's coverage expansion and other reforms, they are likely to push the GOP to preserve *some* elements that favor them. Governors are also expressing concern about the repeal of the Medicaid expansion and the negative impact that will have on their state budgets.

What about 2016 Open Enrollment?

The Obama Administration is staying the course with open enrollment which runs from November 1 to January 31. The Department of Health and Human Services announced that more than 100,000 people signed up for plans on HealthCare.gov the day after the election.

Changes Beyond the ACA

One of Ryan's Better Way proposals is to transform Medicare into a premium-support program, in which the government makes fixed per-capita contributions and beneficiaries use those payments to get their care from either traditional Medicare or private plans. A move away from defined benefits would potentially expose seniors to higher out-of-pocket costs.

On Medicaid, Trump and GOP congressional leaders want to convert the program into a system of capped federal contributions to the states and give state leaders enormous freedom to set eligibility, benefits and program structure. Democrats, healthcare providers and even many state officials oppose such a change, fearing it would slash funding, reduce provider payments and leave a large number of low-income people without healthcare.

NACCHO will continue to report on efforts to change or eliminate ACA and other changes to health insurance programs and ways NACCHO members can make the benefits of the law known to policymakers.

Questions?

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OBAMACARE REPEAL AND REPLACE

Policy Brief and Resources

SECTION 1

Topline

Obamacare has failed.

Six years after the enactment of Obamacare, here's what we know: This law has failed the American people.

Insurance markets are collapsing. Premiums and deductibles are soaring. Patients' choices are dwindling. The law has failed to deliver on its core promises.

The law is only getting worse.

While we could simply allow the law to collapse, that would not be fair to the American families struggling under Obamacare. The truth is, left unaddressed, the situation would only get worse – with even fewer coverage options and even higher costs.

Repeal is relief.

That's why, when the House returns after President's Day, we will act to repair the damage done by Obamacare by repealing the law and replacing it with a better system. We will deliver on our promise to the American people.

A stable transition.

Our efforts will ensure protections for the most vulnerable, and there will be a stable transition period to a patient-centered health care system that gives Americans access to quality, affordable care.

We have a better way.

Our replacement plan ensures more choices, lower costs, and greater control over your health care. Specifically it:

- Moves health care decisions away from Washington and to where they belong: with patients, their families, and their doctors,
- Provides coverage protections and peace of mind for all Americans—regardless of age, income, medical conditions, or circumstances,
- Gives patients the right tools, like Health Savings Accounts, to make their health insurance more portable and affordable,
- Allows those who don't receive insurance from an employer or government program to have access to quality coverage,
- Breaks down barriers that restrict choice and prevent Americans from picking the plan that is best for them and their family,
- Modernizes and strengthens Medicaid to protect the most vulnerable.

SECTION 2

Facts

Key Obamacare Facts

25% average increase in premiums this year for the millions of Americans trapped in Obamacare HealthCare.gov exchanges.

(SOURCE: HHS)

Nearly 1/3 of US counties have only 1 insurer offering exchange plans.

(SOURCE: KAISER FAMILY FOUNDATION)

4.7 million Americans kicked off their health care plans by Obamacare.

(SOURCE: ASSOCIATED PRESS)

$1 trillion in new taxes, mostly falling on families and job creators.

(SOURCE: SENATE BUDGET AND FINANCE COMMITTEES)

18 Failed Obamacare Co-Ops out of 23, which were established as an alternative to the public option, have collapsed, costing taxpayers nearly $1.9 billion and forcing patients to find new insurance.

(SOURCE: HOUSE ENERGY AND COMMERCE COMMITTEE)

$53 billion in new regulations requiring more than **176,800,000 hours of paperwork**.

(SOURCE: AMERICAN ACTION FORUM)

Courtesy of:
House Committee on Energy and Commerce
House Committee on Education and the Workforce
House Committee on Ways and Means
Senate Committee on Finance
Senate Committee on Health, Education, Labor, and Pensions

SECTION 3

Key Points

Committee on Energy & Commerce // Committee on Ways & Means

Obamacare is hurting more people than it is helping, forcing Americans to buy insurance they don't like, don't need, and cannot afford.

- Premiums have gone up by an average of 25 percent this year. This year alone, seven states saw premium increases of more than 50 percent.
- Nearly 1/3 of all U.S. counties have only one insurer offering plans on their state's exchange.
- Under Obamacare, we have a new class of uninsured—those paying the penalty because they can't afford the plans, and those who are buying plans that have sky-high premiums and deductibles, prohibiting their access to actually receiving care.
- Families and job creators have faced $1 trillion in new taxes.

House Republicans are working hand-in-hand with the new administration to provide much-needed relief and deliver a 21st century health care system that:

- Lowers costs, expands access, improves quality, and puts patients and families in charge of their care, while protecting patients with pre-existing conditions and ensuring dependents up to age 26 can stay on their parents' insurance.

There are three different ways we are working to deliver relief to patients across the country.

- **Repeal and Replace Legislation:** House Republicans will advance legislation in the weeks ahead to provide relief from Obamacare's taxes and mandates—including eliminating the individual and employer mandate penalties—and move forward with patient-centered reforms.
- **Action from the Trump Administration:** President Trump and HHS Secretary Price have an important role to play in providing relief from Obamacare's burdensome regulations. Most recently, the administration issued a proposed rule to help protect taxpayers and stabilize the collapsing marketplaces.
- **Delivering Solutions through Regular Order:** Both Energy & Commerce and Ways & Means have already begun to hold hearings examining reforms that will:
    - Decrease costs and increase choices by promoting competition and innovation in the insurance market.
    - Increase flexibility for employers to offer affordable, quality health care options to their employees.
    - Allow individuals and families to purchase insurance across state lines.

Through our repeal and replace legislation, House Republicans will:

- **Modernize Medicaid:** Instead of burdening states with more mandates from Washington bureaucrats, our plan empowers states to design plans that will best meet their needs and put Medicaid on sustainable financial footing.
  - The Medicaid program, a critical lifeline for some of our most vulnerable patients, is three times the size as—and costs three times as much as—under President Clinton. This is not sustainable.
  - The reforms will return the focus of the program back to helping those most in need, put Medicaid on a budget, and ensure we don't pull the rug out from anyone who received care under states' Medicaid expansions.
- **Utilize State Innovation Grants:** States know how to best take care of their own patients—not the federal government. Through this process, we can give states the ability to repair their health insurance markets that were damaged by Obamacare.
  - As explained in A Better Way, providing funding for state innovation programs—whether it is high-risk pools, cutting out-of-pocket costs like premiums and deductibles, or promoting access to health care services—states can gain resources to best take care of their unique patient populations.
- **Enhance Health Savings Accounts:** Obamacare's one-size-fits-all policies limited how individuals could spend and save their health care dollars.
  - Our proposal empowers individuals and families to spend their health care dollars the way they want and need—not the way Washington prescribes—by enhancing and expanding Health Savings Accounts, or HSAs.
  - For example, our proposal increases the amount of money an individual or family can put into their HSA, and allows individuals and families to spend money from their HSA on "over-the-counter" health care items. It allows spouses to make additional contributions, and expands the amount of time and individual or family can use an HSA on certain expenses.
- **Provide Portable, Monthly Tax Credits:** Today, many Americans receive support for their health insurance through work, Medicare, Medicaid, or other government programs, while others are forced to subsidize Obamacare's sky-high costs by purchasing mandated health insurance they do not like and cannot afford.
  - Our proposal provides all Americans access to a portable, monthly tax credit that they can use to buy a health insurance plan that's right for them—not one tied to a job or a government-mandated program.
  - Our proposal is based on age, so as individuals' health needs evolve over time, so will their monthly, portable tax credit. It can travel with them from job to job, state to state, home to start a business or raise a family, and even into retirement.

SECTION 4

Policy

Committee on Energy & Commerce // Committee on Ways & Means

Obamacare Is Collapsing, Republicans will Step into the Breach

Obamacare is collapsing. We all know the damage Obamacare has wrought on our health care system, which is why House Republicans began crafting a bill to repeal and replace it last year. Last June, we put forward the Better Way health care plan, a step-by-step approach to give every American access to quality, affordable health care.

This Congress, committees have already begun the hard work of laying the foundation to rebuild America's health care markets as we dismantle Obamacare. Notably, we are on a rescue mission to save the individual market from total collapse – which is where it is headed absent our intervention.

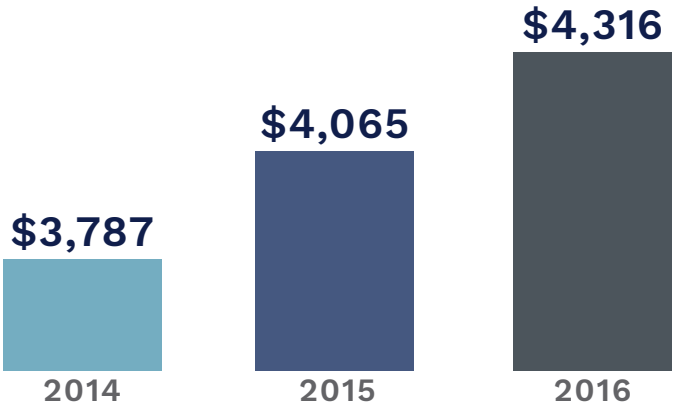
There is no shortage of evidence that patients and families are hurting under the overwhelming weight of Obamacare.

- Patients in 21 states have seen average premium increases of 25 percent or more this year.
- Individuals in seven states will experience premium increases of 50 percent or more.
- In 2016, 255 counties had one insurer. This year, one-third of counties in the entire country– 1,022 counties – have just one insurer.
- Five entire states just have one insurer offering coverage on the exchange.
- Only five of the original 23 health insurance CO-OPs remain in business.

The law has also caused problems for Americans with employer health care coverage. Average annual family premiums in the employer-sponsored market have soared by roughly $4,300 and now total more than $18,000 annually.[1] Even individual premiums are up 27 percent in the employer-sponsored market, double the rise in workers' wages (13 percent) and almost triple the cumulative inflation rate since 2010 (10 percent).[2] Deductibles are also increasing under Obamacare. Deductibles for individual plans in the employer-sponsored market are up an average of 60 percent since 2010 – from $917 to $1,478 in 2016.[3]

OBAMACARE COSTS FAMILIES MORE

AVERAGE ANNUAL OUT-OF-POCKET COSTS FOR FAMILY OF 4 WITH EMPLOYER-BASED COVERAGE



SOURCE: COUNCIL FOR AFFORDABLE HEALTH COVERAGE

There is no saving Obamacare. It cannot be fixed. It cannot be saved. We have the responsibility to prevent a real train wreck for millions of Americans. And not only can we solve this problem, we **must** solve this problem.

We Have A Better Way

Our replacement plan, built on key elements of the Better Way proposal, ensures more choices, lower costs, and greater control over your health care:

Health Care Tax Credits

For decades, the inability of American families and individuals to receive a tax benefit for the purchase of health insurance outside of job-based coverage stifled the growth of the private, individual health insurance market. In response, reformers— Republican and Democrat alike—have considered what could be refined or created to bring more fairness to the tax code. This includes work on deductions and refundable, nonrefundable, and/or advanceable tax credits. The evolution of the tax credit in the context of health reform in recent years has led to a focus on advanceable refundable tax credits being available for those in the individual market, tied to qualified coverage, and adjusted by family size.

Conservative think tanks and thought leaders have long promoted the concept of a tax credit. The Heritage Foundation and the American Enterprise Institute have both written about individual market tax credits as a way to expand coverage and reduce perverse incentives for the past twenty-five years. Congress has been exploring legislative options for just as long.

For instance, the Omnibus Budget Reconciliation Act of 1990 allowed for a non-advanceable supplement to the Earned Income Tax Credit to help recipients pay health insurance premiums on policies covering their children.[4] That add-on was repealed by the Omnibus Budget Reconciliation Act of 1993.[5] GAO found the supplement suffered from low participation rates, in part because of its small size and a lack of public awareness.[6]

President George W. Bush's administration oversaw two major milestones in the movement for more equity in the tax code. The first was the Health Coverage Tax Credit (HCTC), an advanceable, refundable tax credit for the purchase of health insurance. Included as a part of the Trade Act of 2002, the HCTC covered 65 percent of the cost of qualified health insurance for eligible taxpayers and their family.[7] Qualified health insurance included individual market coverage, a group health plan available through a spouse's employer, and state-based plans, like one offered through a state high-risk pool. Among other requirements, plans that qualified through the latter group were required to be guaranteed issue and could not deny on pre-existing conditions. Over time, the HCTC expanded to the current level of 72.5 percent of costs. It is due to sunset January 1, 2020.[8]

Advanceability is a key feature of the HCTC because many Americans need help paying their monthly premiums. They cannot afford to wait until they file their taxes the following year to get assistance. As a result, a system that allows for the delivery of financial help in "advance" of tax filing is critical.

Refundable vs. Non-Refundable Credits

A tax credit can be refundable or non-refundable. A refundable credit means a taxpayer can receive a payment— or "refund"— from the federal government if the amount of the credit exceeds an individual's tax liability. In contrast, a non-refundable credit means the credit is limited to the amount of tax liability. When deciding between the two options, intent is critical: if the credit is to be valuable to the low-income— those who are most in need of assistance to purchase health insurance— then refundability is an important feature.

The second important effort made by the Bush administration was to put forward a plan calling for the replacement of the preferential tax treatment of job-based insurance with a standard deduction of $7,500 for single filers and $15,000 for families.[9] One concern with a deduction, however, is that it is reduces taxable income.[10] This makes it most valuable to higher-income tax filers. Without taxable income, a deduction loses its value.[11] Those who most struggle to buy health insurance are likely lower income, making a deduction an incomplete benefit.

During his Presidential run, Senator John McCain built upon the Bush proposal by again calling for the repeal of the preferential tax treatment of job-based insurance. McCain, however, replaced this benefit with a universal tax credit of $2,500 for individuals and $5,000 for families, indexed annually for inflation.[12] While Obamacare was being debated, Republican alternatives, like the Empowering Patients First Act and the Patients Choice Act, included a similar advanceable refundable credit system. Today, the consensus document, *A Better Way*, and plans advanced by Senators Orrin Hatch and Richard Burr and Representative Fred Upton[13] as well Former Representative Tom Price call for universal credits.[14]

Replacing Obamacare with Universal Health Care Tax Credit

Republicans want to repeal Obamacare's expensive and rigid system of subsidies and replace them with a simple and flexible, advanceable and refundable tax credit to help Americans who do not receive insurance through their employer or a government program.

The Obamacare subsidy system did not work because the law required the subsidies only be used to purchase expensive, one-size fits all coverage. Further, the subsidies could only be used on the government exchanges. The lack of competition on the exchanges — where one-third of U.S. counties have only one insurer on the exchange— has made the complicated Obamacare subsidy unworkable or not useful for millions of Americans.

Republicans want to change all of that. To lower the cost of healthcare, Republicans would provide relief from all the Obamacare tax increases, including:

- The tax on health insurance premiums
- The medicine cabinet tax
- The tax on prescription drugs
- The tax on medical devices
- The increased expense threshold for deducting medical expenses

To provide relief during the transition period, the penalty taxes for the individual mandate and the employer mandate are zeroed-out immediately. Additionally, Americans eligible for the Obamacare subsidy will be able to use their credit for expanded options, including currently prohibited catastrophic plans. To promote market stability and premium stabilization during the transition period, the Obamacare subsidies are adjusted slightly to provide additional assistance for younger Americans and reduce the over-subsidization older Americans are receiving. Hyde restrictions on federal funding for abortions are included for the transition period.

Our proposal will then create a new, advanceable, refundable tax credit to assist with the purchase of health insurance on the individual insurance market. The legislation creates a new code section – 36C— to do this. The credit is:

- Universal for all citizens or qualified aliens not offered other qualifying insurance
- Age-rated
- Available for dependent children up to age 26
- Portable
- Grows Over Time

The credit is not based on income. This will help simplify the verification process and expand access for Americans who have been left behind by Obamacare. Additionally, a universal credit does not create the same labor market distortions and perverse incentives as President Obama's law did: according to CBO, the Obamacare income-based subsidy system resulted in so many lost labor hours it would be as if 2 million full-time equivalent workers left the labor force in 2025. A universal credit fixes this unnecessary disincentive to work and makes sure our tax code is built for growth.

Older Americans will receive a higher credit amount than younger Americans, reflecting the higher cost of insurance for older Americans. Taxpayers can receive credits for their dependents – including children up to the age of 26. The credit, however, is limited only to citizens or qualified aliens. Incarcerated individuals are not eligible for the credit.

The credit is not available to individuals who are eligible for coverage through other sources, specifically through an employer or government program.

The credit can be used to purchase any eligible plan approved by a State and sold in their individual insurance market, including catastrophic coverage. Additionally, if an employer does not subsidize COBRA coverage, the individual can use the credit to help pay unsubsidized COBRA premiums while he or she is between jobs. If the individual does not use the full value of the credit, he or she can deposit the excess amount into a health savings account. The portability of this credit makes it significantly more user-friendly and will promote competition in the individual insurance market to create the types of plans Americans actually want to purchase.

The credit is not available to be used for plans that cover abortion.

Health Savings Accounts

Conservatives have long championed health reform efforts that empower Americans and unleash the forces of choice and competition to lower costs and increase quality. One such policy with a long conservative record is the health savings account (HSA).

According to the National Center for Policy Analysis, work in this area first began in 1984 to advance "medical IRAs," owned by a Medicare-eligible individual.[15] In 1985, Virginia Republican D. French Slaughter, Jr. introduced the Health Care Savings Account Act.[16] The bill would allow individuals and employers to contribute to a tax-preferred account up to the amount of Medicare payroll tax the employee and employer paid during that year. Early distributions would be penalized, spending from the account could not also be taken as a medical expense deduction and catastrophic health protection for certain Medicare-eligible individuals would be established. An examination by Michelle Ye Hee Lee of the *Washington Post* found this bill was the earliest legislation that included some of the basic elements that would later become today's HSAs.[17]

By the 1990s, conservative think tanks were joining forces to advance newly renamed "medical savings accounts" (MSAs).[18] And a flood of— often bipartisan— legislation soon followed: former Senators Breaux and Daschle joined with ten other Senators to introduce a bill[19]; then-Representative Santorum authored a bill with former Senator Phil Gramm[20]; and Representative Sam Johnson sponsored a measure to provide Medical Savings Accounts to those who did not have access to an employer-provided group health plan, but who are covered by a qualified catastrophic coverage health plan and no other coverage.[21]

Building upon these efforts, the Health Insurance Portability and Accountability Act (HIPAA) of 1996 included what became known as Archer MSAs, named for then-Ways and Means Committee Republican Chairman Bill Archer.[22] These accounts eventually begat HSAs as part of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, championed by then-President Bush.[23] The rules surrounding these accounts have stayed generally consistent ever since: an

individual can contribute to an HSA on a tax-preferred basis if she has coverage under a high deductible health plan and no other health coverage.[24] Required deductibles and contributions levels are set in statute[25] and the account itself belongs to the individual.

Today, 20 million Americans are enrolled in HSA-eligible plans.[26] And Republicans have continued to advance legislation to expand access and accessibility of these plans, especially in the context of repeal and replace:

- The 2009 House Republican alternative to Obamacare included four improvements to HSAs[27]
- In 2009, Senators Tom Coburn and Richard Burr and Representatives Paul Ryan and Devin Nunes championed a bill expanding the use of HSAs[28]
- H.R. 2300, the health reform bill authored by Former Representative Price, includes 19 HSA provisions[29]
- The Republican Study Committee's proposal includes nearly two dozen HSA refinements[30]
- The Patient CARE Act, written by Senators Richard Burr and Orrin Hatch and Representative Fred Upton, contains several common sense reforms to expand access to HSAs[31]
- The consensus document, *A Better Way*, improves how HSAs operate and allowed for greater flexibility for individuals and families[32]
- The Ways and Means Committee advanced HSA changes in 2012[33] and 2015, including increases to the contribution levels to match the sum of the maximum out-of-pocket and deductible limit[34]

Making Health Savings Accounts More Flexible and Accessible

HSAs are tax-advantaged savings accounts, tied to a high-deductible health plan (HDHP), which can be used to pay for certain medical expenses. HSAs tied to HDHPs are popular and effective options that lower costs and empower individuals and families. It allows individuals and families to control their utilization of health care by providing incentives to shop around. This ultimately makes health care more affordable and increases quality.

Republicans believe that replacing Obamacare means expanding the number of individuals with HSAs as well as expanding how individuals and families can use their HSA. The policies include:

- **Increase maximum HSA contribution limit:** Under current law, in 2017, the maximum amount that can be contributed (both employer and individual contributions) to an HSA is $3,400 for self and $6,750 for a family. H.R. 1270 (114th Congress) and A Better Way significantly increase the contribution limits by allowing contributions to an HSA to equal the maximum out of pocket amounts allowed by law. For 2017, those amounts are $6,550 for self-only coverage and $13,100 for family coverage.

- **Allow Both Spouses to Make Catch-Up Contributions to the Same HSA:** HR. 1270 and A Better Way provide that if both spouses of a married couple are eligible for catch-up contributions and either has family coverage, the annual contribution limit that can be divided between them includes both catch-up contribution amounts. Thus, for example, they can agree that their combined catch-up contribution amount is allocated to one spouse to be contributed to that spouse's HSA. In other cases, as under present law, a spouse's catch-up contribution amount is not eligible for division between the spouses; the catch-up contribution must be made to the HSA of that spouse.

- **Administrative fix for expenses incurred prior to establishment of HSA:** H.R. 1270 and A Better Way provide that, if an HSA is established during the 60-day period beginning on the date that an individual's coverage under a high deductible health plan begins, then the HSA is treated as having been established on the date that such coverage begins for

purposes of determining if an expense incurred is a qualified medical expense. Thus, if a taxpayer establishes an HSA within 60 days of the date that the taxpayer's coverage under a high deductible health plan begins, any distribution from an HSA used as a payment for a medical expense incurred during that 60-day period after the high deductible health plan coverage began is excludible from gross income as a payment used for a qualified medical expense even though the expense was incurred before the date that the HSA was established.

Modernizing and Strengthening Medicaid to Protect the Most Vulnerable

The Medicaid program today is a critical lifeline for some of our nation's most vulnerable patients, as the program provides health care for children, pregnant mothers, the elderly, the blind, and the disabled. Medicaid currently covers nearly 72 million Americans—more than Medicare — and up to 98 million may be covered at any one point in a given year.

But today, the Medicaid safety net is under strain and not serving patients as well as it should. Many state Medicaid programs suffer from significant waste, fraud, and abuse, due to failures in state and federal oversight. Medicaid's incentives often lead States to offer more benefits, but cut payments to health care providers, which means low-income patients have less and less access to quality care. The result is nationally, only a portion of primary health care providers accept Medicaid beneficiaries— often with even fewer specialists accepting such patients.

On its current path, the Medicaid program is on unsustainable financial footing. This is not merely a fiscal issue, but an issue that jeopardizes the ability of federal and state government to take care of the most vulnerable who actually rely on the program. Today the program spends more general revenue than Medicare and is projected to cost more than defense spending next year.

Obamacare upset this historic balance and worsened Medicaid's spending problem. Obamacare provided enhanced federal funding for able-bodied adults. In 2017, the federal government is paying 95 cents of each expansion dollar, and that phases down to 90 cents in 2020 and beyond for the Medicaid expansion. This is unfair because the federal government is paying a greater portion of the cost of coverage for able-bodied adults, than for the disabled, elderly, and most vulnerable patients. This disparity also creates a perverse incentive for States when they have budget shortfalls and need to trim their Medicaid program. That's because it creates an incentive for States to reduce services or provider payments related to the most vulnerable patients, rather than able-bodied adults.

Repealing Obamacare's Unsustainable and Unfair Medicaid Expansion and Putting States In Charge

For too long, states have been treated like junior partners in the oversight and management of the Medicaid program – forced to go through long and cumbersome waiver processes just to make modest changes to their program. But governors and state legislatures are closer to patients in their states and know better than Washington bureaucrats where there are unmet needs and opportunities to cut down on waste, fraud, and abuse. House Republicans agree control should be returned back to states and Washington bureaucrats role in Medicaid reduced. Instead of simply expanding a broken program, Republicans instead want to put states in charge of their Medicaid programs and give them the tools, resources, and flexibility to address their unique needs

Under our proposal, Obamacare's Medicaid expansion for able-bodied adults enrollees would be repealed in its current form. There would be a period of stability to ensure we are not pulling the rug out from underneath States or patients. States that chose to expand their Medicaid programs under Obamacare could continue to receive enhanced federal payments for currently enrolled beneficiaries for a limited period of time. However, after a date certain, if states choose to keep their Medicaid programs open to new enrollees in the expansion population, states would be reimbursed at their *traditional* match rates for these beneficiaries. This ensures continuity of care

and coverage for low-income adults, but does not reward States that expanded Medicaid under Obamacare and allows individuals to cycle off the program into other coverage sources naturally. To provide equity, non -expansion States could be eligible to receive additional temporary resources for safety net providers during this time frame.

Putting Medicaid On a Budget By Reforming Medicaid Financing With a Per Capita Allotment

Back in 1995, then-President Bill Clinton called for reforming Medicaid with a per capita allotment. But today's Medicaid program is three times larger by enrollment and annual spending than it was when President Clinton first proposed per capita allotments. Caring for the most vulnerable patients must include not only ensuring they receive the care they need, but it must include ensuring programs like Medicaid that provide such care are sustainable. CBO has noted that Medicaid spending will continue to grow at a rate faster than the economy, so it would be irresponsible for Congress not to make targeted improvements to a program that is mathematically unsustainable.

Based on *A Better Way*, House Republicans are looking at transitioning Medicaid's financing to a per capita allotment.

This policy idea has been supported by Republicans in Congress and Republican presidential candidates. For example, House Committee on Energy and Commerce Former Chairman Fred Upton and Senate Finance Committee Chairman Orrin Hatch – both leaders of the congressional committees charged with overseeing the Medicaid program – have proposed per capita allotment reforms. A form of a per capita allotment policy was also supported by several Republican presidential candidates in 2015—including Senator Marco Rubio, Governor Scott Walker, former Governor Jeb Bush, and Governor Chris Christie.

Beginning at a year in the future, a total federal Medicaid allotment will be available for each state to draw down based on its federal medical assistance percentage (FMAP). The amount of the federal allotment will be the product of the state's per capita allotment for major beneficiary categories —aged, blind and disabled, children, and adults—multiplied by the number of enrollees in each group. The per capita allotments for each beneficiary group will be determined by each state's average Medicaid spending in a base year, grown by an inflationary index. Some federal payments, including disproportionate share hospital (DSH) payments, administrative costs, and others, are excluded from the total allotment.

Giving States the Choice to Receive a Medicaid Block Grant

Under this approach, States would also have the choice to receive federal Medicaid funding in the form of a block grant or global waiver. Block grant funding would be determined using a base year and would assume that states transition individuals currently enrolled in the Medicaid expansion out of the expansion population into other coverage. States would have flexibility in how Medicaid funds are spent, but would be required to provide required services to the most vulnerable elderly and disabled individuals who are mandatory populations under current law.

Repealing Obamacare's Medicaid DSH Cuts

Federal law requires states to make Medicaid DSH payments to hospitals treating large numbers of Medicaid and uninsured patients. The federal government provides each state an annual maximum DSH allotment. Obamacare reduced these DSH allotments.

House Republicans will repeal the Medicaid DSH cuts.

State Innovation Grants: The Next Generation of High Risk Pools

Before Obamacare, 34 states had high risk pools. Some were successful at providing relief for patients facing high costs and complex conditions. Building on the purpose of high risk pools, *A Better Way* envisions new and innovative State Innovation Grants. But instead of being tied to a separate pooling mechanism, these resources would give states sole flexibility to help lower the cost of care for some of their most vulnerable patients.

Here is how it works. These funds will help repair state markets damaged by Obamacare. States can use the pool to cut out-of-pocket costs, like premiums and deductibles. States may also use these resources to promote access to preventive services, like getting an annual checkup, as well as dental and vision care. And if they choose, states could funnel the money through a now-dormant high risk pool to achieve the same goals of the dated program.

Among other purposes, states could use these creative State Innovation Grants to:

- Reduce patients' out-of-pocket costs, like copayments, coinsurance, premiums, and deductibles
- Lower the cost of providing care to high utilization patients
- Stabilize the individual and small group markets
- Access preventative services, like an annual checkup
- Promote participation in private health care plans

Some may suggest State Innovation Grants would lead to enrollment caps or waiting lists – like certain high risk pools functioned prior to Obamacare. This is false. These new and innovative State Innovation Grants are designed to help vulnerable patients. Why would anyone allow them to potentially harm the very patients they are intended to help?

We all want a market that works. We all want patients to have access to high-quality, affordably-priced health coverage. To achieve this shared goal, states need well-functioning and stable marketplaces that encourage and incentivize patients to get covered and stay covered.

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The White House

Office of the Press Secretary

For Immediate Release

January 20, 2017

Executive Order Minimizing the Economic Burden of the Patient Protection and Affordable Care Act Pending Repeal

EXECUTIVE ORDER

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MINIMIZING THE ECONOMIC BURDEN OF THE PATIENT PROTECTION AND AFFORDABLE CARE ACT PENDING REPEAL

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. It is the policy of my Administration to seek the prompt repeal of the Patient Protection and Affordable Care Act (Public Law 111-148), as amended (the "Act"). In the meantime, pending such repeal, it is imperative for the executive branch to ensure that the law is being efficiently implemented, take all actions consistent with law to minimize the unwarranted economic and regulatory burdens of the Act, and prepare to afford the States more flexibility and control to create a more free and open healthcare market.

Sec. 2. To the maximum extent permitted by law, the Secretary of Health and Human Services (Secretary) and the heads of all other executive departments and agencies (agencies) with authorities and responsibilities under the Act shall exercise all authority and discretion available to them to waive, defer, grant exemptions from, or delay the implementation of any provision or requirement of the Act that would impose a fiscal burden on any State or a cost, fee, tax, penalty, or regulatory burden on individuals, families, healthcare providers, health insurers, patients, recipients of healthcare services, purchasers of health insurance, or makers of medical devices, products, or medications.

Sec. 3. To the maximum extent permitted by law, the Secretary and the heads of all other executive departments and agencies with authorities and responsibilities under the Act, shall exercise all authority and discretion available to them to provide greater flexibility to States and cooperate with them in implementing healthcare programs.

Sec. 4. To the maximum extent permitted by law, the head of each department or agency with responsibilities relating to healthcare or health insurance shall encourage the development of a free and open market in interstate commerce for the offering of healthcare services and health insurance, with the goal of achieving and preserving maximum options for patients and consumers.

Sec. 5. To the extent that carrying out the directives in this order would require revision of regulations issued through notice-and-comment rulemaking, the heads of agencies shall comply with the Administrative Procedure Act and other applicable statutes in considering or promulgating such regulatory revisions.

Sec. 6. (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or

(ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

DONALD J. TRUMP

THE WHITE HOUSE,
January 20, 2017.

https://www.whitehouse.gov/the-press-office/2017/01/2/executive-order-minimizing-economic-burden-patient-protection-and

http://tfah.org/reports/prevention-fund-state-facts-2017/release.php?stateid=WI

Reports

Wisconsin Could Lose More than $60 Million to Fight Health Epidemics over Five Years if the ACA and Prevention and Public Health Fund are Repealed

Washington, D.C., January 17, 2017 -- The state of Wisconsin would lose at least $64,120,145 to counter health crises over the next 5 years if the Prevention and Public Health Fund (PPHF), part of the Affordable Care Act (ACA), were repealed, according to an analysis by the Trust for America's Health (TFAH). The U.S. Centers for Disease Control and Prevention (CDC) stands to lose 12 percent of its annual budget.

In total, states would end up losing more than $3 billion over the next five years - from grants and programs supported by the Prevention Fund.

"CDC is the world's leading public health authority and the front line against major threats to the health and well-being of the American people-such as disease outbreaks, prescription drug misuse and diabetes," said John Auerbach, President and CEO of TFAH. "Losing the Prevention Fund would result in diminished support for public health in every state, undermining their ability to fight epidemics and keep people safe. The costs of these vital public health efforts will either be passed along to states or the efforts will be eliminated-resulting in more people becoming sick and higher healthcare costs."

The $890 million gap in CDC's annual funding created by eliminating the Prevention Fund could not be filled under current laws without drawing funds away from other Department of Labor, Education and Health and Human Services programs. Among activities supported directly by the Prevention Fund are grants to states for infectious disease control, resources through the Preventive Health and Health Services Block Grant and other core public health programs which, if cut, would increase illness, injuries and preventable deaths.

If the Prevention Fund is eliminated, the impact will be felt at the local, state and federal levels as public health organizations respond to several major health crises that are on the rise, such as:

- **Health Security Funds for Disease Outbreaks, Disasters and Bioterrorism**: With the exception of the one-time-only funding for Ebola and Zika, Wisconsin's core funding for preparedness and response to health emergencies have been cut by more than one-third in the past decade, with the state now only receiving $10,844,792 per year for these protections. CDC has responded to more than 750 health emergencies in the past two years. Infectious diseases cost the country more than $120 billion per year, and that cost grows exponentially when major new diseases strike.
- **Prescription Painkiller and Heroin Use:** Deaths from opioids grew by 130.6 percent in Wisconsin in the past 10 years. Nationally, more than 2 million Americans misuse prescription drugs, and nearly a half million are addicted to heroin, costing the country more than $55 billion a year in healthcare, workplace and criminal justice spending. CDC plays a critical role by providing support to states and healthcare providers to monitor and control the inappropriate prescribing of opioids.
- **Obesity and Diabetes:** 30.7 percent of adults in Wisconsin are obese and 13.4 percent of children are overweight or obese. Nationally this contributes to more than $200 billion in direct health costs. One in

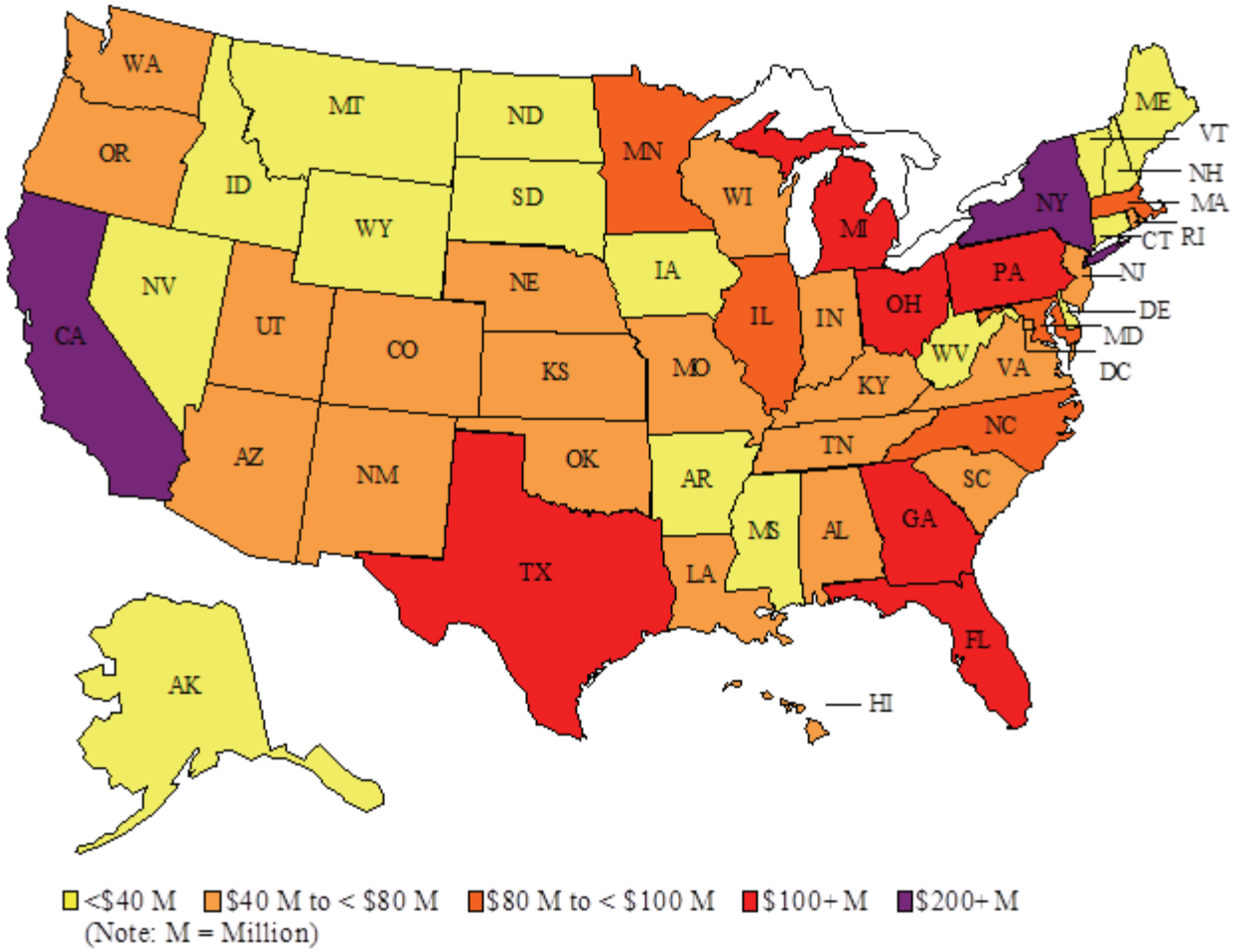
three children could develop diabetes in their lifetime, and one in four are not healthy enough to serve in the military by the ages of 17 to 24.

- **Declining Life Expectancy:** Life expectancy in the United States has declined for the first time in two decades. While death rates are higher among Blacks and other people of color, death rates have increased the fastest (nationally, by 10 percent since 1999) among middle-aged White men and women (ages 45 to 54), whose death rates have increased by 1 percent in Wisconsin since 1999. Increasing death rates among middle-aged Whites are the highest in West Virginia, Mississippi, Oklahoma, Tennessee, Kentucky, Alabama and Arkansas.

Wisconsin: At-Risk for Immediate Losses Use of CDC Prevention Funds in the State Annually	
Annual Prevention Fund Grants to States (based on FY 2016)	$12,824,029
Vaccines to Needy Children and Adults (based on FY 2015)	$2,904,083
Core State-Health Needs (identified by state department of health) (based on FY 2015)	$3,055,241
Infectious Disease Prevention and Healthcare-Associated Infections (based on FY 2015)	$1,100,012
Chronic Disease Prevention including diabetes, heart disease and stroke, and tobacco cessation (based on FY 2016)	$1,726,805

Amounts each state stands to lose over the next 5 years if the Prevention Fund was repealed (based on fiscal year 2016 grants to state) include:

Prevention and Public Health Fund: Potential Loss of Funding in The Next Five Years, Based on Fiscal Year 2016 Awards Granted by CDC to States



State	Potential Five Year PPHF Loss, Based on FY 2016 Funding
Alabama	$44,867,115
Alaska	$22,312,985
Arizona	$46,840,075
Arkansas	$29,599,945
California	$307,768,530

State	Potential Five Year PPHF Loss, Based on FY 2016 Funding
Colorado	$44,671,845
Connecticut	$36,728,860
Delaware	$12,462,820
District of Columbia	$51,533,080
Florida	$101,864,250
Georgia	$100,421,755
Hawaii	$40,025,880
Idaho	$22,428,585
Illinois	$93,084,850
Indiana	$41,381,450
Iowa	$35,630,210
Kansas	$45,329,065
Kentucky	$40,687,570
Louisiana	$45,111,030
Maine	$27,588,000

State	Potential Five Year PPHF Loss, Based on FY 2016 Funding
Maryland	$84,876,045
Massachusetts	$88,112,505
Michigan	$110,739,075
Minnesota	$80,759,870
Mississippi	$31,276,855
Missouri	$53,853,865
Montana	$24,831,145
Nebraska	$47,957,625
Nevada	$19,174,580
New Hampshire	$24,967,020
New Jersey	$60,558,365
New Mexico	$43,257,135
New York	$207,587,230
North Carolina	$85,917,320
North Dakota	$14,975,550

State	Potential Five Year PPHF Loss, Based on FY 2016 Funding
Ohio	$114,951,125
Oklahoma	$46,585,755
Oregon	$46,462,400
Pennsylvania	$111,991,355
Rhode Island	$40,238,960
South Carolina	$56,576,525
South Dakota	$18,732,825
Tennessee	$67,537,910
Texas	$147,214,850
Utah	$49,396,510
Vermont	$14,637,565
Virginia	$77,104,520
Washington	$70,060,890
West Virginia	$22,669,320
Wisconsin	$64,120,145

State	Potential Five Year PPHF Loss, Based on FY 2016 Funding
Wyoming	$11,024,970

Trust for America's Health is a non-profit, non-partisan organization dedicated to saving lives by protecting the health of every community and working to make disease prevention a national priority.www.healthyamericans.org

ALICE: A STUDY OF FINANCIAL HARDSHIP IN WISCONSIN

LIVE UNITED®

2018 REPORT

ALICE® is an acronym for Asset Limited, Income Constrained, Employed.

The United Way *ALICE Project* is a collaboration of United Ways in Connecticut, Florida, Hawai'i, Idaho, Indiana, Iowa, Louisiana, Maryland, Michigan, New Jersey, New York, Ohio, Oregon, Texas, Virginia, Washington, and Wisconsin.

United Way

EXECUTIVE SUMMARY

In 2016, 872,561 households in Wisconsin — 37.5 percent — could not afford basic needs such as housing, child care, food, transportation, and health care.

This United Way ALICE Report for Wisconsin provides the most comprehensive look at the population called **ALICE** — an acronym for **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed. ALICE households have incomes above the Federal Poverty Level (FPL) but struggle to afford basic household necessities. Since it is well established that economic conditions worsened during the Great Recession, this Report focuses on the recovery that started in 2010 and looks at how households have fared since.

Despite recent reports of overall improvement in employment and gains in median incomes, the economic recovery in Wisconsin has been uneven. Many families continue to face challenges from low wages, depleted savings, and the increasing cost of basic household goods. The total number of Wisconsin households that cannot afford basic needs increased 5 percent between 2010 and 2016.

This Report also shows what has changed in Wisconsin since the first United ay ALICE Report for Wisconsin was published two years ago. It updates the cost of basic needs in the **Household Survival Budget** for each county in Wisconsin, and the number of households earning below the amount needed to afford that budget (**the ALICE Threshold**). The Report delves deeper into county and municipal data and looks at the demographics of ALICE and poverty-level households by race/ethnicity, age, and household type to reveal variations in hardship that are often masked by state averages. Finally, the Report highlights emerging trends that will affect ALICE households in the future.

For the period of 2010 to 2016, the data reveals an ongoing struggle for ALICE households and a range of obstacles to achieving financial stability:

- **The extent of hardship:** Of Wisconsin's 2,326,846 households, 11.7 percent lived in poverty in 2016 and another 25.8 percent were ALICE households. Combined, 37.5 percent (872,561 households) had income below the ALICE Threshold, an increase of 5 percent since 2010.

- **The basic cost of living:** The cost of basic household expenses in Wisconsin increased steadily to $61,620 for a family of four (two adults with one infant and one preschooler) and $19,848 for a single adult — significantly higher than the FP of $24,300 for a family of four and $11,880 for a single adult. The cost of the family budget increased by 18 percent from 2010 to 2016 — higher than the national rate of inflation of 9 percent during those years.

- **Jobs:** Low-wage jobs continued to dominate the employment landscape in Wisconsin, with 62 percent of all jobs paying less than $20 per hour. Although unemployment rates fell, wages remained low for many occupations. With more contract work and on-demand jobs, job instability also increased, making it difficult for ALICE workers to meet regular monthly expenses or to save.

- **The role of public assistance:** Public and private assistance continued to provide support to many living in poverty or earning slightly above the FPL, but it provided less support to ALICE households whose income is above eligibility levels. Spending on health care and health insurance outpaced spending in other budget areas; there remained large gaps in assistance, especially in housing and child care.

- **Emerging trends:** Going forward, several trends could change the economic landscape for ALICE families:

- *The Changing American Household* — Shifting demographics, including the rise of the millennials, the aging of the baby boomers, and domestic and foreign migration patterns, are having an impact on who is living together in households and where and how people work. These changes, in turn, influence the demand for goods and services, ranging from the location of housing to the provision of caregiving.

- *Market Instability* — Within a global economy, economic disruptions, natural disasters, and technological advances in other parts of the world trigger rapid change across U.S. industries and cause shifts in supply and demand. This will increasingly destabilize employment opportunities for ALICE workers.

- *Growing Health Inequality* — With the cost of health care outpacing the ability of many households to afford it, there will be increasing disparities in health according to income. The societal costs of having large numbers of U.S. residents in poor health will also grow.

Using the best available information on those who are struggling, this Report offers an enhanced set of tools for stakeholders to measure the real challenges ALICE households face in trying to make ends meet. The FPL gives an outdated calculation of the number of people struggling; that in turn distorts the identification of problems related to poverty, misguides policy solutions, and raises questions of equity, transparency, and fairness in the allocation of resources. The United Way *ALICE Project* has developed new resources in order to move beyond stereotypes and judgments of "the poor," and to instead encourage the use of more accurate data to inform programmatic and policy solutions for these households and their communities.

GLOSSARY

ALICE is an acronym that stands for **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed — households with income above the Federal Poverty Level but below the basic cost of living. A household consists of all the people who occupy a housing unit. In this report, households do not include those living in group quarters such as a dorm, nursing home, or prison.

The Household Survival Budget calculates the actual costs of basic necessities (housing, child care, food, transportation, health care, and a smartphone) in Wisconsin, adjusted for different counties and household types.

The ALICE Threshold is the average income that a household needs to afford the basic necessities defined by the Household Survival Budget for each county in Wisconsin. (Unless otherwise noted in this Report, households earning below the ALICE Threshold include both ALICE and poverty-level households.)

The Household Stability Budget is greater than the basic Household Survival Budget and reflects the cost for household necessities at a modest but sustainable level. It adds a savings category and an expanded technology category (smartphone and basic home internet), and it is adjusted for different counties and household types.

The ALICE Income Assessment is the calculation of all sources of income, resources, and assistance for ALICE and poverty-level households. Even with assistance, the Assessment reveals a shortfall, or Unfilled Gap, between what these households bring in and what is needed for them to reach the ALICE Threshold.

DATA & METHODOLOGY

WHAT'S NEW

Every two years, the United Way *ALICE Project* engages a national Research Advisory Committee of external experts to scrutinize the ALICE methodology and sources and ensure that the best local data is presented. The focus remains on the county level because state averages mask significant di ferences between counties. For example, the percent of households below the ALICE Threshold in Wisconsin ranges from 27 percent in Ozaukee County to 62 percent in Menominee County.

This rigorous process results in enhancements to the methodology and new ideas for how to more accurately measure and present data on financial hardship. While these changes impact specifi calculations, the overall trends have remained the same: ALICE represents a large percentage of our population, and these households are struggling to meet their basic needs. To ensure consistency and accuracy in change-over-time comparisons in this Report, data has been recalculated for previous years (2010–2014).

For a more detailed description of the methodology and sources, see the Methodology Overview on our website, UnitedWayALICE.org.

For this Report, the following improvements have been incorporated:

> **The cost of a smartphone has been added to the Household Survival Budget:** Technology is increasingly essential to live and work in the modern economy, and smartphone use in particular has become an expectation for employment in many contexts. Therefore, the cost of a basic smartphone plan for each adult in the household has been added to the Household Survival Budget. The Household Stability Budget, which already included the cost of a smartphone for each adult in the family, now includes basic home internet service as well.
>
> **The source for state taxes has been updated:** In order to provide greater consistency across states and reduce the complexity of calculations while maintaining accuracy, the Tax Foundation's individual income tax rates and deductions for each state are used instead of state-level tax sources. Each state treasury's *1040: Individual Income Tax, Forms and Instructions* is still used to confirm state tax deductions and exemptions, such as the Personal Tax Credit and Renter's Credit.
>
> **Change-over-time ranges have shifted:** The first United ay ALICE Reports measured change before and after the Great Recession, in 2007 and 2010. This update focuses on the recovery, measuring change from the baseline of 2010 followed by the even years since — 2012, 2014, and 2016 — and highlighting trends since the end of the Recession. The 2016 results will also serve as an important baseline from which to measure the effects of the rollout of the Affordable Care Act (ACA) in 2014, as well as new policies implemented under the Trump administration.
>
> **Additional detail is provided at the sub-county level:** With the development of our website, there is more ALICE data available at the local or sub-county level, including, place, zip code, Public Use Microdata Area (PUMA), and Congressional District.

What remains the same: This Report examines issues surrounding ALICE households from different angles to draw the clearest picture with the range of data available. Sources include the American Community Survey, the U.S. Department of Housing and Urban Development, the U.S. Department of Agriculture, the Bureau of Labor Statistics at the U.S. Department of Labor, the Internal Revenue Service, the Tax Foundation, and these agencies' Wisconsin state counterparts, as well as Supporting Families Together Association (the state's umbrella organization for child care resource and referral agencies) and the Wisconsin Department of Children and Families. State, county, and municipal data is used to provide different lenses on ALICE households. The data are estimates; some are geographic averages, others are one- or five-year averages depending on population size. In this Report, many percentages are rounded to whole numbers for ease of reading. In some cases, this may result in percentages totaling 99 or 101 percent instead of 100 percent.

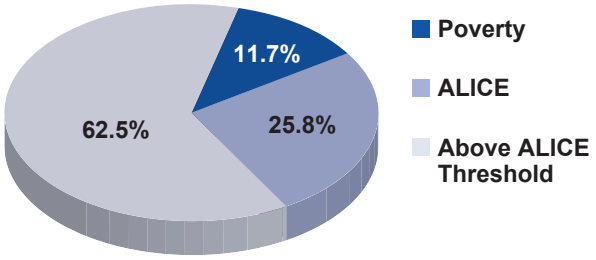
AT-A-GLANCE: WISCONSIN

2016 Point-in-Time Data

Population: 5,778,709 | **Number of Counties:** 72 | **Number of Households:** 2,326,846

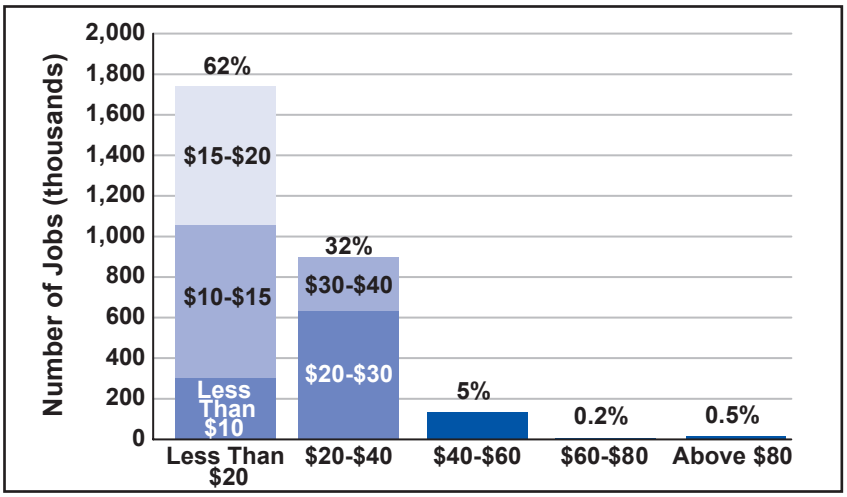
How many households are struggling?

ALICE, an acronym for **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed, are households that earn more than the Federal Poverty Level (FPL), but less than the basic cost of living for the state (the ALICE Threshold). Of Wisconsin's 2,326,846 households, 271,935 earn below the FPL (11.7 percent) and another 600,626 (25.8 percent) are ALICE households.



How much does ALICE earn?

In Wisconsin, 62 percent of jobs pay less than $20 per hour, with more than half of those paying less than $15 per hour. Another 32 percent of jobs pay between $20 and $40 per hour. Less than 6 percent of jobs pay more than $40 per hour.



What does it cost to afford the basic necessities?

Despite low national inflation during the recovery (9 percent from 2010 to 2016), the bare-minimum Household Survival Budget increased by 18 percent for a family and 24 percent for a single adult. Affording only a very modest living, this budget is still significantly more than the Federal Poverty Level of $ 1,880 for a single adult and $24,300 for a family of four.

Household Survival Budget, Wisconsin Average, 2016

	SINGLE ADULT	2 ADULTS, 1 INFANT, 1 PRESCHOOLER
Monthly Costs		
Housing	$492	$735
Child Care	$–	$1,231
Food	$158	$525
Transportation	$349	$698
Health Care	$215	$802
Technology*	$55	$75
Miscellaneous	$150	$467
Taxes	$235	$602
Monthly Total	$1,654	$5,135
ANNUAL TOTAL	$19,848	$61,620
Hourly Wage*	*$9.92*	*$30.81*

**New to budget in 2016*

***Full-time wage required to support this budget*

AT-A-GLANCE: WISCONSIN

Wisconsin Counties, 2016		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Adams	7,950	45%
Ashland	6,670	46%
Barron	19,017	43%
Bayfiel	6,798	37%
Brown	104,804	34%
Buffalo	5,707	35%
Burnett	7,308	42%
Calumet	18,839	29%
Chippewa	24,973	36%
Clark	12,732	42%
Columbia	23,019	30%
Crawford	6,652	42%
Dane	217,506	31%
Dodge	34,648	39%
Door	13,023	32%
Douglas	18,538	43%
Dunn	16,445	42%
Eau Claire	41,312	42%
Florence	1,958	38%
Fond du Lac	40,815	31%
Forest	3,940	43%
Grant	19,353	43%
Green	14,772	34%
Green Lake	7,939	41%
Iowa	9,692	34%
Iron	2,954	41%
Jackson	8,066	42%
Jefferson	32,378	37%
Juneau	9,978	45%
Kenosha	64,386	38%
Kewaunee	8,211	32%
La Crosse	47,086	35%
Lafayette	6,692	37%
Langlade	8,521	42%
Lincoln	12,546	34%
Manitowoc	34,234	34%
Marathon	55,147	35%
Marinette	18,380	41%

Wisconsin Counties, 2016		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Marquette	6,328	38%
Menominee	1,215	62%
Milwaukee	381,318	48%
Monroe	17,813	38%
Oconto	15,440	36%
Oneida	14,965	41%
Outagamie	72,994	30%
Ozaukee	35,417	27%
Pepin	2,948	40%
Pierce	15,101	42%
Polk	18,188	34%
Portage	28,009	34%
Price	6,676	36%
Racine	75,921	40%
Richland	7,506	38%
Rock	63,222	42%
Rusk	6,245	45%
Sauk	25,293	42%
Sawyer	7,488	42%
Shawano	16,940	40%
Sheboygan	47,652	34%
St. Croix	33,460	31%
Taylor	8,751	38%
Trempealeau	11,840	37%
Vernon	11,843	39%
Vilas	10,648	39%
Walworth	40,039	39%
Washburn	7,151	39%
Washington	53,090	29%
Waukesha	156,503	31%
Waupaca	21,412	36%
Waushara	9,749	41%
Winnebago	69,943	32%
Wood	32,749	34%

Sources: Point-in-Time Data: *American Community Survey, 2016.* ***ALICE Demographics:*** *American Community Survey and the ALICE Threshold, 2016.* ***Wages:*** *Bureau of Labor Statistics, 2016.* ***Budget:*** *U.S. Department of Housing and Urban Development; U.S. Department of Agriculture; Bureau of Labor Statistics; Internal Revenue Service; Tax Foundation; and Wisconsin Department of Children and Families, 2016.*

ALICE IN EAU CLAIRE COUNTY

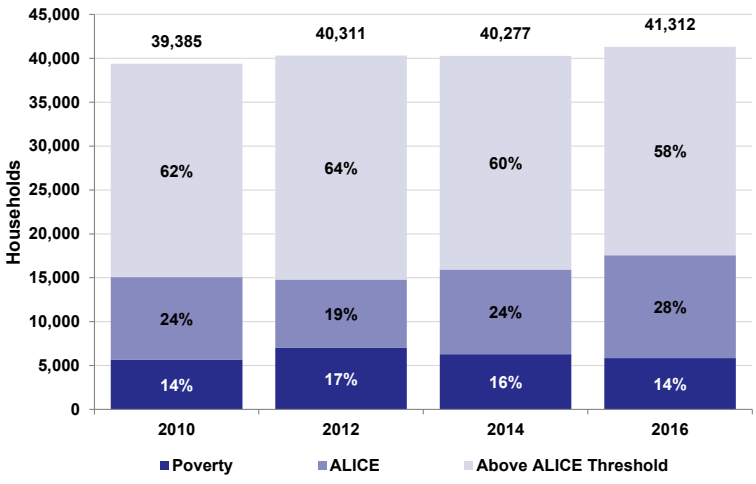
2016 Point-in-Time Data

Population: 102,965 • **Number of Households:** 41,312
Median Household Income: $49,821 (state average: $56,811)
Unemployment Rate: 4% (state average: 4.1%)
ALICE Households: 28% (state average: 25.8%) • **Households in Poverty:** 14% (state average: 11.7%)

How has the number of ALICE households changed over time?

ALICE is an acronym for **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed – households that earn more than the Federal Poverty Level, but less than the basic cost of living for the county (the ALICE Threshold). Combined, the number of ALICE and poverty-level households equals the total population struggling to afford basic needs. The number of households below the ALICE Threshold changes over time; households move in and out of poverty and ALICE status as their circumstances improve or worsen. The recovery, which started in 2010, has been uneven across the state. Conditions have improved for some families, but with rising costs, many still find themselves struggling.

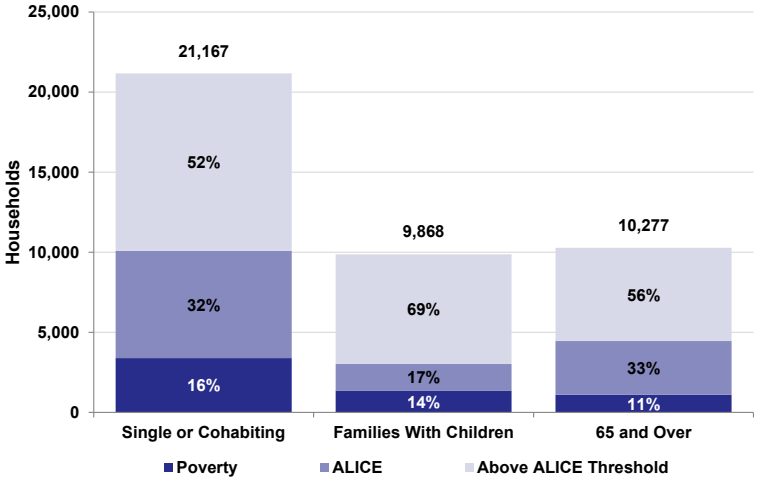
Households by Income, 2010 to 2016



What types of households are struggling?

The way Americans live is changing. There are more different family and living combinations than ever before, including more adults living alone, with roommates, or with their parents. Families with children are changing: There are more non-married cohabiting parents, same-sex parents, and blended families with remarried parents. The number of senior households is also increasing. Yet all types of households continue to struggle: ALICE and poverty-level households exist across all of these living arrangements.

Household Types by Income, 2016



Why do so many households struggle?

The cost of living continues to increase…

The Household Survival Budget reflects the bare minimum that a ousehold needs to live and work today. It does not include savings for emergencies or future goals like college. In 2016, costs were well above the Federal Poverty Level of $11,880 for a single adult and $24,300 for a family of four. Family costs increased by 18 percent statewide from 2010 to 2016, compared to 9 percent inflation na ionally.

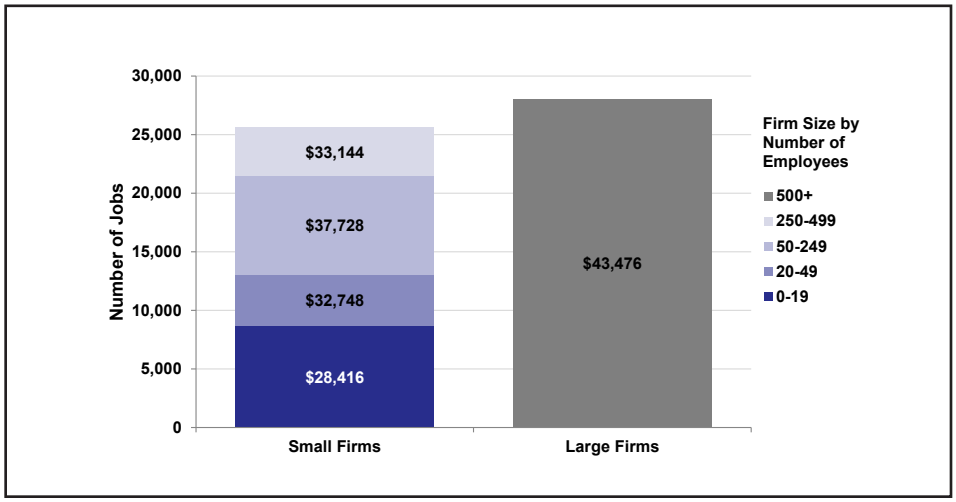
Household Survival Budget, Eau Claire County

	SINGLE ADULT	2 ADULTS, 1 INFANT, 1 PRESCHOOLER
Monthly Costs		
Housing	$466	$735
Child Care	$–	$1,294
Food	$158	$525
Transportation	$349	$697
Health Care	$214	$800
Technology	$55	$75
Miscellaneous	$147	$475
Taxes	$225	$627
Monthly Total	$1,614	$5,228
ANNUAL TOTAL	$19,368	$62,736
Hourly Wage	*$9.68*	*$31.37*

…and wages lag behind

Employment and wages vary by location; firms generally pay higher wages in areas with a higher cost of living, although those wages still do not always cover basic needs. Employment and wages also vary by firm size: Large firms ten to offer higher wages and more job stability; smaller businesses can account for more jobs overall, especially in rural areas, but may pay less and offer less stability. Medium-size firms pay more but typically employ the fewest workers

Private-Sector Employment by Firm Size With Average Annual Wages, 2016



*Sources: **2016 Point-in-Time Data**: American Community Survey. **ALICE Demographics:** American Community Survey; the ALICE Threshold. **Budget:** U.S. Department of Housing and Urban Development; U.S. Department of Agriculture; Bureau of Labor Statistics; Internal Revenue Service; Tax Foundation; and Wisconsin Department of Children and Families, 2016.*

Eau Claire County, 2016

Town	Total HH	% ALICE & Poverty
Altoona city	2,876	36%
Augusta city	602	45%
Bridge Creek	572	44%
Brunswick	632	28%
Clear Creek	291	20%
Drammen	296	29%
Eau Claire city	26,501	46%
Fairchild	131	36%
Fairchild village	251	67%
Fall Creek village	560	44%
Lincoln	389	25%
Ludington	416	24%
Otter Creek	170	26%
Pleasant Valley	1,063	18%
Seymour	1,252	29%
Union	1,021	31%
Washington	3,005	29%
Wilson	174	40%

Note: Municipal-level data on this page is 5-year averages for Census Places and County Subdivisions. Totals will not always match county-level numbers because some county-level data is 1-year estimates.

Data to Action Toolkit

Getting Data off the Shelf and into the Community

Eau Claire City-County Health Department

Medical College of Wisconsin

United Way of the Greater Chippewa Valley

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For an up-to-date downloadable version of this toolkit, please visit www.echealthycommunities.org.
For reprints, please contact the Eau Claire City-County Health Department at 715-839-4718.

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Executive Summary
Data to Action Toolkit

A Community Health Assessment (CHA) is a recognized precursor to developing a Community Health Improvement Plan (CHIP) aimed at improving the health status of a community. CHA is a process that monitors the pulse of a community's health by systematically collecting and analyzing information to build an accurate profile of the health of the community. Community leaders use this health profile to develop Community Health Improvement Plans and interventions, evaluate interventions, educate policymakers and inform residents about the health status of their community. Population health data availability is presumed to be a precursor to health improvement. **However, many organizations face the challenge of moving from the identification of health problems in the CHA to true action to improve health.**

> *Many organizations are asking…how can communities effectively use community health data to achieve their goals and objectives for improved health?*

This toolkit is designed to help communities answer the following questions so they can answer the big question about how communities can use health data to move to action.

- ✓ Who should access health data in the community and use it in their work? How will key stakeholders be identified?
- ✓ What knowledge do you want to learn from the identified key stakeholders about their use of health data for decision-making?
- ✓ How will your organization engage key stakeholders to learn about and encourage their use of health data for decision-making?

This toolkit is divided into four sections: Engagement, Gathering Information, Interpreting the Data and Evaluation. Each section provides an overview and describes how the grant team completed the activities for the project. Appendices include tools used as part of the grant project. Please read through the grant team experience, think about how it could work in your community, and adapt the resources as needed. The goal in disseminating the results of this project is to help other communities move data to action.

This research was made possible by a grant funded by the Advancing a Healthier Wisconsin Endowment at the Medical College of Wisconsin. Over the past two and a half years, a team made up of representatives from the Eau Claire City-County Health Department, Medical College of Wisconsin, United Way of the Greater Chippewa Valley and many other community partners were funded to identify evidence and best practice around these questions in Eau Claire County. During the grant period, the team:

- Completed a literature review to see if there was existing best practice on moving 'data to action'.
- Held focus groups and key informant interviews with three key stakeholder groups (media, policy makers, and coalition members) to learn perspectives on moving from data gathering to policy and practice change.
- Held Health Data Summit and Community Meeting with the three key stakeholder groups to increase usage and value of population health data using the Healthy Communities website.
- Evaluated impact of the grant project and created a blueprint for other communities to follow.

This grant team hopes that your organization finds it helpful to read through their experience gathering data from community members and evaluating how interventions worked in the Eau Claire community.

Summary of Healthier Wisconsin Partnership Program Grant Project

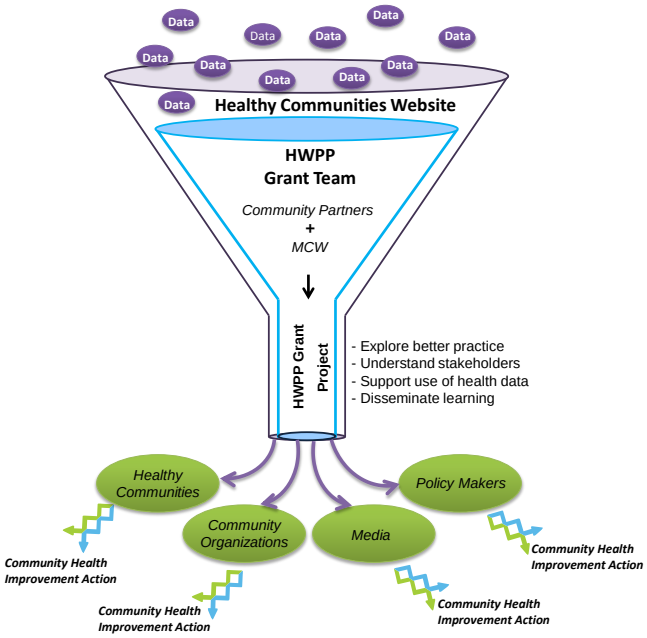
The Eau Claire City-County Health Department (ECCCHD), Medical College of Wisconsin (MCW) and United Way of the Greater Chippewa Valley (UWGCV) received a two year research grant from the Advancing a Healthier Wisconsin Endowment at the Medical College of Wisconsin to research how the Eau Claire Community can work with key stakeholders to move from 'data to action'.

Grant Project Goal: Research how individuals and organizations can use community health assessment data via the Eau Claire Healthy Communities website (www.echealthycommunities.org) to create action through policy and practice change. This grant supported work to ensure the website is not a "static" data resource that partners may use to simply update their community health assessment, but rather a 'platform' for community partners where can find health data and use it to inspire individual, community and system action. *The Eau Claire Healthy Communities website is sponsored by five local organizations that have a strong commitment to using health data to drive community health improvement planning. The website was launched in November 2012 and is being use as the 'platform' of this grant team project to help deliver the message of the importance of using data to drive decisions.*

Grant Project Partners: Eau Claire City-County Health Department, Eau Claire Healthy Communities, HSHS Sacred Heart Hospital, Marshfield Clinic, Mayo Clinic Health System, Medical College of Wisconsin and United Way of the Greater Chippewa Valley.

Key Stakeholders: Local, Regional and State Policymakers, Media and Eau Claire Healthy Communities members* were the key stakeholders or target audiences of the project.

*Over 200 diverse partners from across the county participate in Eau Claire Healthy Communities, a community-based coalition developed to create and maintain healthy communities. Together they work to better align efforts among community partners and create a strategic framework for collaborative local health improvement activities.



Over the two-year period, the grant team went through the following processes to complete the grant project.

Engagement and Interpreting the Data: Grant team obtained key stakeholder perspectives on moving from data gathering to policy and practice change. This included key informant interviews and focus groups with key stakeholders. This information was interpreted into key themes about health data usage of stakeholders.

Gathering Information & Intervening: Researched to see if there was existing best practice on moving 'data to action'. Based on results of the engagement process, the grant team developed pilot interventions with three key stakeholder groups to increase usage and value of population health data using the Healthy Communities website as the 'platform'.

Evaluation: Evaluated the pilot interventions and created a blueprint for other communities to follow. The results of this project were shared with additional communities through presentations and the development of this toolkit.

Engagement

Community engagement is a key step in many public health processes. Even though it is a familiar process, communities often struggle with effective community engagement. Two important steps in the engagement process are identifying who are the stakeholders and then how they will be engaged.

1. First, it is important to take time to identify a clear purpose and scope of community engagement. Think about what your organization is hoping to achieve and then who will help achieve those purposes. This will help identify the target audience or key stakeholders of your project.

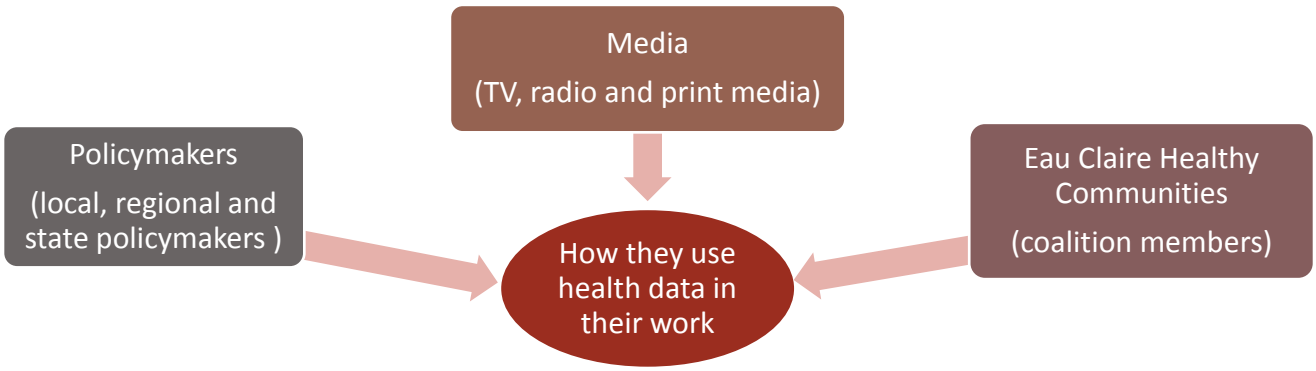
2. After the key stakeholders have been selected, the next step is to decide how to engage them. Note there are many ways to engage stakeholders. Keep in mind that engagement means that doing the research or project is done *with* the community and not *to* the community. Your organization will need to decide how to engage the stakeholders by thinking through:
   - ✓ Level of stakeholder participation
   - ✓ Stage in process that they will be engaged
   - ✓ Best ways to communicate with them
   - ✓ Special needs or barriers of the key stakeholder (i.e. time of day for the events, format and content of communication materials, and location of the venue)

Important to note: Participants in any stage of engagement should be informed of the next stages of the process, how their feedback will be used and if there are future opportunities for engagement. This helps reinforce participation and encourage stakeholders to continue to be active as the project moves forward.

What we did:

Who did the grant team choose to engage as their key stakeholder groups?

The Eau Claire grant team chose to engage three stakeholder groups for grant activities: policymakers, media, and Eau Claire Healthy Communities coalition members. Each group contributed to the purpose of the grant project of learning how the selected stakeholder groups use health data in their work. The grant team chose to engage each stakeholder group for specific reasons.



*Besides media, policymakers, and coalition members, other audiences that you may be interested to engage include: healthcare providers, school boards, parents, grant funders, chamber of commerce, educators and city planning.

Below is an overview of the three key stakeholders groups and why they were engaged in activities.

Why Engage Policymakers?

In order to foster the concept of **Health in All Policies**, policymakers need readily available, valid, and trusted health data when engaging in discussions and establishing policy in a community.

Why Engage Media?

The media can be an effective vehicle to disseminate important health information to the general public. It is vital that media sources use accurate, valid data in their news stories and reporting.

Why Engage Eau Claire Healthy Communities Members?

Eau Claire Healthy Communities is a coalition of key stakeholders working together to improve the health of the community. These public health system partners need to be supported with access to current, valid data for planning, program evaluation, and securing additional financial resources.

How did the grant team engage their key stakeholder groups?

To get policymakers, media and Eau Claire Healthy Communities members invested in the grant project, the team made their "ask" relevant to them. The grant team communicated to the key stakeholders that they wanted to find out how they use health data, so they could ultimately make each of the key stakeholder's job of researching health data easier.

Each participant was informed about the grant project and asked to participate in the project either through a personal conversation, an email invitation or through discussion at an Eau Claire Healthy Communities coalition meeting.

Below are a few tips that helped to ensure engagement from key stakeholders.

- *Personal conversations and invites*
  - After making the "ask" to participate, a follow up email with details of the event was sent.
  - An initial email request to participate in grant activities was sent out to all contacts. If no response was received, a follow up email from a person that had a connection with them was sent. The person emailed a short message of the importance of this research project along with the original email invitation that was sent to them. This was an effective method to increase participation.

- *Email invites to participate in grant activities*
  - Follow up emails were sent before the event to remind participants of their commitment to engage in the project.
  - **See Appendix A and B for sample telephone and email invitations to participate in either a focus group or key informant interview.**

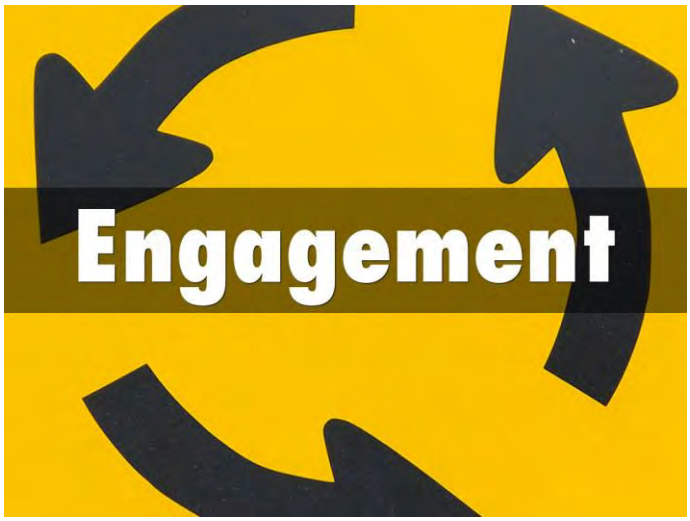
- *Conversations about health data at health coalition meetings*
  - Eau Claire Healthy Communities is our local community-based coalition developed to create and maintain healthy communities. As part of the Healthy Communities Council bi-monthly meetings, updates were shared about the Healthy Communities website and research project throughout the grant project to personally invite them to participate in events and to keep them engaged in the conversation around 'data to action'.

Activity

Think about who your organization wants to access health data in your community and use it in their work.

At what stage of the grant project did the grant team engage their stakeholders?

Engagement took place throughout the entire grant period of two years. Focus groups and key informant interviews were held at the beginning of the grant period, yet engagement didn't end after those activities. The grant team continued to email future opportunities (a community training and a community meeting) to maintain participant involvement. They also continued to survey participants about their usage of the Eau Claire Healthy Communities website. Eau Claire Healthy Communities members received updates on grant progress throughout the two years at meetings. At the end of the grant project, the toolkit was distributed to all participants so they would see how their information was used.



Additional Resources about Community Engagement

County Health Rankings and Roadmaps. Community Action Center. http://www.countyhealthrankings.org/roadmaps/action-center

University of Kansas Community Toolbox. http://ctb.ku.edu/en

Gathering Information and Intervening

Gathering information simply means to collect data about the research question and finding ways other organizations or communities have addressed it. Asking stakeholders is another way to gather information. This helps plan the research project.

To start the process of data collection, it is important to look and see if there is existing information already collected about the topic, whether that means doing a literature review or connecting with others in the community that may already be doing the same research. This secondary data, or data that has already been collected by others, helps to avoid reinventing the wheel and getting a better understanding of what research is already available on this topic. Secondly, decide on how information will be gathered from key stakeholders. It may be beneficial to gather primary data from key stakeholders to answer questions that cannot be answered by secondary sources, or to gain a better understanding of a particular topic.

A literature review helps determine if research is relevant and worth doing by answering questions like:

-What are you trying to answer? Why?

-Has anyone done something similar?

-What is already known?

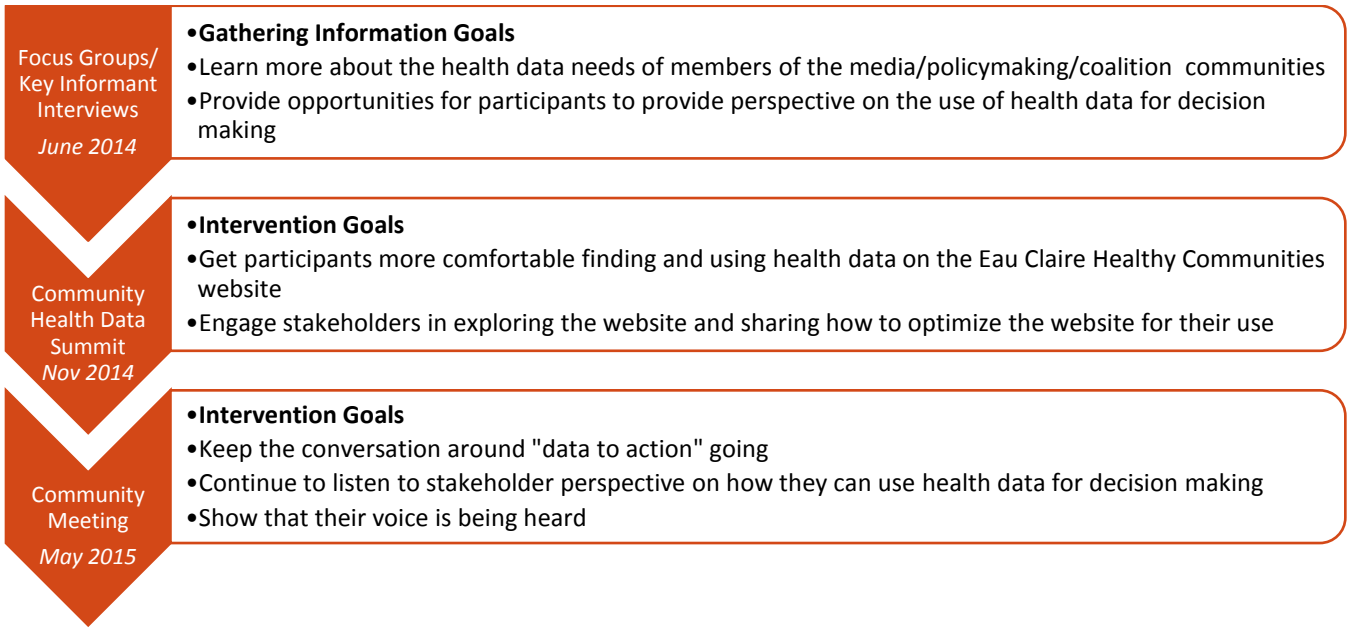
Primary data is data collected by the person or group conducting the research project. There are many ways to gather primary data from the community. Examples include: focus groups, key informant interviews, community forums and public hearings, and surveys. Each method requires a different amount of time, expertise and provides different advantages and disadvantages to data collection. Take the time to review each method to decide which method works best for a project and for your community.

What we did:

Gathering Information: Before the grant team chose their information gathering methods, they performed a literature review to see what information regarding the "data to action" theme and interventions for increasing use of health data was available. The team found literature regarding use of data web portals and literature on decision making, but the idea of using a data web portal for decision-making in the community is novel and complex, which made the design of this study a challenge and an opportunity. The group decided on focus groups and key informant interviews, and surveys as their methods for gathering information. Additional information about focus groups and key informant interviews, and what the grant team did, is available on the following pages.

Intervening: Based on this data gathering, the grant team developed two interventions to recruit and train target groups on using community health data in their work: a community training and community meeting for key partners and stakeholders. Each intervention is described in detail on the following pages.

Grant Project Timeline for Gathering Information and Intervening



Focus Groups

What is a focus group?

A focus group is a group interview that relies on group interaction with the group (Morgan, 1997) or can be thought of as "collective conversations" (Kamberelis & Dimitriadis, 2011). Focus groups reduce the distance between "the researcher" and "the researched" and create a safe space for sharing one's life experiences.

What is the goal of a focus group?

A focus group can be used for pedagogy, politics and inquiry and from this last perspective, the goal is to generate "rich, complex, nuanced and even contradictory accounts" (p546) of how people give meaning and interpret the lived experience and how their perspective might be used to affect social and or policy change (Kamberelis & Dimitriadis, 2011)

What are the benefits of a focus group?

- Gain insight from individuals and the group.
- Cost effective and efficient.
- Focus groups give voice to those that might not otherwise be heard.
- Receive deeper information from group conversation and interaction. The power of focus groups is in the interaction.
- Create a compromise between participant observation and individual interviews.
- Can be used for exploratory research, primary research or follow up research.

What we did: The grant team wanted to know how policymakers, media and Eau Claire Healthy Communities coalition members use health data in their work. The team understood that this was not an easy question to answer on a survey, so they used focus groups as a method to gather information. The depth of information that the grant team would receive from a focus group was the reason why they decided to choose this method. In addition, they felt that they would benefit from the group conversation that happens as a result of focus groups. The conversation often helps to encourage new thoughts which may not happen in a one-on-one conversation. Focus groups for the grant project occurred in June 2014.
Stakeholders were asked the following questions as part of the focus group:

- ✓ *Can you share some of your experiences with using health data?*
- ✓ *What sources do you typically use to get health data?*
- ✓ *How do you determine the validity of the source(s)?*
- ✓ *What challenges, if any, do you face when trying to get health data?*

In addition to the questions, the grant team asked during their data gathering, additional questions that may help identify what you want learn from key stakeholders.

- ✓ *What are their budget priorities?*
- ✓ *How are those established?*
- ✓ *What health issues are important to them?*
- ✓ *Who are they currently listening to now?*
- ✓ *What data might they have? Or what data could we help you with?*

So how many focus groups or interviews should you do to get a representative sample?
There is not a hard and fast rule about how many interviews or focus groups you should conduct. It really depends upon the available time to devote to the process and the available funds as there is a cost to conduct these interviews. In our process, we conducted four focus groups and fourteen key informant interviews. When we began reading and coding the transcripts, themes "emerged" that we agreed upon as a group. After several readings, no more themes emerged. It was at this stage that we decided to conclude conducting interviews.

Five Components Needed to Have a Successful Focus Group

Skilled Leader and Facilitator

A facilitator who has experience facilitating, has training about the topic, and relates well to the participants is very important. Make sure the facilitator does not contribute their opinion during the conversation. This creates a bias with the responders. The amount of structure is up the facilitator and the topic being explored – you can also use a "funnel" technique where you begin broad and then get into details. *Note: There are times when participants are quiet. Not speaking does not mean uninterested. It may mean they are processing or do not understand the question.*
What we did: The Academic Partners and Health Department staff from the grant team facilitated the focus groups. Academic partners ensured that these staff received training on facilitation techniques to help build the skill set and capacity of the Health Department staff to facilitate focus groups in the future.

Recorder

It is helpful to have 1 to 2 people to take notes during the focus group. This helps to ensure any important points that are mentioned during the focus group are not missed.
What we did: The grant team recorded the focus group and then transcribed the audio. Transcription adds time and cost to the project. An hour of transcription could run between $100 and $500 depending on the number of people and the amount of conversation.

Time

Take the time to determine what success would look like from your focus group. Determine your outcome or what you would like to learn and then develop your questions. Watch out for too many questions – it is not meant to be an interrogation. To get the focus group thinking about developing questions, a good question to ask is, "At the end of these focus groups, what do we want to learn?"
What we did: **See Appendix C to review the focus group guide used for this grant project.**

Group Dynamics

Discuss who will participate in the focus groups—whether participants are grouped together with similar factors or if a varying group composition would be a better way to get answers to your questions.
What we did: The grant team decided to have separate groups for each key stakeholder group, because they felt that the answers from coalition members may be different if there were also policymakers or media in the room.

Resources

Note that details must be carefully planned to have a successful focus group. Find out what day, time, place is most convenient for your key stakeholders. Have food available—food brings people together. Make sure that there is enough people power available to help develop questions, plan the details of the focus group, record minutes and facilitate the focus group. *Tip: See if your local university can help add capacity to your project team. Many professors are experienced in qualitative research and many students are looking for experience or learning hours!*
What we did: The grant team created a document to timeline out what needed to happen to prepare for focus groups, and to track who had been invited and their participation status. **See Appendix D to view a sample of this document.**

Key Informant Interviews

What is a key informant interview? It is a one-on-one in-depth interview with a specific focused discussion. The purpose is to collect information from individuals that have firsthand knowledge and particular insight about the community issue or topic that is being researched.

What are the benefits of a key informant interview?

- Possible greater response from a specific individual.
- Detailed and rich data can be gathered.
- Allows interviewer to build or strengthen relationships with important community stakeholders.

What we did: The grant teams used this method as a backup option for those who were not able to attend the focus groups, but were still interested to speak with a member of the grant team for the project. The grant team member also used a script for these interviews. **See Appendix E to review the key informant interview guide used for the grant project.** It is a slight variation of the focus group guide. Key informant interviews happened in June-August 2014.

Community Health Data Summit

After learning more from focus groups and key informant interviews about how policymakers, media and community members used health data in their work, the grant team wanted to continue the conversation with each key stakeholder and increase their comfort using health data. These elements became the goals of the Community Health Data Summit held by the grant team in November 2014.

The agenda for the Community Health Data Summit (2.5 hours) was as follows.

- ✓ ***Introduction about health data***—Members of grant team reviewed what health data means, why are we talking about it and what is happening in Eau Claire around it.
- ✓ ***Demonstration of the Eau Claire Healthy Communities website***—Eau Claire Healthy Communities website (www.echealthycommunities.org) is an online resource that houses Eau Claire County health data. The grant team wanted community members to see this website as a trusted, valid website for local health data.
- ✓ ***Hands on group activity*** —Participants did activity designed to increase their comfort finding health data on the Healthy Communities website. Participants went to a computer lab and paired up to complete a worksheet designed to help them practice finding and interpreting health data from the Eau Claire Healthy Communities website. **See Appendix F to view the worksheet that was distributed to participants.**
- ✓ ***Group discussion about activity and feedback on website***—After participants went through the interactive group activity and completed the worksheet, the grant team brought them back to a large group to discuss how the website could be updated to make it easier to find and interpret health data. This feedback was compiled and put into themes: overall site changes, wanted features, wanted data, and other thoughts about how the data is interpreted. The grant team shared this information with the website's administer and changes were made on the Eau Claire Healthy Communities site. The company valued the feedback and made some of the requested changes standard on all their health data sites across the country. The relationship with this company has been essential to helping the grant team work with the community on how health data is presented to them via the website.
- ✓ ***Evaluation***—Attendees were given a survey at the end of the Community Health Data Summit to evaluate their comfort level using the website and interpreting health data. **See Appendix G to view the survey that was distributed to community partners at this summit.**

Community Meeting

After the focus groups and key informant interviews and the Community Health Data Summit were held in 2014, the grant team decided they should host another event in 2015 in order to keep the community informed of what was happening with the grant project. They decided to host a Community Meeting in May 2015 with the goal to keep the conversation going in the community around 'data to action'. The grant team also wanted to present results of the research from the focus groups and key informant interviews and show the changes that were made to the website based on their feedback from the Community Health Data Summit. It was important to let the community know that the grant team was not doing research about them…they were doing research **with** them.

All policymakers, media and Eau Claire Healthy Communities' members that had been invited to participate in grant activities were invited to the same meeting to learn more about the grant process. To accommodate the different schedules of each stakeholder group, the grant team provided two meeting options—a meeting in the morning and a meeting in the afternoon.

Activity

Think about ways that will work in your community and how you are going to gather data?

When you engage your community, how are you going to find out their needs and values of health data?

The agenda for the community meeting (1.5 hours) included:

- ✓ ***Recap of grant activities***
- ✓ ***Demonstration of the Eau Claire Healthy Communities website***
  - The grant team made sure to showcase the changes that were made to the website based on feedback from the Community Health Data Summit to let them know that their opinions and feedback were valued.
- ✓ ***Small group discussion***
  - The conversation of the small group discussion was based on the following two questions.
    - *What parts of this current project would you like to see continue?*
    - *What would you like to see in the future around health data?*
- ✓ ***Evaluation***
  - At the end of the Community meeting, a survey was distributed to participants to evaluate their usage of the Eau Claire Healthy Communities website. **See Appendix H to view the survey that was distributed to community partners.**

Additional Resources to learn more about focus groups

Kamberelis, George, and Greg Dimitriadis. *Focus Groups: From Structured Interviews to Collective Conversations*. Abingdon, Oxon: Routledge, 2013. Print.

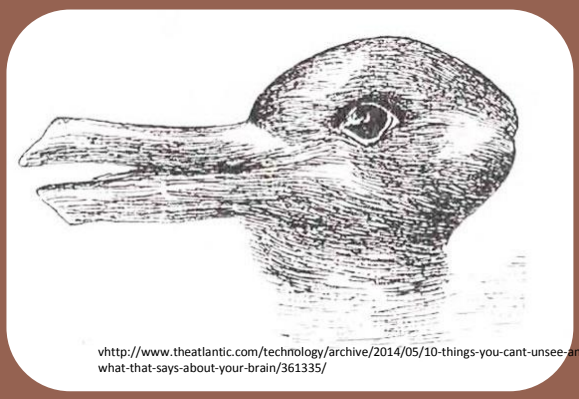
Morgan, David L. *Focus Groups as Qualitative Research*. Second ed. Newbury Park, CA: Sage Publications, 1997. Print.

Interpreting the Data

There are two types of data that can be collected throughout the data gathering stage: quantitative data and qualitative data. **Quantitative data** is information typically collected as or can be translated into numbers. **Qualitative data** is information collected as descriptions, anecdotes, opinions, quotes, interpretations, etc. Both types of data provide value and need to be analyzed differently.

It is important to take time to interpret both types of data. For quantitative data, you will want to analyze statistics (such as using average, frequency, etc.). For qualitative data, you will need to take time to review the data and determine how you will examine, compare and contrast and interpret patterns or themes.

What is this an image of? A rabbit? A duck? **Both?**



vhttp://www.theatlantic.com/technology/archive/2014/05/10-things-you-cant-unsee-and-what-that-says-about-your-brain/361335/

Takeaway is that every person has a different perspective. It is helpful to talk through qualitative data themes with multiple people or a team to gain knowledge of their interpretation, which may confirm your perspective or add a new one!

What we did: The grant team took time to interpret both quantitative (from surveys) and qualitative data (from focus groups and key informant interviews). Survey results were compiled and reviewed to gain a better understanding of how participants used health data in their work, how participants used the Eau Claire Healthy Communities website, and how comfortable participants were finding and interpreting health data.

Much more time was taken to interpret the qualitative data that was gathered from the focus groups and key informant interviews in comparison to the quantitative data collected. Described below is the grant process used for interpreting the qualitative data from focus groups and key informant interviews.

- The grant team recorded the focus group and key informant interviews and had capacity for a person to transcribe the recordings.
- In order to see if a pattern or common themes emerged from the research, the group followed this process to find and document themes from the focus group and key informant interview transcripts.
  - Each person read through the transcripts on their own. It was important to keep in mind the questions of interest that were asked during the focus groups as they were reading *i.e. their experience using health data, how they determine validity of sources, challenges trying to get data.*
  - Each person read the transcript line by line first time through – no marking – just read the text.
  - The second time through they used a highlighter to identify themes that stood out to them individually. They highlighted quotes and made notes on what they would call that theme. For example, "Trustworthy Source".
  - The grant team had a call and discussed what each team member thought was important.
  - After discussion, the grant team came to consensus on what was important in each part that was highlighted.
  - As the grant team began discovering the same information was important to multiple team members and felt like they were hearing the same information many times, it became a theme.
- **See Appendix I for an activity that provides practice interpreting data from a focus group transcript.**

Focus Group and Key Informant Interview Themes

After review and discussion of the transcripts, the grant team identified five themes. These themes have been shared broadly throughout our local, state and national networks, as well as with the key stakeholder groups that participated in the focus groups and key informant interviews. These themes have also been helpful to keep in mind as work is continued with media and policymakers. Themes are listed below, with a quote from one of the participants and a statement from the grant team portraying what was learned.

Valid

"Well, there's a lot of garbage out there. People put a lot of numbers out there but they don't have an appropriate reference for it." (Focus group with policymakers)

While the meaning of valid seemed to be slightly different for each person, to the participants valid meant the data is credible, reliable, statistically significant, and has a good research design.

Accessible

"I mean, I suppose there are cases both in what I do now and what I used to do when you're working on a story and it's like, oh I wish they had data on X that they could get to me in the next half hour and it doesn't work like that often times because things have to be assembled or maybe no one's ever done this survey or study on that." (Key informant interview with media)

This quote references tight deadlines in the media world. Participants noted that they wanted one common place where all of the same information could be stored and found quickly.

Current

"I think the worst one and the reason why we don't do a lot of or as many stories as we might is the information is so old. Oh, we have a new study today and the newest information is from 2008. Okay, what good does that do me? What does that have to do with now?" (Key informant interview with media)

This quote addresses the issues with data taking a long time to collect and report. In the public health world, it is known that the data a few years old is the most recent health data. But to outsiders, they may be wondering why they aren't getting current year data. It is important to educate media, policymakers and community members about this issue so they understand that older data may be the most recent as data collection and interpretation takes a long time.

Local

"Yeah, we're always looking for local data because we're a local broadcaster. We're always looking for the local tie. I mean if we use national data it's only to support and help fill in information." (Key informant interview with media)

Through focus group and key informant interviews, the grant team found that Eau Claire residents wanted local data, but they also wanted county, state, national data to provide comparison data. They are also interested in very local data tracked by census tract and zip code to help identify neighborhood health issues in the community.

Trusted

"Not only the data but the person presenting the data and then as you said, you have to pull yourself back, be a little bit more objective and try to weigh all that, sometimes right on the spot." (Focus group with policymakers)

The grant team learned that each person has their own local trusted sources. Even if they feel comfortable gathering data and interpreting it, they also like to talk with a local, trusted resource person about it. They also heard from policymakers they often get opposing data, so they tend to go to their trusted sources to make sure they have unbiased data.

Additional Resources for Interpreting Data

Kamberelis, George, and Greg Dimitriadis. *Focus Groups: From Structured Interviews to Collective Conversations*. Abingdon, Oxon: Routledge, 2013. Print.

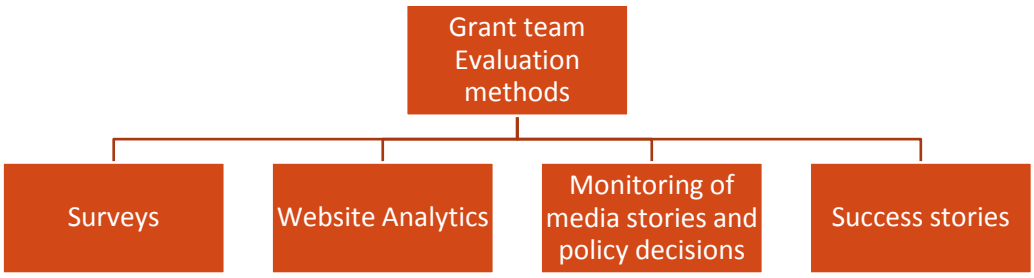
Morgan, David L. *Focus Groups as Qualitative Research*. Second ed. Newbury Park, CA: Sage Publications, 1997. Print.

Evaluation

Evaluation is a key component of any project or program because it provides valuable information and feedback for improvement. The overall evaluation involves establishing criteria, constructing standards, measuring performance, comparing results to the standards, and compiling the evidence to make a judgment about what has been completed and its overall impact.

In the end, evaluation offers an opportunity to document what is being done and assess what has been accomplished relative to goals, objectives, and impact. That information can then be used to help make decisions and determine how to proceed, especially keeping in mind the overall intention of improving a program or project in terms of its effectiveness and usefulness. Once completed, evaluation results can also be shared with others who might want to learn more and/or possibly replicate the process in their own situation.

What we did: For the grant project, qualitative and quantitative data evaluation took place through multiple avenues. This included surveys, website analytics, monitoring of media stories, monitoring of City Council and County Board agendas and minutes, and success stories from community partners. The grant team also noted that the 'journey' introducing data to action to the Eau Claire community was just as important as the results that were collected. It is important to have community involvement and support, but that often requires change. Gaining buy-in early throughout the project and continuing to engage the key stakeholders helped to bring everyone along the 'journey' of discovering how they can use data to fuel decisions and help them 'move data to action'. The following pages detail the evaluation methods used by the grant team, as well as the results.



Survey Evaluation

Quantitative data

Surveys were distributed to grant participants throughout the two-year grant period after the Community Health Data Summit, after the Community Meeting and at the end of the grant period. The surveys addressed current utilization of the Eau Claire Healthy Communities website, comfort level with data sources, and the perceived value of population health data.

See Appendix G and H to view surveys from the Community Health Data Summit and Community Meeting. See Appendix J to view the survey sent to all individuals that participated in grant activities.

The grant team also coordinated an additional survey to evaluate who was using the Eau Claire Healthy Communities website. They wanted to know if the website had more new users or returning users and for what purpose they were using the website. The website also houses Eau Claire Healthy Communities coalition information, so the team understood that not everyone that goes to the site is looking for health data. To evaluate the users of the Eau Claire Healthy Communities website, the grant team created a 'pop up survey' that was placed on the website. The survey 'pops up' when the user clicks on the website. The program that distributes the survey recognizes each individual user by their IP address, so if they have already taken the survey it will not show up again. This helped ensure the grant team received unduplicated data. **See Appendix K to view the pop up survey that was placed on the Eau Claire Healthy Communities website to find out more about who is using the website.**

What we found: All of the Community Health Data Summit participants (100%) agreed that the summit provided them with good opportunities to share their perspective on the use of health data and decision making. Of those that participated in the Community Meeting, 67% of participants felt very or extremely comfortable using the Eau Claire Healthy Communities website. Initial results from the pop-up survey indicate that 42% of individuals used the website to find health data, 50% used it to find Healthy Communities information, 4% used it to research for a policy decision and 4% used it to help write a news story.

Website Analytics

Quantitative data

The grant team tracked website analytics to get a better feel of how often the Eau Claire Healthy Communities website was being utilized and what information visitors were looking for most frequently. They tracked the number of total visits, average visits per day, length of engagement and the most popular health data searched by visitors. It was determined by Healthy Communities website administrators that these were the best indicators to use for evaluation purposes. If the goal is to increase the number of people visiting your sites, then visits would be the best metric. If the goal is to keep visitors on the site for as long as possible, then page views are the metric used to monitor the goal. If the goal is for visitors to visit a particular page, then the number of visitors viewing that page and how many times the page are metrics used to monitor the goal. Below are descriptions of what each analytic measures and how it can be interpreted.

Total Visits

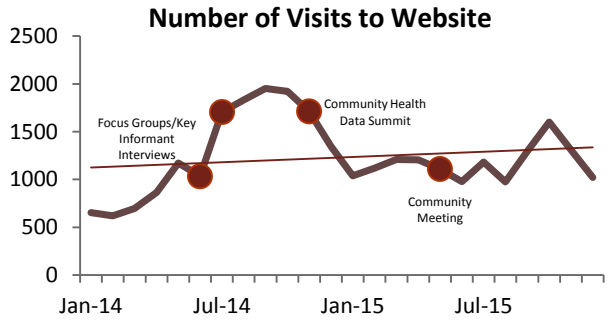
A visit consists of a series of page views that a single visitor makes during a period of activity. A visit ends after the visitor closes the browser, clears cookies, or is inactive for 30 minutes. Total visits/sessions are what everyone looks for as the best metric. This is followed by average page views.

Page Views

Typically, an increased number of page views means visitors are finding more on the website. However, if the page views go down, it may mean that customers may be better at navigating the website. For these reasons, this is not necessarily the best measure.

Length of engagement

This measures length of stay on a website or webpage. It is not necessarily a great indicator to use as the length of stay on the site or on a page is influenced by so many variables; for example, many visitors visit a page and not close out of the site all day. Visitors may also visit the page and copy the whole thing into a report, or take a screenshot, which takes only a second.



What we found: Overall, the grant team found the trend line for the number of visits to the website remained around the same throughout the grant period (see graph to the right). The important piece to note is that after community engagement events occurred, the number of visits to the website tended to increase. *Continued engagement is important!!*

Monitoring of Media Stories and City Council/County Board Packets

Quantitative data

The overall goal of monitoring media stories and City Council/County Board agendas and minutes was to see if grant activities made an impact on how often media and policymakers were using health data in their stories and policy decisions. To find this out, the grant team needed to know if they were using health data. If so, they needed to know what type of data they were using and the source of the data. The grant team began tracking health data usage in local media: two TV stations and one newspaper. Results were obtained by doing searches on each of the media's website. To ensure a consistent process, the key words "health department" and "healthy communities" were used in the search criteria. Grant team members and university students reviewed all search results and included those that had quantitative health data on the media tracking chart. Information tracked on the media tracking chart for each story included: the date, topic, what health data appeared, the data source and the link. Stories were tracked from January 2014 to December 2015. **See Appendix L for an example of the spreadsheet was used to collect this data.**

To track policy decisions, grant team members reviewed City Council and County Board agenda and minutes. Using knowledge of activities happening in the community and looking at the agenda items, the grant team members determined if the agenda item had the potential to include health data. If so, they requested and reviewed the minutes of that particular meeting, looking for health data being used. Those agenda items that met the criteria of using health data were added to the tracking sheet. Tracking of City Council and County Board meetings occurred from January 2014-December 2015. **See Appendix L for an example of the spreadsheet was used to collect this data.**

What we found: The grant team found that Health Department was listed as a valid source for health data, however as they explored the tracking spreadsheet further they found a large variance in what student volunteers considered health data in media stories. The grant team decided there was a large margin of error due to multiple university students running websites searches without a clear definition of what was considered 'health data'. For other communities thinking about replicating this process, the team would recommend incorporating a clear definition of health data in the website search instructions. Overall, it was helpful to review what the media are reporting on in our community and where they are finding their health data. However, it is hard to make a determination solely from the review of media stories and policy decisions that grant activities influenced how media stories are written and policy decisions are made due to many confounding factors. We also learned this was a time intensive process.

Successes Stories from the Community

Qualitative data

Over the two year grant period, the grant team members had many opportunities to communicate and engage with key stakeholders about the grant project and the objective of getting stakeholders to use data to move from 'data to action'. Below are stories from community members about how they used data to drive action and success in the community.

What we found: The stories shared with members of the grant team help paint the picture of how the community has latched onto the idea of using health data in their work. This does not happen overnight. The Eau Claire community spent several years 'planting the seed' of using health data, and used this grant project as an opportunity to dedicate additional time and efforts to engage with the community on this important topic. These stories demonstrate the impact of our grant project on the community.

Below are several stories of policy success, grant writing success and coalition success with health data as a result of grant activities.

Policy Success using Health Data

A local business who rents its space from the City requested to add an additional "all you can drink" area. The city council held a hearing and members of our local health coalition that focuses on high-risk drinking prevention came to speak. They used a variety of different visuals and data during their presentation, but one person used the Eau Claire Healthy Communities website to provide a visual of the issue of binge drinking in our county. They pulled up the binge drinking health data point that showed how binge drinking rates in Eau Claire County compared to the state and nation on a scale-- red being bad and green being good. Eau Claire County was definitely in the red. This visual stuck with the policymakers. After the hearing and presentation of health data, the request was withdrawn by the local business. This started community conversation around the topic and increased awareness about the health issue of binge drinking in our community. Partnerships were developed and strengthened throughout the process, all of which contributed to policy success.

The L.E. Phillips Senior Center has found the Healthy Communities Website valuable in allowing us to obtain excellent information in regards to the Eau Claire community. This information has been beneficial in helping us make decisions on programming areas for the aging population that provides positive results for our participants. We are grateful for the information we get through the website and find it extremely valuable in helping us better serve our population.

-Quote from Mary Pica-Anderson, Executive Director of the L.E. Phillips Senior Center

Grant Writing Success using Health Data

The director of a local non-profit organization attended a United Way partner meeting, and commented how useful it was to have Eau Claire County data in one place. She told how she had used the website for exploring health data for grants and found it to be a helpful starting place. She also took the time to dig a little deeper and explore the source of data displayed on the website in order to find additional information.

Members of the grant team were asked to present about the Healthy Communities website at the local United Way partner meeting. At this time, United Way partners were going through a new application process and the website was introduced as another source to find valid health data. During the meeting, the local senior center director shared that she used the Healthy Communities website to find new and different health data indicators to use in a grant – which she received. She said that she does not think she would have received the grant without using the website.

Coalition Success presenting Health Data

The Co-Chair of the High Risk Drinking Action Team was working with the Health Department staff to plan the agenda for the upcoming meeting. She was very excited to share that she had just found new data on alcohol use and thought the data could help them with their action planning. She requested 30 minutes on the agenda for this topic. In previous years, this would not have been the case…our community leaders bringing the health data to the table. It would have been the opposite, with the Health Department being the one to bring it to the table. And there probably wouldn't have been as much excitement or engaging conversation held around this data.

Overall thoughts on Grant Project Evaluation

Success can be measured in many ways. Often it can be hard to quantify the widespread impact of a project. The stories in this section are another great way to show the impact of the work that happened as a result of this grant project. It also shows that it does take time get others invested in using data to drive decision…it does not happen overnight. The continual engagement of community members in conversation around the 'data to action' topic makes a difference.

Additional Resources on Evaluation

County Health Rankings Action Center. *http://www.countyhealthrankings.org/roadmaps/action-center*

Conclusion and Project Sustainability

Eau Claire County is fortunate to have many assets that helped us move this 'data to action' project forward in the community.

- Active and engaged policymakers, in Eau Claire County, that are interested in health and data.
- Active and engaged Eau Claire Healthy Communities coalition.
- Community coalitions are speaking about data—all members, not just some.
- Well-connected community and established relationships between community partners.
- Located in a media island and have a good connection to local media.
- Emerging theme of data-driven decisions in the community—the need to show the data and how you have improved health.

Even with the assets in the Eau Claire community, the grant team still had barriers.

- Hard to get media to the table. Timing is a challenge-as their staff has daily deadlines and not much extra capacity. Personal asks helped bring media to the table.
- Tracking of media and policy decisions was time intensive.
- At the community training and meeting, it was hard to meet everyone's needs given their limitations using the Eau Claire Healthy Communities website. We had multiple facilitators at the meetings to assist those at various skill levels.
- Different value is placed on health data by members of the key stakeholder groups and a variety of opinions on what they feel is "good enough data" to use.
- The idea of how you bring 'data to action' is still so new; we had to create a process to get people to move 'data to action'.
- Website data itself is a challenge. There is data that individuals want that isn't available.

The grant team learned many lessons from this project.

- Personal connects, or asks, are very effective to gain partner's interest and get them to come to the table.
- Data means different things to each key stakeholder.
- There are a variety of levels of comfort with use of technology that impacts how we communicate with the individuals.
- Continued engagement is essential to keeping interest in the topic of health data.
- Take the time to preplan—choosing the key stakeholders, defining objectives, and deciding how they will be engaged.

The Eau Claire Community has seen many potential impacts due to this grant project.

- Members of the media, policymakers and Eau Claire Healthy Communities coalition have a greater awareness of importance of using health data to drive action
- Members of the media, policymakers and Eau Claire Healthy Communities coalition have an increased awareness and comfort using the Eau Claire Healthy Communities website to find and interpret health data.
- Key stakeholders have reported success using health data to research for a policy decision, write a media story, and write grants to move forward action around health priorities in our community.

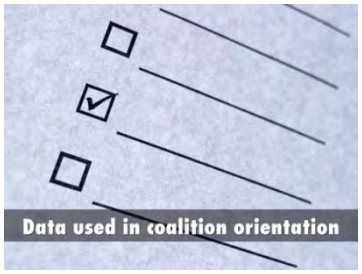
The grant project work will be sustained through many ways.

Work of the grant project will be sustained through the strong coalition of Eau Claire Healthy Communities as well as through the Eau Claire City-County Health Department and United Way of the Greater Chippewa Valley. All organizations have a strong commitment to using health data to drive decisions.

The Eau Claire City-County Health Department will continue to have the conversation around 'data to action' with members of the media and policymaking groups through their connections. Due to the grant, Board of Health Members, who have participated in the grant activities, are more conscious of the valuable health data that is hosted on the Eau Claire Healthy Communities website and discuss this information to make decisions at their meetings.

The lessons learned about how media value data will be kept in mind as the Health Department delivers health data to them through press releases and how they deliver data to the community through articles, press releases and social media. The themes of having data that is accessible, valid, current, local and trusted are very valuable pieces of information that are shared with staff that are writing the communication materials.

The Eau Claire Healthy Communities website will continue to be funded through a partnership of organizations that are committed to using health data to drive community health assessment and community health improvement planning. These organizations have committed to continued evaluation of the use of the website as a function of their partnership.



Eau Claire Healthy Communities members will continue to use the Eau Claire Healthy Communities website as a valid source of data. All new members of Eau Claire Healthy Communities Council and Action Teams receive information about the website as part of their orientation so they have a better understanding of how the coalition uses health data in their work.

This toolkit will be shared widely with community partners that have participated in the research, with those that have heard the numerous presentations at local, state and national conferences, and with all interested parties through the electronic sharing of it on the Eau Claire Healthy Communities website.

Appendix A- Telephone Invitation for Focus Group Participants

Name of person:

Phone number:

Date/Time called:

Hi, this is _____ from the Eau Claire City-County Health Department. We're working with the Medical College of Wisconsin with a research grant to see how the community uses health data. The reason we are reaching out to you is that we are specifically looking at how (media/policymakers/Healthy Community members) use health data. _____*of* _____*gave us your name and said that you would be a valuable person to contact (Insert this sentence if applicable).*

We will be hosting a small focus group to learn more how you and your (media/policymaker/Healthy Community members) colleagues use health data in their day-to-day work. Our goal is to learn how health organizations can better provide health data to you to ultimately make your job of researching health data easier. The focus group and research results will be used to help improve our Eau Claire Healthy Communities website that houses local health data, as well as to train (media/policymakers/Healthy Community members) how to best use the website for their purposes.

We are planning to host a focus group sessions in June. We will be providing refreshments and have an incentive to thank you for volunteering your time and input to this research project.

We have three dates scheduled. Which one of these would be most convenient for you?

Focus Group Times			
Tuesday, June 3rd	1:00pm-3:00pm	3:00pm-5:00pm	
Wednesday, June 4th	9:00am-11:00am	1:00pm-3:00pm	3:00pm-5:00pm
Thursday, June 5th	9:00am-11:00am	1:00pm-3:00pm	

No_____ Would prefer to have a one-on-one interview instead of participating in a focus group? Is there anyone else at your workplace or within your field that you would suggest to contact to participate in the focus group?

Yes_____Which times are you able to make? What is your preferred time? Great. I will send out an email confirmation about the focus groups and all the details. Is there anyone else at your workplace or within your field that you would suggest to contact to participate in the focus group? Thanks. We look forward to seeing you at the discussion.

Appendix B- Email Invitation for Focus Group Participants

Name of Person:

Email address:

Date/time emailed:

Hello,

My name is _____ and I work for the Eau Claire City-County Health Department. The Health Department received a research grant to work with the Medical College of Wisconsin to see how the community uses health data. The reason we are reaching out to you is that we are specifically looking at how (media/policymakers/Healthy Community members) use health data. _____ *of* _____ *gave us your name and said that you would be a valuable person to contact (Insert sentence if applicable).*

We will be hosting a small focus group to learn more how you and your (media/policymaker) colleagues use health data in their day-to-day work. The goal of our grant is to learn how health organizations can better provide health data to you to ultimately make your job of researching health data easier. The focus group and research results will be used to help improve our Eau Claire Healthy Communities website that houses local health data, as well as to train (media/policymakers/Healthy Community members) how to best use the website for their purposes.

We are planning to host a focus group sessions in June. We will be providing refreshments and have an incentive to thank you for volunteering your time and input to this research project.

We have three dates scheduled. Which one of these would be most convenient for you?

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Thursday, June 5th	9:00am-11:00am	1:00pm-3:00pm	

Please let us know which focus group works best for you. Also, if you know anyone else at your workplace or within your field that you would suggest contacting to participate in the focus group, please let us know their name and contact information.

If the focus group times don't work for you, or if you would prefer to have a one-on-one interview instead of participating in a focus group, please let us know.

Please do not hesitate to call if you have any questions. I look forward to hearing from you.

Appendix C- Focus Group Guide

Introductory Script

Hello, my name is [facilitator name] with [affiliation]. Thank you for taking the time to participate today.

This focus group is part of a larger study being conducted by the Eau Claire City-County Health Department, Medical College of Wisconsin, United Way of the Greater Chippewa Valley, Marshfield Clinic, Mayo Clinic Health Systems, Sacred Heart Hospital, and Eau Claire Healthy Communities.

Through focus groups, we hope to learn more about the health data needs of members of the [media/policymaking] communities in order to develop an effective and sustainable process that can help meet those needs.

Question 1

We are interested in how members of the [media/policymaking] communities use health data. When we use the phrase "health data," we are referring to a broad range of information that includes personal, social, cultural, economic, and environmental factors that influence health status for different populations. For example, health data may include demographic information (such as data collected and reported by the US Census). Health data may also include information about factors that influence our built environment (such as the locations of grocery stores, the accessibility of public parks and green space, etc.).

- Can you share some of your experiences with using health data?
- What sources do you typically use to get health data?
- How do you determine the validity of the source(s)?
- What challenges, if any, do you face when trying to get health data?

Question 2

[Media Hypothetical]

Imagine that you are asked to cover a story about road traffic accidents that are alcohol related.

- What process would you undertake to prepare the story?
- What is the relevancy of health data for the story?
- What sources would you turn to for health data?

[Policymaker Hypothetical]

Imagine that you are asked to review a proposed ordinance/policy increasing DUI enforcement to arrest impaired drivers, whether for driving under the influence of alcohol, marijuana, prescription or illegal drugs.

- What process would you go through to make a decision on whether to support it or not?
- What is the role and relevancy of health data in your decision?
- What sources would you turn to for health data?

Question 3

The Eau Claire Healthy Communities website is part of a broad effort to improve information and communication about health throughout Eau Claire County. It provides up-to-date health data at the

county level as well as information about what is happening to improve the health of the community through Healthy Communities Council and its action teams, and the community health improvement plan.

In this study, we would like to know how to make the Eau Claire Healthy Communities website easy to access, easy to use, and able to serve as a consistent and reliable source of health data.

Let's take a look at the website together. [At this time, the facilitator shows the website on a wall screen and leads participants through a navigation of the website.]

Imagine that we are interested in obtaining health data about binge drinking in Eau Claire County. What kind(s) of health data would we want to obtain? [Navigate through the website to find relevant health data].

- If you were doing this exercise on your own, what do you imagine the experience would have been like for *you* to navigate this website in order to get this health data?
- How likely would you be to use this website in your future work?

Question 4

Is there anything else we haven't discussed today that you think is important for us to know?

Closing Script

Thank you again for taking the time to participate today. If for any reason you would like to get in touch with us, you may contact us by phone or through our website. The number and website address are provided on your copy of the consent form. Once we have completed all of the focus groups, we will be reviewing the aggregated comments from all participants to develop and pilot a training program about the use of the Eau Claire Healthy Communities Website. We hope to complete the focus groups by this summer and begin piloting our training program by the end of this year. On your consent forms, we already learned whether or not you are interested in participating in the next phase of our project. So, for some of you, we will be in touch as things evolve over the coming months.

Thanks again or participating today!

Appendix D- Focus Group Preparation Materials

Table used to track preparation for focus groups.			
TASK	**PERSON RESPONSIBLE**	**COMPLETED BY DATE**	**DONE**
Look at policymakers calendars and try to decide best time to invite them			
Email invites to media/policymakers			
Follow up invites with phone calls			
Prep focus group materials and food **Focus Group Materials Needed:** / **Refreshments:** Extra notepads and pens / Water/Coffee (all groups) Flip chart, tape markers / Fruit (all groups) Focus group script / Subs (over lunch/dinner) Name Tags/table tents / Pretzels (over lunch/dinner) Recorder / Plates, napkins, cups Copies of survey/questionnaire			
Send reminder email			
Facilitate Focus groups			
Send Thank you letter/email - to attendees			
Transcribe notes			
Summarize session and email summary to participants			
Create and disseminate report on key findings			

Table used to track attendees of focus groups.			
HWPP Focus Group Times			
Wednesday, June 18th	**2:00pm-3:30pm**	**4:30pm-6:00pm**	**5:15pm-6:45pm**
	Media(snacks)	HC Members(snacks)	Policymakers(dinner)
	(List attendees here)	*(List attendees here)*	*(List attendees here)*
Thursday, June 19th	**7:30-9:00am**	**9:30am-11:00am**	**12:00pm-1:30pm**
	HC members(snacks)	Media (snacks)	Policymakers(lunch)
	(List attendees here)	*(List attendees here)*	*(List attendees here)*

Table used to track who was invited to participate in focus groups.			
Name/Title/Organization/Email	**Invite sent?**	**Follow-up**	**Response**
Example: Gina Schemenauer *News Reporter*, WEAU TV 13 gina.schemenauer@weau.com	Emailed 5/27	n/a	Signed up for focus group
Example: Gina Schemenauer *News Reporter*, WEAU TV 13 gina.schemenauer@weau.com	Emailed 6/1	Emailed again 6/20,	6/21- not able to attend focus group *Potential key informant interview

Appendix E- Key Informant Interview Guide

Introductory Script

Hello, I'm [interviewer name] from the [affiliation]. Thank you for taking the time to meet with me today.

The Eau Claire Healthy Communities website is part of a broad effort to improve information and communication about health throughout Eau Claire County. It provides up-to-date health data at the county level as well as information about what is happening to improve the health of the community through the Healthy Communities Council and its action teams and the community health improvement plan.

As part of that effort, we are working on a project that we hope will increase access and use of the website as a consistent and reliable source of health data. An important first step in this work is to better understand how leaders in the fields of media and policymaking currently use health data. To do that, we are conducting interviews with key community members in these fields. As mentioned in the informed consent form, the themes that emerge from these interviews will be used by our planning team to develop a community training program on the website and the use of health data.

Question 1

We are interested in how members of the [media/policymaking] communities use health data. When we use the phrase "health data," we are referring to a broad range of information that includes personal, social, cultural, economic, and environmental factors that influence health status for different populations. For example, health data may include demographic information (such as data collected and reported by the US Census). Health data may also include information about factors that influence our built environment (such as the locations of grocery stores, the accessibility of public parks and green space, etc.).

- Tell me about yourself/your organization.
- How long have you worked in the area?
- Can you share some of your experiences with using health data?
- What sources do you typically use to get health data?
- How do you determine the validity of the source(s)?
- What challenges, if any, do you face when trying to get health data?

Question 2

[Media Hypothetical]

Imagine that you are asked to cover a story about road traffic accidents that are alcohol related.

- What process would you undertake to prepare the story?
- What is the relevancy of health data for the story?
- What sources would you turn to for health data?

[Policymaker Hypothetical]

Imagine that you are asked to review a proposed ordinance/policy increasing DUI enforcement to arrest impaired drivers, whether for driving under the influence of alcohol, marijuana, prescription or illegal drugs.

- What process would you go through to make a decision on whether to support it or not?
- What is the role and relevancy of health data in your decision?
- What sources would you turn to for health data?

Question 3

In this study, we would like to know how to make the Eau Claire Healthy Communities website easy to access, easy to use, and able to serve as a consistent and reliable source of health data.

Let's take a look at the website together. [At this time, the interviewer shows the website and leads the participant through a navigation of the website.]

Imagine that we are interested in obtaining health data about binge drinking in Eau Claire County. What kind(s) of health data would we want to obtain? [Navigate through the website to find relevant health data].

- If you were doing this exercise on your own, what do you imagine the experience would have been like for *you* to navigate this website in order to get this health data?
- How likely would you be to use this website in your future work?

Question 4

Are there other people you think we should talk to? Have we covered everything you think is important?

Closing Script

Thank you very much for taking the time to meet with me today. Your knowledge and insights will be very helpful to us. If for any reason you would like to get in touch with us, you may contact us by phone or through our website. The number and website address are provided on your copy of the consent form.

Once we have completed all of the interviews, we will review the aggregated comments to develop and pilot a training program about the use of the Eau Claire Healthy Communities Website. We hope to complete the interviews by this summer and begin piloting our training program by the end of this year. On your consent forms, we already learned whether or not you are interested in participating in the next phase of our project. So, if you indicated yes, we will be in touch as things evolve over the coming months.

Thank you again.

Appendix F- Intervention – Healthy Communities Website Worksheet

1. Under the Community Health Indicators, what does the green range indicate about a health issue? The red range?

   Filter by Priority:

2. Data indicates that children living below the poverty level, a social determinant of health, are more likely to experience significant health issues. Can you find the data that shows how significant of an issue this is in Eau Claire County?

3. Binge drinking is a health risk factor. Find the percentage of adults who binge drink in Eau Claire County ____%

   *What is considered binge drinking?

4. Fruit and vegetable consumption is a health behavior that helps prevent chronic disease. Find the percentage of adults that report fewer than 5 servings of fruits/vegetables per day in Eau Claire County. ____%

5. Obesity and lack of physical activity have played a major role in the increase of diabetes, a chronic disease. Find the age-adjusted death rate due to diabetes in Eau Claire County.
   _____deaths per 100,000 population

6. Suicide is a major, preventable mental health problem. Find the age adjusted death rate due to suicide for Eau Claire County.
   ____deaths per 100,000 population

Appendix G – Evaluation Survey from Intervention

All questions were asked using the following scale.

☐Strongly agree	☐Somewhat agree	☐Neither agree or disagree	☐Somewhat disagree	☐Strongly disagree

1. Information I gained about the Eau Claire Healthy Communities website will be useful in my daily work.
2. I am comfortable using the Eau Claire Healthy Communities website.
3. The Summit provided me with good opportunities to share my perspective on the use of health data and decision making.
4. I am knowledgeable about using health data in my work.
5. I am confident finding health data through online sources.
6. The Eau Claire Healthy Communities website is easy to navigate.
7. I see the Eau Claire Healthy communities website as a valuable source of health data
8. Do you have any feedback on what else you would like to see on the website? Please explain.
9. Do you have any other comments/suggestions for future work/events?

Appendix H –Evaluation Survey from Community Meeting

1. **When was the last time you used the Healthy Communities website (www.echealthycommunities.org)?**
   - In the past 15 days
   - In the past 30 days
   - In the past 60 days
   - In the past 90 days
   - More than 90 days
   - I have never used the website

2. **In the last 90 days, approximately how many times have you used the Healthy Communities Website?**
   - 0-4 times
   - 5-10 times
   - 11-15 times
   - More than 15 times

3. **How much time do you spend on the website during a typical session?**
   - 0-4 times
   - 5-10 times
   - 11-15 times
   - More than 15 times

4. **For what purpose have you used the Healthy Communities website? How well did it meet your needs?**

	Extremely well I found all the health data I needed	*Very well* I found most health data that I needed	*Moderately well* I found some health data that I needed	*Not well* I didn't find any health data that I needed	*Not applicable*
To find health data					
To assist with grant writing					
To help write a news story					
To research for a policy decision					
To find Healthy Communities information					
Other (please specify)					

5. **Typically, how long does it take you to find the health data that you need?**
    - 0-4 times
    - 5-10 times
    - 11-15 times
    - More than 15 times
    - I don't find the health data I need

6. **How comfortable are you using the Eau Claire Healthy Communities website?**
    - Extremely comfortable
    - Very comfortable
    - Moderately comfortable
    - Slightly comfortable
    - Not at all comfortable

7. **How likely are you to recommend this website to someone you know?**
    - I have already referred someone
    - Extremely likely
    - Very likely
    - Moderately likely
    - Slightly likely
    - Not at all likely

8. **Which of the following HWPP activities have you participated in the past year? (Check all that apply)**
    - Focus group (June 2014)
    - One-on-one interview (Summer 2014)
    - Health Data Summit (November 2014)
    - None of the following

9. **What group do you best identify with?**
    - Healthy Communities Member
    - Policymaker/Elected Official
    - Department Head
    - Media
    - Other (please specify)_____

Appendix I- Interpreting the Data Activity

Activity: Pulling Themes from Focus Group Transcript

Text from focus group held in Eau Claire Co. with Policymakers

Directions

- Keep in mind the questions of interest that were asked during these specific focus groups.
  - We are interested in how policymakers use health data. How do you use data?
  - What process do you use to prepare your story or legislation?
  - What kind of data would we want to obtain?
- Read line by line first time through – no marking – just read the text.
- Second time through, use a different highlighter to pull out themes that stand out for you. Highlight quotes. Maybe make notes on what you would call that theme "Trustworthy Source" for example.

Facilitator: Can you share some of your experiences using health data?

Policymaker: Okay. I think when we passed one of the early ordinances in Wisconsin to ban cigarettes in Eau Claire which then lead to some other cities doing it, the same thing in rather weeks, and then within a matter of months the state legislature finally banned smoking. That was the culmination of years of effort and study by many groups including our city county health department, American Cancer Society, and smoke free Wisconsin _____. All of these things kind of came together. That's where data really drove because we had an outpouring of people with stories, if you want to call that data. Stories, testimony, personal experiences, as well as research data of the effects of smoking. Now one might say that we've had some of that data since the surgeon general's report decades report. True. But some of that didn't sink into the gray matter and it wasn't used often to drive decision making but we did use that to drive decision making home and what it did is that years of exposure to that data had influenced public opinion to the degree that suddenly that became acceptable. They wanted it. And now we've seen taverns who oppose it are basically saying today privately it was the best thing that's ever happened to us. It's increased business. People have come in there without having to worry about walking home and sending their clothes out to have them cleaned. They can breathe. They weren't coughing. Things like that. But that was a recent experience of about six years ago.

Facilitator: So how do you evaluate the validity of data then?

Policymaker: I start with the source. So I think if it's a reputable source. _____ was referring to Johns Hopkins. I was referring to Center for Disease Control. We've talked about the city county health department. I think that data collected we rely on the source. Some of the airborne sand issues or if there's a professor at the university in the water shed now, he's no longer in chemistry, and he's been

putting out a lot of information and it contains data that seems, that we believe, I mean, it's peer reviewed so we believe that there's some validity to that. So I would rely primarily on the source of the data.

Policymaker: And who's funding it?

Policymaker: That's the key.

Policymaker: That's, cause I know at the University here there's a group also trying to or at least studying the effects of asbestos, a different group. It's not _____, that are coming to a completely different opinion and their funded by, at least in part by _____.

Policymaker: I met this guy at a conference and got in to quite an exchange with him. So I think you gotta look at who's paying for it.

Policymaker: I think the dissemination or if you will the discernment as to what health data is valid, it's no different than fiscal data or engineering data or anything else. It's no better than the credentials of the persons giving it and many times it hasn't been double checked. I mean, I can sit, give you lots of experiences about data we've been given that's supposed to be good. I would probably add on to what ___ said earlier that probably our best ideal desire would be to have some known impartial source that we could go to and say well this comes from an official agency whose sole duty is to research and sifted winnow and give you some of that stuff, but I think in short of that, the sifting and winnowing will have to be our own. We need to use our God given talents to be able to judge whether this is decent and whether it has been peer reviewed, whether it's coming from a reliable source, you know, but the buyer beware.

Policymaker: And it's not hard to find opposing points of view.

Policymaker: ____'s right. It depends on who's paying for it. Especially now with Supreme Court rulings and everything. It's like the door is open and there are all kinds of people willing to pay to get their personal agendas, their personal data out there.

Appendix J- Survey to those that have participated in HWPP grant activities

1. **When was the last time you used the Healthy Communities website (www.echealthycommunities.org)?**
   - In the past 15 days
   - In the past 30 days
   - In the past 60 days
   - In the past 90 days
   - More than 90 days
   - I have never used the website

2. **In the last 90 days, approximately how many times have you used the Healthy Communities Website?**
   - 0-4 times
   - 5-10 times
   - 11-15 times
   - More than 15 times

3. **What is the PRIMARY reason you came to the site?**
   - To find health data
   - To assist with grant writing
   - To help write a news story
   - To research for a policy decision
   - To find Healthy Communities information

4. **Did you find what you needed?**

Extremely well	*Very well*	*Moderately well*	*Not well*
I found all of the information that I needed	I found most of the information that I needed	I found some of the information that I needed	I didn't find any of the information that I needed

5. **Please tell us how easy it is to find information on the Healthy Communities website.**
   - Easy
   - Average
   - Difficult
   - Very difficult

6. **What group do you best identify with?**
   - Member of Eau Claire Healthy Communities
   - Policymaker/Elected Official
   - Department Head
   - Media
   - Community Member
   - Other (please specify)_____

Appendix K- Website Pop up Survey

This survey will be a "pop up" on the Eau Claire Healthy Communities website (www.echealthycommunities) and will provide information about how the website is being utilized. The information will be used for evaluation of our HWPP grant.

Website Survey

1. Is this the first time you have visited the Healthy Communities website?
    a. Yes or no

2. What is the PRIMARY reason you came to the site?
    a. To find health data
    b. To assist with grant writing
    c. To help write a news story
    d. To research for a policy decision
    e. To find Healthy Communities information

3. Did you find what you needed?

Extremely well	*Very well*	*Moderately well*	*Not well*
I found all of the information that I needed	I found most of the information that I needed	I found some of the information that I needed	I didn't find any of the information that I needed

4. Please tell us how easy it is to find information on the Healthy Communities website.
    a. Easy
    b. Average
    c. Difficult
    d. Very difficult

5. What group do you best identify with?
    a. Member of Eau Claire Healthy Communities
    b. Policymaker/Elected Official
    c. Department Head
    d. Media
    e. Community Member
    f. Other (please specify)_____

Appendix L- Process for tracking health data usage in media and policy decisions

As part of our research grant, we began tracking health data usage in our local media: two TV stations and one newspaper. For the TV stations, we searched using the key words, "health department" and "healthy communities". We reviewed all search results. We included those that had quantitative health data on our media tracking chart. Information tracked about the story included: the date, topic, what health data appeared, the data source and the link. As for the newspaper, we repeated the process but only searched using the key word, "health department". We tracked stories from January 2014- present.

For tracking of policy decisions, we reviewed City Council and County Board packets and agendas. Using our knowledge of activities happening in the community and looking at the agenda item, we determined if we wanted to explore the agenda item further. We requested the meeting minutes of those meeting that had potential health data used in the decisions. As we reviewed the minutes we looked for quantitative health data or health data being used in the minutes. Those agenda items that met the criteria were added to the tracking sheet. We have tracked city council and county board meetings from January 2014-present.

Below is an example of the table that we used to track.

Date	Media Type	Title	What data appeared	Data Source
10/21/2014	TV 13-WEAU	20 hospitalized in WI from flu this season	At this point in the flu season, we normally have one or two people who have been hospitalized due to seasonal influenza; however, this year 20 people have already been hospitalized.	WI Department of Health Service
7/22/2015	TV 18-WQOW	Experts say mental health starts at infancy	n/a	n/a
11/13/2015	Leader Telegram	CDC: Fewer Americans are smoking	About 17 percent of American adults smoked cigarettes in 2014 — approximately a 20 percent drop from the rate of adult smoking in 2005.	Centers for Disease Control and Prevention

Date	City Council	County Board	Topic	Where Data appeared	Data Source
4/2/2014		x	National Public Health Week Proclamation	This proclamation includes health data to show why this week should be supported by the board.	Eau Claire Health Department

251.04 Local board of health; powers and duties.

(1) Except as authorized in s. 251.02 (2) (b), (3m), (3r), and (3t), a city board of health shall govern a city health department, a county board of health shall govern a county health department or multiple county health department, and a city−county board of health shall govern a city−county health department. A city board of health, a county board of health, a city−county board of health, or a board of health for a local health department as authorized in s. 251.02 (2) (b), (3m), (3r), or (3t) shall assure the enforcement of state public health statutes and public health rules of the department as prescribed for a Level I local health department. A local board of health may contract or subcontract with a public or private entity to provide public health services. The contractor's staff shall meet the appropriate qualifications for positions in a Level I local health department.

(2) A city or county board of health or a board of health for a local health department as authorized in s. 251.02 (2) (b), (3m), (3r), or (3t) shall assure that its local health department is a Level I, Level II, or Level III local health department, as specified in s. 251.05 (1).

(3) A city or county board of health or a board of health for a local health department as authorized in s. 251.02 (2) (b), (3m), (3r), or (3t) may adopt those regulations, for its own guidance and for the governance of the local health department, that it considers necessary to protect and improve public health. The regulations may be no less stringent than, and may not conflict with, state statutes and rules of the department.

(4) A local board of health shall report to the department as required by rule.

(5) A local board of health shall meet at least quarterly.

(6) A local board of health shall:

(a) Assess public health needs and advocate for the provision of reasonable and necessary public health services.

(b) Develop policy and provide leadership that fosters local involvement and commitment, that emphasizes public health needs and that advocates for equitable distribution of public health resources and complementary private activities commensurate with public health needs.

(7) A local board of health shall assure that measures are taken to provide an environment in which individuals can be healthy.

(8) Unless the manner of employment is otherwise provided for by ordinance, a local board of health shall employ qualified public health professionals, including a public health nurse to conduct general public health nursing programs under the direction of the local board of health and in cooperation with the department, and may employ one or more sanitarians to conduct environmental programs and other public health programs not specifically designated by statute as functions of the public health nurse. The local board of health shall coordinate the activities of any sanitarian employed by the governing body of the jurisdiction that the local board of health serves. The local board of health is not required to employ different persons to perform these functions.

(9) In counties with a single county health department and either a county executive or a county administrator, the county executive or county administrator may assume the powers and duties of a local board of health under this section. If a county executive or a county administrator elects to assume those powers and duties, the local board of health shall be only a policy−making body determining the broad outlines and principles governing the administration of the county health department.

History: 1993 a. 27 ss. 261, 264, 463; 1997 a. 114; 1999 a. 9, 185; 2001 a. 16; 2003 a. 158.

HEALTH IN ALL POLICIES

A Guide for State and Local Governments

The California Endowment

APHA American Public Health Association

CDPH California Department of PublicHealth

PUBLIC HEALTH INSTITUTE®

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ABOUT THIS GUIDE

"Health in All Policies: A Guide for State and Local Governments" was written by the public health facilitators of the California Health in All Policies Task Force and is geared toward state and local government leaders who want to use intersectoral collaboration to promote healthy environments. There are many different ways to support intersectoral collaboration for health, and the guide provides a broad range of perspectives and examples.

In developing the guide, the authors reviewed the published peer-reviewed and gray literature and interviewed people working in formal and informal intersectoral collaborative government processes to promote health at local, state, and national levels across the United States and in other countries. While the guide reflects a wide variety of approaches to Health in All Policies, and provides local, state, and national case examples from across the United States and around the world, it draws heavily on the authors' experiences in California and from documents produced by the California Health in All Policies Task Force. More information about the California experience is available in Part III.

Much of the information in this guide may appear intuitive or self-evident. However, the authors' experiences suggest that careful consideration of basic concepts, such as relationship building and decision-making, is very helpful in pursuing the broad range of activities that fall within Health in All Policies.

Health in All Policies is a growing field and the authors expect that new approaches to Health in All Policies will continue to emerge after the publication of this guide.

A NOTE ABOUT THE ORGANIZATION OF THE GUIDE

The order of information in this guide is not intended to imply that the practice of Health in All Policies will necessarily follow any one sequence. For example, some Health in All Policies initiatives will emerge from existing relationships, while others will be created through a top-down directive and necessitate the building of new relationships.

Part I of this guide is a discussion of the concept of Health in All Policies, including its key elements, history, and links to other public health and equity initiatives. Part II covers the "nuts and bolts" of this work and discusses an array of considerations including structure, relationship building, leadership, and messaging. Part III of the guide is a case study of the California Health in All Policies Task Force. Those less familiar with Health in All Policies approaches may find it useful to read the guide in order, while others may be more interested in starting with the California case study or another section.

The guide includes a glossary of commonly used terms, as well as a list of annotated resources, organized by section. You will also find *Food for Thought* sections throughout the guide. These are lists of critical thinking questions you may wish to consider as you apply a Health in All Policies approach.

LANGUAGE USE IN THIS GUIDE

Several of the authors' choices of language merit comment.

The term "policy" deserves special attention. While policy is often seen as synonymous with legislation, it actually describes a broad range of activities, and can be defined much more broadly as an agreement on issues, goals, or a course of action by the people with power to carry it out and enforce it.[1,2] In this guide, "policy" refers to *public* policy, which can be defined as the "sum of government activities, whether acting directly or through agents,"[3] that have an influence on residents and communities. Public policy has also been defined as "the actions of government and the intentions that determine those actions,"[4] "political decisions for implementing programs to achieve societal goals,"[5] or simply "whatever governments choose to do or not to do."[6]

Another term that deserves attention is "equity," which is used frequently in the phrase "health equity," and sometimes by itself. Promoting equity is a key strategy for addressing major population health issues rooted in socioeconomic inequalities facing the United States. Health inequities are differences in health "that are a result of systemic, avoidable and unjust social and economic policies and practices that create barriers to opportunity."[7] In this guide "sustainability" refers to the need of society to create and maintain conditions so that humans can fulfill social, economic, and other requirements of the present without compromising the ability of future generations to meet their own needs.[8] This can be thought of in terms of environmental, economic, and social impacts, and encompasses the concept of stewardship and the responsible management of resources. The authors believe that equity and sustainability are core components of a healthy community.

The term "agency" is generally used to indicate any government entity including an agency, department, office, or board.

The terms "partners" or "partner agencies" generally refer to government agencies, while "stakeholders" generally refers to those outside of government, including members of local communities, representatives of community groups and nonprofit organizations, academics, and representatives of businesses. However, note that for *state* government agencies, the term "stakeholder" may also refer to a representative of a *local* government agency.

PART I. WHAT IS HEALTH IN ALL POLICIES AND WHY DO WE NEED IT?

Health in All Policies: A Guide for State and Local Governments starts with background information on the concept of Health in All Policies in order to ground the reader in key concepts and definitions. Part I includes an overview of the social determinants of health and describes Health in All Policies as an approach to address these key drivers of health outcomes and health inequities. The authors discuss the connections between health, equity, and sustainability and describe the importance of addressing equity and sustainability in order to build healthy communities. Part I also includes an overview of the key principles of Health in All Policies, a description of a healthy community as a goal for Health in All Policies work, and an international history of Health in All Policies.

SECTION 1: Background

KEY POINTS

- Health in All Policies is a collaborative approach to improving the health of all people by incorporating health considerations into decision-making across sectors and policy areas.
- Health is influenced by the social, physical, and economic environments, collectively referred to as the "social determinants of health."
- Health in All Policies, at its core, is an approach to addressing the social determinants of health that are the key drivers of health outcomes and health inequities.
- Health in All Policies supports improved health outcomes and health equity through collaboration between public health practitioners and those nontraditional partners who have influence over the social determinants of health.
- Health in All Policies approaches include five key elements: promoting health and equity, supporting intersectoral collaboration, creating co-benefits for multiple partners, engaging stakeholders, and creating structural or process change.
- Health in All Policies encompasses a wide spectrum of activities and can be implemented in many different ways.
- Health in All Policies initiatives build on an international and historical body of collaborative work.

1.1 What is Health in All Policies?

Health in All Policies is a collaborative approach to improving the health of all people by incorporating health considerations into decision-making across sectors and policy areas. (See Appendix II for other definitions of Health in All Policies.) The goal of Health in All Policies is to ensure that all decision-makers are informed about the health, equity, and sustainability consequences of various policy options during the policy development process.[9] A Health in All Policies approach identifies the ways in which decisions in multiple sectors affect health, and how better health can support the achievement of goals from multiple sectors. It engages diverse governmental partners and stakeholders to work together to improve health and simultaneously advance other goals, such as promoting job creation and economic stability, transportation access and mobility, a strong agricultural system, environmental sustainability, and educational attainment.[10]

Health in All Policies is a collaborative approach to improving the health of all people by incorporating health considerations into decision-making across sectors and policy areas.

Health in All Policies builds on a long public health tradition of successful intersectoral collaboration, such as efforts to implement water fluoridation, reduce lead exposure, restrict tobacco use in workplaces and public spaces, improve sanitation and drinking water quality, reduce domestic violence and drunk driving, and require the use of seatbelts and child car seats.

Health in All Policies encompasses a wide spectrum of activities, with one-time collaborative efforts with a single partner at one end, and whole-of-government approaches involving on-going collaboration across many agencies at the other. While all parts of the spectrum can help further a Health in All Policies approach, Health in All Policies is most effective when it goes beyond one-time or one-issue collaborations. Ultimately the Health in All Policies approach seeks to institutionalize considerations of health, equity, and sustainability as a standard part of decision-making processes across a broad array of sectors.

> "I think it's clear that if we are going to be successful as a state in advancing improvements in individual health [and] in closing health disparities we need to be thinking across silos and across sectors."
>
> —Kimberly Belshé, *former Secretary, California Health and Human Services Agency, November 2010*

1.2 Why We Need Health in All Policies

Health in All Policies is a response to a variety of complex and often inextricably linked problems such as the chronic illness epidemic, growing inequality and health inequities, rising healthcare costs, an aging population, climate change and related threats to our natural resources, and the lack of efficient strategies for achieving governmental goals with shrinking resources. These "wicked problems"[11] or "social messes"[12] are extremely challenging. Addressing them requires innovative solutions, a new policy paradigm, and structures that break down the siloed nature of government to advance trans-disciplinary and intersectoral thinking.[13] Health in All Policies provides such an approach.

Governments, at all levels, are challenged by declining revenues and shrinking budgets while also facing increasingly complex problems. Collaboration across sectors—such as through a Health in All Policies approach—can promote efficiency by identifying issues being addressed by multiple agencies and fostering discussion of how agencies can share resources and reduce redundancies, thus potentially decreasing costs and improving performance and outcomes.

"A Social Mess is a set of interrelated problems …resistant to analysis and, more importantly, to resolution…[It is characterized by] uncertainty and risk, complexity, systems interacting with other systems, competing points of view and values, different people knowing different parts of the problem (and possible solutions), and intra- and inter-organizational politics."

—Robert Horn, *Strategy Kinetics*[14]

SOCIAL DETERMINANTS OF HEALTH AND EQUITY

At its core, Health in All Policies represents an approach to addressing the social determinants of health, which are the key drivers of health outcomes and health inequities. It is founded in the recognition that public health practitioners must work with partners in the many realms that influence the social determinants of health, which are largely outside the purview of public health agencies.

The Upstream Parable

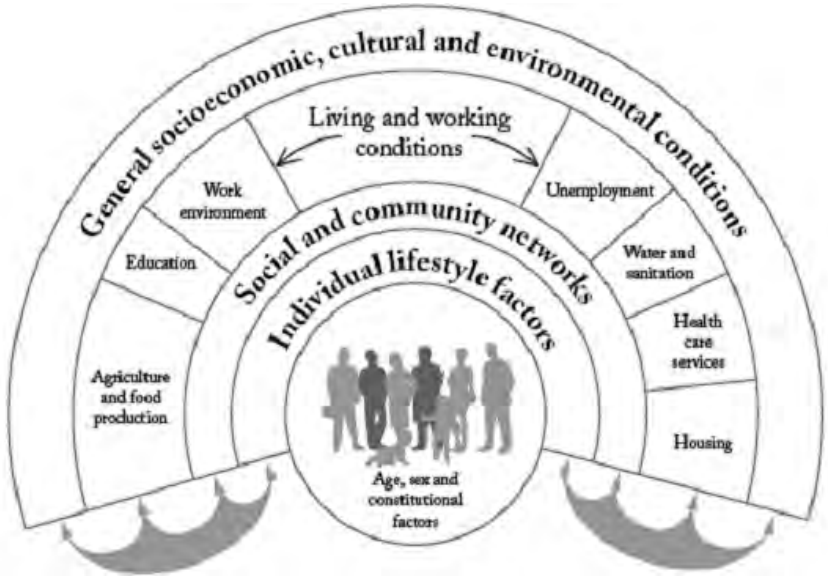
Irving Zola, in a widely cited article by John McKinlay, offered this metaphor for our current sickness-based health system and the need for upstream, preventative approaches for health: "Sometimes it feels like this. There I am standing by the shore of a swiftly flowing river and I hear the cry of a drowning man. So I jump into the river, put my arms around him, pull him to shore, and apply artificial respiration. Just when he begins to breathe, there is another cry for help. So I jump into the river, reach him, pull him to shore, apply artificial respiration, and then just as he begins to breathe, another cry for help. So back in the river again, reaching, pulling, applying, breathing, and then another yell. Again and again, without end, goes the sequence. You know, I am so busy jumping in, pulling them to shore, applying artificial respiration, that I have *no* time to see who the hell is upstream pushing them all in."[15]

Health is influenced by the interaction of many factors including:

- genetics, biology, individual behavior;
- access and barriers to health care; and
- social, economic, service, and physical (natural and built) environments.[16]

While clinical care is vitally important, only a small portion (15–20%) of overall health and longevity can be attributed to clinical care.[17] Social, physical, and economic environments and conditions, collectively referred to as the "social determinants of health," have a far greater impact on how long and how well people live than medical care.[18,19,20] The interaction between health, social factors, and environmental factors is complex. The "Policy Rainbow" below is one model that shows the layers of influence on an individual's potential for health. See the Annotated Resources (Appendix IV, page 140) for additional models that demonstrate the relationship between health and the built and social environment, such as the Spectrum of Prevention and the Health Impact Pyramid.

FIGURE 1. THE BROAD DETERMINANTS OF HEALTH
Dahlgren, G. and Whitehead, M. (1991). Policies and Strategies to Promote Social Equity in Health. Stockholm, Sweden: Institute for Futures Studies. Used with permission.



The social determinants of health are key drivers of health inequities, which are persistent in the United States.[21] Health inequities are differences in health "that are a result of systemic, avoidable and unjust social and economic policies and practices that create barriers to opportunity." These are distinct from health disparities, which are "differences in health status among distinct segments of the population including differences that occur by gender, race or ethnicity, education or income, disability, or living in various geographic localities."[22] For example, health disparities include the increased risk of sickle cell disease in African Americans or the increased risk of breast cancer in women, whereas health inequities include the increased rates of asthma hospitalization in children living near freeways or the lower life expectancies for African Americans living in low-income neighborhoods.

Several studies suggest that addressing social and economic inequalities like inadequate education, which contributes to inequitable mortality rates, would contribute substantially more to overall population health than the emergence of new medical advances.[23,24,25] Economic inequality is increasing in the United States, and is likely to lead to worsening health inequities.[26]

Economic well-being is one of the most critical determinants of health; living in poverty is associated with significantly worse health outcomes across all races and ethnicities and in every state and community.[27] Furthermore, unemployment is associated with poor physical and mental health outcomes.[28] A report from the Robert Wood Johnson Foundation states that:

> "The first wealth is health."
>
> —Ralph Waldo Emerson[30]

> The means by which poverty damages health over the life course are many, but key elements involve limits on opportunity and participation that come directly from inadequate financial resources, diminished early life environments and poor educational opportunities, physical environments that are dangerous and under-resourced, poor working conditions, absence of benefits, job insecurity, lack of health insurance and access to quality medical care, and acute and chronic stress.[29]

Education is another key determinant of health; education and health correspond closely and impact each other in both directions. People with higher levels of educational attainment consistently experience lower risks for a wide array of illnesses and increased life expectancy.[31] They also experience improved future economic well-being.[32] In turn, educational attainment itself is shaped by health. For example, the health of students significantly impacts school dropout rates,[33] attendance,[34] and academic performance.[35,36,37]

Structural racism contributes to persistent inequities. People of color have consistently lower incomes, less household wealth, and lower educational achievement levels than Whites. Children living in poverty are more likely to be Hispanic or African American.[38] Even at equivalent income levels, people of color in the United States consistently experience significantly higher rates of illness and injury than their White counterparts.[39]

The Gardener's Tale

The following parable, paraphrased here, illustrates how structural racism impacts outcomes and perpetuates inequities over time. Imagine a gardener who has two packets of seeds, one for red flowers and one for pink flowers, and two flower boxes, one with poor soil and one with rich soil. The gardener, who loves red flowers, plants the red flower seeds in the box with the rich, fertile soil, and plants seeds for pink flowers in the box with poor, rocky soil. The seeds in the rich soil grow into big and beautiful flowers; the pink seeds in the poor soil fare poorly, becoming straggly, anemic-looking plants. As the seeds self-sow in the boxes, the progeny of the red flowers in the rich soil continue to thrive, while the pink flowers in the poor soil struggle to survive. The gardener concludes, "I was right to prefer the red flowers."[40]

Neighborhood characteristics have significant impacts on health outcomes because they influence an individual's ability to adopt behaviors that promote health.[41] Efforts to change behaviors that impact health are most effective when they also address the environments in which people make their daily choices.[42] For example:

- People whose neighborhoods lack parks, green open spaces, or trees and whose neighborhoods have high crime rates, have less access to safe places to play or walk.[43]
- People in low-income neighborhoods often have less access to affordable, healthy food retail options, and have more access to cheap fast-food outlets.[44]
- Rates of violent crime and interpersonal violence are higher in neighborhoods with a high density of alcohol outlets.[45]

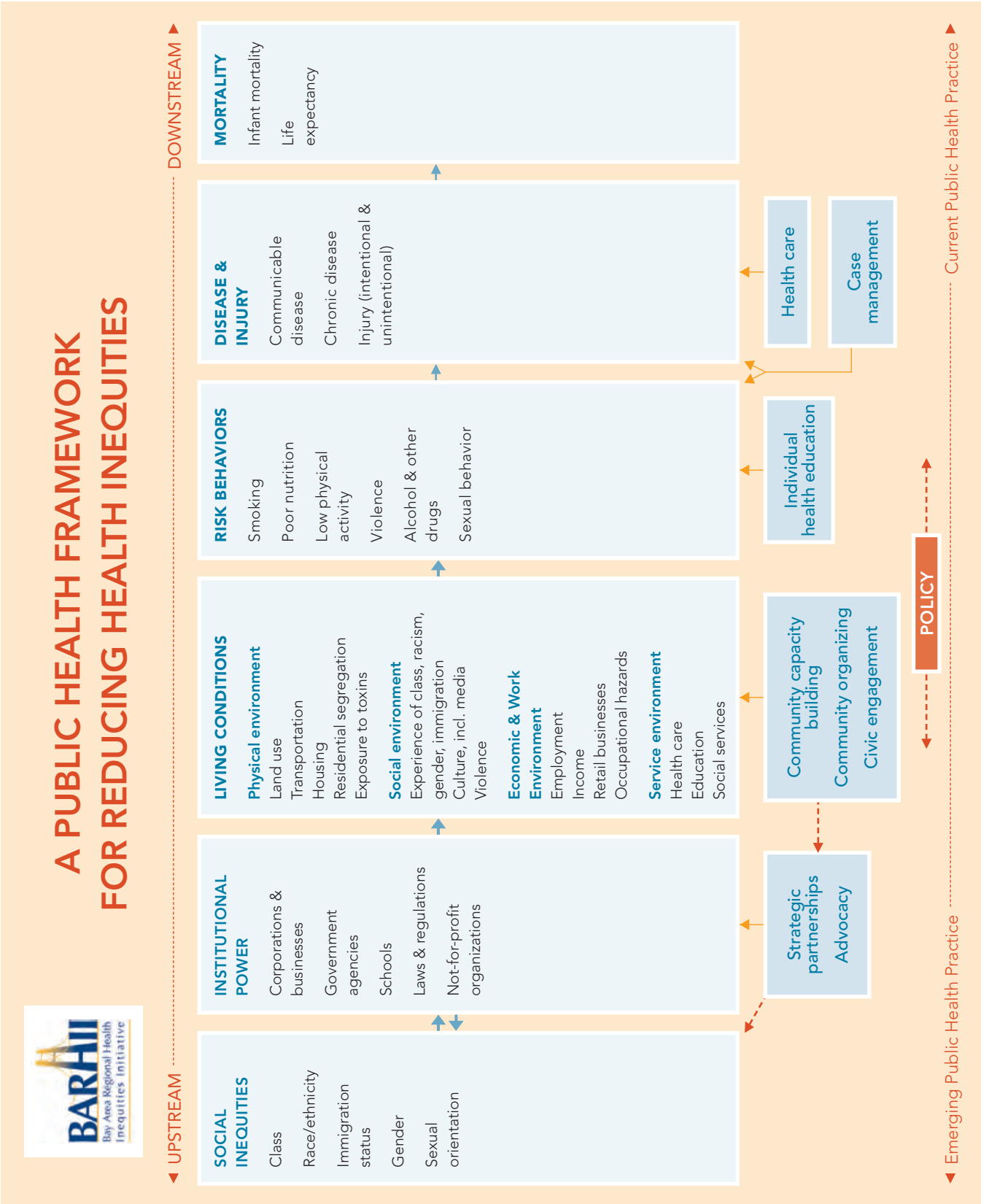
In almost all urban areas, serious health problems are highly concentrated in a fairly small number of distressed neighborhoods,[46] and the health problems of high-poverty neighborhoods remain substantially more serious than those of middle-class and affluent neighborhoods. People living in neighborhoods with high rates of poverty can have life expectancies up to 14 years shorter than those who live in neighborhoods with less poverty.[47]

These inequities, in part, reflect differences in characteristics between neighborhoods with high levels of poverty where many people of color live and those with less poverty where more white people reside. Many studies suggest that residents of low-income and minority neighborhoods are the most likely to lack access to supermarkets and healthful food, have fewer parks, and are more likely to be located near sources of air pollution.[48,49] Fast-food restaurants and foods with high caloric density and little nutritional value are also more available in lower-income and minority neighborhoods.[50] Liquor stores are disproportionately located in predominantly African American census tracts, even after controlling for census tract socioeconomic status.[51] Residents of rural areas are also more likely to lack access to supermarkets and healthful food.[52]

Furthermore, research shows that racial segregation itself negatively impacts health, regardless of individual income level.[53] For example, cities with the highest degrees of residential racial segregation also show the greatest gaps in African American and white infant mortality rates.[54] This is especially important because rates of residential segregation by race remain high[55] and rates of residential segregation by income are actually increasing across the United States.[56]

The Bay Area Regional Health Inequities Initiative, a collaboration of 11 local health departments in the San Francisco Bay Area, developed the following framework to illustrate how the social determinants of health are linked with poor health outcomes. This framework builds on the Dahlgreen and Whitehead model shown earlier (Figure 1, page 9), to convey how social inequities and institutional power can affect living conditions, risk behaviors, disease, injury, and ultimately mortality.

FIGURE 2. A PUBLIC HEALTH FRAMEWORK FOR REDUCING HEALTH INEQUITIES
Bay Area Regional Health Inequities Initiative. (2010, June). Used with permission.



While inequity hurts those at the bottom of the socioeconomic ladder, it is also associated with poorer health outcomes for all members of a community—not just those with fewer financial resources. Wilkinson and Pickett analyzed the relationship between income inequality and health outcomes, using data from industrialized nations and states in the United States, and found that higher overall inequality is consistently associated with worse health outcomes at all rungs of the socioeconomic ladder.[57]

HEALTH AND SUSTAINABILITY

Environmental sustainability is inextricably linked to health and equity,[58] and has an important place in Health in All Policies work. Global environmental challenges not only directly impact health (e.g., flooding and extreme heat events), but also threaten the supporting systems on which human life depends—air, food, shelter, and water. For example, the health effects of air pollution, crop loss, stratospheric ozone depletion, sea level rise, and collapse of fisheries all suggest that environmental sustainability must itself be a key health goal. Luckily, many strategies to address health and equity also address environmental challenges (more information about co-benefits is available in Section 4.2).

It is incumbent upon those engaged in Health in All Policies to incorporate sustainability into the work. In California, for example, the nexus between health, equity, and sustainability was embedded in the structural placement of the Health in All Policies Task Force within the Strategic Growth Council, given the Council's core function as a cabinet-level body created to ensure coordination across agencies on issues related to sustainability.[59] In other jurisdictions, Health in All Policies initiatives may need to intentionally consider sustainability throughout their work.

> "[E]cosystems are the planet's life-support systems—for the human species and all other forms of life… Nature's goods and services are the ultimate foundations of life and health, even though in modern societies this fundamental dependency may be indirect, displaced in space and time, and therefore poorly recognized.
>
> —World Health Organization, Millennium Ecosystem Assessment[65]

HEALTH AND THE ECONOMY

The population's health impacts, and is impacted by, the economy in the United States in multiple ways. The rising costs of health care—now roughly 18% of United States gross domestic product (GDP)[60]—are sapping the government's ability to invest in other critical areas like education, renewable energy, or deficit reduction. Of the $2 trillion spent on health care each year, 75% is attributed to chronic conditions,[61] and nearly 10% of all national medical costs are obesity-related.[62] Cardiovascular disease alone costs society nearly $400 billion each year,[63] and it is estimated that an excess of $180 billion is spent annually to treat uncomplicated diabetes and hypertension.[64]

Prevention of chronic illness alone could yield very significant savings. For example, the Trust for America's Health estimates that an investment of $10 per person per year in proven community-based programs to increase physical activity, improve nutrition, and prevent smoking and other tobacco use could save the country more than $16 billion annually within five years—a return of $5.60 for every $1 spent.[66] In California, a potential reduction of 1% in common chronic conditions among the 2.6 million current members of the California Public Employees Retirement System is projected to yield a savings of $3.6 million per year.[67] Good health allows increased workforce participation and productivity, while illness and injury negatively impact the productivity not only of the individual, but also of family members who provide care for their loved ones. Labor time lost due to health reasons represents $260 billion per year in lost economic output.[68] For example, full-time workers in the United States who are overweight or obese and have chronic health conditions miss an estimated 450 million additional days of work each year compared with healthy workers, resulting in an estimated annual cost of more than $153 billion in lost productivity.[69,70]

Furthermore, people across the political spectrum agree that spending money to improve the health of communities makes sense. Over 75% of voters in small, conservative counties in California "agree that public investments aimed at keeping people healthy, like building parks and promoting neighborhood safety, pay for themselves in the long run by preventing disease and reducing health care costs."[71]

OBESITY: AN EXAMPLE OF THE NEED FOR HEALTH IN ALL POLICIES

The causes of the obesity epidemic are complex, including the food, physical activity, social, and economic environments that shape individuals' opportunities to make healthy food and beverage choices and incorporate exercise into daily routines. More than one-third of adults and almost one-fifth of children in the United States are obese, and obesity rates have more than doubled for adults and tripled for children since 1980.[72] Obesity increases the risk of many health conditions including coronary heart disease, stroke, high blood pressure, Type 2 diabetes, some cancers, osteoarthritis, and infertility. It may also shorten population life expectancies for future generations.[73,74]

The increased prevalence of sedentary lifestyles, which contributes to rising obesity rates, is related to changes in patterns of land use and transportation, increased distances from homes to school and work, parental fears about children's safety, shifts in the nature of work, and cultural changes. Increased consumption of foods and beverages with high caloric density and little nutritional value is encouraged by the proliferation of time-saving, processed convenience foods, pressures on working parents, intensive marketing, and government subsidies for commodity products such as corn and soy.

Reducing the prevalence of obesity and chronic disease will require that public health practitioners address people's environments, which will in turn require working across multiple sectors. Transportation, planning, agriculture, labor, economic development, education, entertainment, and other partners will all need to be involved in order to advance a comprehensive approach to obesity and chronic disease prevention. It will also require exploring the links between these sectors and environmental sustainability, as well as addressing inequities in how communities are impacted.

1.3 What is a Healthy Community?

Because community and social factors drive health outcomes and health equity, it is important to ask, "What is a healthy community?" The framework below provides an answer to this question. The framework was developed by the California Health in All Policies Task Force, and was an important step in developing a shared vision for the group. The California Health in All Policies Task Force case study at the end of this guide gives more information about how the framework was developed as well as other details about implementation of Health in All Policies in California.

> "Health: a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."
>
> —World Health Organization[75]

What is a Healthy Community?

A Healthy Community provides for the following through all stages of life:

MEETS BASIC NEEDS OF ALL

- Safe, sustainable, accessible, and affordable transportation options
- Affordable, accessible and nutritious foods, and safe drinkable water
- Affordable, high quality, socially integrated, and location-efficient housing
- Affordable, accessible and high quality health care
- Complete and livable communities including quality schools, parks and recreational facilities, child care, libraries, financial services and other daily needs
- Access to affordable and safe opportunities for physical activity
- Able to adapt to changing environments, resilient, and prepared for emergencies
- Opportunities for engagement with arts, music and culture

QUALITY AND SUSTAINABILITY OF ENVIRONMENT

- Clean air, soil and water, and environments free of excessive noise
- Tobacco- and smoke-free
- Green and open spaces, including healthy tree canopy and agricultural lands
- Minimized toxics, green house gas emissions, and waste
- Affordable and sustainable energy use
- Aesthetically pleasing

ADEQUATE LEVELS OF ECONOMIC AND SOCIAL DEVELOPMENT

- Living wage, safe and healthy job opportunities for all, and a thriving economy
- Support for healthy development of children and adolescents
- Opportunities for high quality and accessible education

HEALTH AND SOCIAL EQUITY

SOCIAL RELATIONSHIPS THAT ARE SUPPORTIVE AND RESPECTFUL

- Robust social and civic engagement
- Socially cohesive and supportive relationships, families, homes and neighborhoods
- Safe communities, free of crime and violence

California Health in All Policies Task Force. (2010, December 3). *Health in All Policies Task Force Report to the Strategic Growth Council.* Retrieved from: http://sgc.ca.gov/hiap/docs/publications/HiAP_Task_Force_Report.pdf Used with permission.

1.4 The Five Key Elements of Health in All Policies

There is no one "right" way to implement a Health in All Policies approach. While all Health in All Policies initiatives are based on the concept that population health and equity depend upon collaborative, intersectoral action, there is substantial variation in process, structure, scope, and participation in the initiatives. These variations depend upon many factors, including the needs of a particular community, available resources, and relationships with key partners.

Regardless of how a Health in All Policies initiative is structured, there is a wide range of activities that governments can use to promote consideration of health in decision-making. These activities can be seen as falling along a spectrum, ranging from one-time opportunities for stakeholder input to activities that fully embed health considerations into all aspects of government decision-making. Where an activity falls on this spectrum will depend on how much the activity incorporates the five key elements described below. Organizers of initiatives will choose activities depending on capacity, resources, and support from decision-makers, and they may engage in a variety of different activities at the same time or over time. These activities can include jointly sponsored conferences or trainings, providing input on documents or rules, joint research projects, sharing data or new data metrics, health impact assessments, the organization of interagency offices, collaborative decision-making, and many more.

Based on experiences in California, and through a review of Health in All Policies work around the nation and globe, five key elements of Health in All Policies have emerged as vital to the success of this work:

1. **Promote health, equity, and sustainability.** Health in All Policies promotes health, equity, and sustainability through two avenues: (1) incorporating health, equity, and sustainability into specific policies, programs, and processes, and (2) embedding health, equity, and sustainability considerations into government decision-making processes so that healthy public policy becomes the normal way of doing business. Promoting equity is an essential part of Health in All Policies, given the strong ties between inequity and poor health outcomes for all members of society.

2. **Support intersectoral collaboration.** Health in All Policies brings together partners from many sectors to recognize the links between health and other issue and policy areas, break down silos, and build new partnerships to promote health and equity and increase government efficiency. Agencies that are not typically considered as health agencies play a major role in shaping the economic, physical, social, and service environments in which people live, and therefore have an important role to play in promoting health and equity. A Health in All Policies approach focuses on deep and ongoing collaboration, rather than taking a superficial or one-off approach.

3. **Benefit multiple partners.** Health in All Policies is built upon the idea of "co-benefits" and "win-wins." Health in All Polices work should benefit multiple partners, simultaneously addressing the goals of public health agencies and other agencies to benefit more than one end (achieve co-benefits) and create efficiencies across agencies (find win-wins). This concept is essential for securing support from partners and can reduce redundancies and ensure more effective use of scarce government resources. Finding a balance between multiple goals will sometimes be difficult, and requires negotiation, patience, and learning about and valuing others' priorities.

4. **Engage stakeholders.** Health in All Policies engages a variety of stakeholders, such as community members, policy experts, advocates, members of the private sector, and funders. Robust stakeholder engagement is essential for ensuring that work is responsive to community needs and for garnering valuable information necessary to create meaningful and impactful change.

5. **Create structural or procedural change.** Over time, Health in All Policies creates permanent changes in how agencies relate to each other and how government decisions are made. This requires maintenance of both structures which can sustain intersectoral collaboration and mechanisms which can ensure a health and equity lens in decision-making processes across the whole of government. This can be thought of as "embedding" or "institutionalizing" Health in All Policies within existing or new structures and processes of government.

The State of South Australia, an international leader on this approach, has also developed ten principles for Health in All Policies, which can be viewed in Appendix III, on page 139.

1.5 A Brief History of Health in All Policies

While Health in All Policies has gained significant traction in the last few years, its origins go back 35 years to the World Health Organization Declaration of Alma-Ata in 1978. The timeline below shows the history of this innovative approach to intersectoral collaboration for health, including its global spread.

See the Annotated Resources (Appendix IV, page 140) for more details on the events below.

- **1978** World Health Organization Declaration of Alma-Ata
- **1986** World Health Organization Ottawa Charter for Health Promotion
- **1987** Health Policy Towards the Year 2000, Norway
- **1988** World Health Organization International Conference on Health Promotion, Adelaide, Australia
- **2000** National Health Strategy, New Zealand
- **2001** Public Health Act, Quebec, Canada
- **2003** National Public Health Policy, Sweden
- **2005** World Health Organization Commission on Social Determinants of Health
- **2006** Finnish Presidency Health Theme, European Union
- **2007** State Strategic Plan, South Australia
- **2007** Thai National Health Act, Thailand
- **2009** Partnership for Sustainable Communities, United States
- **2010** California Health in All Policies Task Force, United States
- **2010** European Union Council Conclusion Statement on Health in All Policies
- **2010** National Prevention, Health Promotion, and Public Health Council, United States
- **2010** Adelaide Statement on Health in All Policies, South Australia
- **2011** For the Public's Health: Revitalizing Law and Policy to Meet New Challenges, Institute of Medicine, United States
- **2011** Rio Political Declaration on Social Determinants of Health, Brazil

Public Health 3.0: Time for an Upgrade

It is time to boldly expand the scope and reach of public health to address all factors that promote health and well-being, including those related to economic development, education, transportation, food, environment, and housing. Despite nearly $3.0 trillion in annual health care spending, the United States ranks 27th in the world in life expectancy, and relatively low in many other measures of health and well-being.[1,2] Worse yet, for the poor in this country, life expectancy is actually decreasing.[3] Given these trends, and persistent gaps in health status, it's time for a major upgrade to Public Health 3.0.

PUBLIC HEALTH 1.0

The public health system in its modern sense began to take shape after the industrial revolution in the late 19th century. During the 20th century, public health was empowered by extraordinary scientific advances in our understanding of disease, powerful new prevention and treatment tools such as vaccines and antibiotics, and expanded capability in areas such as epidemiology and laboratory science. We refer to this period as Public Health 1.0.

Yet, by late in the century, the capacity and effectiveness of public health agencies varied enormously across the country, with little consensus about what should be expected of public health. In 1988, the Institute of Medicine (IOM) declared in *The Future of Public Health* that "this nation has lost sight of its public health goals and has allowed the system of public health activities to fall into disarray."[4]

PUBLIC HEALTH 2.0

We conceive of Public Health 2.0 as beginning with this IOM report and continuing to the present day. The IOM Committee characterized the mission of public health as fulfilling society's interest in assuring conditions in which people can be healthy, and defined the core functions of governmental public health agencies as assessment, policy development, and assurance. This seminal report was enormously influential in shaping and reenergizing public health (e.g., by spurring national deliberations leading to the clear articulation of the essential services of public health). However, there was little emphasis on how public health leaders might work across sectors to address social, environmental, or economic determinants of health.

A CHANGING LANDSCAPE FOR PUBLIC HEALTH

Several developments are driving the need to re-envision public health practice once again. Health trends in the last 30 years are such that the leading causes of death and illness are now attributable to behaviors (e.g., smoking, sedentary lifestyle, and eating patterns) that are powerfully driven by the social and physical environments in which people live, learn, work, and play.

Today, the largest part of many state and local agency budgets are federal grants, giving state and local public health departments limited flexibility in how best to meet local needs.[5] Most health departments have not seen their budgets or functional capacity fully restored since the sharp and sustained budget cuts to public health at every level which followed the Great Recession in the United States (2007–2009).

The Affordable Care Act (ACA) improved access to health care for all. Today, 17.6 million people have access to affordable health care that did not have access before. This development is facilitating public health's transition away from clinical care provider of last resort to primary prevention and health promotion.

The ACA also catalyzed movement away from fee-for-service to value-based payments, potentiating innovative prevention and health-promoting care models.[6] The ACA's requirement that nonprofit hospitals must do community health needs assessments has increased collaboration between medicine and public health.

In the past decade, there has been a widening embrace of health department accreditation as one strategy to improve public health agency performance. As of November 2015, 33 states plus the District of Columbia have a health department accredited by the Public Health Accreditation Board (PHAB), reaching 45% of the US population.

Finally, there has been increasing recognition in recent years that we—in public health and beyond—must find ways to directly address the broad social and environmental determinants of health, through collaborative, cross-sector efforts. Elected and civic leaders have also become more aware of the importance of community health, realizing that a healthy community is one with a strong educational system, safe streets, effective public transportation, and affordable, high-quality food and housing.

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PUBLIC HEALTH 3.0

In this context, we submit that it is time for a major upgrade to Public Health 3.0: a modern version that emphasizes cross-sector collaboration and environmental, policy, and systems-level actions that directly affect the social determinants of health. Several pioneering US communities are already experimenting with this expansive approach to community health. It is time to position *all* local and state public health authorities as leaders in building communities that, by their nature, promote the public's health and wellness.

What are the key components of Public Health 3.0?

Enhanced Leadership and Workforce

An exciting evolving model is one in which local and state public health leaders see themselves not only as the director of their governmental agency but also more broadly as the chief health strategist for their communities, capable of mobilizing community action to affect health determinants beyond the direct reach of their agencies.[7]

New Partners

Broad engagement with partners across multiple sectors is inherent to the Public Health 3.0 vision. It is especially important to engage elected leaders, by sharing our vision that health is a fundamental driver of community development. The business community is another key partner, with much to gain and give to this effort. Members of the general public—including those from the subpopulations at greatest risk of poor health—must also be brought into the process of identifying and deciding how best to respond to community needs.

Accreditation

The Public Health Accreditation Board accreditation process institutionalizes a culture of improvement, innovation and transparency, which fosters public trust and support. We encourage continued evolution and improvement of the PHAB process to incorporate Public Health 3.0 elements.

Technology, Tools, and Data That Matter

We need to develop timely, locally relevant health information systems instead of relying on data that are outdated, merged across years to improve sample size, and not actionable at the neighborhood level.

New Metrics of Success

We need to define what constitutes a healthy, sustainable, thriving community and, thus, how to measure success. A limited number of domains should be identified that collectively encompass the conditions and outcomes relevant to measuring the health of a community.

Funding

Adequate, flexible funding is necessary for a broadly engaged Public Health 3.0 organization. At the federal level, we need to explore ways of funding state and local public agencies to promote an expansive approach to assuring community health. New financial and other support for public health should be developed from state and local sources as well.

REALIZING THE VISION

To accomplish this upgrade to Public Health 3.0, we need to engage a broad spectrum of thought leaders to better define the vision and identify likely challenges to its implementation.

We at the federal level must also consider how we can help catalyze progress. It is time once again for the public health community to step up our game: to recognize the changing landscape of health in our country, and to develop and embrace dramatically enhanced, community-wide approaches to assuring the conditions in which all people can be healthy. AJPH

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The High Achieving Governmental Health Department in 2020 as the Community Chief Health Strategist

Public Health Leadership Forum

This paper was prepared by RESOLVE as part of the Public Health Leadership Forum with funding from the Robert Wood Johnson Foundation. John Auerbach, Director of Northeastern University's Institute on Urban Health Research, also put substantial time and effort into authoring the document with our staff. The concepts put forth are based on several working group session (See Appendix B for members) and are not attributable to any one participant or his/her organization.

RESOLVE

May 2014

The High Achieving Governmental Health Department in 2020 as the Community Chief Health Strategist

Public Health Leadership Forum

Background

Local and state health departments need to adapt and evolve if governmental public health is to address emerging health demands, minimize current as well as looming pitfalls, and take advantage of new and promising opportunities. To succeed requires a view into the future. This paper provides that vision. And, importantly, it zeroes in on what a high *achieving* public health department of the future will be doing differently. It does so not with a comprehensive inventory of tasks but rather with a distillation of the most important new skills and activities essential to be high achieving and serve in the role of the *community chief health strategist*.

A working group of public health practitioners and policy experts was convened by RESOLVE as part of the Public Health Leadership Forum with funding from the Robert Wood Johnson Foundation (See Appendix B for a list of members). The working group purposely set a time frame of public health in 2020 – just six years into the future – in order to look far enough ahead to provide a compelling beacon, while staying close enough to the present to emphasize the urgency of taking immediate steps to start the process of change and build the leadership necessary to be successful.

Vision

The core mission of public health remains the same: the reduction of the leading causes of preventable death and disability, with a special emphasis on underserved populations and health disparities. This is our perpetual north star. But *how* we achieve that mission has to change, and change dramatically, because the world in which we find ourselves is very different than just a few years ago, and it will continue to rapidly change. Unless we recognize the new circumstances and adapt accordingly, public health will not just be ineffective, it runs the risk of becoming obsolete.

Just what are the conditions that have brought about the need for this overhaul and a call for new practices and skills? A short list includes:

- *The health care needs of the population are changing*. The prevalence of chronic disease has skyrocketed as life expectancy has increased and other causes of death have

decreased. Much attention has appropriately focused on obesity and asthma in the last several years, and health departments have scrambled to find the necessary resources to respond. In the coming years these diseases are likely to continue to remain priorities, but in addition, health departments will need to focus on other chronic diseases that are leading preventable causes of morbidity as well such as those associated with behavioral and oral health and sensory-related disabilities.

- *The demographics of the country are changing*. The increased prevalence of the chronic conditions mentioned above will continue as the elderly and very elderly (over 85 years of age) population grows. Public health departments will face the challenge of developing strategies to help elders maintain their independence and quality of life. The continuing growth of the Latino population and other populations of color could intensify the already existing health disparities even as access to care increases for many. To date, our public health successes have not often been evenly effective by class and race. As a consequence and particularly in poorly resourced areas the preventable disease burden of the future will require new approaches perhaps drawn from the global health arena.
- *Access to clinical care will change in a post Affordable Care Act (ACA) environment*. Although there will be differences from community to community, access to clinical care will likely grow everywhere due to an increase in public and private health insurance coverage. As a result some services traditionally provided by public health departments will be covered by health insurance. This change will mean that the role of public health departments as the safety net provider will be diminished and in some instances eliminated entirely. At the same time there will likely be an enhanced role of such departments in assuring that the care provided by others is accessible as well as high quality, prevention-oriented and affordable.
- *An information and data revolution is underway as the world changes to an internet-based, consumer-driven communications environment*. Public health's role as the primary collector of population health information will be reduced as new, diverse and real-time databases emerge. However, the public health role as interpreter and distributor of information will become more pronounced. Governmental public health will have the responsibility for surveying and aggregating the many sources and ensuring accessibility of the essential information in understandable formats.
- *As attention to the factors contributing to chronic diseases increases, the non-health sectors will often be the key to optimizing the health of the public.* Public health's role will involve working collaboratively with these diverse sectors – be they city planners, transportation officials or employers – to create conditions that are likely to promote the health and well-being of the public.

In combination, these new required practices might be characterized as creating a sweeping new role, one we are calling the *"chief health strategist"* of a community. This new role builds upon the past and present functions of health departments and is a critical evolution necessary to be a high achieving health department in the near future.

Public health departments functioning as chief health strategists should retain, refine and defend the programs that are currently successful, such as environmental health, infectious disease control, all hazards preparedness and response, and other skills, strategies and programs essential for protecting and improving the health of communities. But as the chief health strategist, public health departments' roles will differ in significant ways.

Departmental representatives will be more likely to design policies than provide direct services; will be more likely to convene coalitions than work alone; and be more likely to access and have real-time data than await the next annual survey. Additionally, chief health strategists will lead their community's health promotion efforts in partnership with health care clinicians and leaders in widely diverse sectors, from social services to education to transportation to public safety and community development. The emphasis will be on catalyzing and taking actions that improve community well being, and such high achieving health departments will play a vital role in promoting the *reorientation of the health care system towards prevention and wellness*. Health departments will also be deeply engaged in addressing the causes underlying tomorrow's health imperatives.

While it won't be easy for health departments, even those with the most resources, to achieve this vision of becoming chief health strategists in their communities, it is imperative. Even the smallest of health departments can take partial steps, and some departments are already changing to meet the new demands, and can provide examples for others to follow.

The vision of high achieving health departments serving as community chief health strategists may seem ambitious, particularly for those health departments that are small or under-resourced, and we recognize that many agencies will not be able to adapt quickly. Change across our nation's diverse health departments will occur at different times and at different paces, nut beginning the process is necessary for departments of all sizes whether or not they have lost resources. The demands of the future are unavoidable. Governmental public health must be ready to meet them.

Key Practices of the Chief Health Strategists of the Future

High-achieving local and state governmental health departments of 2020 serving as the community's chief health strategists will share several key practices, seven the working group identified as the newest or most unique are highlighted below. Following the description of the practices, we suggest a beginning menu of steps that health departments large and small can take in order to begin to work toward at least the first practice in the next few years.[1]

PRACTICE #1: Adopt and adapt strategies to combat the evolving leading causes of illness, injury and premature death.

Starting in the first few decades of the 20th century, public health departments focused great attention and received considerable funding to fight infectious disease. This orientation of funding reflected the dominance of such diseases as tuberculosis, food-borne illness, and influenza as causes of death in the early part of the century. While improved water and sewage-system regulations, widespread public education, and medical interventions helped address those illnesses, the HIV and then the H1N1 epidemics made clear the continuing health threat posed by infectious diseases, which remain serious health concerns in the U.S. These health threats will require adequate resources to maintain the progress that has already been made, as well as address new infectious disease challenges.

But health departments lack the equivalent capacity to prevent and respond to today's leading causes of illness and death: heart disease, cancer, lower respiratory illness, stroke, and unintentional injuries and overdoses. Unlike infectious diseases, many of these involve chronic conditions that require years if not decades of expensive care and control. Today's public health budgets are not properly aligned or sufficiently funded to tackle these now leading causes of illness, injury, and premature death. Current funding and programs are in fact more reflective of the health concerns of the past than of the present, let alone the future.

Here is where health departments of the future need to shift their focus and the funding streams must follow. Chief health strategists of the future will be able not only to *anticipate* those factors contributing to death and disease in a community, but be able to identify and secure the essential resources necessary to focus attention on chronic disease prevention. The health department strategists of the future will need to focus on the ongoing as well as emerging leading health concerns with the same intensity and strategic skills they once directed toward eliminating tuberculosis.

The most effective preventive solutions for these chronic conditions are often similar across disease categories. The widespread benefits associated with modified and improved conditions at community work places or schools, such as infrastructure for fresh fruits and vegetables and

[1] We look forward to gathering additional action steps for the other practices as this paper is disseminated more broadly.

locating near parks and other open spaces, to support the concurrent behavioral changes of improved diet and exercise, for example, can help individuals and communities that share multiple and interacting risks and health conditions. But prevention efforts that would substantially reduce deaths by addressing tobacco use and obesity are currently underfunded—dangerously so.

And while more needs to be done to address tobacco, obesity, heart disease, cancer and stroke, there are other challenges that will be increasingly appearing on our radar screen. For example, the lack of progress that has been made in reducing the prevalence of disabilities related to behavioral health, musculoskeletal disorders, and sensory loss, will become ever-growing problems if unaddressed as the make up of our communities change and as life expectancy increases. To effectively and efficiently improve community health, public health departments as chief health strategists must keep up to date not only with *what* is threatening people's health, but also *who* is most at risk – discussed in Practice #2 below.

To summarize: the high-achieving health department of 2020 serving as the chief health strategists must understand and address the primary causes of illness, injury, and premature death. These departments will ensure that their efforts are aligned with the needs of the growing prevalence of disabilities; that they have developed expertise in the prevention and/or treatment of chronic conditions; that they are continually looking to and preparing for the newly emerging health trends; and that they are seeking, securing and channeling resources to be successful.

PRACTICE #2: Develop strategies for promoting health and well-being that work most effectively for communities of today and tomorrow.

Demographic trends are shifting the make-up of our communities, rendering some of our focus and community health strategies outdated. If not updated, these changes will potentially compound some of our current weaknesses. By 2020, baby boomers will be over 65, and the percentage of the population that is elderly will be larger than ever before. This shift will intensify the need to focus on the health of the elderly, the importance of preserving their quality of life and the prevalence of such conditions as dementia, as well as paying more attention to their preventable health concerns, such as the injuries resulting from falls.

The country will also be more racially and ethnically diverse, as the non-white population edges toward outnumbering the white population for the first time. And unless we tap new strategies to more effectively confront and reduce health disparities, not only will these disparities increase, they will jeopardize the overall health and well-being of our communities even more extensively. To date our public health advances have often been less successful at reducing class and racial disparities. The preventable burden of the future will differentially require new,

health equity approaches including those that specifically improve health in poorly resourced areas.

These and other changes will compel the health departments of 2020 as the chief health strategists to focus on the health needs and concerns of the fastest-growing populations. Health departments that have historically focused on maternal and child health activities – understandable as high level of death and disability were occurring in infants and pregnant women in communities of the past. However, now – in communities of today and because of successes we have had with maternal and child health issues - health departments will need to broaden their vision to include the elderly as they become a larger proportion of the community and the injuries and illnesses they experience become a more significant variable of overall community health. Health departments also will need to pay greater and greater attention to people of color and Latinos, Asian-Americans, and other immigrants. Demographic shifts may also be accompanied by socioeconomic changes such as a growing income gap and concurrent inequalities in health outcomes. The state and local health departments as chief health strategists should be the trusted source regarding emerging demographic and health trends.

The high achieving health department and health strategist must address the needs related to emerging demographic patterns, and the health inequities experienced by specific sub-populations. Chief health strategists need to answers these questions for each community:

- What are (and will in the future be) the greatest health threats, and who is (and will be) most at risk?
- What will it take to reduce these threats and reach the greatest number of high risk populations with whatever resources are available?

A starting point is to have access to accurate, timely, and understandable data. And that leads to the next essential practice.

PRACTICE #3: Chief health strategists will identify, analyze and distribute information from new, big, and real time data sources.

Public health has always been an information-based discipline. That's its stock in trade. But the old ways of collecting and analyzing information are no longer sufficient. The nature of information technology, information sources, and public expectations of accessibility are changing, and public health needs to rapidly adapt and evolve in response.

Other new and often big data sources can help correct that. Future health departments as strategists should be able to retrieve certain up-to-date clinical data from Electronic Health Records. Among the other sources used will be "big data," data sets so large and complex that

traditional processing and management approaches don't apply. Health departments are unlikely to have data systems within their control that are large enough to capture all the necessary behaviors, attributes, and community determinants of health.

Instead, by 2020 health departments as chief health strategists may submit regular requests for data from Medicaid, Medicare, from all payer claims, or even outside of the health arena, from city planners, schools, and public safety officials. The strategist will need to look beyond the usual health-related data sources to patient-initiated feedback from social media and to extract data from search engines.

Once these data are collected, assessed, and aggregated, the public health departments as chief health strategist will not just make these data available but analyze them and translate the health implications of identified trends and hot spots, as well as share this information with the public, providers, partnering agencies, and policy makers to inform community-wide decision making and actions collaboratively in order to improve overall health and well being. The chief health strategist's responsibility is to the community it serves, and communities will want and should have meaningful interpretations of what information means for them and their health. The goal, in addition to informing the broad community, will be to offer a more comprehensive picture of health that will deepen their and their partners' understanding of the complex factors affecting the health of a community.

But by 2020, the obligation of health departments as strategists will go beyond accessing and analyzing data to providing information. Health departments will make information accessible for users to customize questions whenever they are needed for whatever purpose they are needed. Data collection and analysis must move closer and closer to real time. It will be unrealistic and unacceptable, in 2020, to wait one year or longer to have the latest reported information on, for example, infant mortality and diabetes rates, as is currently the case.

The health department as the chief health strategist will be prepared to answer what is happening in the current year and not what was happening one, two, or even three years ago. How will the health department as strategist get that information? One way is for clinicians, hospitals, and health departments to look to up-to-the-minute reporting of dangerous infectious disease outbreaks and the response to them. In recent years there have also been numerous examples of the value of rapid responses to clusters of health care associated infections. Access to such information might not require the regulatory-imposed reporting systems of infectious disease thanks to the evolving opportunities to access such data through meaningful usage agreements. In a growing number of communities there are local health information exchanges that can become intermediaries, collecting the data in a format that is usable by a health department without requiring unrealistically sophisticated IT capacity.

The range, freshness, and subtlety of new data sources can make the health department as strategist of the future far more responsive and effective than in the past. With such data health departments can, and good strategists will, focus interventions to more effectively serve populations with disparities. They will be able to evaluate ongoing interventions with more precision and accuracy. And with access to new kinds of data, the high achieving health department as strategist can respond quickly and inventively to chronic disease diagnoses, not just infectious disease outbreaks. If clinicians identify clusters of newly diagnosed asthma cases in one neighborhood, for instance, the public health department can determine which neighborhood environmental factors can be altered in order to reduce future incidence. This means that health departments as chief health strategists of the high achieving departments will need new kinds of skills. Mobilizing the department's existing resources to respond most effectively to the new health priorities will require familiarity with multiple data sources, the ability to advocate for access to those data sources, and then the ability to extract and interpret new data and share the most meaningful findings with the health department's partners and the public. Analysis, energy, and imagination will be essential characteristics; so will clear communication and the ability to make the complex seem simple.

Clear, accurate, and well-analyzed data will be especially important as health departments as strategists expand their partnerships to include multiple governmental agencies and community-based organizations that may be less familiar with health indicators and disease causation – as the next section will make clear. And above all, health departments as strategists will strive for increased accessibility of information to the community by such means as tapping friendly interfaces to accessible information and increasing sophistication in the use of social media.

In these efforts, high achieving health departments will rely heavily on one particular segment of the larger community – health care providers and facilities. The chief health strategist will understand, reach out to and collaborate with key partners in the health care community. These key allies and alliances promote good health, of course. But they may also be crucial in answering the all-important question of how high achieving health departments as chief health strategists of the future will fund community mobilization and policy-oriented campaigns – namely by redirecting funding from services for which they no longer need to pay. This leads to the next practice.

PRACTICE #4: Build a more integrated, effective health system through collaboration between clinical care and public health.

With some notable exceptions, the American public health and the clinical care systems have long been separate and distinct. One is focused on population groups and the other on individual patients; one is largely funded by the government, the other mostly by insurers.

Today, the two systems sometimes interact - for example, through infectious disease reporting during an outbreak like measles or pertussis, or when a community health center or a hospital needs a license. Numerous health departments directly provide or fund a limited number of clinical services such as immunizations or treatment for sexually transmitted infections. A few departments even run their own federally qualified community health centers. But these are the exceptions, not the rule.

This separation of public health and health care has not served us well in our overall goal to create a system that improves health. That can and must finally change. The high achieving health department as chief health strategist in 2020 will form close and interactive relationships with the clinical providers and health insurers in its municipality. The chief health strategist will know who to connect with and how best to make these connections, as well as work within the financing network to make respective efforts viable.

There are several reasons why this change will occur. The ACA is increasing health care access to millions of additional Americans and decreasing (although not eliminating) the need for the public health system to provide safety-net services such as immunizations, STD treatment, and family planning services.

Collaboration with Clinical Partners

In Massachusetts, a Prevention and Wellness Trust was created in 2012 by the state legislature, which awarded $60 million to the Department of Public Health to oversee a process of establishing community-clinical partnerships to promote health and reduce costs. With this resource, the health department has funded 9 collaborative initiatives made up of municipalities, community-based organizations, healthcare providers, health plans, regional planning agencies, and worksites. The activities funded include enhancing community-clinical relationships, lowering community members' barriers to optimal health, identifying health-related community resources, tracking referrals to and the use of community resources in clinical records, and using quality improvement to strengthen community-clinical process and linkage.)

By 2020, health departments as chief health strategists will have conducted careful analyses of the available and accessible clinical services in their communities and determined if their departments should continue to provide them, at what level, and for whom. The high-achieving health department will reduce, eliminate, or significantly adapt its provision of direct services, implement billing practices where services are still needed, and may shift to primary care providers some activities such as tuberculosis care and disease intervention so they are more integrated.

As more people have access to care through expanded health insurance benefits, governmental public health can increasingly serve an expanded health assurance function – linking those in need with potential providers rather than offering the services themselves. And they can play an increased role in monitoring and reporting on community access, cost, and quality of treatment care.

Departments may identify certain new services they can provide to complement those offered by clinical providers. One example: bundled packages of home visits by educators and risk reduction specialists to women with high-risk pregnancies or to families with a child who has moderate to severe asthma. Such services can be new generators of revenue, offered to insurers and clinicians in exchange for reimbursement. A second example involves using community health workers or other strategies to help patients address the social determinants of health, linking with opportunities for improved housing, employment training, or family unification.

Another dynamic changing the landscape is the continuing rise of health care costs and associated interest by the health care community in turning to partnerships to leverage their ability to improve health. The widening range of state and national payment reform initiatives will bring with it new possibilities for linkage between public health and clinical medicine. The movement away from the predominant fee-for-service to a global, value-based system of reimbursement should open the door for greater partnership and to the allocation of new revenue to support public health efforts. New global payment systems can potentially add population-based outcome measures to the list of quality measures that must be met to maximize reimbursement. For example, if clinicians have a financial incentive for their patients to stop smoking, they may seek the involvement of the local or state health department. And in turn, departments can share in the revenue incentives.

Such possibilities also build upon the momentum created by the ACA's provision that hospitals must develop community health assessment reports or face penalties from the IRS. Many hospitals have sought the guidance of and/or collaborated with their public health departments to meet that requirement. The health departments of the future will strive to solidify those connections, and to ensure that those connections result in the investment of hospital resources in population health initiatives. In addition, health departments may seek out or solicit new strategies for innovative investment in community prevention, for example through the use of wellness trusts and social impact bonds.

High-achieving health departments as chief health strategists will fight for a seat at the table where payment reform and insurance expansion are being determined in their states and localities, alongside the usual participants of Medicaid, private insurers, and providers. To achieve this goal by 2020, chief health strategists must develop new knowledge and skills in

such areas as benefit package design, identification and analysis of health metrics, and analyses of return on investment.

Finally, the movement to near-universal use of electronic medical records (EMRs) governed by the ACA's required "meaningful use" provisions will offer access to new and timely data, as discussed in Practice #3. And EMRs may assist in the tracking of patient referrals and the usage of community-level services supported by public health such as smoking cessation services, chronic disease self-management training, and home visits by community health workers.

In summary, the high achieving health department as chief health strategist, then, will take advantage of the numerous opportunities to join the efforts of public health, clinical providers and insurers. Health care and payment reform will allow for innovative collaboration such as linking smoking cessation treatment with community level cessation groups and expanding smoke-free regulations. Departments will face challenges in the process, as they reduce their own direct services and refer newly insured residents to primary care medical homes and as they strive to acquire a new understanding and appreciation of insurance practices. Additionally, as health departments work more closely with clinical partners, they may also learn useful lessons about quality improvement measures and transparent goal setting and monitoring – aspects of the health care business model that can be integrated into the high achieving health department's in 2020 and beyond. They can then look inward and identify some of the organizational system changes in their own departments that will help them function more efficiently and effectively. The following practice highlights why it will be important for departments to be on the lookout for those lessons, as well as Practice #6 which pushes further the need for improved business systems.

PRACTICE #5: Collaborate with a broad array of allies – including those at the neighborhood-level and the non-health sectors – to build healthier and more vital communities.

A century ago, as public health advocates grappled with deadly infectious diseases, they looked to other disciplines for assistance. They knew they would need the involvement of other kinds of authorities if they were going to solve the problems associated with, for example, water-borne and air-borne infections, which spread rapidly in the living conditions of the poor. It was changes in housing codes and municipal investments in sewer systems, plumbing infrastructure, swamp drainage, and aerial insecticide spraying that saved more lives, faster, than public information campaigns or even medical breakthroughs could.

The conditions today and in the future are clearly different. As mentioned in Practice #1, it takes more focused teamwork within the public health community, with new and different skills and strategies, as well as cooperation and coordination with the health care community, when grappling with chronic conditions instead of infectious disease. But there are some

additional lessons in the past successes worth learning from and adapting to the present. And among them is the importance of working beyond a limited circle of partnerships – even a more expanded team among health and human service organizations. There is once again the need for cross-disciplinary collaboration and close partnerships with non-health-oriented organizations.

Environmental irritants in the home, the workplace, and the community contribute to ever-rising asthma rates, to choose one current and pressing example of an illness that requires collaborations among diverse non-health – oriented agencies and community leaders as well as those in the public health and health care sectors. In order to reduce these asthma triggers, health departments need to align their particular skill sets, as well as form partnerships with the medical community, landlords and housing code inspectors, employers and unions, polluting businesses and environmental regulators – to name just a few.

But developing the needed partnerships with other sectors takes time, training, and specialized personnel, and those partnerships will happen only if they are made to be priorities. Much of our work with these sectors will need to be through adaptive leadership and influencing without direct authority. These partnerships will require developing experience and skills among non-governmental organizations and other community leaders with how to effectively navigate regulatory and legal processes at the local and state levels and to influence policy. But they will also require understanding and respecting the priorities, goals, and objectives of other public and private, governmental and non-governmental agencies and organizations.

Building Community Coalitions

The Robert Wood Johnson Foundation's County Health Rankings initiative has prompted the creation of a number of broad-based community coalitions to tackle local health problems. One such effort was in Scioto County, Ohio, which was ranked last among all 88 Ohio counties in 2012. That ranking motivated community leaders to convene meetings of stakeholders to set the agenda for helping improve the county's health. Local health departments played a key role in providing data, identifying needs and gaps, and highlighting other efforts that were already underway. The initial coalition members decided to broaden the group so it would include people from contiguous counties in urban Kentucky that were facing similar issues. While the meetings were initially primarily of health professionals, they soon included teachers, superintendents of schools, clergy, law enforcement officials, and large employers. An early project involved improving childhood immunizations by linking schools and electronic medical records.)

It is not just diseases that require cross-disciplinary partnerships. It is the socio-economic conditions that foster them and make them worse. As health departments confront and address health disparities caused by economic inequality, racism, and discrimination, they need to take a broader approach. Factors as diverse as housing segregation, high school dropout rates, gang violence, and unemployment contribute to elevated risk for illness, injury, and premature death in low-income and minority communities. Working on these issues can, it is true, push most health departments out of their comfort zones. Nonetheless, the high achieving health departments as chief health strategists of the future will speak out compellingly on the connection between these issues and specific health outcomes, and then work collaboratively to change those factors to improve health outcomes.

The health department of the future will also encourage and support the leadership of community members in the efforts to promote healthy conditions. By training, informing, and nurturing leadership in neighborhoods with elevated health problems, the chief health strategists can develop a valuable and long-term resource for health promotion and, in essence, expand the public health base.

The Surgeon General's National Prevention Strategy of 2011 touts the importance of a health department's active engagement with community members and organizations. Community efforts, the report says, help people "take an active role in improving their health, support their families and friends in making healthy choices, and lead community change."[1]

Health departments should thus explore the possibility that federal resources can support local and state health departments in convening broad-based collaborative efforts at the community level. But with or without federal funding, such convening is necessary.

In summary, by 2020 chief health strategists will identify, pursue and establish effective partnerships with those in positions to make a difference in the community's health. In addition to partnerships with others in the health system, as well as other governmental agencies, chief health strategists will participate in and support community-based coalitions that examine health data, set goals, and develop plans to improve health. They will enlist civic and other community leaders such as key local businesses and the Chamber of Commerce as well as leaders at the grass roots level to help carry out those plans. In community-based collaborative efforts, health departments will share the latest findings on evidence-based action steps and, if possible, give community coalitions grants and other resources.

Partnerships can be catalyzed and fostered through the provision of access to information and unique skills that others see as adding value to their respective endeavors, as well as joining in meaningful collaborations. Additionally, potential and ongoing partners and patrons alike are drawn to professional practice and conduct, and business practices are key elements in demonstrating value.

PRACTICE #6: Replace outdated organizational practices with state-of-the-art business, accountability, and financing systems.

Not surprisingly, the training most public health professionals received in school and on the job is insufficient to handle the challenges of the future and as the health enterprise changes. Mining big data? Tapping social media for epidemiological information? Embedding population health metrics within value-based insurance contracting? Participating in designing bidding packages for major transportation projects? These aren't in the job description or the skill sets of the employees in most public health departments. But they need to be… and soon.

To assume the mantle of chief health strategist, health departments need to retool and retrain and seek new employees with updated required skills. The high achieving health department of 2020 will have the personnel, know-how, and technological tools to handle the variety of required tasks. By 2020, the health departments as chief health strategist will have assessed the necessary skills - particularly the newer ones required – and compared them with the skills of the current workforce. Where they don't match, the health department will develop a plan to either rewrite job descriptions or hire people with the needed skills as positions become available. Or, it will investigate and pursue re-training opportunities for the current workforce, prioritizing the skills that are most essential.

Public health programs operate inefficiently for a number of reasons. One is that they are simply following the practices that have previously been put in place. But these outdated modes need to be replaced with current business practices. These include being efficient, effective, transparent, and accountable – in other words, being good stewards of public resources. Among the necessary practices will be establishing visible goals (perhaps with the use of an online dashboard), measuring and analyzing the progress in meeting them, and striving for continuous improvement using a thorough analysis of the lessons learned in the process. Such practices are now common in the private sector. Health departments would do well to study and learn from the best of such models.

A second reason for the inefficiency of public health departments is the size and structure of some departments. Some are too small to capture the efficiencies that come with scale or to have the degree of specialization that is needed. So a key task of the chief health strategist will be to examine if such limitations can be overcome by sharing agreements across jurisdictions. This may necessitate and lead to formal affiliations and even mergers of health departments.

Health departments will need to make the business case for public health activities – that is, using health economics to highlight examples when public health interventions save money in the short, as well as the long, term. It will no longer be sufficient to simply claim that prevention saves money without the economic analysis to demonstrate that this is the case for

each specific activity. Such analyses will also be needed to demonstrate that health departments are wisely using their own resources and translating them into positive health and economic outcomes. One way to prove that they are will be to achieve accreditation from PHAB.

The health department as chief health strategist in 2020 will diversify the funding base for public health. In addition to relying on local, state, and federal grant funding, health departments will establish mechanisms to bill insurers and providers whenever possible. However, newly identified funding might or might not come to the health department itself, depending on an assessment by the department of where the funding can be of most use. Part of the role of the chief health strategist will be assuring that resources are directed to others. For example, departments of the future will collaborate with non-health related government agencies to encourage that they direct their own resources towards practices which will directly improve community conditions.

Accomplishing this expected practice is a tall order for any health department. To acquire this and the other goals for skills and practices mentioned previously, health departments need to help create and become part of a learning health system in which science, informatics, incentives, and culture are aligned for continuous improvement and innovation, with best practices seamlessly embedded in the delivery of public health, and community health overall, and new knowledge captured as an integral by-product of the ongoing experience of becoming chief health strategists.

Health departments as chief health strategists also need guidance, support, and encouragement from what for many is their largest funder and most important technical assistance and policy partner… the federal government. The next section explores why the federal public health system is so important for the health departments of the future.

PRACTICE #7: Work with corresponding federal partners – ideally, a federal Chief Health Strategist - to effectively meet the needs of their communities.

Chief health strategists require the support (financial and policy) and architecture of the federal government. Without this support – and, moreover, leadership – from the federal government, it will be difficult for local and state health departments to adequately prepare for 2020 and become chief health strategists. Locals and states can and must be their own agents of change to become the health departments of the future.

But the necessary transformation is not something they can make entirely on their own. Certainly, they need financial support from the U.S. Department of Health and Human Services. The federal government, as a major (sometimes THE major) funder of state and local public

health, sets the tone and drives the structure and function of public health at the state and local level.

In order for local and state health departments to function cohesively, they need greater flexibility in funding than federal agencies currently provide coupled with the skills and tools to take advantage of that flexibility. Grant awards with narrowly segmented focuses – a short-term work plan for asthma, a separate one for tobacco, a third one for diabetes – lead to organizational silos and more limited external partnerships. If locals are to bring together all who can affect health, then federal health agencies need to make it easier to braid federal funding, and the federal health and non-health agencies need to design their programs to permit closer coordination of funding.

Such flexibility will encourage health departments to address community, workplace, and school conditions in ways that have a positive impact on many health problems. Prevention-related activities that encourage healthy eating and active living decrease a number of many health risks, including diabetes and heart disease. Efforts have been underway at the Centers for Disease Control and Prevention (CDC) to provide more coordinated funding in such areas as HIV and other sexually transmitted diseases and has piloted integrated chronic disease grants. Such approaches enhance the likelihood of improving health outcomes.

An additional example that will be of growing relevance to the health department of the future is the potential to use funding for what might be referred to as foundational public health services such as the needed steps to update Health Information Technology, develop broad-based partnerships, and collaborate with clinical systems.

To be clear, flexibility in the use of funding should not be confused with the lack of accountability. But the chief health strategist will be hampered in accomplishing specific necessary (and measurable) tasks if the funding continues to be awarded in an overly restrictive manner.

But the federal government's role in fostering change at the state and local level is not simply about funding. Transformation also requires a change in the way the federal agencies interact with the local and state officials. To begin with, a unified set of policies and practices, including but not limited to funding, would provide a consistent system within which to function.

One obvious challenge to such cohesive structure is that the current federal health enterprise is not a single "health department" with a unified set of policies and practices. Rather, it is a diffuse set of agencies charged with different aspects of health services that drive state and local public health activities through different funding streams and associated requirements, regulatory authorities, and legislative efforts.

The federal system needs to establish and embrace a goal and a plan to function as a "virtual" federal health department and be a chief health strategist at the national level. Federal inter-agency coordination that gives consistent and unified guidance, resources, and training to support local and state changes is invaluable. In fact, without such support, the necessary changes mentioned in each section of this report are more difficult to achieve. It may be too ambitious to propose that within the next six years (our 2020 time frame) there should be a federal equivalent to the chief health strategist at the local or state level. But, the closer the federal health system can come to operate with a single voice, uniform procedures, and a common set of priorities, the better.

There is opportunity and evidence that federal leaders recognize the changes needed for the future. The National Prevention Strategy paints an ambitious picture of what public health and prevention efforts need to be. And that picture looks startlingly and encouragingly familiar to a number of the themes identified above. For instance, it strongly reinforces Theme #4 regarding the importance of seeking broad-based meaningful partnerships, as indicated by its language that "*Aligning and coordinating prevention efforts across a wide range of partners is central to the success of the National Prevention Strategy. Engaging partners across disciplines, sectors, and institutions can change the way communities conceptualize and solve problems, enhance implementation of innovative strategies, and improve individual and community well-being.*"[2] A consistent message throughout the National Prevention Strategy is the importance of bringing all societal and governmental resources together to address the determinants of health and their direct health consequences.

The same observation applies to the six practices discussed above. For example, if locals and states are to harness health information technology and mine new data sources, they can't be sidetracked by outdated national approaches to surveillance and other data collection. Or by conflicting reporting requirements that narrowly define what are the acceptable data for each federal agency and/or program. This means that the same vision of innovation and diversification in data sources needed at the local and state levels must occur at the federal level. Dozens of federal data collection efforts, surveys and registries need to be modernized. Cross-agency conferences and webinars should be held to identify promising practices. Partnerships with those managing useful big data sites should be brokered at the national level in ways that ease access to the data at the state and local levels. National and regional training for state and local health information technology staff should be frequent. And all federal agencies that fund public health should commit to abide by the outcome of such efforts, so that local and state health departments are not required to maintain the current, inefficient patchwork quilt of agency-specific data sources.

Similarly, if locals are going to succeed in bringing the community and clinical world together, then the federal government needs to incentivize both public health *and* the clinical world to

work together. Promising steps in that direction are beginning with the growing collaboration of CDC and the Center for Medicare and Medicaid Innovation, and the inter-agency support for Million Hearts and ABCS campaigns. But the funding, training, and prioritization of such efforts is limited.

One final point mentioned earlier but worth reiterating is the magnitude of the challenges faced by the health department of the future. It is unrealistic that a small and under-resourced department can achieve these. Therefore, an additional role for federal agencies might be to create incentives for health departments to consider municipal partnerships across local and state lines. Just as the ACA opens up whole new vistas for chief health strategists to collaborate across previously separated public-private lines, state and federal agencies should look to break down bureaucratic barriers.

In summary, the previous sections have called for the rethinking of the role of new local and state chief health strategists, suggesting a sweeping set of responsibilities that should be adapted to meet the actual conditions of the future. This final practice suggests not only that the state and local health departments as chief health strategists form a more effective partnership with the federal government agencies, but also necessitates that the federal government modify and adapt as well, as a virtual federal chief health strategist with the whole nation as its community, both to meet the new health needs and conditions, and to optimize, through unified goals, policies, and funding, the likelihood that local and state health departments will be modernized and well prepared. A few obvious starting points for such a federal health transformation would include the translation of the National Prevention Strategy into the terms and practices by which federal government and health agencies actually do business, and the creation of new, more unified working relationships across the federal departments and sectors.

Action Steps and Conclusion

It is not that long between now and 2020. Even as health departments persevere under the stressful conditions of several years of budget cuts and the simultaneous increase in the number of issues they must address, they must evolve. For some health departments, their limited size and relatively narrow scope of activities may potentially require combining resources with others in their state or region. It may simply be unrealistic for health departments below a certain size to become the chief health strategist and manage the necessary division of labor and flexibility to adapt to the new circumstances.

However, some health departments are already embracing the new opportunities outlined in this paper – whether through strategic planning, preparing for the Public Health Accreditation Board process, and considering the departmental changes they must make. They will recognize in our concept of a chief health strategist the new roles they have begun to assume.

These seven proposed practices are a tall order and require action that starts today if it is not already underway. Given the urgency of this need, we offer the following menu of suggested action steps, which are designed to stimulate discussion, idea development and additional to-dos. Some of the suggestions are intended to be scalable to the circumstances faced by any department. They emphasize processes that can be undertaken to assess new and future conditions, compare current practices to future needs, begin to explore new data sources, start one or more new partnerships, mobilize leadership at the community level, and strengthen management systems. Health departments can undertake necessary exploratory work – even without new resources. As more and more health departments engage in these efforts, there will be success stories and lessons from which all can learn.

Appendix A: Becoming the High Achieving Public Health Department as the Chief Health Strategist by 2020 and Beyond

1. *The first practice mentioned above involved understanding and addressing the primary causes of illness, injury, and premature death, while the second practice highlights the needs related to emerging demographic patterns, and the health inequities experienced by specific sub-populations*.

   To achieve both objectives of a health department as a chief health strategist of any size could begin with a planning process both internally and in partnership with others to determine the likely needs of 2020 and consider how best to meet them. Some of the steps could include:

   a. Collecting the most comprehensive available data on health and demographics including that prepared by area hospitals to meet the new IRS regulations;
   b. Assessing data for increasing prevalence of illness and injury and for changing demographics in the coming decade. Focus on the major causes of illness, injury and premature death; what's changing and what's problematic now and unaddressed.
   c. Convening an advisory group with external members to review data and determine if there are likely future trends and needs of the most prevalent current and future conditions not captured by the data; consider open public meetings to solicit additional input.
   d. Reviewing internal distribution of staff and resources relative to the issues of growing concern; assess ability to redistribute existing resources to better reflect these issues.
   e. Discussing possible steps to address the future needs with the advisory group; prepare materials highlighting the dilemma

2. *Assess the diagnoses, trends, and underlying causes of the leading illnesses, injuries, and premature deaths within a municipality and analyze their significance in relation to the current distribution of public health funding*.

3. *Assess the demographic trends for the municipality as well as the populations with the greatest health disparities, and analyze their significance in relation to the current distribution of public health funding for the area*.

4. *Examine existing and emerging databases in the area that can offer information relevant to the health department's planning, programs, and policies. Select one or two promising databases such as open-source, social media, or big data systems and invest in exploring what it would take to gain access to and analyze the data they hold. Learn to analyze aggregated information to better understand the health determinants in your area.*

5. *Convene meetings of clinical providers and insurers to discuss potential linkages between population health and clinical care. Develop at least one pilot program to strengthen these connections.*

6. *Collaborate with new non-health-sector partners such as police officers and educators who have the potential to make an impact on the living conditions of some of the more vulnerable segments of the community.*

7. *Invent or adapt job descriptions for positions likely to be needed in the future. These include: information technology, with expertise in big data systems, social media, and analyzing claims data from insurers; building coalitions and organizing communities; building bridges with other sectors including health care providers, non-health governmental agencies, large employers, and community-based organizations.*

8. *Initiate an effort to strengthen internal management systems in ways that create transparent goals, and establish ways to measure progress in achieving them.*

Appendix B–Working Group Members

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[1] http://www.surgeongeneral.gov/initiatives/prevention/strategy/
[2] *Ibid.*

Transforming Public Health:

Emerging Concepts for Decision Making in a Changing Public Health World

About this Project

The Transforming Public Health project, funded by The Robert Wood Johnson Foundation (RWJF) and convened by RESOLVE, tasked a small group of public health thought leaders with *developing guidance for public health officials and policymakers in prioritizing vital public health functions in a shifting political and fiscal landscape*.

A cross-section of diverse public health stakeholders, including state and local health officers, academics, federal agency representatives, and public health advocates (see participant list in Appendix A) attended three day-long meetings over six months with the goal of reaching consensus on guidance for public health decision makers. The dialogue among project participants reflected in this paper was in the context of recent and ongoing budget and staffing cuts at health departments across the country, as well as new opportunities provided by a reforming health care system and ever present concerns about health care costs.

This paper is not a "how to" guide, but is meant to offer governmental public health practitioners concepts to consider and help guide difficult resource allocation decisions while also trying to adapt to ever changing challenges, demands, and opportunities.

While some participants would prioritize transformation as essential to meet the current public health opportunities and pressing challenges, others emphasize shoring up current efforts and tackling transformation only when additional resources can be found. These different emphases reflect ongoing tension within the governmental public health community.

The emerging concepts discussed in this paper are offered as suggestions for state and local officials, and where applicable those at the federal level, to consider in making decisions about what is best for, and most needed in, their localities with the resources they have or may be able to obtain.

This paper is not the end of a conversation, but an additional discussion frame intended to work in concert with other similar documents and/or projects, such as the recent IOM report*, For the Public's Health: Investing in a Healthier Future*.

The concepts in this paper are based on the group's discussion and are not attributable to any one participant or his or her organization. They are conclusions the group reached via a variety of discussions outlined in this report, and while participants had the opportunity to edit and comment, RESOLVE is the author of this report.

Introduction

In the 20th century, average life expectancy of Americans increased by more than 30 years, and some have attributed 25 years of that gain to non-clinical related public health interventions.[1] In June 2011, the National Prevention, Health Promotion, and Public Health Council, through its National Prevention Strategy, articulated an overarching goal for the nation's health in the 21st century: to "increase the number of Americans who are healthy at every stage of life."[2] To achieve this goal will require a strong and vital public health system – with governmental public health at the local, state, and federal level taking a leadership role.

This is an unprecedented period of change and opportunity for governmental public health.

- The health system is going through major transformations, not just due to the passage and implementation of the Affordable Care Act (ACA), but also driven by the need to create more integrated approaches to prevention, primary care, and overall health to be more efficient and effective. *This requires reassessing the role of governmental public health departments in relationship to the larger health system of which both clinical health care and public health must be integral parts, along with nonprofit and for profit organizations in the community.*

- The health challenges facing Americans in the 21st century are increasingly chronic, rather than infectious, diseases. Responding to this shift requires a different approach in both the clinical and community settings. While public health strategies play an integral role in preventing and detecting infectious disease, influencing the quality and length of life for Americans will require *a greater focus on the systems, policies, and program changes that will reduce the prevalence of chronic diseases.*

- There is growing recognition that where people live, learn, work, and play can be as important to health outcomes as medical intervention. Indeed, improving educational opportunities, assuring stable housing, improving access to healthy foods, and creating walkable communities are public health interventions, and *governmental public health departments need to embrace new tools and train or retrain a workforce with new skills in order to lead a "health in all policies" approach that also addresses the social determinants of health.*

- Technology, particularly health information technology, provides new opportunities for understanding and improving the public's health. These advances also require *reassessing and re-envisioning how we currently access and work with data, and communicate with colleagues, health care providers, policymakers, and with the public.*

Amid these new opportunities also come challenges for public health departments. The worst global recession since the Great Depression has cut investments in public health and other services across all levels of government, threatening governmental public health departments' capacity including in new areas of emphasis. Increased skepticism about government's role and ability to effect meaningful change is relevant to governmental public health activities as well.

Now is the time to make a compelling case for investing in public health as a means to achieve a healthier nation, improve the value of dollars spent, and potentially reduce health care costs.

To achieve a healthier nation, governmental public health departments must:

- Refocus their efforts – and build skills sets – to address the 21st century's principal health challenges, while at the same time, protecting the great successes in communicable disease and maternal child health, for example, in an era of declining resources;
- Demonstrate the unique skills and expertise that public health practitioners bring to the table and be leaders;
- Build strategic partnerships with the reforming health care system and the key players outside the health system – across all sectors of society – to address the health needs of Americans and those factors that determine health; and
- Make a compelling case for investing in governmental public health departments and interventions, as well as evidence- and experience-based community prevention strategies as a means to achieve the national goal of improved length and quality of life through system wide health reform.

This paper enumerates emerging concepts identified by the Transforming Public Health meeting participants, driven by the numerous changes and opportunities governmental public health officials are facing and addressing each day. While each community will need to assess the particular challenges and opportunities before them, these emerging concepts are presented, along with some examples of what and how these concepts are being shaped and implemented by governmental public health officials now, as options to consider. These examples are not intended to dictate how to implement these concepts, but to inform and, as appropriate, be adapted to the specific needs of communities at different levels so that all governmental public health officials and their partners can better meet the challenges of – and lead transformation to – a 21st Century public health system.

Foundational Capabilities for Today and Tomorrow

Changing circumstances require governmental public health officials to be deft and flexible — in the face of current financially austere times *and* in future times of adequate funding — in order to meet traditional and changing public health needs. Health departments must possess and preserve the foundational public health capabilities – those skills that are necessary to provide basic public protections, like clean air, safe food and water, and prevention of infectious diseases or bioterrorism, critical to the health of their communities, while adapting to and effectively addressing changing health threats.

Briefly, these include (and are further described below): developing policy; using integrated data sets; communicating with the public and other audiences to disseminate – and receive – information; mobilizing the community and forging partnerships; cultivating leadership – along with organization, management, and business – skills; demonstrating accountability; and protecting the public in the event of an emergency or disaster.

Health departments must ensure they possess certain foundational capabilities that are crosscutting and integral to the effective functioning of a health department. These foundational capabilities are reflected in, but different from, the Ten Essential Services,[3] Core Functions,[4] and the national voluntary public health accreditation standards.[5] The capabilities differ from these in that they are prioritized, not all inclusive, and are amenable to costing.

Health departments across the country vary in their capacity to carry out these foundational capabilities, in part because they have little reliable or sustainable funding to do so – and therefore for many, building these foundational capabilities, as well as new skills, may be incremental and based on local need. But the Transforming Public Health participants believed that, ultimately*, these capabilities are central to a health department's capacity to improve the public's health.*

The recent IOM report, *For the Public's Health: Investing in a Healthier Future,* also called for defining, prioritizing, and financing a set of foundational capacities, including: information systems and resources; health planning; partnership development and community mobilization; policy development analysis and decision support; communication; and public health research, evaluation, and quality improvement.[6] The capabilities identified as most important by the participants in this project are similar to those highlighted in the IOM report; this illustrates that while there is general consensus about where governmental public health departments need to go, getting there can (and should) be done in slightly different ways, while attending to differing community-based priorities. *However, it should be the goal of all governmental health officials across the country to have the following identified capabilities present in their departments.*

- ***Developing policy to effectively promote and improve health*.** Policy development is the ability to identify, formulate, and achieve what needs to be done to help people make healthier choices and change the condition of peoples' lives. Most public health departments need to become more sophisticated at doing both. Affecting and ultimately changing policy is a challenge and requires particular analytical and strategic skills. The recent IOM report suggests a robust role for governmental public health in policy development saying, "…many health departments have played a smaller role in policy development than they should have."[7] Doing so requires cultivating skills for identifying, developing, and implementing tested and legally feasible public health policy recommendations, as well as developing and implementing strategies to inform or influence those policies.

  Policy development is both internal and external: internal to assure that health agencies leverage their policy powers to promote health, and external to assure a "health in all policies approach," or collaborating with non-health agencies and partners from other sectors to develop policies and programs that promote improved health outcomes through informing and influencing. One state health department, for example, assigned a staff person to participate in the state transportation department's meetings leading to the adoption of a health impact assessment for all major statewide transportation projects. This effort took a year of relationship building and learning about the priorities and processes of the transportation department by the health staffer.

- ***Using integrated data sets for assessment, surveillance, and evaluation to identify critical health challenges, best practices, and better health.*** The ability to access and analyze data sets such as census reports, vital records, reportable disease registries, and hospital discharge records is critical. And, as HIT expands in numerous ways – including the widespread use of electronic medical records and laboratory reporting of disease and the adoption of meaningful use standards – there are rapidly growing opportunities for health departments to access and use timely data for health planning and resource targeting. This means strengthening capacity and infrastructure for IT, both in regards to hardware and software, as well as a trained workforce.

  The challenges facing governmental public health departments today necessitate redefining assessment, surveillance, and evaluation to reflect the growing understanding of the breadth of what affects health, while at the same time making sure that surveillance of traditional public health concerns remains robust. Needed is the ability to collect, integrate, and make use of data sets from a variety of sources, as well as competencies in health economics and sub-population analysis for effective decision making. These skills are essential for going beyond observing trends and understanding and addressing the root causes of problems.

- ***Communicating with the public and other audiences to disseminate – and receive – information in an effective manner for health, including health promotion opportunities, access to care, and prevention.*** Governmental public health departments must have appropriate, proactive, effective, valid, and reliable means to communicate with the public, policy makers, and others, on a variety of issues and topics that effectively convey messages, as well as promote input to health departments from others. Public health departments need the skills to execute a media strategy and communicate and interact with multiple audiences, taking full advantage of the internet and continually evolving new approaches from social media to video production to blogging and tweeting. For example, one local health department has assisted its adolescent advisory group in developing their own YouTube-based videos and twitter messaging regarding the health issues of most concern to teenagers.

  Additionally, health departments need to put systems in place to receive information from the public promoting effective two-way communication, such as through ongoing public engagement processes or routine data gathering and sharing. For example, when residents call their local health department to ask questions about flu symptoms or symptoms possibly related to food-borne illness, this should alert health officials to a potential issue in the community. This input from the public is integral to effective communication.

  Finally, health department staff needs to better understand the contextual and analytical meaning of data so that critical information can be extracted and translated for the public in real time. Public health communications need to be strategic, relevant, and nimble, with an ability to "seize the moment" in the face of breaking news events or effectively communicating with policy makers—in both pushing a health-focused agenda and briefing various audiences on what is happening in the community in times of calm and crisis. For example, health departments should have materials ready to go in the event of a severe flu outbreak – and use the opportunity to

educate the public about the importance of prevention, including vaccinations for priority populations.

- ***Mobilizing the community and forging partnerships to leverage resources (funding and otherwise).*** Governmental public health departments must work in thoughtful, creative, and effective ways with important partners, including community-based organizations, health care providers, insurers, local businesses, and other governmental agencies and leaders (in and out of health). Most health departments need to become more engaged in building partnerships with key leaders in the community – and not just with those who are focused on health. Developing the ability to work in sectors outside of health in a thoughtful, creative, and effective manner is integral to achieving and broadening impact. This collaborative approach should encourage mutual respect of different views, values, and priorities, as well as identification and development of mutually beneficial actions and policies.

  Community mobilization in and of itself has a health impact and can almost always lead to better health outcomes.

  Ideally, collaboration and expanded partnerships would result in health departments leveraging activities and resources outside the public health department (and perhaps even outside the health system) to promote more effective policymaking activities. For example, one local health department is partnering with its local hospital to do a joint community health assessment and improvement plan. The department is engaging the community in such planning, and in so doing, will move closer to meeting voluntary accreditation standards.

  Through skillful convening and facilitating, governmental public health departments can add value by helping to mobilize the community. For some health departments, this skill will require development of additional expertise and new funding mechanisms to support such initiatives.

- ***Building new models that integrate clinical and population health.*** National efforts to implement health and payment reform create a timely opportunity to connect clinical and population health in ways not previously possible. Governmental health departments may want to consider their role in the promotion, training, and certification of community health workers who may be members of clinical teams, involved in neighborhood-based activities, and/or both. The increased availability of HIT in the clinical setting may also result in enhanced surveillance of the community's health, for example, aggregating illness reporting data and the determination of chronic disease prevalence. Likewise, public health interventions taking place in community settings that reinforce clinical guidance may be of interest to health care providers.

- ***Cultivating leadership – along with organization, management, and business – skills needed to build and sustain an effective health department and workforce to effectively and efficiently promote and improve health.*** Successful organizational leadership requires many skills, including those deployed externally and internally. Internal leadership includes having the human resources staff to develop and maintain, recruit and retain, and train and retrain a competent workforce. It

also means having the financial resources and oversight ability to comply with requisite standards and policies.

Coordinating governmental public health efforts outside of the more traditional boundaries where work historically has been conducted requires skills that can add value – and leading when necessary – to the work being done in the public and private sectors, across cabinet agencies, and across issues areas. One state health officer, for example, leads a planning team that includes state health, housing, transportation (and other) departments as well as Tribal liaisons, the state chamber, and other key stakeholders in determining and achieving key health (and other) outcomes, as well as developing policy and legislative priorities.

Governmental public health departments can lead, convene, and facilitate in areas where they do not possess direct authority, but where there has been and can continue to be influence, or as the IOM put it, "(be) the definitive source of population health expertise in intersectoral collaborations."[8] For example, several local health departments in one state routinely use health impact assessments in partnership with other city agencies when reviewing proposed new development.

- ***Demonstrating accountability for what governmental public health does directly and for those things that it oversees through accreditation, continuous quality improvement, and transparency*.** This does not just pertain to governmental public health departments, but to health care providers across the health system, as well as other participants in, and areas of, government and beyond that affect health. Accountability needs to exist at the systems level.

  Further, accountability includes being able to account for public dollars, as well as for health outcomes. Achieving voluntary accreditation from the Public Health Accreditation Board is a process through which governmental public health departments can begin to demonstrate accountability. Data sets and systems against which to measure health outcomes and the performance of health departments are not widely available, and the workforce has varying degrees of expertise in working with such data when they are available. Thus, governmental public health departments have had difficulty in the past illustrating accountability and demonstrating value. The recent IOM report recognizes this and suggests that HHS establish data collection mechanisms to aid in developing accountability measures.[9]

- ***Protecting the public in the event of an emergency or disaster, as well as responding to day-to-day challenges or threats, with a cross-trained workforce*.** Health protection includes the ability to operate in, and lead a response to, acute and ongoing events; lead and conduct preparedness drills; and undertake routine activities, such as responding to foodborne illness outbreaks. Governmental health departments need the skills to effectively work in partnership with other organizations and agencies in an emergency, including multi-level governmental public safety and emergency management units and private sector health care providers. For example, local and state health departments responded to the impact of devastating tornados, focusing attention on the tasks established by an emergency management-led incident command structure. The

delegated tasks included addressing the health concerns of those living in shelters and coordinating the triage of patients to hospitals and other health care facilities.

Protecting the public is a central function of a public health department – absent a strong, efficient, and effective governmental public health presence, communities will suffer. Without public support for this presence, the broader mandate for governmental public health diminishes.

Prioritizing Programs and Services for Today and Tomorrow

With foundational capabilities in place, public health practitioners are better positioned to work smarter and more efficiently – and to begin to broaden their lens. From this expanded and more integrated perspective, public health officials can think creatively, strategically, and pragmatically as they confront the challenges and opportunities of a reforming health care system and fiscal challenges while building a cohesive and *integrated health system* to better protect people in their community. Keeping a broader, more strategic framework in mind can help prioritize and implement initiatives and programs to more effectively meet goals. Prioritizing is the only way to be able to take on new challenges in a time of declining resources.

Important considerations for governmental public health departments in developing a framework include: (1) ensuring what is being done is being done well and as efficiently as possible; (2) coordinating across all levels of the governmental public health system, other governmental agencies, and jurisdictions to maximize impact; and (3) cultivating and/or training a workforce that can deliver foundational capacities when implementing programs.

Governmental public health departments have a clear responsibility to perform and/or mobilize the community to conduct activities that protect health and prevent disease and injury on a population wide basis, such as restaurant inspections or initiatives increasing access to healthy food or promoting physical activity. The role of governmental public health is less clear around the direct delivery of services. Participants generally agreed that governmental public health departments may need to directly deliver both clinical and non clinical services in cases where they are:

- Effective in promoting health and preventing disease/injury to individuals, as well as the broader community – for example, tobacco cessation and vaccination;
- Can be delivered efficiently by a public health department; and
- Are not sufficiently provided by others in the community.

Resource allocation and the activities undertaken by a health department should be prioritized and purposeful, and must be an appropriate and effective use of public funds. Thus, governmental public health departments need to make choices regarding what to stop doing, what to start doing, and what to continue to do based on these and other community-based needs and parameters. In practice, prioritization will require strong alignment and greater flexibility on the part of federal public health agencies to support redirection of resources.

Health departments need to further identify those programs or activities that are done well and determine if they are being carried out in the most effective and efficient manner. In conducting this review, health officials may find that even a successful program may not be efficient, and certain activities may need to be modified or evolved to better meet the current needs of the community. For example, a few years ago, a local health department undertook a strategic planning process to help shift their overall focus from a reactive to a *proactive* framework. The health department's planning process took the "opportunity to re-invent itself… carefully and strategically" to help prioritize its work.

Governmental public health departments should focus on those activities that they not only do well, but those that they are uniquely qualified or positioned to do – such as undertaking data analysis, evaluation, and surveillance; addressing social determinants; and engaging and convening the community. Moving away from direct delivery of services when they can be provided by others in the community more efficiently or effectively, and focusing on systems and policy change with partners in and outside of government to develop and implement population-based health improvement strategies will help spur the change that needs to be achieved.[10]

Addressing the social determinants of health and combating the chronic disease challenge is not going to be solved by simply trying to help one person at a time – these are truly population level problems that need to be addressed as such. Governmental public health leaders understand what it takes to improve conditions and peoples' lives and should actively lead in these areas.

Other Considerations

Transforming Public Health project participants also identified a variety of other issues important for governmental health departments to consider, which are discussed below.

Quality Improvement

A meaningful culture of continuous quality improvement should be a goal for every health department and is a demonstration of an effective and well trained workforce. The standards and measures associated with the voluntary accreditation process should help guide health departments to focus on critical priorities for their states and local communities. While the standards were not explicitly designed as such, anecdotal evidence suggests that at least a few governmental health departments are using them as a tool in making difficult prioritization decisions spurred by budget cuts. A Midwestern county, for example, has used the accreditation standards to help outline what their health department can and cannot continue to do.[11]

Coordination Across all Levels of Government to Foster Synergy and Efficiency

As currently constituted, the governmental public health system, like the clinical care system, is fragmented, and the lack of coordination among various levels of government is a barrier to effective and efficient practice. In most cases, the manner in which governmental agencies at all levels work together needs to fundamentally change. There needs to be ongoing and more robust information exchange between and across various agencies and levels of government, and activities and funding mechanisms need to be streamlined to be less duplicative (where appropriate) and more efficient.

Local, state, and federal governmental public health agencies need to engage in discussions regarding activities and funding, identifying overlapping programs and gaps in services.

Each level of government has its role to play in the public health system and responsibilities are going to vary by state and across jurisdictions, but, as a principle, it is central that the efforts of each level of government complement each other.

It is vital that public health departments ensure all governmental agencies (and their non-governmental partners) understand and are engaged in their roles contributing to improved health outcomes, whether directly (such as through schools providing healthier lunches or transportation departments promoting public and active transit) or indirectly (by improved high school graduation rates or stable housing). Fostering health considerations in all policymaking leads to improvements in the community's health, and builds a stronger overall health system.

Workforce Development

Participants repeatedly raised the need for a competent, well-trained workforce with new and different skills essential for an effective governmental health department. Some of the skills identified as requiring more training or retraining of the current or future workforce include policy development, business and management/administrative skills, the use of technology and understanding it, and communications. A better- and cross-trained public health workforce, more versatile and well equipped to handle various public health challenges or threats, enhances the capacity and effectiveness of governmental public health at all levels. Additionally, greater understanding of other disciplines that interact and overlap with public health, such as education, transportation, and the environment, is important for identifying and leveraging opportunities to create an effective health system.

Making the Case and Demonstrating Value

Public health departments generally have not demonstrated the skills necessary to make the case and articulate their value to policymakers and the public. Some of this inability is a gap in training, but much of it is due to lack of data and funding for a comprehensive public health services research agenda. The IOM Committee on Public Health Strategies to Improve Health addressed both of these issues in their recent report suggesting that both a research agenda and funds for infrastructure should be a priority.[12]

As data and accountability systems are upgraded and established, governmental public health departments at all levels must use metrics and milestones to better show efficiency and value. Timeframes for demonstrating that value at all levels of government must be realistic. Practitioners, researchers, and funders across the field must work together to provide tools to answer such basic questions as, "what are the costs?" and "what are the benefits?" as well as to develop realistic metrics for measuring performance and demonstrating accountability. Once these systems and metrics are in place, they need to become an integral part of governmental public health departments' knowledge base and skills and be applied in real-world situations.

Technology can and should assist with building robust data and accountability systems and is integral to making an effective case that demonstrates value. Technology facilitates the collection of relevant data regarding service delivery and health outcomes and can support real-time decision making, as well as continuous quality improvement. Just as the Office of the National Coordinator at the U.S. Department of Health and Human Services has made resources available to incentivize the adoption of electronic health records among clinical providers, so must resources be made available to local and state governmental health departments to incentivize the participation in new data systems and development of technology to manage and evaluate the work of governmental public health practioners. In June of 2011, the Centers for Disease Control and Prevention and the Department of Labor began an interagency collaboration to establish a fellowship programs in public health informatics. This program will help address workforce shortfalls and establish and promote career pathways, as well as develop specific and actionable public health informatics position descriptions.

Funding

As the IOM public health funding report recently stated, "Sufficient, stable, (and) sustainable funding is needed" for state and local health departments.[13] Governmental public health has always been funded in a program-by-program manner, a big part of why achieving foundational capabilities is so challenging. Unless or until this appropriation structure changes, funds are in danger of disappearing as categorical programs are further cut. As these funds diminish, both the need for, and challenge in, "transforming public health" becomes acute.

While there is little doubt additional resources are needed, in the current fiscal environment increasing funds will be difficult at best. Going forward, governmental public health departments need to think more creatively, and in partnership with others, about ensuring adequate funding in order to protect and promote the public's health. Participants outlined the key points below as possible funding streams and issues to consider on the path to sustainability, which likely involves considering a combination of options, particularly as they relate to efficiencies and financing reform.

- *Billing for services and using discretionary public health dollars as a last option for those services which are reimbursable:* As governmental public health departments shift away from direct service, and more and more of the population becomes insured, the clinical services that public health provides should be billed for whenever possible. This activity will likely require building the infrastructure within public health departments to bill for services or contracting out such services. Further, discretionary dollars should not be used for such services if they can be reimbursed unless there is a clearly articulated and appropriate population health reason for doing so.

- *Leveraging categorical programs:* The aforementioned IOM report posited that health departments need to be able to "shift funds between categories."[14] Participants in this project also support flexibility of funds to allow a certain percentage of any given categorical funding stream be applied toward strengthening foundational capabilities rather than have each categorical program address these capabilities individually (i.e. each program having its own

dedicated policy advisor, data program, etc.). This flexibility of funding could support health departments pooling dollars from several categorical grants to fund an entire FTE. Additionally, such flexibility would provide the opportunity for health departments to focus on the social determinants of health, or other cross cutting areas, where there are common steps that might be taken to benefit work across a variety of health issues (or categorical program areas).

- *Looking to the Prevention and Public Health Fund:* In a time of shrinking budgets, the Prevention and Public Health fund has contributed to strengthening core capacity and funding innovation at governmental health departments across the country. Community Transformation Grants, which were directly allocated from the Fund, have received almost uniformly positive reviews in the work that is being done to improve health across the country. Only 61 states or localities received funding, but those that did were active in their work. The Fund has the potential to continue to provide additional core funding and incentivize innovation through new and/or different models – losing it altogether or any significant diminishment of resources would be a set back to innovation and related improvements in the health of the nation.

- *Making the case for core budget support from state and local dollars:* The federal government should use its power to encourage states and localities to spend their own funds on important public health protections. Increased flexibility in the use of federal resources to address local and state public health needs would positively contribute to any such use of power. Doing so will create incentives for spending local dollars on important public health protections, for example through matching requirements or conditions of an award.

- *Leveraging opportunities within, and/or contributions from, the health care delivery system:* Such opportunities create the potential for new and different partnerships and funding streams. As the health care delivery system moves toward greater financial accountability for population *health* outcomes, the value of prevention and public health to reducing health care costs has become more apparent. This provides the opportunity for public health practioners to form more collaborative relationships – programmatically and financially – with public and private insurers, Accountable Care Organizations, hospital community benefit programs, and others. . Governmental public health departments can help ensure that investments by the health care delivery system in community health promotion and prevention are coordinated and integrated with other public and private mechanisms – and are beneficial to the health of the public.

- *Establishing creative arrangements such as 501 (c) (3) organizations:* The creation of 501 (c) (3) organizations allows for flexibility in both raising and spending funds and allows for program implementation to be done in an innovative manner outside of the traditional funding and regulatory environments. These organizations can and should support collaborative partnerships. For example, in one area of the country, a local health department has built a wellness campus that brings together public health, education, and health care delivery services, while addressing a variety of other community needs through public-private partnerships.

- *Recognizing the value to health of non-health dollars, like transportation or community redevelopment funds:* As a "health in all policies" approach becomes more accepted, and the definition of health and its determinants is broadened, it will be important to recognize that not all health promotion functions run through a health department's budget. Recognizing – and advocating for – other investments as contributors to health is an important role for public health leaders in any fiscal discussions.

Conclusion

Governmental public health is an essential component of an *integrated health system*. As the nation continues to seek strategies that produce quality health outcomes for all individuals, the public health community is responsible for looking at the health of the population as a whole. Doing so means having available, appropriate, effective, and efficient public health programs delivered by governmental public health actors, by partners across government, or by others in the private sector. This paper has outlined emerging concepts that should be considered as governmental public health departments at all levels continue to think about how to adapt to growing challenges and opportunities with ever shrinking funds. Thinking through effective resource allocation will help assure the public's health today and in the future, regardless of funding levels.

Governmental public health practitioners currently do many things well under difficult circumstances. As the landscape continues to change, governmental public health officials must provide leadership and expertise to create innovative agendas and build on successful accomplishments, while at the same time develop new skills and strategies for creating a *comprehensive and integrated health system* that achieves better health outcomes within communities and across the nation.

As stated at the outset, this paper is not to be viewed as the final chapter of any one public health transformation discussion, but instead should be regarded as a clarion call that the time is ripe to continue discussion – and more importantly to act – on the best ways for the public health community to contribute to an integrated health system. Doing so will mean developing, implementing, and maximizing strategies to improve and promote the health of the public with governmental public health departments working in concert with its partners across the spectrum.

Appendix A: Public Health Thought Leader Group Participants

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End Notes

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[3] See: <http://www.cdc.gov/nphpsp/essentialServices.html.

[4] Institutes of Medicine, *The Future of Public Health*, 1988

[5] See <http://www.phaboard.org/>.

[6] Institutes of Medicine, *For the Public's Health: Investing in a Healthier Future,* 2012.

[7] Ibid.

[8] Ibid.

[9] Institutes of Medicine, *For the Public's Healthy: Investing in a Healthier Future,* April 2012.

[10] Institutes of Medicine, *For the Public's Healthy: Investing in a Healthier Future,* April 2012.

[11] Kuehnert, P and McConnaughay, K. Touch choices in tough times: enhancing public health value in an era of declining resources. Journal of Public Health Management and Practice 2012; 18:2.

[12] Institutes of Medicine, *For the Public's Healthy: Investing in a Healthier Future,* April 2012..

[13] Ibid.

[14] Institutes of Medicine, *For the Public's Healthy: Investing in a Healthier Future,* April 2012.

WPHA/WALHDAB - *2019-2020 Wisconsin Bill Tracking*

Bill Number	Bill Description	Position	Bill Status
Assembly Bill 1 (Companion to Senate Bill 2)	Relating to: coverage for pre-existing conditions	?	• Passed Assembly on 1/22/19
Senate Bill 2 (Companion to Assembly Bill 1)	Relating to: coverage for pre-existing conditions	?	• In Senate Health Committee
Assembly Bill 81 (Companion to Senate Bill 89)	Relating to: licensure of dental therapists	↑	• In Assembly Medicaid Reform Committee
Senate Bill 89 (Companion to Assembly Bill 81)	Relating to: licensure of dental therapists	↑	• In Senate Health Committee
Senate Bill 39 (Companion to Assembly Bill 33)	Relating to: expungement of records of certain crimes	↑	• Executive Session held on 4/2/19
Assembly Bill 33 (Companion to Senate Bill 39)	Relating to: expungement of records of certain crimes	↑	• Executive Session held on 3/28/19
Assembly Bill 85 (Companion to SB 109)	Relating to: groundwater quality standards	Monitoring	• Public hearing held in Assembly Environment on 4/4/19
Senate Bill 109 (Companion to AB 85)	Relating to: groundwater quality standards	Monitoring	• In Senate Committee on Natural Resources

Senate Bill 22	Relating to: sale of below cost prescription drugs	Monitoring	• In Senate Economic Development, Commerce and Trade Committee
Senate Bill 106 (Companion to Assembly Bill 187)	Relating to: micro market licensing fees		• Public hearing held in Senate Licensing Committee
Assembly Bill 187 (Companion to Senate Bill 106)	Relating to: micro market licensing fees		• Introduced in Assembly Licensing Committee
Assembly Bill 186 (Companion Senate Bill 170)	Relating to: allowing minors to operate temporary stands without a permit or license		• Passed Committee on 9/12
Senate Bill 170 (Companion Assembly Bill 186)	Relating to: allowing minors to operate temporary stands without a permit or license	Will change to "other" upon adoption of amendment in committee	• Public Hearing held on 9/10
LRB 2418	Relating to: applying the indoor smoking ban to vapor products and marijuana		• Cosponsorship period closed 5/15/19
Assembly Bill 119 (Companion to SB 122)	Relating to: grants for homeless shelters		• Passed Assembly on 6/19/19
SB 122 (Companion to AB 119)	Relating to: grants for homeless shelters		• Available for scheduling in the Senate
Assembly Bill 120 (Companion to SB 145)	Relating to: homeless case management services		• Passed Assembly on 6/19/19
SB 145 (Companion to AB 120)	Relating to: Homeless Case Management Services		• Public Hearing Held in Senate Public Benefits on 9/10

Assembly Bill 121 (Companion to SB 120)	Relating to: housing navigator grants		• Passed Assembly on 6/19/19
SB 120 (Companion to AB 121)	Relating to: housing navigator grants		• Public hearing held in Senate Housing on 8/13
Assembly Bill 122 (Companion to SB 124)	Relating to: employment and training activities for homeless populations		• Passed Assembly on 6/19/19
SB 124 (Companion to AB 122)	Relating to: employment and training activities for homeless populations		• In Senate Workforce Development
Assembly Bill 123 (Companion to SB 119)	Relating to: housing grants to homeless individuals and families		• Passed Assembly on 6/19/19
SB 119 (Companion to AB 123)	Relating to: housing grants to homeless individuals and families		• Public Hearing Held in Senate Housing on 8/13
Assembly Bill 124 (Companion to SB 144)	Relating to: grants to defray housing costs		• Passed Assembly on 6/19/19
SB 144 (Companion to AB 124)	Relating to: grants to defray housing costs		• Public hearing held in Senate Housing on 8/13
Assembly Bill 126 (Companion to SB 126)	Relating to: creating a family caregiver tax credit		• In Assembly Ways and Means Committee
Senate Bill 126 (Companion to AB 126)	Relating to: creating a family caregiver tax credit		• In Senate Revenue Committee
Assembly Bill 248 (Companion to SB 262)	Relating to: eliminating personal conviction exemption from immunization		• In Assembly Committee on Constitution and Ethics
Senate Bill 262 (Companion to AB 248)	Relating to: eliminating personal conviction exemption from immunization		• In Senate Committee on Health

Assembly Bill 295 (Companion to SB 267)	Relating to: increasing the homestead tax credit maximum income		• In Assembly Committee on Ways and Means
Senate Bill 267 (Companion to AB 295)	Relating to: increasing the homestead tax credit maximum income		• In Senate Revenue Committee
Assembly Bill 362	Relating to: remote orders for the sale of alcohol beverages to be picked up on retail license premises		• In Assembly Committee on State Affairs
Assembly Bill 363	Relating to: alcohol beverages delivery and the face-to-face requirement for retail sales of alcohol beverages		• In Assembly Committee on State Affairs
LRB – 3687	Relating to: Adding e-cigarettes to indoor smoking ban		• Circulating for cosponsorship
Senate Bill 118	Relating to: placement of cigarettes, nicotine products and tobacco products by retailers		• Public hearing held in Senate Committee on Small Business on April 4
Senate Bill 316	Relating to: the treatment of a pregnant or postpartum person in prison and county jail.		• In Senate Judiciary Committee
Assembly Bill 353 (Companion to SB 328)	Relating to: inspections of recreational and educational camps	Monitoring	• In Assembly Committee on Regulatory Licensing Reform
Senate Bill 328 (Companion to AB 353)	Relating to: inspections of recreational and educational camps	Monitoring	• In Senate Committee on Licensing
Assembly Bill 321 (Companion to SB 302)	Relating to: setting standards for certain contaminants		• In Assembly Committee on Environment
Senate Bill 302 (Companion to AB 321)	Relating to: setting standards for certain contaminants		• In Senate Committee on Natural Resources
AB-394 (Companion to SB 361)	Relating to: Medicaid Expansion		• In Assembly Medicaid Reform Committee

SB 361 (Companion to AB 394)	Relating to: Medicaid Expansion		• In Senate Public Benefits Committee
SB 364 (Companion to AB 422)	Relating to: Raising the Tobacco Purchase Age		• In Senate Health Committee
AB 422 (Companion to SB 364)	Relating to: Raising the Tobacco Purchase Age		• In Assembly Substance Abuse Committee
SB 423	Relating to: Lead Testing		• In Senate Natural Resources Committee
SB 424	Relating to: Lead Testing		• In Senate Natural Resources Committee
SB 324 (Companion to AB 346)	Relating to: extension of eligibility under the Medical Assistance program for post-partum women.		• In Senate Insurance Committee
AB 346 (Companion to SB 324)	Relating to: extension of eligibility under the Medical Assistance program for post-partum women.		• In Assembly Medicaid Reform Committee
LRB-0953	Relating to: Requiring an employer to provide reasonable break time for an employee who is breast-feeding the employee's child to express breast milk for the child.		• Circulating for Cosponsorship
AB 330 (Companion to SB 309)	Relating to: requiring coverage of the dispensing of an extended supply of contraceptives.	Monitoring	• In Assembly Insurance Committee
SB 309 (Companion to AB 330)	Relating to: requiring coverage of the dispensing of an extended supply of contraceptives.	Monitoring	• In Senate Health Committee
AB 290	Relating to: permitting pharmacists to prescribe, administer, and dispense certain contraceptives, granting rule-making authority, and providing a penalty.	Monitoring	• In Assembly Health Committee
AB 304 (Companion to SB 286)	Relating to: permitting pharmacists to prescribe certain contraceptives, extending the time limit for emergency rule procedures, providing an exemption from emergency rule procedures, granting rule-making authority, and providing a penalty.	Monitoring	• In Assembly Health Committee
SB 286 (Companion to AB 304)	Relating to: permitting pharmacists to prescribe certain contraceptives, extending the time limit for emergency rule procedures, providing an exemption from emergency rule procedures, granting rule-making authority, and providing a penalty.	Monitoring	• In Senate Health Committee
LRB-3637	Relating to: requiring hospitals to allow patient designation of caregiver	Monitoring	• Closed for cosponsorship

SB 350	Relating to: eliminating administrative rule limitation on recovery birth costs	↓	• Passed Senate Children and Families Committee on 9/30/19
AB 103	Relating to: eliminating administrative rule limitation on recovery birth costs	↓	• Public hearing held on 6/4/19 in Assembly Family Law Committee
AB 523	Relating to: interim psychologist license	Monitoring	• In Assembly Regulatory Licensing Reform Committee
AB 525	Relating to: implementing a suicide prevention program	↑	• In Assembly Health Committee
AB 527	Relating to: grants related to preventing suicide by firearm	Monitoring	• In Assembly Local Government Committee
AB 528	Relating to: grants to support peer-to-peer suicide prevention programs	↑	• In Assembly Education Committee
AB 529	Relating to: grants to the Wisconsin Safe and Healthy Schools Center	↑	• In Assembly Education Committee
AB 530	Relating to: grants for suicide prevention programming to local mental health programs	↑	• In Assembly Local Government Committee
AB 531	Relating to: requiring that student identification cards include contact information for suicide prevention hotlines	Monitoring	• In Assembly Education Committee
LRB 0323	Relating to: Family Medical Leave Insurance	↑	• Circulating for cosponsorship
LRB-4383/4700	Relating to: “Red flag” gun laws	↑	• Awaiting numbering as a Special Session Bill
LRB-4698/4701	Relating to: Universal background checks on firearms purchases	↑	• Awaiting numbering as a Special Session Bill

WALHDAB
Public Health In Action
Wisconsin Association of Local Health Departments and Boards

WPHA
Wisconsin Public Health Association

2019-2020 LEGISLATIVE PRIORITIES

Heading into the 2019-2020 legislative session, WPHA and WALHDAB decided that three overarching themes should be incorporated in all of our efforts:

1. **Building and retaining public health infrastructure through public health funding.**
2. **Infusing health and equity in all policies.**
3. **Improving public health workforce succession planning to support consistent and efficient delivery of services.**

Along with these overarching themes, WPHA and WALHDAB decided to detail specific priorities and will actively engage in policy next legislative session that will focus on four social determinants of health.

JUSTICE REFORM

- **Increase treatment alternatives and diversion program (TAD) funding for mental health and substance abuse issues.**
  There has been bipartisan interest in this issue the past few sessions, particularly with the HOPE (Heroin, Opioid Prevention and Education) Agenda. Last session, there were several bills introduced (and some that became law) which provided funding for mental health and substance abuse.

- **Increase funding allocated to counties for juvenile justice services to fund all costs associated with bringing 17-year-old first time juvenile offenders back to the juvenile justice system.**
  Juvenile justice reform has been identified as an important issue to several active members of WPHA and WALHDAB. Corrections, particularly involving juveniles, has been a bipartisan topic of discussion recently in Wisconsin politics.

EARLY CHILDHOOD EDUCATION

- **Fully fund School Breakfast Program.**
  State statute asks the state to fund school breakfast at 15 cents per each breakfast served. However, due to the popularity of the program, state funding only allows for an 8 cent reimbursement. We are seeking additional dollars to ensure the program is fully funded.

HOUSING

- **Expand low income housing tax credits for developers and rental assistance vouchers for renters.**
  Near the end of last session, Wisconsin Act 176 earned bipartisan support and became law. The bill is just one example of a tax credit that helps encourage the development of low-income housing. WHEDA oversees many types of tax credits that support low-income housing developments, which focus on assisting developers as well as renters. Essentially, the tax credits lower construction and labor costs for developers and monthly rent for renters. With an aging population, low income senior housing tax credits are becoming more common in municipalities.

- **Funding for programs to eliminate / abate lead paint, soil and pipes, including but not limited to a statutory provision requiring that lead remediation dollars be used for that dedicated purpose.**
  Lead abatement garnered significant bipartisan support last session, including Wisconsin Act 137, which provides financial assistance to replace lead service lines. There is also a dedicated fund in the DHS portion of the state budget meant to address lead poising lead exposure service. However, state statute does not explicitly limit the ability of the fund to be used for other purposes.

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INCOME STABILITY & EMPLOYMENT

- **Supporting and expanding Paid Family Leave.**
  Last session, there were bipartisan efforts to address paid family leave initiatives. Republican legislators explored opportunities to create paid family leave savings accounts. Democrats proposed ways for companies and municipalities to provide paid family leave. WPHA and WALHDAB support efforts to maintain financial stability for individuals on family leave.

- **Increase Earned Income Tax Credit and move from one-time to monthly payments.**
  In the last state budget, Governor Walker increased funding for this program from $30,100,000 in 2017-2018 to $35,000,000 during the 2018-2019 fiscal year. Tax credits are a popular legislative idea and it is one that we believe will continue to be of bipartisan interest.

- **Establish tax credit for family caregivers.**
  A new tax credit can potentially save health care associated costs because it will provide financial assistance to families who care for family members at home.

- **Increase workforce training/transitional jobs.**
  This issue has drawn bipartisan support, and we believe, will continue to do so into the next session. Wisconsin has low unemployment. However, there is a major labor shortage in some sectors due to a lack of workers with the necessary and required skills to perform certain jobs in an evolving economy.

ABOUT PUBLIC HEALTH

Public health is a broad science with a focused goal of protecting and improving the health of Wisconsin citizens. Over the last century, public health has dramatically increased life expectancy through such scientific advancements as vaccination, infectious disease control and chronic disease prevention. It has become increasingly clear that health outcomes are primarily driven by the social and economic conditions in which we live, work, play, pray, grow up, and grow old. That's why public health is increasing its emphasis on education, income and employment, housing, and other "social determinants of health."

Together, WPHA and WALHDAB represent over 1,200 public health professionals in communities across Wisconsin, striving to prevent, promote, and protect the citizens of the state.

About WPHA:
The Wisconsin Public Health Association is the largest statewide association of public health professionals in Wisconsin. Established in 1948, WPHA exists to improve, promote and protect health in Wisconsin. WPHA strives to be diverse in its constituency, rich in partnerships and valued for its policy recommendations and best practices. WPHA is the collective voice for public health in Wisconsin.

About WALHDAB:
The Wisconsin Association of Local Health Departments and Boards is the statewide leader and voice for local governmental public health. WALHDAB was founded in 1991 to serve local health departments and boards of health.

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Eau Claire Healthy Communities

Eau Claire City-County Health Department

Healthy Eau Claire Joint Legislative Task Force

A partnership between Eau Claire City-County Health Department Board of Health and Eau Claire Healthy Communities

Initiatives:

- Planning the joint ECCCHD Board of Health-ECHC Legislative Event. This event has happened in April for the past 4 years with local elected officials from the City, County, State and Federal level attending along with the ECCCHD Board of Health and representatives from Eau Claire Health Communities Council and Action Teams to discuss public health issues.
- One-on-ones with local candidates to build relationships. This has included training of committee members on doing 1-1 with JONAH and targeted appointments made with state and national elected officials.

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EAU CLAIRE COUNTY REPRESENTATIVES		
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Critical CDC Public Health Investments are at Risk:

The Impact in Wisconsin

Total Amount to Wisconsin:

$12,824,029

263 jobs

Are estimated as supported by these funds annually*

$2,904,083 to support **vaccines** for needy **children** and adults

$3,055,241 to the Department of Public Health for **core state-identified needs**

$1,100,012 in infectious disease prevention **including health care-associated infections**

*Evidence-based health economic formula utilizing state-specific personnel costs and impact variables
**Dollar amounts come from publically available governmental data on the Prevention Fund and the grants it supports

Trust for America's Health
WWW.HEALTHYAMERICANS.ORG

2017-19 Wisconsin State Biennial Budget

Governor Scott Walker released his proposed state budget to a joint session of the Legislature on February 8, 2017. The budget is introduced as Assembly Bill 64 / Senate Bill 30.

Highlights of the Governor's two-year spending plan include:

- An additional $649 million for K-12 education
- An additional $140 million for the UW system, which includes a 5 percent tuition cut
- Elimination of state prevailing wage
- Elimination of the state forestry property tax levy
- Reducing the two lowest individual income tax brackets by 0.1 percent each
- Transitioning to a self-insurance model for state employees
- Two-year technical college tuition freeze

The WCA Government Affairs staff has prepared the following summary of provisions in the Governor's budget that are likely to affect counties. WCA will continue to provide members with additional information about the budget as it becomes available. Please check the WCA website at www.wicounties.org for updates.

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AGRICULTURE, ENVIRONMENT, AND LAND USE

Department of Natural Resources Reorganization: The Governor's budget recommends reorganizing and restructuring the department.

Water Quality and Environmental Protection: The Governor's budget provides additional support for forestry management, water quality management expansion, environmental management and protection and natural heritage. Modifications to the Environmental Improvement Program and additional resources for water quality management will ensure the continued protection of the state's ground- and surface water. In addition, through the class action settlement resulting from Volkswagen, settlement funds received by the state will be redirected to replacing aging, inefficient vehicles with clean-powered vehicles.

UW-Extension Pollution Abatement Program: The Governor's budget eliminates the requirement that the DNR allocate $500,000 in each fiscal year for education and technical assistance provided by the UW-Extension relating to the nonpoint source water pollution abatement program.

County Conservation Activities: The Governor's budget increases the amount of cost sharing for non-point abatement projects and other land and water conservation activities performed by counties by $825,000 each year.

Soil and Water Resource Management Bond Authority and Cost Share Grants: The Governor's budget provides $7 million in SEG-supported general obligation bonds for grants to counties for implementation of land and water resource management plans, including cost-share grants to landowners. Funding amounts are consistent with the current biennium.

Environmental Management Account Funding Changes: The Governor's budget increases expenditure authority for watershed nonpoint source contracts and other environmental aids. In addition, the budget reduces the transfer of funding from the general fund by $3.2 million and instead transfers the aforementioned amount from the general fund to the nonpoint account.

Department of Forestry Relocation: The Governor's budget requires the chief forester to relocate to a location north of STH 29. Further, the budget provides relocation assistance to any existing employees currently in the divisions central office who wish to relocate to a state office north of STH 29.

Timber Sales and Cutting Procedures: The Governor's budget changes the procurement and sale of timber by: 1) raising the threshold from $3,000 to $10,000 at which a sale of estimated value must be publicly advertised; 2) eliminating the requirement that the sale notice must be posted in a newspaper and permitting the department to select the best method to advertise timber sales; and 3) extending the

amount of time from two years to five years by which a county must report on when merchantable wood products were cut under an approved cutting plan.

Permitting of Concentrated Animal Feeding Operations (CAFOs): The Governor's budget requires that DATCP and DNR jointly conduct a study, to be completed by December 31, 2018, to determine whether the Wisconsin Pollutant Discharge Elimination System permit program for Concentrated Animal Feeding Operations (CAFOs) should be transferred from DNR to DATCP.

COUNTY ORGANIZATION AND PERSONNEL

Broadband Access: The Governor's budget makes changes to funding for grants by the Public Service Commission (PSC) for the construction of broadband infrastructure in underserved areas of the state. The Governor's budget continues to expand funding for broadband and access through transfers in funds and statutory changes for the PSC, Department of Administration's (DOA) Technology for Educational Achievement Program, the Department of Natural Resources (DNR), and the Department of Transportation (DOT) for a total of $30.5 million in FY 2017-18, and approximately $10 million in FY 2018-19.

The Governor's plan includes delaying the sunset date for the Technology for Educational Achievement (TEACH) program infrastructure grant to July 1, 2019 resulting in an additional $15 million available.

The budget also provides $6 million in new dollars from the Universal Service Fund and $5 million from E-rate to the Broadband Expansion Grant program in FY 2017-18. Also, the $1.5 million cap will be lifted thus allowing for $14 million in total spending in FY 2017-18. Further, the Governor directs unused funds from the Universal Service Fund to the Broadband Expansion Grant program and allows grants and broadband office administration to be funded from under-spending in the rate-assessed Universal Service Fund appropriation. This is an estimated increase of approximately $1 million in FY 2018-19.

Veterans: The Governor's budget provides $60,000 in both FY 2017-18 and 2018-19 to create a pilot program for crisis intervention services for veterans in Kenosha and Racine counties.

The Governor also changed the County Veterans Service Office Grant Program by returning the program to a block grant model for disbursement of grant dollars and requiring accountability from the county executive, administrator, or administrative coordinator to certify proper use of the funds. Salary and fringe benefit expenses incurred in 2017 and 2018 shall not exceed 50 percent of the grant funds awarded and salary and fringe benefit expenses incurred in 2019 shall not exceed 25 percent.

Further, the Governor's budget provides $107,800 in FY 2017-18 and $143,800 in FY 2018-19 for a County Veterans Service Office liaison position to improve administration and outreach services associated with the program.

Printing, Publishing and Mailing Efficiencies: The Governor's budget allows for an electronic option for all units of government for any printing, publishing, or mailing that is statutorily required. However, the following documents will be excluded from the waiver authority and the electronic option: any election documents, facsimile ballot, referenda, notice of public hearing before a governmental body, and notice of meetings of private and public bodies required by law; and summons, order, citation, notice of sale, or other notice that is intended to inform a person that the person may or shall do an act or exercise a right within a designated period or by a designated date. Also exempted is certified or registered mail.

For mailing, the budget allows the governmental entity to mail the nonexempt document electronically. For printing, the budget allows the governmental entity to make the nonexempt document available to the public on its website. For publishing, the budget allows the governmental entity to publish the nonexempt document on its website. If statute requires that the nonexempt document be published on the website and in another form, the budget allows the governmental entity to publish the document only on the website. The date in which the document is provided on the website is the date of publication.

Rental Unit Energy Efficiency: The Governor's budget eliminates rental unit energy efficiency standards and certifications along with powers of the Department of Safety and Professional Services (DSPS) related to those standards and requirements. DSPS will be allowed to take enforcement action for violations of the standards that occur before the effective date of the budget. Also, the budget eliminates the requirement that the owner of the rental property, before transferring ownership, must do one of the following: 1) have the rental unit inspected by a certified inspector who will then issue a certificate that the unit meets minimum energy efficiency standards; 2) if the unit is scheduled for demolition within 2 years, a waiver of certification must be obtained from DSPS or a certified inspector; or 3) obtain a stipulation between the transferee of the unit and DSPS or the city, village, town in which the unit is located showing that the transferee will bring the unit into compliance with minimum energy standards within a year of the transfer.

The Governor's budget eliminates the following: the Register of Deeds may not record a document that transfers real estate that contains a rental unit unless the document is accompanied by that certificate, waiver or stipulation under current law.

Prevailing Wage and Project Labor Agreements: The Governor's budget calls for a full repeal of prevailing wage requirements (state prevailing wage law and highway prevailing wage law) for state construction projects including projects led by the DOT.

The Governor's budget also prohibits any unit of government in Wisconsin from either requiring or considering the use or lack of use of project labor agreements by contractors as a condition of bidding on a public works project. A unit of government is prohibited from 1) requiring a bidder to enter into an agreement with a labor organization; 2) considering whether or not a bidder has or has not entered into an agreement with a labor organization; or 3) requiring that a bidder enter into an agreement that requires them or their employees to become or remain members of a labor organization or pay dues or fees to a labor organization.

Local Government Property Insurance Fund: The Governor's budget closes the LGPI fund to new policies after July 1, 2017 and renewals after December 31, 2017. Coverage cannot be extended beyond December 31, 2018 and all claims must be filed before July 1, 2019 or they will not be covered. Any funds remaining after July 1, 2019 will be dispersed amongst the local governmental units that were insured on July 1, 2017.

Administrative Rules: The Governor's budget provides that if an economic impact analysis for a proposed rule reveals that the cost would be $10 million or more for implementation, and compliance costs are reasonably expected to be incurred by or passed along to local governmental units over any two-year period, the agency must stop work on the rule and may not continue to promulgate the rule unless 1) the bill that authorizes the promulgation is enacted; or 2) if the agency modifies the rule to address the implementation and compliance costs through a revised impact analysis or any subsequent prepared independent economic impact analyses.

HEALTH AND HUMAN SERVICES

Department of Health Services (DHS)

FoodShare Employment and Training: The Governor's budget extends participation in the FoodShare Employment and Training (FSET) program to all able-bodied adults by piloting mandatory FSET program participation for able-bodied adults with school-age children. Once implemented statewide, it is estimated FSET enrollment will increase by roughly 25,000 per year.

Universal Referral for FoodShare Employment and Training: The Governor's budget recommends referring all eligible able-bodied adults to the FoodShare Employment and Training program, allowing vendors to fully explain the benefits of receiving employment and training services. Participation would not be required, and there would be no sanctions to FoodShare benefits for nonparticipation.

Employment and Training for Childless Adults: The Governor's budget increases investment in employment and training services for childless adult Medicaid participants and institutes a requirement that those not employed or who are underemployed participate in available services. Approximately 49,200 enrollees will be referred to employment and training services and DHS is provided with $1,608,000 GPR and

$3,216,000 all funds and 2.0 FTE positions in FY18 and $8,255,500 GPR and $16,511,000 all funds and 24.0 FTE positions in FY19 to provide these services.

Asset Limit: The Governor's budget implements a $25,000 liquid asset limit in Wisconsin Shares and FoodShare to focus assistance on those most in need. Associated costs for DHS to implement this requirement are $118,200 all funds in FY18 and $3,589,800 all funds in FY19.

Child Support: The Governor's budget reinstates the child support requirement for FoodShare, so both parents are asked to support their children as a condition of receiving benefits. The budget provides $1,172,300 all funds in FY18 and $185,800 all funds in FY19 and 1.0 FTE position for systems changes to implement the requirement.

Medicaid Purchase Plan (MAPP): The Governor's budget strengthens the work requirement and eliminates the premium cliff in the MAPP program to provide incentives for people with disabilities to engage in meaningful work by requiring a monthly premium for all enrollees ($25 per month unless the premium would be an undue hardship, plus 3 percent of adjusted earned or unearned income that exceeds 100 percent of the FPL). Enrollees will also be required to show proof of paid employment, substantial in-kind work, or participation in pre-employment programming in order to be eligible for this additional support. The budget minimizes the number of MAPP members who might lose access to Medicaid by increasing the medically needy eligibility limit to 100 percent of the federal poverty level. The budget also strengthens the Health and Employment and Counseling program by providing additional funding and position authority. Funding is allocated at $901,200 all funds in FY18 and $3,203,900 all funds in FY19. Three FTE positions are also authorized.

Eligibility Determinations and Cost-Sharing: For determinations of financial eligibility and any cost-sharing requirements for the Community Options Program (COP), for certain community integration programs, the Family Care program, Family Care Partnership, IRIS, and certain Medical Assistance programs, the Governor's budget requires DHS to exclude any assets accumulated in the person's independence account and any assets from retirement benefits accumulated from income or employer contributions while employed and receiving state-funded benefits under COP or MAPP benefits. The budget sets the same requirement for excluding retirement benefits from eligibility determinations for the MAPP program as assets accumulated in an independence account are already excluded under current law.

The budget also changes the income limit for Medical Assistance program eligibility for certain elderly, blind, or disabled individuals who are medically needy to 100 percent of the federal poverty line for a family the size of the individual's family.

Children's Long-Term Supports: The Governor's budget expands access to care by providing $14,067,300 in FY18 and $25,205,500 in FY19 to eliminate the waiting list for long-term supports for approximately 2,200 children with developmental disabilities, physical disabilities, or severe emotional disturbances. The budget also implements

reforms to increase efficiency or service delivery and to develop an equitable funding methodology to ensure county funding remains within the program.

The budget allows DHS to require a county to maintain a specified level of contribution, which is determined by DHS based on historical county expenditures, for the disabled children's long-term support program. Counties are required under the budget to cooperate with DHS to determine an equitable funding methodology and county contribution mechanism going forward and to ensure that county contributions are being expended for the children's long-term support program. The budget also allows DHS to contract with a county or group of counties to deliver children's long-term support program services.

Nursing Home Rates: The Governor's budget provides an increase of $18,354,900 in FY18 and $33,118,900 in FY19 to: (a) increase nursing home provider rates by 2 percent in each fiscal year to support direct care workforce and increased resident acuity in nursing homes; (b) increase provider rates by 1 percent in each fiscal year to intermediate care facilities for individuals with intellectual disabilities; and (c) increase funding for enhanced behavioral and cognitive impairment incentives.

Personal Care: The Governor's budget supports the Personal Care program direct workforce by providing a 2 percent increase of $5,034,300 in FY18 and a 2 percent increase of $9,936,300 in FY19 to address increased program participant acuity.

Birth to 3 Medicaid Reimbursement: The Governor's budget increases Medicaid reimbursement for Birth to 3 by allowing the Birth to 3 allocation to be used for the nonfederal share of any newly implemented Birth to 3 Medicaid services. The budget also authorizes the department to submit any Medicaid state plan amendment that increases Medicaid reimbursement for Birth to 3.

Lead Poisoning: The Governor's budget updates the definition of lead poisoning or lead exposure in statute from 10 micrograms per deciliter to 5 micrograms per deciliter, increases the Medicaid reimbursement for investigations to $800, and provides $61,000 all funds in FY18 and $122,000 all funds in FY19.

Peer-Run Respite Center: The Governor's budget provides $450,000 in FY19 to develop a Peer-Run Respite Center for Veterans in the Milwaukee area to improve outcomes of veterans in crisis and those having difficulty coping with mental illness.

Children's Crisis Facility: The Governor's budget provides $249,100 in FY18 and $996,400 in FY19 to develop an eight bed Crisis Treatment and Stabilization Facility for children to improve outcomes of children in crisis. The facility will be community based and provide mental health services to children in the least restrictive setting. In addition, the facility will improve clinical outcomes while also reducing the number of institutional admissions at Winnebago Mental Health Institute.

Meeting Reimbursement: The Governor's budget provides $10,000 in FY18 and $10,000 in FY19 for the Office of Children's Mental Health to reimburse individuals for travel costs associated with attending meetings to include people with lived experience in the decision making process.

Forensic Treatment Capacity at Mendota: The Governor's budget increases forensic treatment capacity and improves patient services at the Mendota Mental Health Institute by providing 73.0 FTE positions and $7,190,500 in FY18 and $7,220,100 in FY19 to reduce the current forensic inpatient caseload and admission waiting list.

Income Maintenance Consortia Reestimate: The Governor's budget recommends funding the income maintenance consortia based on updated caseload assumptions and program requirements ($12,393,800 in FY18 and FY19).

Child Psychiatry Consultation Program: The Governor's budget increases funding for the Child Psychiatry Consultation Program by $500,000 annually.

Department of Children and Families (DCF)

Children and Family Aids: The Governor's budget increases the Children and Family Aids allocation by $1,250,000 PR-F in FY18 and by $5,000,000 PR-F in FY19 to address increasing child welfare costs. Total Children and Family Aids from all sources would be $70,630,800 in FY18 and $74,712,400 in FY19. Increases will begin in CY18.

The budget also increases children and family aids to counties to fully fund a prior foster care rate increase, which was a 2.5 percent increase effective in CY15.

Fostering Futures: The Governor's budget provides an additional $200,000 TANF in FY19 to Fostering Futures: Connections Count to develop and implement a trauma-informed training curriculum that is more specific to Wisconsin's needs. Total program funding would be $360,300 in FY18 and $560,300 in FY19.

In-Home Safety Services: The Governor's budget provides additional funding of $889,800 TANF in FY18 and $1,921,600 TANF in FY19 to expand child safety and out-of-home placement services statewide so that children may remain at home with supportive services rather than being placed outside of the home. Similar to Children and Family Aids, the budget requires matching funds by counties (9.89 percent). Total funding for services is $6,282,500 in FY18 and $7,314,300 in FY19.

Foster Care/Kinship Care Rates: The Governor's budget increases foster care and kinship care rates by 2.5 percent annually in each calendar year. The basic foster care and kinship care rate would increase from $232 to $238 in CY18 and from $238 to $244 in CY19. Additional funding from all fund sources under the bill would be $861,300 in FY18 and $2,162,100 in FY19.

Tribal High-Cost Placements: The Governor's budget provides $247,500 PR-S in additional funding in each fiscal year and flexibility (consolidating related appropriations) for high-cost tribal out-of-home care placements to meet tribes' needs. Total available funding for the program would be $717,500 in each fiscal year.

Child Care: The Governor's budget eliminates the child care cliff by providing child care subsidies to families participating in Wisconsin Shares whose incomes rise above 200 percent of FPL but with copayments that increase $1 for every $3 in additional income. The estimated cost is $1,962,600 TANF funding in FY19.

The budget also provides that, if an individual who is eligible for a child care subsidy under Wisconsin Shares permanently ceases participating in an approved activity, the individual will remain eligible for the child care subsidy for a period of three months after the individual ceases participation or until the individual's eligibility is redetermined, whichever is earlier. The budget also provides that an individual will also remain eligible for a child care subsidy while the individual experiences a temporary break in an approved activity, such as a break due to illness, to care for a family member, a school or holiday break, a regular break from seasonal work, or any other break from an approved activity that does not exceed three months.

The Governor's budget adds a requirement that a child for whom a Wisconsin Shares child care subsidy is sought be immunized according to the immunization requirements implemented by DHS.

Learnfare: The Governor's budget allows benefits to be sanctioned if a family is not compliant with case management in efforts to address attendance issues, and the Learnfare-eligible student is either habitually truant or unenrolled in school. Currently, sanctions can only be levied for nonenrollment.

Public Benefits and Absenteeism: The Governor's budget requires the Departments of Children and Families, Public Instruction, Health Services, and Workforce Development to study the population overlap of public benefit programs and chronic absenteeism among students.

Home Visiting Program: The Governor's budget provides $3,900,000 in additional TANF funding annually to the state's home visiting program to expand the number of families served and increase the number of parents equipped with the tools needed to improve chances of success for parents and their children. Program funding would total $14,297,000 all funds in each fiscal year and $28,595,400 over the biennium.

Supporting Parents Supporting Kids: The Governor's budget continues funding for Brown and Kenosha counties for the existing Supporting Parents Supporting Kids program by providing $200,000 all funds in FY18. The budget provides $553,636 all funds in FY19 to administer a five-county child support demonstration program to expand an enhanced Supporting Parents Supporting Kids model that provides work, employment training, and parenting services to low-income noncustodial parents to get a

job in order to fulfill financial obligations to his or her child. Grants in FY19 are anticipated to total $375,000, funded by existing child support program revenue. With the anticipated federal match, funding for the demonstration program over the biennium will total $938,600 all funds.

Drug Testing for W-2: The Governor's budget requires most new Wisconsin Works applicants to participate in substance abuse screening, testing and, if necessary, treatment. The budget enables DCF to expand the screening process through administrative rules.

Public Assistance Collections: The Governor's budget reallocates 3.0 FTE positions for additional staffing in DCF's Public Assistance Collections Unit to enhance efforts to combat fraud and collect overpayments.

Public Assistance Program Fraud and Error Reduction: The Governor's budget provides $605,500 in each year of the biennium to reimburse counties for program integrity, and W-2 and child care fraud investigation costs.

Child Victims of Sex-Trafficking: The Governor's budget provides an additional $2,000,000 GPR in FY19 for services to child victims of sex trafficking. Total funding would be $2,000,000 in FY18 and $4,000,000 in FY19. The Governor also recommends modifying current law to expand exclusive original jurisdiction of juvenile courts to include any child who is a victim of or at substantial risk of becoming a sex trafficking victim.

Juvenile Justice

Lincoln Hills/Copper Lakes: The Governor's budget provides 20.5 FTE positions to improve staff ratios and increase services at the Lincoln Hills School and Copper Lake School juvenile facilities.

The budget provides 3.25 FTE positions and $256,100 GPR in FY18 and $300,500 GPR in FY19 to expand mental health services for girls at Copper Lake School so that they have similar access to mental health services as juvenile males.

The budget improves staff ratio requirements at Lincoln Hills School as prescribed by the federal Prison Rape Elimination Act (PREA) by providing 8.25 FTE positions and $653,400 PR in FY18 and $653,400 PR in FY19.

The budget provides 9.0 FTE positions and $93,500 PR in FY18 and $65,900 PR in FY19 for the safe distribution of medication to the juvenile population.

JCI Population: The Governor's budget projects a juvenile population of 253 in each fiscal year of the biennium.

The budget requires that individuals under the age of 18 be placed at a juvenile correctional facility or a secured residential care center for children and youth, rather than an adult prison, when appropriate.

JCI Rates: The Governor's budget sets the daily rates for juvenile correctional institutions at $344 in FY18 and $352 in FY19. The current rate is $292.

Other:

School Mental Health: The Governor's budget provides $6.5 million to improve and expand school mental health services. The Governor's budget establishes three new programs: (a) $3,000,000 in FY19 to support school social work expenditures; (b) $2,500,000 in FY19 to support school and community health collaborations; and (c) $491,000 in FY18 and $514,000 in FY19, as well as 1.0 FTE position, to support training for school employees in trauma-informed care.

Tax Credits: The Governor's budget extends the Wisconsin Earned Income Tax Credit (EITC) to low and moderate income noncustodial parents who pay their current child support on time and in full throughout the year. The credit will be equal to 2/3 percent of the amount that a single parent with one child can claim under the state EITC, or a 7.5 percent match on the federal EITC. The change will take effect in tax year 2018 and provide $230,000 annually in benefits to eligible filers.

The Governor's budget creates an employment assistance tax credit (Young Adult Employment Assistance Credit) for young adults aging out of foster care or lost supplemental security income (SSI) benefits due to the age 18 redetermination within the prior three years. The credit would be set at 125 percent of the federal credit for childless adults (benefits approximately 2,000 filers). The credit begins in tax year 2018.

Housing Assistance: The Governor's budget authorizes the Wisconsin Housing and Economic Development Authority (WHEDA) to request a waiver from the U.S. Department of Housing and Urban Development to pilot employment, training or self-sufficiency programming requirements for certain able-bodied adult recipients of Housing Choice Vouchers.

The Governor's budget authorizes WHEDA to implement voluntary self-sufficiency services in coordination with other organizations for Housing Choice Voucher recipients.

Homelessness: The Governor's budget pilots a homelessness employment program to provide homeless individuals with work experience and work routine through jobs cleaning up municipal parks and public spaces with a goal of transitioning them into permanent employment. The budget provides $75,000 GPR in each year of the biennium to a Wisconsin municipality to pilot the program, with a $50,000 matching grant requirement.

The Governor's budget provides ten $50,000 grants annually funded by TANF funds to homeless shelters for intensive case management services for homeless families, with a focus on financial management counseling, continued school enrollment for children, connecting parents who are job training graduates or who have a recent work history with their local workforce development board to employment, and enrolling unemployed or underemployed parents in W-2 or FSET.

Elderly and Disabled Transportation Aids: The Governor's budget provides a 2 percent increase in both fiscal years of the biennium for aids to counties for the transportation of seniors and individuals with disabilities.

Tribal Youth Treatment Facility: The Governor's budget provides $100,000 Tribal gaming revenue in each fiscal year to fund a feasibility study and business plan for a youth wellness center in northern Wisconsin.

JUDICIAL AND PUBLIC SAFETY

Offender Reentry: The Governor's budget expands opportunities for inmates within 6 months of their release to be moved to county jails so that they can participate in work release and related employment programs.

Treatment Alternatives and Diversion Program: The Governor's budget provides $2 million in one-time GPR funds in FY 2017-18 and $2 million one-time GPR funds in FY 2018-19 for the Treatment Alternatives and Diversion program. Also, the Governor's budget provides $150,000 in one-time GPR funds in FY 2017-18 and FY 2018-19 for drug courts to be used for grants to counties to help with expansion. This is a 30 percent increase in funding over the base funding.

Pay Progression: The Governor's budget plan provides additional funding for pay progression of $664,400 GPR in FY 2018-19 for deputy and assistant public defenders and $1.066 million in GPR in FY 2017-18 and $2.6 million GPR in FY 2018-19 for deputy and assistant district attorneys to increase retention.

Director of State Courts: The Governor's budget allows the Director of State Courts to develop a pay plan for judges and justices to be submitted to the Joint Committee on Employment Relations for approval. Under current law, annual salaries for judges and justices are reviewed and established in the state compensation plan in the same manner as positions in the state classified service. The pay plan may utilize savings within the Wisconsin Court System from existing appropriations. The budget directs $334,000 in one time GPR funds in FY 2018-19 to reflect an amount equal to the wage increase provided to other state employees. Non-judicial staff will continue to be covered under the state compensation plan.

Emergency Services: The Governor's budget doubles the match by the state to a municipal contribution to the service award program up to $500 per year for volunteer firefighters, emergency medical technicians and first responders. Also recommended is a

reduction in the required service time to qualify for an award from 20 to 15 years and a reduction of the age required to receive a service award from 60 to 53 years.

The budget creates a new emergency medical technician endorsement and an extension in the time period for license renewal from 2 to 4 years. This budget also allows ambulance service providers that receive aids from the Department of Health Services (DHS) to escrow unused moneys and use those moneys in a subsequent year for first responder training and examinations or emergency medical technician training and examinations at any level.

Due to an increase in demand for emergency response training courses for law enforcement, fire services and military personnel, the Governor's budget increased permanent training staff at the Regional All-Climate Training Center by providing 2 FTE permanent positions and relocating existing resources.

TAXATION AND FINANCE

Joint Agency: The Governor's budget provides counties and municipalities the authority to enter into contracts to establish joint agencies or commissions to carry out certain functions that will fulfill each of the participating local governments' obligation to establish such an agency or commission for that function.

Sales Tax Holiday: The Governor's budget creates a "back to school" sales tax holiday effective for two days in both August 2017 and August 2018 for specified school supplies. The sales tax holiday is expected to reduce state sales tax revenues by $11 million.

Elimination of State Property Tax: The Governor's budget eliminates the state portion (forest mill tax) of the property tax beginning in 2017.

Levy Limits: The Governor's budget modifies levy limits by requiring municipalities and counties to reduce their levy limit authority by the amount that debt service on debt issued before July 1, 2005, would decrease in the current year compared to the prior year.

Direct Payment of Property Tax Credits: The Governor's budget recommends, beginning with distributions in 2018, allowing municipalities which receive in total at least $3 million from the sum of the school levy tax credit, first dollar credit, and lottery credit to make one ongoing request, rather than annual requests, to receive these payments directly from the state, instead of through the county.

Newspaper Publishing Requirements: The Governor's budget allows an electronic option for all units of government for any statutory printing, publishing, or mailing requirements. The following documents are excluded from the waiver authority and the electronic option: any election documents, facsimile ballot, referenda, notice of public hearing before a governmental body, and notice of meetings of private and public bodies required by law; and a summons, order, citation, notice of sale, or other notice that in

intended to inform a person that the person may or shall do an act or exercise a right within a designated period or by a designated date. In addition, the proposal exempts certified or registered mail.

Shared Revenue: The Governor's budget maintains the current county shared revenue funding allocation, excluding Milwaukee County (see below).

Milwaukee County Shared Revenue: The Governor's budget reduces Milwaukee County's shared revenue payment in fiscal year 2019 by $1,950,000 each year for 10 years in recognition of the $26 million Volkswagen emissions settlement funds to be made available to the county for replacement of eligible vehicles.

Fire Suppression: The Governor's budget specifies that a person who sets a forest fire is liable to the state for all of the fire suppression expenses that are shared by the state and the county and that the county's share of expenses, which is otherwise equal to the state's share, is reduced by the amount by which such damages, if paid, exceed the state's share of expenses.

Timber Cutting Notices: The Governor's budget provides that the requirement that the sale of timber cut from a state, county, or community forest be advertised in a local newspaper may be satisfied by posting notice on certain official internet sites. The budget also provides that approval and notice requirements apply to the sale of timber with an estimated value of $10,000 or more that was cut from a state, county, or community forest. Finally, the budget provides that a county cutting merchantable wood products from a county forest must furnish DNR with a report not more than five years after filing a cutting notice.

TRANSPORTATION AND PUBLIC WORKS

Transfers from the General Fund to the Transportation Fund: The Governor's budget transfers a one-time payment of $24 million from the Petroleum Inspection Fund to the Transportation Fund in both fiscal years 2017-18 and 2018-19.

General Transportation Aids: The Governor's budget includes an increase to counties in General Transportation Aids by increasing the annual amount allocated from $98.4 million in the current biennium to $111.1 million by calendar year 2018.

Routine Maintenance Agreements: The Governor's budget increases the allocation for Routine Maintenance Agreements between the state and the counties by $33,733,000 over the biennium for counties to perform additional maintenance work on the State Trunk Highway and Interstate systems.

Mass Transit Operating Aids: The Governor's budget funds Mass Transit Operating Aids at current levels:

Tier A-1: $64,193,900

Tier A-2:	$16,868,000
Tier B:	$24,486,700
Tier C:	$5,188,900

Local Bridge Improvement Program: The Governor's budget includes an increase of $6 million in the Local Bridge Improvement Program. State funding for the program is increased by $3 million annually. Total program funding increases over the biennium from $16.9 million to $22.9 million.

Local Road Improvement Program (LRIP): The Governor's budget increases county LRIP (CHIP) Entitlement Program funding from $13.9 million in the 2015-17 biennium to $15.9 million in the 2017-19 biennium. In addition, the budget increases county LRIP (CHIP) Discretionary Program funding from $10.3 million in the 2015-17 biennium to $11 million in the 2017-19 biennium.

Majors Projects: The Governor's budget cuts $16 million from the majors program. The total funding level for the majors program is $669.9 million in the 2017-19 budget cycle. Delayed projects include US HWY 53, US HWY 12, STH 64 and the Rock County Transportation Plan.

Southeast Mega Projects: The Governor's budget reduces funding from $414.6 million in the 2015-17 biennium to $122 million in the 2017-19 biennium. This is a proposed funding reduction of $292.6 million for the upcoming budget cycle.

State Highway Rehabilitation Funding: The Governor's budget provides $1.7 billion in funding for the State Highway Rehabilitation Program in the 2017-19 biennium.

Seniors and Individuals with Disabilities Specialized Transportation Aids: The Governor's budget increases funding for the program by $562,200 in the biennium. This amounts to a 2% increase in funding in each year of the budget.

Project Labor Agreements (PLA): The Governor's budget proposal prohibits the state and local units of government from requiring that a bidder enter into a Project Labor Agreement.

State Prevailing Wage Requirements: The Governor's budget eliminates prevailing wage requirements for projects using state dollars. Projects using federal dollars are still applicable to federal Davis-Bacon wage requirement thresholds.

WPHA Budget Updates

Dear WPHA Members,

Last week Wednesday, Governor Scott Walker unveiled his budget bill proposal for the 2017-19 biennium. The theme of the Governor's budget is "Wisconsin is Working" and it is organized around three main priorities: "student success, accountable government, and rewarding work." The budget bill specifically outlines how the state of Wisconsin will appropriate roughly $76 billion tax dollars over the course of the next two years. The bill has now been sent to the Wisconsin legislature where it will be reviewed by the Joint Committee on Finance (JFC) who could significantly alter the governor's original spending plan. The committee will review and amend the budget bill after having several public hearings across the state in which citizens may testify. After JFC has passed the bill, it will then be sent to the State Assembly and Senate for passage and finally to the Governor for his signature.

If you would like to browse the budget, here is a link to the bill and other related information.

We are still in the process of analyzing the 1,000-page document, but wanted to provide you with the below overview of the governor's budget as it relates to public health.

**Please know that there are many items in the budget, and WPHA recognizes that not all may be listed below that are of concern to our members. We will continue to work through next steps for advocacy and action alerts regarding the budget, relating to our priority and member issues.*

1. **Department of Health Services – Seven sections of department within budget**

- **Public Health Services Planning, Regulation and Delivery -** Funded at $287,198,200 in 2017-2018 and $287,163,700 in 2018-2019.
- **Mental Health and Developmental Disabilities Services; Facilities –** Funded at $414,676,400 in 2017-2018 and $417,489,600 in 2018-2019.
- **Medicaid Services –** Funded at $10,729,653,500 in 2017-2018 and $11,427,550,400 in 2018-2019.
- **Care and Treatment Services –** Funded at $67,056,00 in 2017-2018 and $68,053,800 in 2018-2019.
- **Quality Assurance Services Planning, Regulation and Delivery –** Funded at $27,498,400 in 2017-2018 and $27,498,400 in 2018-2019.
- **Disability and Elder Services –** Funded at $279,196,800 in 2017-2018 and $279,889,000 in 2018-2019.
- **General Administration –** Funded at $67,945,500 in 2017-2018 and $67,942,000 in 2018-2019.
- **Department Totals = $3,851,241,800 in 2017-2018 and $4,092,313,600 in 2018-2019.**
- **Position Totals = Total 2,536.63 in 2017 and total 2,555.50 in 2018, an increase of 18.87 positions.**

2. **Cancer Research**

- Funded at $247,500 in both years of the biennium.

3. **Statewide Poison Control Program**

- Funded at $382,500 in both years of the biennium

4. **Lead Poisoning**

- "This bill reduces the blood lead level defined as "lead poisoning or lead exposure" from 10 or more micrograms per 100 milliliters of blood to 5 or more micrograms per 100 milliliters of blood. The presence of lead poisoning or lead exposure in a child under six years of age allows DHS to request admission to the premises to conduct a lead investigation."

5. **Reducing Fetal and Infant Mortality and Morbidity**

- Funded at $222,700 in both years of the biennium.

6. **Women's Health Block Grant**

- Funded at $1,742,00 in both years of the biennium.

7. **Community Health Services**

- Funded at $5,490,000 in both years of the biennium.

8. **Tobacco Use Control**

- Funded at $5,315,000 in both years of the biennium.

9. **State Laboratory of Hygiene**

- GPR funded at $11,037,300 in both years of the biennium.
- PR funded at $21,871,300 in both years of the biennium.
- PR-S Drivers funded at $1,619,200 in both years of the biennium.

10. **HIV/AIDS**

- AIDS Network, Inc.; principal, repayment, interest and rebates funded at $23,900 in both years of the biennium.
- AIDS Resource Center of WI; principal, repayment, interest and rebates funded at $63,700 in both years of the biennium.

11. **FoodShare**

- "Provide $3,321,200 in fiscal year 2017-18 and $35,221,800 in fiscal year 2018-19 and 1.5 FTE positions to strengthen employment and training services for adults receiving FoodShare benefits by:
    - automatically referring all able-bodied adults with children below the age of 18, or who are caring for an incapacitated person, to the FoodShare Employment and Training (FSET) program with the goal of encouraging voluntary participation among those who may find it beneficial and
    - requiring participation in FSET for certain able-bodied and unemployed or underemployed FoodShare recipients with school-age children in a select number of counties.
    - Under these two initiatives, as many as 80,000 Wisconsinites will be provided an opportunity to participate in employment and training."
- Implement a $25,000 liquid asset limit in Wisconsin Shares and FoodShare to focus assistance on those most in need. Associated costs for the Department of Health Services to implement this requirement are $118,200 all funds in fiscal year 2017-18 and $3,589,800 all funds in fiscal year 2018-19, for a biennial total of $3,708,000.
- Identify and treat barriers to employment caused by substance abuse by requiring most new Wisconsin Works applicants to participate in substance abuse screening, testing and, if necessary, treatment. Enable the department to expand the screening process through administrative rules.
- Reinstate the child support requirement for FoodShare, so both parents are asked to support their children as a condition of receiving benefits. Provide $1,172,300 all funds in fiscal year 2017-18 and $185,800 all funds in fiscal year 2018-19 and 1.0 FTE position for systems changes to implement the requirement.
- Eliminate the child care cliff which creates a disincentive to work more hours or accept a raise by providing child care subsidies to families participating in Wisconsin Shares whose income rise above 200 percent of federal poverty level but with copayments that increase $1 for every $3 in additional income. The estimated cost associated with this change is $1,962,600 Temporary Assistance for Needy Families (TANF) funding in fiscal year 2018-19.

12. Temporary Assistance for Needy Families Funding

- Provide $3,900,000 additional TANF funding annually to the state's home visiting program to expand the number of families served and increase the number of parents equipped with the tools needed to improve chances of success for parents and their children. Program funding would total $14,297,700 all funds in each fiscal year and $28,595,400 over the biennium.

13. Nursing Training Programs

- Provide $1,500,000 in fiscal year 2017-18 through Wisconsin Fast Forward to provide grants to community-based organizations for public-private partnerships to create and implement nursing training programs for middle and high school students.

14. **Wisconsin Earned Income Tax Credit**

- Extend the Wisconsin Earned Income Tax Credit (EITC) to low and moderate income noncustodial parents who pay their current child support on time and in full throughout the year. The credit will be equal to 2/3 percent of the amount that a single parent with one child can claim under the state Earned Income Tax Credit, or a 7.5 percent match on the federal Earned Income Tax Credit. This change will take effect in tax year 2018 and provide $230,000 annually in benefits to eligible filers. Budget bill returns more than $20 million a year to the EITC.

15. Homestead Tax Credit

- Credit on income tax returns for qualifying homeowners and renters. The budget proposal requires able-bodied adults to work to receive this low-income housing credit. Starting in 2018, able-bodied adults below the age of 62 will need to earn money to claim the credit. Disabled and seniors would be exempt.
- "Governor Walker seeks to restore the Homestead Tax Credit to its original intent — to provide property tax relief for the elderly and disabled on fixed incomes — and expand the credit by indexing it going forward. ... He is seeking to reward work — in part by eliminating subsidies for able-bodied adults to encourage them to work," Walker spokesman Tom Evenson said.

16. **DATCP**

- Direct the Department of Agriculture, Trade and Consumer Protection, and the Department of Natural Resources to conduct a study on the feasibility of transferring the permitting process for concentrated animal feeding operations from the Department of Natural Resources to the Department of Agriculture, Trade and Consumer Protection.

17. **UW-Madison**

- Provide $50,000 in each fiscal year, or $100,000 over the biennium, for the Alzheimer's Disease Research Center at the University of Wisconsin-Madison campus.

18. Wisconsin Rural Residency Program

- Provide $100,000 in each fiscal year, or $200,000 over the biennium, for the Wisconsin Rural Physician Residency Assistance Program.

19. Safety Net Programs

- Fully fund the ongoing costs of essential safety net programs, including the state supplement to the Supplemental Security Income program, the Medicaid Funeral and Cemetery Aid program and the Wisconsin Chronic Disease program.

20. Medigap Helpline

- Strengthen support for Wisconsin seniors by fully funding the Medigap Helpline and providing permanent funding and support for Include, Respect, I Self-Direct ombudsman services at the Board on Aging and Long-Term Care.

21. **Children's Mental Health**

- $3 million for school social workers. An estimated one in five school-age children and youth struggle with mental health issues and of these, 80 percent of those students do not receive professional help. Governor Walker's budget proposal creates a categorical aid program to support the social work expenditures of school districts and independent charter schools.
- $2.5 million for Mental Health Expansion Grants. Governor Walker's budget proposal creates a grant program helping school districts and independent charter schools in connecting youth to mental health services.
- $1 million to support Mental Health Diagnostic Training. To better provide mental health screening and intervention services to Wisconsin students, Governor Walker's budget proposal supports training opportunities for school district and independent charter school employees.

22. State Crime Laboratories

- Provide $150,000 in fiscal year 2017-18 to purchase equipment for the state crime laboratories that will greatly improve the ability of the laboratories to identify controlled substances during forensic toxicology investigations. In particular, the equipment will help the state crime laboratories readily identify synthetic opioids.

Eau Claire City-County
Health Department

720 Second Ave, Eau Claire, WI 54703
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Fact Sheet – 10/19/2016 Board of Health Meeting

Agenda Item 6.b

Board of Health Advocacy/Policy – Communicable Disease Discussion

Background:
The Wisconsin Public Health Association (WPHA) and the Wisconsin Association of Local Health Departments and Boards (WALHDAB) have made communicable disease funding for local health departments a legislative priority. These organizations have developed materials supporting the need for state funding for the investigation and control of communicable disease.

The ECCCHD BOH has previously reviewed the materials developed by WPHA/WALHDAB related to this legislative priority (see attached). No specific policy/advocacy action has taken place related to this broad issue although the department and BOH have provided education to elected officials about Zika funding and in that communication talked broadly about the importance of communicable disease efforts.

Attached for review and discussion is additional information about communicable disease efforts at the local level.

- "Selected Reportable Communicable Disease Incident Counts for Eau Claire County 2007-2016" contains the number of cases reported to the health department for the most common reportable communicable diseases. Also included is a line graph of this data. The data for this graph and associated table comes from the Wisconsin Electronic Disease Surveillance System (WEDSS).
- "Total Communicable Disease Occurrences Eau Claire County 1991-2015" shows the total reportable communicable disease cases dating back to 1991. This data was created using a combination of paper records from the health department and WEDSS data.
- "Map of Total Communicable Disease Occurrences in Wisconsin 2015" shows the total incident counts of reportable communicable diseases that occurred in 2015 mapped out by county in the state of WI. The darker counties are those that have higher disease incident counts.
- State information on reportable diseases is on the Form 4151 and available at https://www.dhs.wisconsin.gov/disease/diseasereporting.htm. These are the mandated reportable diseases that all local health departments are required to do individual follow up on.

Additionally, health department staff is involved in a broad range of communicable disease prevention and control work which includes public health nursing staff and leadership as well as environmental health staff and leadership. This work includes the communicable disease investigation work that is tracked in the data above as well as community and systems work including coalitions (ie. Infectious Disease Committee, Health Care Associate Infection Committee, Get the Shot Committee, and more) and communicable disease prevention education, and laboratory testing. The health department also has performance measures specific to Communicable Disease as one of our 6 focus areas for performance measurement. Considerable staff time is devoted to communicable disease work.

Revenue sources for Communicable Disease efforts currently include:

- City/County tax levy
- HIV Federal grant
- Immunization Federal Grant
- Other small grants

There is no general communicable disease funding from the state of WI currently available.

Reportable Communicable Disease Counts (Past 5 years plus 2009)

Disease	2009		2014	2015	2016	2017	2018
Anaplasmosis	27		19	27	30	25	14
Arboviral Disease	0		2	0	1	12	2
Babesiosis	2		4	2	5	6	3
Borrelia miyamotoi	0		0	0	0	0	1
Blastomycosis	1		0	3	2	0	0
Campylobacteriosis	10		18	27	17	40	48
Chlamydia	283		383	426	481	507	513
Cryptosporidium	7		12	5	23	20	30
Cyclosporiasis	0		0	0	0	1	18
E. coli pathogenic	0		4	6	39	107[1]	131
Ehrlichiosis chaffeensis	14		0	0	0	4	5
Ehrlichiosis ewingii	2		0	0	0	0	0
Ehrlichiosis muris eauclairensis	0		0	0	0	0	1
Ehrlichiosis, undetermined	0		3	2	3	4	5
Giardiasis	15		12	9	6	14	15
Gonorrhea	19		38	53	31	64	169
Haemophilus Influenzae	0		3	3	0	2	3
Hepatitis A	1		0	0	0	1	0
Hepatitis B	9		6	8	8	5	8
Hepatitis C	23		53	62	84	39	66
Histoplasmosis	0		0	0	0	3	0
Influenza, seasonal hospitalized cases	124[2]		60	49	40	89	138
Kawasaki Disease	0		0	0	0	1	1
Legionellosis	2		2	0	0	0	1
Listeriosis	0		0	0	0	0	0
Lyme Disease	156		30[3]	49	61	62	65
Malaria	0		0	2	0	0	1
Measles	0		0	0	0	0	0
Meningococcal Disease	0		0	0	0	0	0
Mumps	0		0	0	0	0	0
Mycobacterial Disease (Non-Tuberculosis)	13		25	18	13	19	18
Parapertussis	0		3	4	2	2	0
Pertussis (Whooping Cough)	3		20	19	24	7	9
Rocky Mountain Spotted Fever	0		1	0	0	0	0
Salmonellosis	11		10	15	21	22	16
Shigellosis	0		1	1	0	4	1
Streptococcal Invasive Disease, Group A & B	4		16	12	19	18	25
Streptococcus Pneumoniae Invasive Disease	4		6	14	6	4	12
Syphilis	1		8	6	4	11	8
Toxoplasmosis	0		0	0	0	0	1
Transmissible Spongiform Encephalopathy	0		0	0	0	1	0
Tuberculosis Disease	0		0	2	0	0	2
Tuberculosis Infection[4]	-		-	-	-	-	34
Varicella (Chickenpox)	7		9	5	3	8	6
Vibriosis	0		0	0	0	2	1
Vancomycin-intermediate Staphylococcus aureus (VISA) and Vancomycin-resistant Staphylococcus aureus (VRSA)	0		0	0	0	0	1
Yersiniosis	0		1	0	1	1	5
Annual Total	738		749	829	924	1105	1377

[1] Hospitals labs began using multi-disease panels for enteric disease testing; panels identify more E. coli strains.
[2] H1N1 epidemic year
[3] Change in Lyme disease reporting requirements
[4] Latent TB (TB Infection) became reportable July 1, 2018.

2018-2019 School Summary Report

School ID	School	School District	Minimum Req	In Process	Behind Schedule	No record	Health Waiver	Religious Waiver	Personal Waiver	Total Enrollment	Waiver All Vaccines	% Complete	% Complete + Waivers
0040	Altoona Elementary	Altoona	542	0	0	0	0	0	31	573	8	95%	100%
0060	Altoona High	Altoona	404	1	0	1	3	1	26	436	8	93%	100%
0080	Altoona Intermediate	Altoona	255	0	2	0	0	0	5	262	2	97%	99%
0100	Altoona Middle	Altoona	304	0	37	0	4	1	16	362	2	84%	90%
			1505	1	39	1	7	2	78	1633	20	92%	100%
0020	Augusta Elementary	Augusta	259	7	1	0	1	0	3	271	4	96%	97%
0200	Augusta Middle	Augusta	116	0	21	0	1	0	5	143	4	81%	85%
0040	Augusta High	Augusta	133	0	1	0	0	2	3	139	3	96%	99%
0102	Augusta Mennonite School	Augusta	31	0	0	0	0	0	11	42	0	74%	100%
0410	Wildlands Charter School	Augusta	57	0	2	0	0	0	12	71	6	80%	97%
			596	7	25	0	2	2	34	666	17	89%	100%
1111	Crestview Academy	ECASD	133	23	4	0	0	0	27	187	27	71%	86%
0500	Sam Davey Elementary	ECASD	347	0	0	0	0	0	5	352	0	99%	100%
0170	DeLong Middle	ECASD	840	0	122	12	1	3	55	1033	5	81%	87%
0100	Flynn Elementary	ECASD	262	0	0	0	0	3	13	278	2	94%	100%
0590	Lakeshore Elementary	ECASD	388	0	0	4	2	8	25	427	4	91%	99%
0220	Locust Lane Elementary	ECASD	242	0	0	0	0	1	10	253	2	96%	100%
0240	Longfellow Elementary	ECASD	241	0	6	4	0	0	16	267	1	90%	96%
0280	Manz Elementary	ECASD	409	0	7	5	0	1	14	436	2	94%	97%
0580	McKinley Charter School	ECASD	92	0	0	0	0	1	3	96	0	96%	100%
0350	Meadowview Elementary	ECASD	425	0	0	0	0	0	27	452	0	94%	100%
0340	Memorial High	ECASD	1556	0	5	1	1	6	57	1626	9	96%	100%
0111	Montessori Charter	ECASD	204	0	1	0	0	3	76	284	18	72%	100%
0400	North High	ECASD	1325	0	12	3	4	4	59	1407	6	94%	99%
0560	Northstar Middle	ECASD	464	0	43	0	0	2	32	541	9	86%	92%
0422	Northwoods Elementary	ECASD	348	0	0	0	1	3	31	383	2	91%	100%
0420	Putnam Heights Elementary	ECASD	413	1	3	0	0	3	19	439	0	94%	99%
0460	Robbins Elementary	ECASD	473	0	0	0	0	5	34	512	5	92%	100%
0480	Roosevelt Elementary	ECASD	274	0	0	0	0	2	11	287	0	95%	100%
0520	Sherman Elementary	ECASD	363	0	7	3	0	0	12	385	0	94%	97%
0540	South Middle	ECASD	746	0	31	0	1	2	47	827	9	90%	96%
0800	McKinley Charter School-Northwest Detention Center	ECASD	3	0	0	0	0	0	0	3	0	100%	100%
0200	Prairie Ridge Early Learning	ECASD	752	0	23	2	1	4	33	815	6	92%	97%
			10300	24	264	34	11	51	606	11290	107	91%	100%
0020	Fall Creek Elementary	Fall Creek	372	3	8	0	0	5	17	405	4	92%	97%
0040	Fall Creek High	Fall Creek	244	0	2	1	2	2	14	265	1	92%	99%
0050	Fall Creek Middle	Fall Creek	156	0	14	1	1	4	11	187	1	83%	92%
			772	3	24	2	3	11	42	857	6	90%	100%
1174	Otter Creek Christian Academy	Private	4	0	0	0	0	0	0	4	0	100%	100%
0166	Bethel Christian School	Private	26	0	3	1	0	0	4	34	0	76%	88%
1510	Immanuel Lutheran College HS	Private	101	1	0	0	0	0	13	115	9	88%	99%
1820	Messiah Lutheran	Private	93	0	0	0	0	1	34	128	22	73%	100%
5757	St Mark's Lutheran	Private	83	0	0	0	0	0	6	89	5	93%	100%
			307	1	3	1	0	1	57	370	36	83%	100%
6255	Saint Mary's Grade School	Regis	99	1	0	0	0	0	21	121	12	82%	99%
1390	Imm Conception Grade School	Regis	196	1	2	0	0	0	5	204	5	96%	99%
2440	Regis High	Regis	190	0	0	1	4	0	17	212	6	90%	100%
1183	Regis Middle	Regis	157	0	8	0	2	0	16	183	4	86%	96%
4160	St James School	Regis	134	0	0	0	0	1	9	144	4	93%	100%
			776	2	10	1	6	1	68	864	31	90%	100%
	All Eau Claire County Schools		13660	33	342	73	693	83	885	15680	200	87%	98%
Totals							**29**	**68**	**885**	**15680**			
% of Totals							**0.18%**	**0.43%**	**5.64%**				

DEPARTMENT OF HEALTH SERVICES
Division of Public Health
F-44151 (Rev. 08/08)

ACUTE & COMMUNICABLE DISEASE CASE REPORT

Information for completing this form on reverse side

STATE OF WISCONSIN
s. 252.05, Wis. Stats
(608) 267-9003

DEMOGRAPHIC DATA PATIENT INFORMATION

Case Identification for all Category I and II Diseases

Patient's Name (Last) (First) (M.I.) | Date of Birth (mm/dd/yyyy) | Age | Sex ☐ Male ☐ Female

Patient's Address | City | State | Zip Code

County of Residence | Home Telephone ( ) | Work Telephone ( )

Patient's Parent / Guardian if patient is a minor (not needed for STD) | Patient's Employer & Occupation or School, Day Care, Institution

Race: ☐ American Indian or Alaskan Native ☐ Asian ☐ Black or African American ☐ Hawaiian or Pacific Islander ☐ White ☐ Other Specify:

Ethnicity: ☐ Hispanic or Latino ☐ Not Hispanic or Latino

Patient Pregnant? ☐ Yes ☐ No | If yes, Due date (mm/dd/yyyy) | Patient Died of This Illness? ☐ Yes ☐ No | Patient Hospitalized? ☐ Yes ☐ No

MORBIDITY DATA

Disease / Organism | Date of Onset ☐ Asymptomatic | Specimen Type | Outbreak Related? ☐ Yes ☐ No ☐ Unknown | Underlying Medical Condition? ☐ Unknown ☐ Yes, specify: ☐ No

Lab data (test name, test date, test result; include confirmatory tests) | Immunization data (immunization name and date(s))

SEXUALLY TRANSMITTED DISEASES

Complete appropriate section for specific disease(s)

☐ Syphilis
- ☐ Primary (chancre present)
- ☐ Secondary (skin lesions, rash, etc.)
- ☐ Early Latent (asymptomatic, < 1 yr)
- ☐ Late Latent (over 1 yr duration)
  - ☐ Neurosyphilis
  - ☐ Cardiovascular ☐ Other
- ☐ Congenital

☐ Gonorrhea ☐ Chlamydia
- ☐ Asymptomatic
- ☐ Uncomplicated Urogenital (Urethritis,Cervicitis)
- ☐ Salpingitis (PID)
- ☐ Ophthalmia/Conjunctivitis
- ☐ Other (Arthritis, skin lesions, etc.)
- ☐ Resistant Gonorrhea
  - ☐ Pencillinase-Producing ☐ Other

☐ Chancroid

For all STDs:

Has patient been treated? ☐ Yes ☐ No

Date(s) of Treatment (mm/dd/yyyy)

Type and Amount of Treatment

ENTERIC DISEASES AND HEPATITIS

Campylobacter, Cryptosporidia, E. coli, Giardia, Hepatitis A, Salmonella, Shigella, Yersinia

Check below if patient:

Yes	No	Unknown	
☐	☐	☐	is a food handler.
☐	☐	☐	attends or works at a day care center.
☐	☐	☐	is a health care worker.
☐	☐	☐	is in contact with animals. Specify animal:
☐	☐	☐	drinks unpasteurized milk.
☐	☐	☐	traveled out-of-state. Location / dates:

Other:

Hepatitis B and C Laboratory Results

HBsAg	☐ Positive	☐ Negative
anti-HBs	☐ Positive	☐ Negative
anti-HBc	☐ Positive	☐ Negative
anti-HBc-IgM	☐ Positive	☐ Negative
HepC-EIA	☐ Positive	☐ Negative
HepC-RIBA	☐ Positive	☐ Negative
HepC-PCR	☐ Positive	☐ Negative

TUBERCULOSIS

Mycobacteriology

Specimen type and date collected (mm/dd/yyyy)

Smear
☐ Positive ☐ Negative ☐ Pending ☐ Not done

Nucleic acid amplification
☐ Positive ☐ Negative ☐ Pending ☐ Not done ☐ Indeterminate

Culture
☐ Positive ☐ Negative ☐ Pending ☐ Not done

If culture positive:
☐ *M. tuberculosis* complex
☐ Atypical Mycobacteria, Specify:

Patient's country of origin | Date arrived in U.S.

Chest X-ray and CT Scan

Chest Xray
☐ Not done ☐ Unknown
☐ Normal ☐ Abnormal

For abnormal CXR:
Evidence of cavity
☐ Yes ☐ No ☐ Unknown
Evidence of miliary TB
☐ Yes ☐ No ☐ Unknown

Chest CT or other imaging study:
☐ Not done ☐ Unknown
☐ Normal ☐ Abnormal

For abnormal CT or other study:
Evidence of cavity
☐ Yes ☐ No ☐ Unknown
Evidence of miliary TB
☐ Yes ☐ No ☐ Unknown

Tuberculin Test

Mantoux
☐ Not Done
Date Done (mm/dd/yyyy)
Result (mm induration)
☐ Positive _____mm
☐ Negative _____mm
If negative, anergic?
☐ Yes ☐ No

Blood Assay
Date Done:_____
☐ Positive ☐ Negative
☐ Indeterminate

Date/time **called** to local public health (mm/dd/yyyy, hour)

Treatment
☐ Isoniazid
☐ Rifampin
☐ Pyrazinamide
☐ Ethambutol
☐ Other, specify:

Date started (mm/dd/yyyy)

VARICELLA AND COMMENTS

Varicella Severity Estimate: ☐ Mild (<50 lesions) ☐ Moderate (Approx. 50-499 lesions) ☐ Severe (Approx. 500+ lesions)

Epi-Linked to Another Varicella Case? ☐ Yes ☐ No ☐ Unknown Epi-Linked Case Name:

Comments:

Date rec'dby LHD | Date sent to DPH

REPORTING SOURCE (REQUIRED)

Agency Reporting (Name & Address) | Date reported | Telephone No. ( )

Attending Physician (Name & Address) | Interviewer Initials | Date of Interview | Physician Telephone No. ( )

COPY 1 – STATE EPIDEMIOLOGIST COPY 2 – LOCAL HEALTH AGENCY COPY 3 – PATIENT MEDICAL RECORD

Information for Completing
ACUTE AND COMMUNICABLE DISEASE CASE REPORT

WISCONSIN STATUTE CHAPTER 252.05 AND ADMINISTRATIVE RULE CHAPTER HFS 145 REQUIRE REPORTING OF COMMUNICABLE DISEASES.
Persons required to report include any person licensed under ch. 441 and 448, Wis. Stats., or any other person having knowledge that a person has a communicable disease such as:

- A person in charge of infection control at a health care facility
- Laboratory directors
- School nurses, principals of schools and day care center directors

For further information see Wisconsin Administrative Rule HFS 145.

Diseases listed under categories I and II are to be reported to the local city or county health officer located in the local public health department of the patient's place of residence. Category III conditions must be reported directly to the state epidemiologist. Complete the "Demographic Data", "Morbidity Data" and "Reporting Source" sections for ALL diseases. For diseases preceded by an asterisk (*), provide immunization history. Follow-up epidemiologic information may be requested by local or state public health officials. Send copy "A" and copy "B" to the local health officer. Copy "C" may be retained with the patient's record.

REPORT THE FOLLOWING DISEASES TO YOUR LOCAL HEALTH AGENCY

CATEGORY I:

The following diseases are of urgent public health importance and shall be reported IMMEDIATELY by telephone or fax to the patient's local health officer upon identification of a case or suspected case. In addition to the immediate report, within 24 hours complete and mail an Acute and Communicable Diseases Case Report (DPH 4151) or enter the report into the Wisconsin Electronic Disease Surveillance System. Public health intervention is expected as indicated. See s. HFS 145.04 (3) (a).

Anthrax[1,4,5]
Botulism[1,4]
Botulism, infant[1,2,4]
Cholera[1,3,4]
*Diphtheria[1,3,4,5]
*Haemophilus influenzae invasive disease, (including epiglottitis)[1,2,3,5]
Hantavirus infection[1,2,4,5]
*Hepatitis A[1,2,3,4,5]
*Measles[1,2,3,4,5]
Meningococcal disease[1,2,3,4,5]
Outbreaks, foodborne or waterborne[1,2,3,4]
Outbreaks, suspected, of other acute or occupationally-related diseases
*Pertussis (whooping cough)[1,2,3,4,5]
Plague[1,4,5]
*Poliovirus infection (paralytic or nonparalytic)[1,4,5]
Rabies (human)[1,4,5]
Ricin toxin[4,5]
*Rubella[1,2,4,5]
*Rubella (congenital syndrome)[1,2,5]
Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV)[1,2,3,4]
Smallpox[4,5]
Tuberculosis[1,2,3,4,5]
Vancomycin-intermediate *Staphylococcus aureus* (VISA) and Vancomycin-resistant Staphylococcus aureus (VRSA) infection[1,4,5]
Yellow fever[1,4]

Any illness caused by an agent that is foreign, exotic or unusual to Wisconsin, and that has public health implications[4]

CATEGORY II:

The following diseases shall be reported to the local health officer on an Acute and Communicable Disease Case Report (DPH 4151) or by other means or by entering the data into the Wisconsin Electronic Disease Surveillance System within 72 hours of the identification of a case or suspected case. See s. HFS 145.04 (3) (b).

Arboviral disease[1,2,4]
Babesiosis[4,5]
Blastomycosis[5]
Brucellosis[1,4]
Campylobacteriosis (campylobacter infection)[3,4]
Chancroid[1,2,4,5]
Chlamydia trachomatis infection[1,2,4,5]
Cryptosporidiosis[1,2,3,4]
Cyclosporiasis[1,4,5]
Ehrlichiosis (anaplasmosis)[1,5]
E. coli 0157:H7, other Shiga toxin-producing E. coli (STEC), enteropathogenic E. coli, enteroinvasive E. coli, and enterotoxigenic E. coli.[1,2,3,4]
Giardiasis[3,4]
Gonorrhea[1,2,4,5]
Hemolytic uremic syndrome[1,2,4]
*Hepatitis B[1,2,3,4,5]
Hepatitis C[1,2]
Hepatitis D[2,3,4,5]
Hepatitis E[3,4]
Histoplasmosis[5]
Influenza-associated pediatric death[1,2]
Influenza A virus infection, novel subtypes[1,2]
Kawasaki disease[2]
Legionellosis[1,2,4]
Leprosy (Hansen Disease)[1,2,3,4,5]
Leptospirosis[4]
Listeriosis[2,4]
Lyme disease[1,2]
Lymphocytic Choriomeningitis Virus (LCMV) infection[4]
Malaria[1,2,4]
Meningitis, bacterial (other than Haemophilus influenzae, meningococcal or streptococcal, which are reportable as distinct diseases)[2]
*Mumps[1,2,4,5]
Mycobacterial disease (nontuberculous)
Psittacosis[1,2,4]
Pelvic inflammatory disease[2,5]
Q Fever[4,5]
Rheumatic fever (newly diagnosed and meeting the Jones criteria)[5]
Rocky Mountain spotted fever[1,2,4,5]
Salmonellosis[1,3,4]
Syphilis[1,2,4,5]
Shigellosis[1,3,4]
Streptococcal disease (all invasive disease caused by Groups A and B streptococci)
Streptococcus pneumoniae invasive disease (invasive pneumococcal)[1]
*Tetanus[1,2,5]
Toxic shock syndrome[1,2]
Toxic substance related diseases:
Infant methemoglobinemia
Lead intoxication (specify Pb levels)
Other metal and pesticide poisonings
Toxoplasmosis
Transmissible spongiform encephalopathy (TSE, human; CJD)
Trichinosis[1,2,4]
Tularemia[4]
Typhoid fever[1,2,3,4]
*Varicella (chickenpox)[1,3,5]
Vibriosis[1,3,4]
Yersiniosis[3,4]

CATEGORY III:

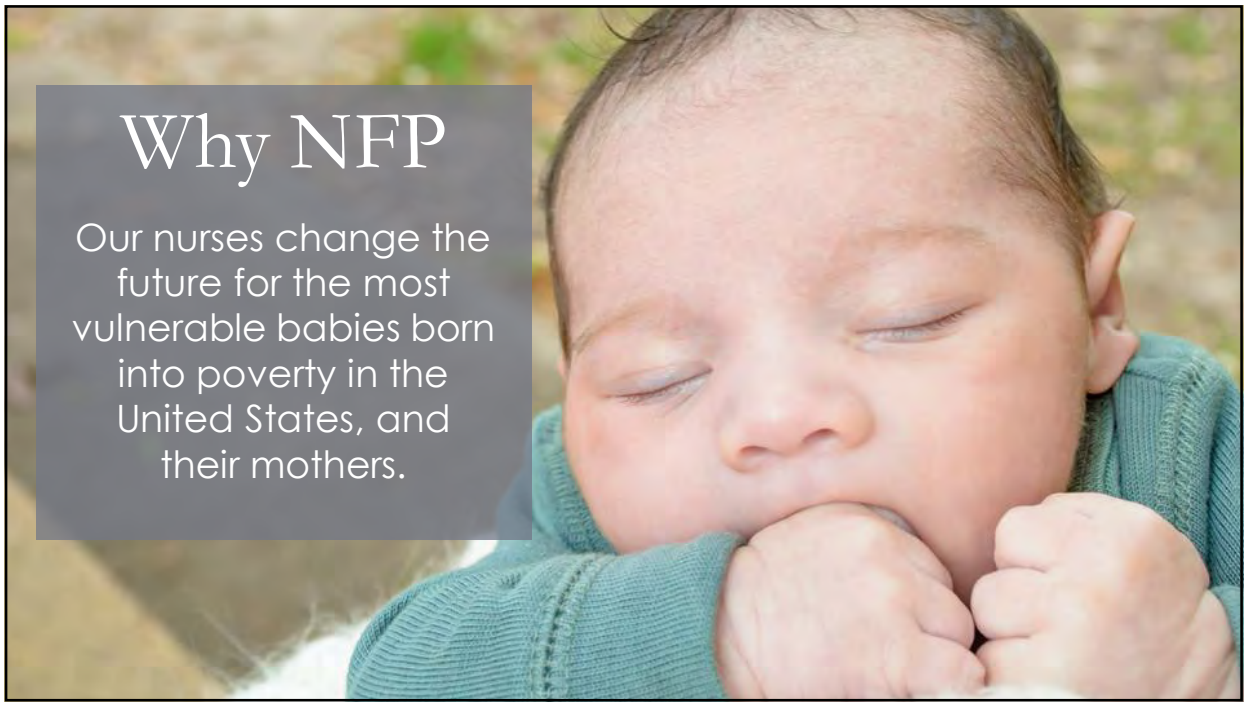
The following diseases shall be reported to the state epidemiologist on an AIDS case report (DPH 4264) or a Wisconsin Human Immunodeficiency Virus (HIV) Infection Confidential Case Report (DPH 4338) or by other means within 72 hours after identification of a case or suspected case. See s. 252.15 (7) (b), Stats., and s. HFS 145.04 (3) (b).

Acquired Immune Deficiency Syndrome (AIDS)[1,2,4]
Human immunodeficiency virus (HIV) infection[2,4]
CD4+ T-lymphocyte <200/uL, or CD4+ T-lymphocyte percentage of total lymphocytes <14

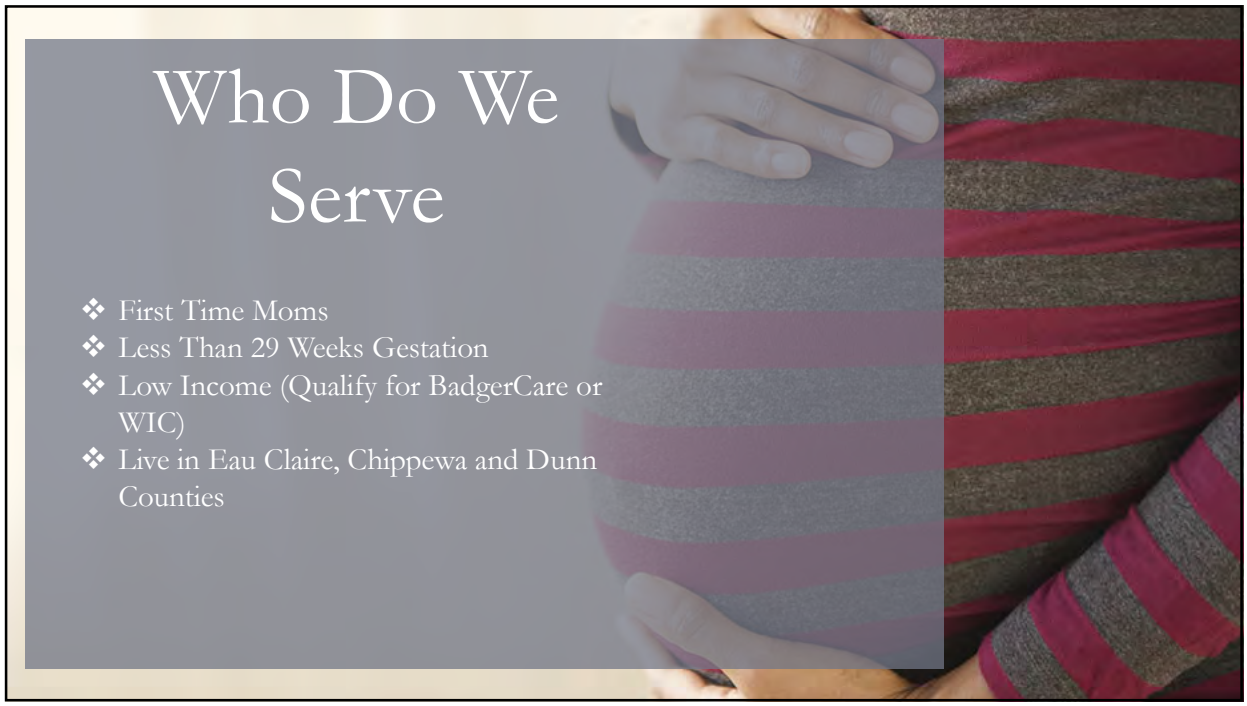
KEY:

[*]For diseases preceded by an (*), indicate immunization history in the "Immunization data" box in the "Morbidity data" section.
[1]Infectious diseases designated as notifiable at the national level.
[2]Wisconsin or CDC follow-up form is required. Local health departments have templates of these forms in the Epinet manual.
[3]Risk assessment by local health department is needed to determine if patient or member of patient's household is employed in food handling, day care or health care.
[4]Case investigation by local health department is needed.
[5]Immediate treatment is recommended, i.e., antibiotic or biologic for the patient or contact or both.

Nurse-Family Partnership
Helping First-Time Parents Succeed
Empowering First Time Mother's Living in Poverty
Becky Knutson
Jenny Price
Jill Bauer
Hannah Harter
Rebecca Gorski
Meghan Ketchens
Suzanne Schnoor
Sara Hegeman
Consortium Administrator: Beth Draeger,
Healthy Beginnings Division Manager


Why NFP
Our nurses change the future for the most vulnerable babies born into poverty in the United States, and their mothers.

NFP Goals
Improve Pregnancy Outcomes
93 women served; 60 babies (992 visits)
77% client retention rate
2018 – 19 expected graduates
Improve Child Health and Development
83% of clients initiated breastfeeding
Improve Economic Self-Sufficiency of the Family
Created partnerships with Job Center, Pat Stein, YMCA, Children's Museum, Schools including Early Learning Center
(Data includes both Eau Claire & Chippewa Counties)


Who Do We Serve
First Time Moms
Less Than 29 Weeks Gestation
Low Income (Qualify for BadgerCare or WIC)
Live in Eau Claire, Chippewa and Dunn Counties

Who Do We Serve

Multip Pilot:

- Risk factor indicating high risk
- Pregnant
- Low Income (Qualify for BadgerCare or WIC)
- Live in Eau Claire, Chippewa and Dunn Counties

Who We are Serving

Age:

72% are 24 and younger

Race:

70% white
10% Multiracial
6% Black
4% Asian
3% American Indian
7% declined/missing data

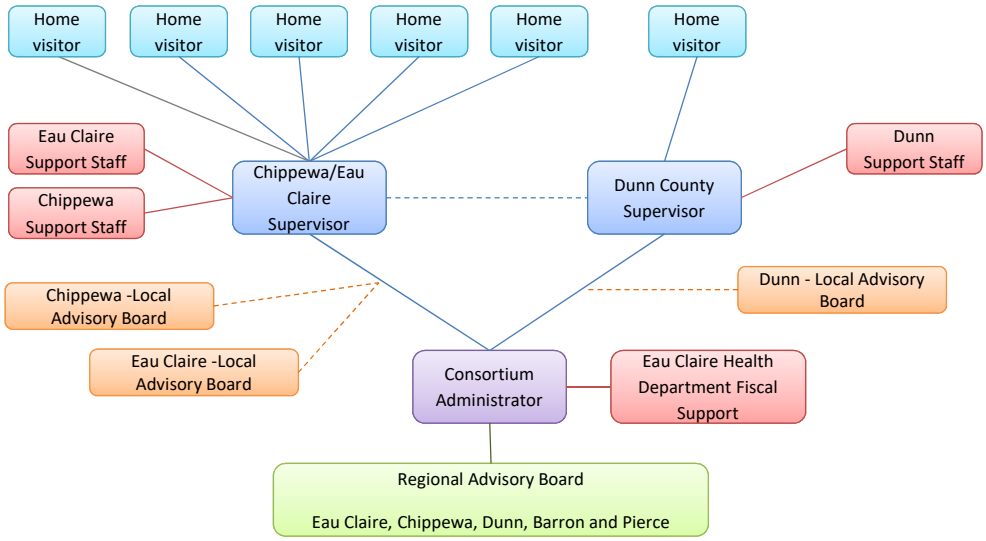
Ethnicity:

86% Non-Hispanic
9% Hispanic
5% Declined/Missing Data

NFP Nurses
Registered Nurses
Specializing in Community Health Nursing Practice
Receive Extensive Education in the Model
Catholic Charities

Every dollar invested in NFP can yield **up to $6.20 in return.**

Western Wisconsin Nurse-Family Partnership Consortium



Suzanne

Nurse-Family Partnership
Helping First-Time Parents Succeed

Western Wisconsin Nurse Family Partnership Consortium

Sara

Hannah

Meghan

Becky

Rebecca

Jill

Questions?

Eau Claire City-County
Health Department

720 Second Ave, Eau Claire, WI 54703
www.echealthdepartment.org
P: 715-839-4718
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Informational Item -10/16/2019 Board of Health Meeting

Agenda Item 3.a

Family Planning Clinic Update

The corresponding presentation and discussion about the ECCCHD Family Planning Clinic (FPC) is intended to provide information on what our clinic offers, how it provides service, the funding sources for the clinic, and some of the challenges and opportunities facing the clinic. Overall, the FPC provides services that that enable clients to understand available choices to make informed reproductive health and family planning decisions. The services offered allow individuals to achieve desired birth spacing, reduce disease and improve health outcomes for women, men and families. The attached presentation will expand on how the FPC team achieves these objectives.

Healthy People 2020 notes that publicly funded family planning services prevent unintended pregnancies, prevent the spread of disease and reduce expenses for both federal and state governments. Even though family planning and reproductive health are a vital part of total health, many people have barriers to receiving these services. Common barriers include cost, limited access to services, lack of awareness and a lack of youth-friendly/confidential locations. We work to address each of these barriers and then identify and outreach to those people that are not receiving, or cannot receive, services elsewhere. We do not turn away individuals for service. Our family planning clinic serves all residents of Eau Claire, along with neighboring counties with limited access to services. In 2014, the Department of Health Services estimated that there were 28,317 males and 28,650 females in Eau Claire County aged 15-54. The FPC serves all people of reproductive health age, as young as 13 and sometimes older than 54, however, our target populations include those without, or with limited, health care insurance; undocumented individuals; teens, who often have confidentiality concerns; and those on Badgercare or Badgercare Plus.

The FPC is funded through Title V and Title X funding, state grants and client payments. In order to keep our services affordable, we participate in the 340B drug pricing program which allows us to purchase medications and supplies at an extremely reduced price. Our clients are charged for services using a sliding fee scale based on their income, with clients who have a family income under 100% receiving services at no charge. We bill to Medicaid for clients that qualify for Family Planning Only services (FPOS) or Badger Care Plus and are exploring other funding options for clients with private insurance. Without federal and state funding, our reimbursement would not be sufficient to keep the clinic sustainable.

Our team generally includes nurses, a nurse practitioner and administrative professionals. Most members of our team only work part-time on clinic services. They each also work in related programs or other areas of the Department. The clinic currently operates five days a week, with shorter hours on Wednesdays. In 2018, 644 unique individuals were served in over 1,000 total visits. These are individuals who may not otherwise seek out services or have services available to them. Some of the services we provided included pregnancy testing, sexually transmitted infection checks, dispensing condoms and oral contraceptives, and colposcopies. In addition, nurses provide patient education around consent and healthy relationships, and screen for other health issues like drug/tobacco use, mental health issues and abuse to provide referrals if needed.

All of the services provided by the family planning clinic contribute to a healthier Eau Claire County by preventing the spread of disease and assisting clients to plan healthy families.

Prepared by Tegan Ruland, Clinical Services

Eau Claire City-County
Health Department
Family Planning Clinic
Board of Health
October 16, 2019

1

Why Family Planning?
• Up to half of pregnancies in the US are unintended (38% in WI)
• STI/STD rates are rising
• Every $1 invested, saves over $7

2

Why Family Planning?

Our goals include helping our clients:

- Understand options
- Make informed decisions
- Reduce the spread of disease
- Get access to affordable contraceptives
- Be free from sexual violence

3

What do we do?

- Sexually Transmitted Infection/Disease (STI/STD) testing and treatment
- Birth control
- Pregnancy testing & emergency contraception
- Reproductive health exams
- Provide education

4

CLINICAL SERVICES BY THE NUMBERS

Cases of Chlamydia in Eau Claire County		Cases of Gonorrhea in Eau Claire County		Cases of Syphilis in Eau Claire County	
2012:	2018:	2012:	2018:	2006:	2018:
332	513	16	169	0	8

1,055	850	16
PATIENT VISITS	STI SCREENINGS	COLPOSCOPY SERVICES

5

Client Barriers

- Cost of services
- Limited access
- Lack of awareness
- Lack of adolescent friendly locations
- Confidentiality

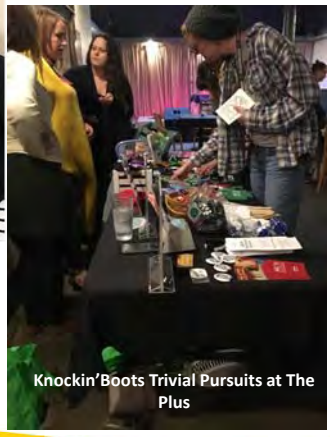
6

Outreach, Partnerships, Students

GYT outreach event at Positive Avenues

New inclusive bathroom signage

Outreach at Sounds Like Summer Concert – Phoenix Park


Knockin'Boots Trivial Pursuits at The Plus

7

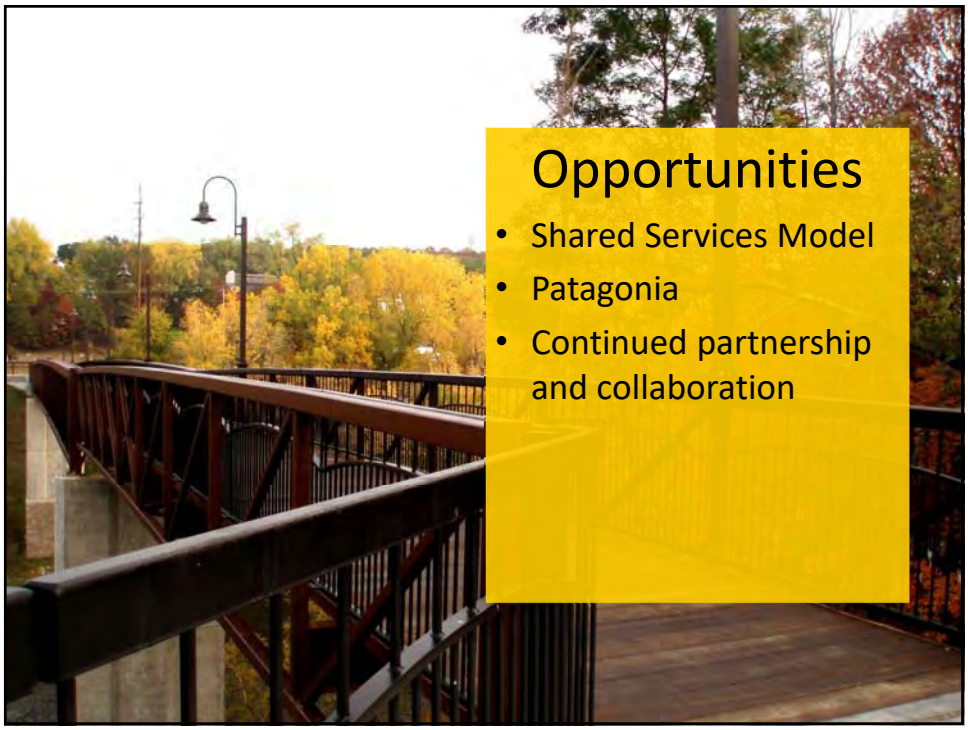
Funding

- Federal
  - Title V
  - Title X
- State
  - BadgerCare Plus
  - Family Planning Only Services (FPOS)
  - Grants – HCET, GYT
- Private Pay – cash, check, debit/credit cards

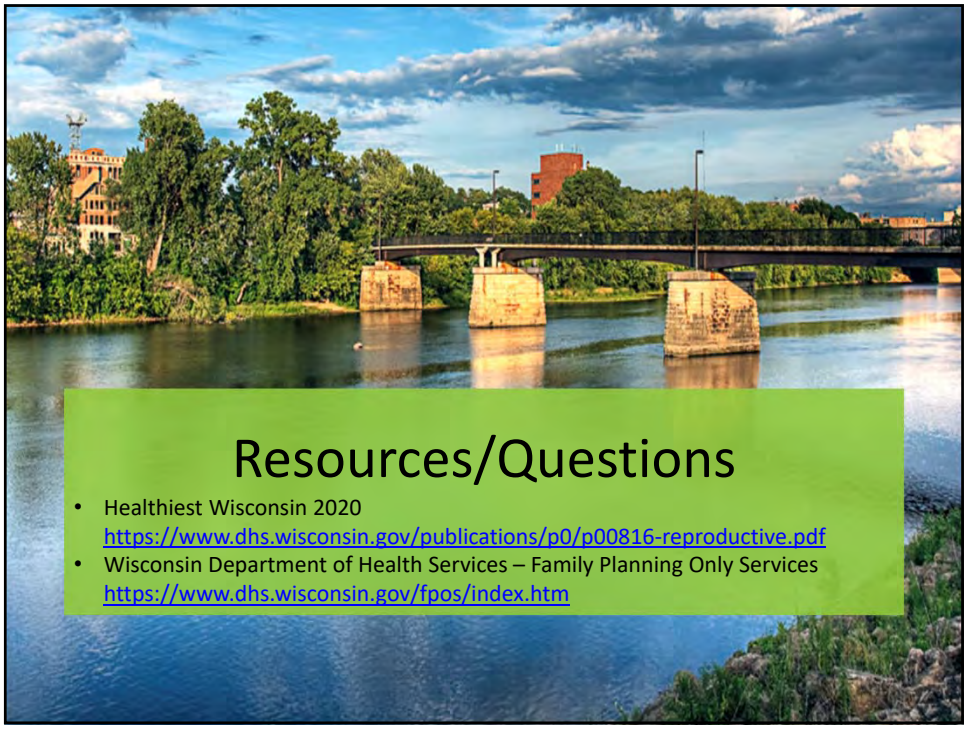
8

Challenges
• Nurse Practitioner
• Title X requirements
• Targeted population outreach

9


Opportunities
• Shared Services Model
• Patagonia
• Continued partnership and collaboration

10


Resources/Questions
• Healthiest Wisconsin 2020
https://www.dhs.wisconsin.gov/publications/p0/p00816-reproductive.pdf
• Wisconsin Department of Health Services – Family Planning Only Services
https://www.dhs.wisconsin.gov/fpos/index.htm

11

Alliance for Substance Abuse Prevention – Eau Claire County

Vision: A community culture free from the abuse of alcohol, tobacco and other drugs

Mission: To improve the lives of children, youth and adults by mobilizing communities to prevent and treat alcohol, tobacco & other drug abuse in Eau Claire County.

Since 2002, the Alliance for Substance Abuse Prevention has made a difference working together to decrease alcohol and tobacco use among Eau Claire County youth. The Alliance has been federally funded by the Drug Free Communities Grant for the past 10 years at a cost of about $125,000/year. Various other state grants have supported the AODA work, such as, WI Wins, Prevention, and Partnership for Success. In addition to these funding sources, there is a significant amount of in-kind support from all of the 16 organizations that make up the Alliance. The Alliance is guided by current data on youth substance use across the county and by community concerns and identified needs. In its work to change the culture around alcohol and other drug use in Eau Claire County, the Alliance has successfully supported the implementation of key programs, such as youth leadership through SADD chapters at all county schools, tobacco and alcohol compliance checks that impact youth access to substances, community education about youth substance use and prevention, and more. The Alliance has sustained key programs while responding to emerging issues in youth substance abuse prevention for over 10 years.

Program need

In 2018, Alcohol Misuse and Substance Use were identified in the **top 3 community health priorities for Eau Claire County** in the Community Health Assessment (CHA). 75% indicated alcohol misuse and 78% said substance use is a major or moderate problem in the county.

Specifically:

- Residents identified availability of alcohol and substances and the culture of alcohol misuse as top reasons for these problems in the county.
    - 72% said alcohol misuse is an accepted attitude or belief in the county.
    - 59% said alcohol and 68% said substances are easily available in the community.
    - 37% said there are too few alcohol-free social activities.
- Comments in the CHA highlighted community concerns about methamphetamine, opioids and prescription drug misuse.
- Many residents wrote in comments about the culture of alcohol use in the county, including the impact of youth exposure to alcohol at community and family events.

Youth surveys indicate that youth alcohol and substance use is an issue that is still present in the community and highlight new trends that require action.

- Although alcohol use has been decreasing, alcohol remains the most used substance by county youth (51% ever had alcohol, 60% US, 64% WI; 22% drank alcohol in the past 30 days, 30% US, 30% WI). Eau Claire County youth report less alcohol use than both the state and the nation, a testament to the important prevention work that has been supported in the county for over 10 years by the Alliance.
- Marijuana use has remained steady among county youth over the past several years with 14% reporting 30-day use. This is similar at the state (16%) and slightly less than the nation (20%). Although use has stayed about the same, fewer youth perceive that they are at risk of harm from marijuana use compared to previous years, with just about half (53%) reporting moderate or great risk to using marijuana in 2017. This is less than the perceived risk of other substances including cigarettes, alcohol, and prescription drugs. This is of concern as municipalities consider decriminalizing marijuana use and as concentrated marijuana products become more available.
- Youth have reported a drastic increase in e-cigarette use with an observed 2-fold increase from 2015 to 2017. More Eau Claire county youth (23.4%) report vaping compared to the state (11.6%) and nation (13.2%). Schools and parents are asking for resources about how to address this issue and have reached out to the Alliance partners for more information.

Return on investment

Investing in substance abuse prevention not only reduces the harm associated with substance abuse experienced by individuals, their families and communities, but it can also greatly reduce the cost of substance abuse to society.

Research over the past 20 years demonstrates that prevention can have significant cost-benefit savings. Analysis of numerous prevention programs shows that they have reported savings of $15–18 on every dollar spent on drug abuse prevention.

In Eau Claire County, there are significant direct government costs (police, courts) related to drug abuse including persons jailed with drug related crimes and children placed out of the home. Based on the Burden of Alcohol in Wisconsin report, in 2011, the cost of excessive alcohol use in Eau Claire County was $160.4 million or $1,624.17 per resident per year. This includes $17.6 million in healthcare costs and $115.7 million in lost productivity. This same analysis estimated that for adults, excessive alcohol use contributed to at least 19 deaths, 1,115 hospitalizations, and 1829 arrests.

Preventing use among youth is important as research shows that early initiation of alcohol use is an important risk factor for later alcohol misuse. Prevention remains an important issue in the county and the state of Wisconsin given the culture of alcohol use and its impact on the community.

Substance abuse is a complex social issue that cuts across multiple sectors and effects everyone in our community. Through increased collaboration and evidence informed prevention initiatives, the economic and social impacts of substance abuse in Eau Claire County could be greatly reduced.

What Needs To Be Sustained?

Resources are needed to support county alcohol and other drug use prevention efforts including maintaining the key partnerships of the Alliance, ensuring that youth alcohol and drug use trends continue to decrease, and addressing emerging issues around alcohol and drug misuse like vaping. Outside of the Alliance staff, there is not another full-time prevention specialist working on alcohol and other drug (AOD) prevention in Eau Claire County, even though AOD issues have been identified as priority issues for the community.

Eau Claire County currently benefits from having a grant funded staff person with expertise in alcohol and other drug abuse prevention. The majority of county government funded resources are currently allocated for enforcement and treatment/recovery. Continuing to provide an expert in alcohol and other drug abuse prevention working in the community will allow the county to continue initiatives and programs that are critical to achieve county goals in youth substance abuse prevention:

1. Strengthening collaboration among Eau Claire County partners to prevent and treat alcohol, tobacco, and other drug abuse.
    - Convening the Alliance for Substance Abuse Prevention which meets 6 times annually and is made up of 18 members representing 16 organizations.
    - Convening 3 workgroups made up of coalition members that meet on an ad hoc basis to address communication, policy, and sustainability issues.
    - Communicating with Alliance and other community partners about strategies, current trends, and new training and information available to guide the work.
    - Individual meetings (estimated 24 meetings/ year) between staff and community partners (e.g. law enforcement, schools, DHS, CJCC) to share information about AOD trends for youth, programs, opportunities for collaboration, policy work, etc.
    - Supporting a new partnership between the Alliance and Eau Claire Healthy Communities to address substance abuse in Eau Claire County.
    - Partnering with city, county, law enforcement, schools, UWEC, and other policy makers to provide information and resources to support policy and system change (e.g. ECASD e-cigarette policy, Altoona e-cigarette policy, athletic codes, marijuana information papers, city good order policy, etc.)

2. Collecting and sharing data with program partners to guide prevention strategies and educate the community.
    - Evaluating county alcohol and other drug use trends (YRBS, Pride survey).
    - Sharing local data with school districts and other partners (YRBS meetings with all 5 school districts; YRBS school and county reports).
    - Sharing other local, state, and national data with partners through education, communication, and reports.

3. Educating the community on alcohol, tobacco, and other drug use.
    - Maintaining the Alliance website with links to resources and information about AOD, the Alliance, events, etc. (estimated 746 hits annually).

- Developing education posts on AOD issues and trends on both the Alliance and Health Department social media (about 140 Facebook posts annually with a 40,000 organic post reach; 85 Tweets with over 20,000 impressions).
- Responding to media inquiries on alcohol and other drug issues (estimated 31 interviews annually).
- Presenting to community groups about the Alliance, alcohol and other drug use trends, issues, and prevention (approximately 11 presentations annually)
- Developing and sharing position papers (e.g. Marijuana information provided in 2018).
- Training for SADD (Students Against Destructive Decisions) to be prevention leaders (49 youth and 6 SADD advisors in 2018) for 6 Eau Claire county high schools. Training topics include leadership, alcohol and other drug use topics, mental health, and creating activisms during the school year.
- Guiding SADD leaders in action around peer education through the Youth Advisory Board monthly meetings and chapter meetings at schools (e.g. prescription drug take back social media challenge, promoting prescription drug take back events with flyers and information distributed at schools, organizing and participating in pre-prom mock car cash awareness event at each school, Juuling/E-cigarettes presentation to school staff, activism #Healthylungshealthylife, distracted driving activisms, conducting television and radio interviews).
- Creating structure and resources for revamped healthy athlete program; working with Athletic Directors and coaching staff to develop resources.

4. Monitoring retail access to tobacco and alcohol at 343 businesses and youth access to alcohol at local music festivals.
    - Conducting ID check training for businesses (3/ year)
    - Conducting alcohol and tobacco compliance checks
        - 2018: 62 alcohol and 63 tobacco

Current DFC Funding Includes

Personnel: 2.5 positions including a full-time Health Educator, with the rest of the time divided amongst 7 other supporting staff positions (program assistant, evaluator, youth advocacy advisor, school consultant, Americorp member and supervisor). Total cost $118,000/year.
Training: includes training for SADD, Alliance members and staff. $5,800/yr.
Materials/Supplies: such as, equipment, printing, advertising. $6,600/yr.
(Grant funds carryover from previous year was $5,400).

YEAR 10 COALITION ACTION PLAN SUMMARY 10/1/18-9/29/19

DFC Goal 1:
Establish and strengthen collaboration among communities, public and private non-profit agencies; as well as federal, state, local, and tribal governments to support the efforts of community coalitions working to prevent and reduce substance use among youth.

Alliance Goal 1:
The Alliance for Substance Abuse Prevention will strengthen collaboration in Eau Claire County to reduce youth alcohol use and prescription drug misuse and maintain a sustainable coalition.

Objective 1.1:
By 9/29/2019, the Alliance will maintain good meeting and communication habits to ensure members stay engaged in substance abuse prevention efforts through the coalition.

Strategy 1.1A: Hold regularly scheduled quarterly meetings using effective agendas and decision-making processes, staying on track and following up with quality minutes.

Strategy 1.1B: Communicate about current strategies, new drugs of concern, and educational opportunities utilizing social media, email, and website with Alliance members and other community partners.

Objective 1.2:
By 9/29/2019, Alliance members will enhance their knowledge and skills to achieve community level change through participation in at least 2 trainings on topics such as community level change, prescription drug misuse, marijuana, and related prevention strategies.

Strategy 1.2A: Provide training for Alliance members, building their capacity to actively engage in youth substance use prevention

Strategy 1.2B: Monitor proposed local and state policies and local drug trends impacting youth substance use (prescription drugs, new tobacco products, alcohol, marijuana, etc.) & inform Alliance Council members and community at-large.

Objective 1.3:
By 9/29/2019, Alliance members will assure the appropriate people are at the table to strengthen intervention strategies by strengthening partnerships with Alliance Council Members.

Strategy 1.3A: Maintain representation & active involvement of all 12 sectors in the Alliance.

Strategy 1.3B: Maintain and expand partnerships with businesses to ensure successful program/policy implementation such as Alcohol & Tobacco Retailer Trainings, written sober server policies, and sponsorship of Parents Connecting Network.

Strategy 1.3C: Expand partnerships with health care, business and government to facilitate the reduction of prescription drug misuse.

Strategy 1.3D: Recognize Alliance members and their contributions to the efforts of the coalition to prevent and reduce substance use among youth.

Objective 1.4:
By 9/29/2019, the Alliance will engage the general community in reducing youth substance use.

Strategy 1.4A: Host a town hall meeting in collaboration with community partners (Marijuana, meth, underage drinking, etc.) to engage community members in being part of the solution by learning about current local drug trends, youth substance use, prevention, and practical policy change.

Strategy 1.4B: Continue and expand outreach to additional community members & organizations with new drug information, local events & volunteer opportunities.

Strategy 1.4C: Increase Alliance visibility in the community.

Strategy 1.4D: Acknowledge/recognize community member contributions to the efforts of the coalition to prevent and reduce substance use among youth.
Objective 1.5: By 9/29/2019, the Alliance will sustain the coalition to support existing and new strategies to reduce youth substance use in Eau Claire County.
Strategy 1.5A: Secure and document in-kind contributions of at least $187,500 from members, partners and volunteers.
Strategy 1.5B Review *sustainability plan and implement sustainability actions to ensure continued work and funding toward community priorities after DFC funding ends.*
Strategy 1.5C Use *evaluation results to assess the effectiveness of current prevention strategies and demonstrate the need for specific prevention strategies to continue.*
Objective 1.6: By 9/29/2019, the Alliance will collect local core measures in Eau Claire County middle and high schools to monitor impact of coalition efforts on youth substance use.
Strategy 1.6A: Develop and carry out a data collection plan to collect core measure data required by DFC.

DFC Goal 2: Reduce substance use among youth and, over time, reduce substance abuse among adults by addressing the factors in a community that increase the risk of substance abuse and promoting the factors that minimize the risk of substance abuse.
Alliance Goal 2: Decrease the percent of Eau Claire County high school youth reporting past 30 day use of alcohol, marijuana and prescription drugs in Eau Claire County by targeting the root causes of retail & social access, acceptance and low-perceived risk.
Objective 2.1: By 9/29/2019, the Alliance will decrease the percentage of high school youth reporting alcohol is easy to get by 2% by targeting community level change strategies to reduce retail and social access in Eau Claire County.
Strategy 2.1A: Enhance access to ID check training by conducting ongoing alcohol compliance checks countywide and providing training to at least 6 establishments.
Strategy 2:1B: Provide support for current Parents Connecting Network (PCN) members to prevent youth access to alcohol.
Objective 2.2: By 9/29/2019, the Alliance will increase the percentage of high school youth reporting their parents feel it's wrong for them to drink alcohol by 2% by targeting community level change strategies to reduce acceptance of underage drinking in Eau Claire County.
Strategy 2.2A: Continue to add new families, who pledge to not provide alcohol to anyone under 21 in their home or on their property, to the Parents Connecting Network.
Objective 2.3: By 9/29/2019, the Alliance will increase the percentage of high school youth reporting their peers feel it's wrong for them to drink alcohol by 1% by targeting community level change strategies to reduce acceptance of underage drinking in Eau Claire County.
Strategy 2.3A: Enhance the knowledge and skills of at least 20 coaches, adult leaders and SADD advisors to continue to support county-wide youth substance abuse prevention efforts.
Strategy 2.3B: Enhance skills of at least 100 students to talk with their peers about alcohol and other drug use, and the importance of being drug free, through youth trainings and activisms.

Objective 2.4: By 9/29/2019, the Alliance will decrease the percentage of high school youth reporting that prescription drugs are easy to get by 2% by targeting community level change strategies to reduce access in Eau Claire County.
Strategy 2.4A: ***Enhance access/reduce barriers to disposal*** *of unused and expired prescription drugs by increasing knowledge of permanent disposal sites & collection events through increased awareness of risks and solutions.*
Objective 2.5: By 9/29/2019, the Alliance will increase the percentage of high school youth reporting marijuana use is harmful to their health by 2% by targeting community level change strategies to increase low-perceived risk in Eau Claire County.
Strategy 2.5A: ***Continue to support youth to provide information to peers*** *on how youth marijuana use is unsafe and unhealthy at Eau Claire County middle school and high schools.*
Strategy 2.5B: ***Continue to provide information to parents and other community members*** *on the risks of youth marijuana use.*

Alliance for Substance Abuse Prevention

Who are we?

Alliance for Substance Abuse Prevention

The Alliance for Substance Abuse Prevention (Alliance) is an Eau Claire County community-based coalition.

The Alliance brings community volunteers and other groups together, helping to coordinate and support county-wide efforts, all working toward the common goal of substance abuse prevention and treatment in our community.

The Alliance Council

Alliance Council meetings are held to promote activisms, policy change, and community involvement. Attendees include members from these community sectors:

- Business
- Civic/Volunteer Groups
- Healthcare
- Law Enforcement
- Media
- Parents
- Education
- Youth
- Youth-Serving Organizations
- Faith-Based Organizations
- State/Local Agencies
- Other organizations involved in reducing substance Abuse

"Compliance checks help keep alcohol out of the hands of minors, ultimately saving lives."

- Jerry Matysik, Eau Claire Police Chief

Alliance Campaigns

students against SADD destructive decisions

YAB Eau Claire County

Eau Claire County Parents Connecting

Parents Who Host Lose the Most. Don't be a party to teenage drinking. It's against the law.

Life of an Athlete American Athletic Institute

Chippewa Valley Mobilizing for Change on Alcohol 21 Reality Check

WI WINS

"Being a part of the Eau Claire Youth Advisory Board (YAB) has allowed me to use my voice to make positive changes in our Community."

-Casey Terzich, Eau Claire Memorial High School SADD/YAB member

Preparing our youth for a better future

Change is possible if we work together

Community Partners

- REALTORS® Association of Northwestern WI
- EC Morning Rotary Club
- UW-Health
- Marshfield Clinic Health System
- Eau Claire County Sheriff's Office
- Eau Claire Police Dept.
- Lutheran Social Services
- Healthy Communities
- Cohen Law Office
- Eau Claire Area School District
- Eau Claire Board of Education
- WI Department of Health Services
- Eau Claire City-County Health Dept.
- Eau Claire City-County Human Svc
- Youth Advisory Board
- Students Against Destructive Decisions
- Big Brothers and Big Sisters
- Boys and Girls Club
- Eau Claire YMCA

In the long run, change will:

- ***Protect our youth***
- ***Reduce the consequences of underage drinking***
- ***Create healthier communities***

Change is slow, but once made, it lasts.

Your support can help to ensure a better future for our communities

Follow and Share

@ECALLIANCE

ASAPECC

Contacts

Alliance for Substance Abuse Prevention

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3/18

Get Involved

Alliance for Substance Abuse Prevention

Our Vision:

A community culture free from the abuse of alcohol, tobacco and other drugs.

Our Mission:

To improve the lives of children, youth, and adults, by mobilizing communities to prevent and treat alcohol, tobacco & other drug abuse in Eau Claire County.

www.getinvolvedASAP.org

Alliance Info

Alliance for Substance Abuse Prevention

Parents Who Host

- Is an annual countywide campaign
- Alerts parents and other adults to the health, safety, and legal risks of underage drinking
- Raises awareness of how youth obtain alcohol
- Asks adults to take specific steps to prevent underage drinking in their homes and on their property

"This campaign reminds parents that they can influence whether or not teens drink."

- Joanne Sorenson, Fall Creek parent of teens

Parents Connecting

- A countywide directory with the capability of networking events.
- Connects families who commit to not allowing alcohol use by anyone under age 21 in their home or on their property
- Encourages parents to call other parents to confirm that gatherings will be alcohol-free and supervised by an adult
- Includes hundreds of families countywide who signed on in the first year

"Our family has referred to the Directory multiple times to support the safe and healthy lifestyle we are working to promote."

- Cheryl & Jim Schmitt, Eau Claire parents

Compliance Checks

- Are ongoing investigations of all establishments licensed to sell/serve alcohol and tobacco
- Involve law enforcement, the Eau Claire Youth Advocacy Adivisor, and trained teams of underage buyers
- Provide education and increase business support for reducing illegal sales to minors
- Recognize businesses after successful compliance checks

"Compliance checks help keep alcohol out of the hands of minors, ultimately saving lives."

- Jerry Matysik, Eau Claire Police

Policy & Practice Change

- Is proven to discourage and prevent substance abuse and underage drinking
- Utilizes suitable, research-based approaches to build healthier alcohol environments
- Engages individuals and organizations in identifying and making needed changes
- Creates awareness of why change is important for our youth's health and safety

"Working with the Sheriff's Office and Reality Check 21 has allowed us to improve our ID checking practice & adopt policies to make Country Jam a safer event for all.

- Sponsorship & Marketing Director, Country Jam USA

Youth Advocacy

- Empowers youth with knowledge and skills necessary to make safe and healthy decisions.
- Raises youth awareness of alcohol and drug-free lifestyles.
- Raises adult awareness on how to be supportive of alcohol and drug-free youth
- Develops youth skills in civic engagement, media and leadership development
- YAB (Youth Advisory Board) Leadership group of SADD with reps from each of the six Eau Claire County high schools.
- Meets once a month for county-wide communication, collaboration and activism planning.
- The Alliance Youth Advocacy Adviser provides direction and guidance to both YAB and SADD members

"Being a part of the Eau Claire Youth Advisory Board (YAB) has allowed me to use my voice to make positive changes in our Community."

-Casey Terzich, Memorial High School SADD/YAB member

Preparing our youth for a better future

NACCHO
National Association of County & City Health Officials
The National Connection for Local Public Health

99-03

STATEMENT OF POLICY

Prevention of Firearm-Related Injury and Death

Policy

The National Association of County and City Health Officials (NACCHO) supports an individual's right to own and use firearms for legal purposes. As public health professionals focused on injury and violence prevention, we also seek to ensure that firearms are stored and used safely and that traditional public health measures are used to ensure comprehensive strategies that prevent firearm-related suicide, homicide, and other violence and unintentional firearm-related injuries and death. NACCHO recognizes the burden and impact of firearm-related injury and death as a national public health issue. NACCHO also recognizes the importance of addressing the root causes of inequities (e.g., racism, sexism, classism) that result in certain populations bearing a disproportionate burden of firearm-related morbidity and mortality.

NACCHO also draws attention to the critical role that local health departments play in preventing intentional and unintentional firearm-related injury and death and in preparing for and responding to threats to individual and community safety in coordination and collaboration with other local, state, and national efforts.

NACCHO supports the following strategies to prevent firearm-related injury and death:

- Legislation, regulation, or policy that (1) requires a background check on all prospective purchasers of firearms; (2) includes enforceable and effective bans on the sale, transfer, importation, and manufacturing of assault weapons and large capacity ammunition magazines; and/or (3) makes firearm trafficking a felony.
- Legislation, regulation, or policy that requires any person seeking to own a firearm to (1) obtain a firearm safety certificate within a reasonable timeframe of purchase; (2) register their firearms in confidential registries and immediately report, upon discovery, any loss or theft of firearms to law enforcement; and (3) store their firearms in a manner that prevents unsupervised access or use by children and other unauthorized users.
- Legislation, regulation, or policy that requires any person seeking to transfer ownership of a firearm to report the sale or transfer to the appropriate authority.
- Legislation, regulation, or policy that restricts or prohibits the acquisition of firearms by high-risk persons, as indicated by data (e.g., persons with a history of violent criminal behavior; unlawful users of or those addicted to controlled substances; those who have been found by a judge to be mentally incompetent, a danger to themselves or others as a result of mental illness, or been involuntarily committed to a mental institution; youth under the age of 21).

- Expansion of the evidence base through research and evaluation related to the causes of firearm-related injury and death and the effectiveness of prevention strategies.
- Data gathering and analysis that link data from multiple sectors (e.g., public health, law enforcement, medical examiners, social services) with appropriate safeguards for privacy.
- Research conducted or funded by federal government agencies on the causes and prevention of gun violence.
- Development, implementation, and evaluation of comprehensive local plans that include multiple strategies (e.g., prevention, preparedness, intervention, enforcement, response, rehabilitation) through the engagement of multidisciplinary partnerships (e.g., public health, healthcare, education, law enforcement, justice, mental/behavioral health, social services, community leaders, businesses, and faith-based organizations)
- Early identification of mental illness and access to high-quality, culturally competent mental and behavioral health services and support.
- Development of local capacity (e.g., plans, resources, and capabilities) to prepare for, respond to, and recover from active shooter situations in schools, workplaces, places of worship, public gathering spaces, and other settings.
- Provision of effective training for threat assessment and risk management for law enforcement officers, first responders, and others.
- Prevention and mitigation of children's exposure to neglect, abuse, trauma, toxic stress, and violence and promotion of safe, stable, nurturing relationships for children to reduce risk of future violence.
- Community-based outreach aimed at detecting and interrupting patterns of violence.

Justification

Firearm-related deaths and nonfatal firearm-related injuries are an important public health issue in the United States. Each year, more than 30,000 people die from gunshot wounds, primarily by suicide.[1] In 2010, over 73,000 people were treated in hospital emergency departments for non-fatal gunshot wounds.[1] Twenty-five mass shootings have occurred since 2006.[2] Firearm-related injury and death disproportionately affect non-Hispanic African Americans (20.2 firearm-related deaths per 100,000) and young adults ages 18–24 (19.6 firearm-related deaths per 100,000; 79.2 nonfatal firearm-related injuries).[3]

The economic costs of firearm-related injury and death are substantial. In 2005, firearm-related deaths and injuries resulted in about $32 billion in medical costs and lost productivity expenses.[1] A 1998 study revealed that the estimated cost of firearm-related injury and death was estimated to be about $100 billion annually when factors such as lost quality of life, psychological and emotional trauma, decline in property values, and other legal and societal consequences were considered.[4]

Restrictions on firearm-related research, surveillance, and evaluation have made it difficult to determine the most effective strategies to prevent firearm-related injury and death. Experts in the field have recommended a number of promising strategies, including those aimed at ensuring responsible access to firearms, reducing exposure to violence, supporting mental and behavioral wellbeing, and interrupting cycles of violence.[5, 6, 7]

Local health departments are responsible for creating and maintaining conditions that keep people healthy and safe, including preventing unintentional and intentional firearm-related injury and death. In mass casualty events, local health departments often play a role in providing and coordinating response and recovery activities, including behavioral health services. Local health departments should be involved in the development, implementation, and evaluation of comprehensive plans that address risk and protective factors across the social-ecological levels (e.g., individual, interpersonal, community, societal).[8]

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Record of Action

Adopted by NACCHO Board of Directors
July 14, 1999
Updated July 2007
Updated February 2013

Preventing Gun Violence

Fact Sheet

APHA
AMERICAN PUBLIC HEALTH ASSOCIATION
For science. For action. For health.

Guns have potential to greatly amplify violence, as they can inflict serious — often deadly — injuries on many people in a short time. In the United States, gun violence is a major public health problem and a leading cause of premature death.

BURDEN OF GUN VIOLENCE

The burden of gun violence in the United States vastly outpaces that in comparable countries:

- Eighty percent of all firearm deaths in about two dozen populous, high-income countries — Australia, France, Italy, Spain, the United Kingdom and 18 others — occur in the U.S., and 87 percent of all children ages 0-14 killed by firearms in this group of nations are U.S. children killed in the United States.[1]
- Each year, 33,000 people in the United States die as a result of gun violence, and almost 85,000 more suffer non-fatal gun injuries.[2]

Gun violence affects people of all ages and races in the U.S. but has a disproportionate impact on young adults, males and racial/ethnic minorities:

- Among U.S. residents ages 10-29, homicide is the fourth leading cause of death for non-Hispanic whites, the second leading cause of death for Hispanics and the leading cause of death for non-Hispanic blacks.[3]

Guns are a weapon of choice for mass homicides and suicide:

- While most gun violence involves fewer than four homicide victims — the Federal Bureau of Investigation threshold for a "mass shooting" — the frequency of mass shootings has tripled since 2011.[4] In 2015, there were 330 mass shootings, killing 367 people and injuring another 1,317.[5]
- Guns are the leading method of suicide in the U.S., accounting for half of all suicide deaths. Although most people attempting suicide choose drug overdose, only 2 percent of these drug overdose attempts end in death, compared with 85-91 percent of gun suicide attempts.[6]

Gun violence cost the U.S. $229 billion in 2015, or an average of $700 per gun in America:[7]

- The societal costs of firearm assault injury include work loss, medical/mental health care, emergency transportation, police/criminal justice activities, insurance claims processing, employer costs and decreased quality of life.

GUN VIOLENCE IS PREVENTABLE

Gun violence is not inevitable. It can be prevented through a comprehensive public health approach that keeps families and communities safe.

A public health approach to preventing gun violence recognizes that violence is contagious and can become epidemic within a society.[8,9] Primary prevention involves the use of core public health activities to interrupt the transmission of violence: (1) **conducting surveillance** to track gun-related deaths and injuries, gain insight into the causes of gun violence and assess the impact of interventions; (2) **identifying risk factors** associated with gun violence (e.g., poverty and depression) and **resilience or protective factors** that guard against gun violence (e.g., youth access to trusted adults); (3) **developing, implementing and evaluating interventions** to reduce risk factors and build resilience; and (4) **institutionalizing successful prevention strategies.**[10,11]

Importantly, prevention does not require predicting who will be violent. Just as aviation safety regulations make air travel safer for everyone, common-sense measures to prevent gun violence make communities safer for everyone.

WHAT IS NEEDED?

To enhance America's public health response to gun violence, we need:

- **Better Surveillance**. The National Violent Death Reporting System currently collects data from only 32 states, and the data is not nationally representative. Information on firearm fatalities from all 50 states and the District of Columbia would provide a more complete picture of gun violence in the United States.[12] The surveillance data collected would prove invaluable for the design of targeted gun violence prevention strategies. But to do that, it must expand from its current 32 states and move toward nationwide implementation. Fortunately, Congress increased funding for the program in 2014 to $11.2 million. This increase will help move us closer to national implementation. We urge a multi-year approach to secure the $23.5 million needed for nationwide expansion of NVDRS.

- **More Research**. Several laws have effectively restricted federally funded research related to gun violence, as well as access to complete crime gun data.[13, 14 ,15] Yet information is needed to fill critical research gaps. For example, there is almost no credible evidence that right-to-carry laws increase or decrease violent crime, almost no empirical evidence to support dozens of violence prevention programs for children, scant data on the effects of different gun safety technologies on violence and crime, and scant data on the link between firearms policy and suicidal behavior.[16,17] We must expand the collection of data and research related to gun violence and other violent crime deaths in order to better understand the causes and develop appropriate solutions. Congress should provide unrestricted funding to the Centers for Disease Control and Prevention for research into the causes of gun violence.

- **Common-Sense Gun Policies**. APHA supports requiring criminal background checks for all firearms purchases, including those sold at gun shows and on the Internet. Currently unlicensed private firearms sellers are exempt from conducting criminal background checks on buyers at gun shows or over the Internet, giving felons, the mentally ill and others prohibited from owning firearms access to weapons. We also support reinstating the federal ban on assault weapons and high-capacity ammunition magazines, which expired in 2004.

- **Expanded Access to Mental Health Services**. Funding for mental health services has been declining, and funding for the Substance Abuse and Mental Health Services Administration continues to be threatened by budget cuts including cuts due to sequestration. We must ensure that state, local and community-based behavioral health systems have the resources they need to provide much-needed care.

- **Resources for School and Community-Based Prevention**. APHA supports comprehensive measures in community and school-based prevention, early intervention strategies and preparedness initiatives to prevent gun violence and prepare our communities and schools in the event of an emergency. We support providing on-site mental health services, including through school-based health centers, a common-sense approach to ensure that children and youth are able to access appropriate treatment and services. SBHCs also support all students' mental health by creating school-wide programs that address bullying, violence, anger, depression and other social and emotional issues that impede academic achievement.

- **Gun Safety Technology**. Although specialized gun trigger locks and safes are on the market today,[18] more needs to be done; there is little ongoing investment and research into gun safety technology. APHA supports innovative technology that can prevent unauthorized gun access and misuse, including unintentional shootings.

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APHA

AMERICAN PUBLIC HEALTH ASSOCIATION

For science. For action. For health.

800 I Street, NW • Washington, DC 20001 • www.apha.org

June 19, 2016

United States Senate
Washington, D.C. 20510

Dear Senator:

The 58 undersigned national public health, medical, and research organizations write to urge you to **vote yes on S.Amdt. 4750 and S.Amdt. 4720 to the Commerce-Justice-Science appropriations bill, S. 2837/H.R. 2578.** S.Amdt. 4750, offered by Senator Murphy, and S.Amdt. 4720, offered by Senator Feinstein, represent critical steps to protect the public health.

Following the massacre of 49 individuals in Orlando, Florida last weekend, we are presented with yet another opportunity to act to address the scourge of gun violence. There were over 33,000 firearm-related deaths in 2013, according to the U.S. Centers for Disease Control and Prevention (CDC). **S.Amdt. 4750** would expand background checks on all gun purchases, and **S.Amdt. 4720** would make it more difficult for known or suspected terrorists to purchase firearms. These proposals would help to reduce access to guns, and would help to save countless lives.

Our groups have been advocating for gun violence prevention strategies for decades. In addition to passing these two amendments, we would welcome the opportunity to work with you in the future to support funding for gun violence prevention research and public health surveillance, including $10 million to support gun violence prevention research at the CDC.

We urge you to **vote yes on the Murphy and Feinstein amendments to the Commerce-Justice-Science appropriations bill.** We thank you for your leadership and look forward to working with you on these and other measures to reduce gun violence in our country.

Sincerely,

Academic Pediatric Association
American Academy of Pediatrics
American Association of Child and Adolescent Psychiatry
American Association of Colleges of Pharmacy
Academic Consortium for Integrative Medicine and Health
American College of Physicians
American College of Preventive Medicine
American Geriatrics Society
American Medical Student Association
American Medical Women's Association
American Pediatric Society
American Psychological Association
American Public Health Association
American Society of Hematology

American Thoracic Society
Association of American Medical Colleges
Association of Maternal & Child Health Programs
Association of Medical School Pediatric Department Chairs
Association of State and Territorial Health Officials
Big Cities Health Coalition
Brady Campaign united with Million Mom March
California Chapter of the American College of Emergency Physicians
Care for the Homeless
Child Welfare League of America
Coalition to Stop Gun Violence
Cure Violence
Delaware Academy of Medicine / Delaware Public Health Association
Doctors Council SEIU
Doctors for America
Foundation for Healthy Generations
Futures Without Violence
Global Healthy Living Foundation
HealthHIV
National Association of County and City Health Officials
National AHEC Organization
National Association of Social Workers
National Association of State Head Injury Administrators
National Coalition for LGBT Health
National Health Care for the Homeless Council
National Hispanic Health Foundation
National Hispanic Medical Association
National Medical Association
National Network of Public Health Institutes
National Physicians Alliance
Pediatric Policy Council
Physicians for the Prevention of Gun Violence
Physicians for Reproductive Health
Prevention Institute
Public Health Institute
Research!America
Suicide Awareness Voices of Education
School-Based Health Alliance
Society for Pediatric Research
Society for Public Health Education
Society of General Internal Medicine
Student National Medical Association
The Koop Institute
Trust for America’s Health

April 6, 2016

The Honorable Thad Cochran
Chairman, Appropriations Committee
U.S. Senate
Washington, DC 20515

The Honorable Harold Rogers
Chairman, Appropriations Committee
U.S. House of Representatives
Washington, DC 20515

The Honorable Barbara Mikulski
Vice Chairwoman, Appropriations Committee
U.S. Senate
Washington, DC 20515

The Honorable Nita Lowey
Ranking Member, Appropriations Committee
U.S. House of Representatives
Washington, DC 20515

Dear Senator/Representative:

The undersigned health care, public health, scientific organizations and research universities representing over 1 million members across the country **urge you to end the dramatic chilling effect of the current rider language restricting gun violence research and to fund this critical work at the Centers for Disease Control and Prevention (CDC).**

In 1996, Congress passed the so-called Dickey amendment as a rider to the Labor-Health and Human Services-Education Appropriations bill. The language stated that the CDC could not fund research that would "advocate or promote gun control," and the language has remained in each subsequent annual funding bill. At the same time, Congress cut CDC funding for this research. Although the Dickey amendment does not explicitly prevent research on gun violence, the combination of these two actions has caused a dramatic chilling effect on federal research that has stalled and stymied progress on gathering critical data to inform prevention of gun violence for the past 20 years. Furthermore, it has discouraged the next generation of researchers from entering the field.

Gun violence is a serious public health epidemic resulting in the senseless deaths of an average of 91 Americans, and another 108 gun injuries, each and every day. A central part of preventing future tragedies is through conducting rigorous scientific research as this has been a proven successful approach in reducing deaths due to other injuries.

Health care providers and public health professionals are overwhelmed in emergency departments, clinics, offices, and communities with the victims of mass shootings, homicides, suicides, accidental shootings, and firearm injuries. Medical professionals and our communities work to address the devastating and long-lasting physical and emotional effects of gun violence on victims, their families and their friends, but are hampered by the insufficient body of evidence-based research to use to point communities toward proven gun violence prevention programs and policies.

Former Representative Jay Dickey (R-AR), author of the current language that has effectively restricted gun violence research, recently noted that, "it is my position that somehow or someway we should slowly but methodically fund [gun] research until a solution is reached. Doing nothing is no longer an acceptable solution."

Here are some of the critical questions that enhanced research would help us answer:

1) **What is the best way to protect toddlers from accidentally firing a firearm?** Safe firearm storage works, but what kinds of campaigns best encourage safe storage? What safe storage methods are the most effective and most likely to be adopted? What should be the trigger pull on a firearm so a toddler can't use it?

2) **What are the most effective ways to prevent gun-related suicides?** Two-thirds of firearm related deaths are suicides. Are firearm suicides more spontaneous than non-firearm suicides? Do other risk factors vary by method? How do we prevent it in different populations—active military, veterans, those with mental illness, law enforcement or correctional officers, the elderly, or teenagers?

3) **What is the impact of the variety of state policies being enacted?** How are different policies around safe storage, mental health, public education, and background checks impacting firearm injuries and deaths?

The CDC's National Center for Injury Prevention and Control is an important part of answering these types of questions. Public health uniquely brings together a comprehensive approach connecting the complex factors that result in violence and injuries including clinical, social, criminal, mental health, and environmental factors.

The impact of federal public health research in reducing deaths from car accidents, smoking and Sudden Infant Death Syndrome has been well proven. Decades ago, we did not know infant car seats should be rear-facing. Robust research on car accidents and subsequent legislation has helped save hundreds of thousands of lives without preventing people from being able to drive. It's time to apply the same approach to reducing gun violence in our communities.

As professionals dedicated to the health of the nation and to the application of sound science to improving the lives of our fellow Americans, we urge you to take action this year. Americans deserve to know that we are working with the best tools and information in the fight to reduce gun violence deaths and injuries.

As Congress works to craft the FY 2017 Labor-HHS-Education Appropriations bill, we urge you to provide the Centers for Disease Control and Prevention with funding for research into the causes and prevention of gun violence.

Thank you for your consideration. We look forward to working with you to improve health and protect the safety of all Americans.

Sincerely,

Academic Consortium for Integrative Medicine & Health
Academic Pediatric Association

Alameda Health System Department of Emergency Medicine
American Academy of Family Physicians
American Academy of Pediatrics
American Association for the Advancement of Science
American Association of Colleges of Pharmacy
American Association of Nurse Practitioners
American College of Emergency Physicians
American College of Emergency Physicians, California Chapter
American College of Occupational and Environmental Medicine
American College of Physicians
American Congress of Obstetricians and Gynecologists
American Educational Research Association
American Geriatrics Society
American Medical Association
American Medical Student Association
American Medical Women's Association
American Pediatric Society
American Psychiatric Association
American Psychological Association
American Public Health Association
American Society for Clinical Pathology
American Society of Hematology
American Thoracic Society
American Trauma Society
Arkansas Public Health Association
Asociación de Salud Pública de Puerto Rico
Association for Psychological Science
Association of American Universities
Association of Medical School Pediatric Department Chairs
Association of Population Centers
Association of Public and Land-grant Universities
Big Cities Health Coalition
Boulder County Public Health
Brigham Psychiatric Specialties
California Center for Public Health Advocacy
California Public Health Association-North
Center for Science and Democracy at the Union of Concerned Scientists
Central Oregon Medical Society
Champaign-Urbana Public Health District
Chicago Center for Psychoanalysis
Chicago chapter Physicians for Social Responsibility
Colorado Public Health Association
Committee of Interns and Residents/SEIU Healthcare
Congregation Gates of Heaven

Consortium of Social Science Associations
Council of State and Territorial Epidemiologists
Cure Violence
Delaware Academy of Medicine / Delaware Public Health Association
Doctors Council SEIU
Doctors for America
Eastern Association for the Surgery of Trauma
Federation of Associations in Behavioral and Brain Sciences
Florida Chapter of the American Academy of Pediatrics, Inc.
Futures Without Violence
Georgia Public Health Association
Hawaii Public Health Association
Health Officers Association of California
Houston Health Department
Illinois Public Health Association
International Society for Developmental Psychobiology
Iowa Chapter Physicians for Social Responsibility
Iowa Public Health Association
JPS Health Network
Kansas Public Health Association
Koop Institute
KU Department of Preventive Medicine and Public Health
Law and Society Association
Lee County Health Department
Local Public Health Association of Minnesota
Louisiana Center for Health Equity
Maine Public Health Association
Maryland Academy of Family Physicians
Minnesota Public Health Association
Montana Public Health Association
National AHEC Organization
National Association of County and City Health Officials
National Association of Medical Examiners
National Association of Nurse Practitioners in Women's Health
National Association of Social Workers
National Association of State Emergency Medical Services Officials
National Association of State Head Injury Administrators
National Black Nurses Association
National Hispanic Medical Association
National Medical Association
National Network of Public Health Institutes
National Physicians Alliance
National Violence Prevention Network
Nevada Public Health Association

New Hampshire Public Health Association
New Mexico Public Health Association
North Carolina Public Health Association
Ohio Public Health Association
Ohio Public Health Association
Oregon Academy of Family Physicians
Oregon Physicians for Social Responsibility
Oregon Public Health Association
Pediatric Policy Council
Physicians for Social Responsibility, Arizona Chapter
Physicians for a National Health Program NY Metro Chapter
Physicians for Reproductive Health
Physicians for Social Responsibility / Northeast Ohio
Physicians for Social Responsibility Wisconsin
Physicians for Social Responsibility, Arizona Chapter
Physicians for Social Responsibility/New York
Physicians for the Prevention of Gun Violence
Population Association of America
Prevention Institute
Psychonomic Society
Public Health Association of Nebraska
Public Health Association of New York City
Public Health Institute
Research!America
RiverStone Health
Safe States Alliance
San Francisco Bay Area Chapter, Physicians for Social Responsibility
Society for Adolescent Health and Medicine
Society for Advancement of Violence and Injury Research
Society for Mathematical Psychology
Society for Pediatric Research
Society for Psychophysiological Research
Society for Public Health Education
Society of Experimental Social Psychology
Society of General Internal Medicine
Southern California Public Health Association
Southwest Ohio Society of Family Medicine
Student National Medical Association
Suicide Awareness Voices of Education
Texas Doctors for Social Responsibility
Texas Public Health Association
Trauma Foundation
Tri-County Health Department
Trust for America's Health

United Physicians of Newtown
Vermont Public Health Association
Virginia Public Health Association
Washington Chapter of the American Academy of Pediatrics
Washington State Public Health Association
Wellness Institute of Greater Buffalo
Whiteside County Health Department

cc:
The Honorable Mitch McConnell
The Honorable Paul Ryan
The Honorable Harry Reid
The Honorable Nancy Pelosi
Members of Congress

The American College of Preventive Medicine Policy Recommendations on Reducing and Preventing Firearm-Related Injuries and Deaths

Bethany L. Strong, MD, MS,[1] Sarah-Blythe Ballard, MD, MPH,[2] Wendy Braund, MD, MPH, MSEd[3]

The American College of Preventive Medicine Policy Committee makes policy guidelines and recommendations on preventive medicine and public health topics for public health decision makers. After a review of the current evidence available in 2016, the College is providing a consensus-based set of policy recommendations designed to reduce firearm-related morbidity and mortality in the U.S. These guidelines address seven general areas pertaining to the public health threat posed by firearms: gun sales and background checks, assault weapons and high-capacity weapons, mental health, research funding, gun storage laws, and physician counseling.

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Introduction

In 2002, the American College of Preventive Medicine (ACPM) issued its first statement that raised concern about the firearm violence epidemic in the U.S. and advocated for policies to reduce this leading cause of injury and death among the American public. The 2002 statement focused on handguns; this statement expands ACPM's recommendations to include all firearms and provides an updated public health and legislative context for these recommendations.

Gun violence is a public health problem. Firearm-related deaths in the U.S. remain the highest in the industrialized countries.[1] Firearms were involved in the deaths of more than 33,500 people in the U.S. in 2013, including homicides, suicides, and unintentional deaths, accounting for more than 17% of the injury deaths that year.[2] Unintentional injury is the leading cause of death in Americans aged 1–44 years.[3] Firearm injury is the third leading cause of injury-related death in the U.S., only after poisonings and motor vehicle crashes.[2] There were 11,000 homicides and 21,000 suicides that involved firearms in 2013,[2] and there were more than 81,000 non-fatal firearm injuries in 2014.[4] Collectively, Americans own between 270 million and 310 million firearms, approximately 101.05 per 100 people.[5] In 2014, a total of 13,576 children aged <20 years were treated in emergency rooms for nonfatal firearm injuries, and adolescents aged 15–19 years were more than twice as likely to have nonfatal firearm injuries than the general population.[4] Children playing with guns in the absence of their parents account for 89% of the unintentional shooting deaths of children at home.[6,7] Gun violence costs the country approximately $174 billion annually in lost work, health care, emergency systems, policy and criminal justice, claims processing, and decreased quality of life.[8] It results in more than $48 billion in medical and work loss costs each year by annual estimates.[9]

Fatal and nonfatal firearm violence seriously threatens the safety and welfare of Americans. Since 1966 when Charles Whitman, an ex-Marine sniper, killed his wife, mother, and 14 more people at the University of Texas before police shot him, there have been more than 125 events in the U.S. in which a lone shooter has shot four or more individuals.[10] Although these highly publicized mass shootings make up less than 1% of firearm-related deaths, they have had significant physical and psychological impacts on individuals in both physical and virtual proximity.[10] These violent acts have increased the public's interest in protecting children, communities, and law enforcement from the harmful effects of gun violence.

As a national organization of physicians dedicated to prevention, ACPM believes in a comprehensive public health approach to addressing the issue of gun violence. ACPM

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supports effective policies and legislation at all levels of the government that are intended to prevent and reduce injuries and deaths related to firearms.

Methods

The ACPM's Policy Committee, which is charged with recommending legislative initiatives and policy positions, developed these recommendations. The committee reviewed available literature through May 2016 on the relationship between gun sales and background checks on firearm-related mortality, the relationship between mental health and gun violence, and the impact of firearm safety measures on health outcomes. The ACPM Prevention Practice Committee reviewed the draft recommendations, after which the Policy Committee considered it formally. The policy recommendations were approved by the ACPM Policy Committee on February 24, 2016, and by the ACPM Board of Regents on February 27, 2016.

Policy Recommendations

The following statements represent the official policy positions and recommendations of ACPM. The evidence base for each policy recommendation follows.

Gun Sales and Background Checks

ACPM supports:

- Expansion of federal legislation, the Brady Handgun Violence Protection Act of 1998, to require background checks for all firearms purchasers including sales by gun dealers, sales at gun shows, sales made online, and private gun transfers between individuals.[11]
- Adoption of state legislation to mandate universal background checks, either as part of a permit to purchase licensing system for all gun sales, or by mandating universal background checks in the absence of a permit law.[11]
- Mandatory reporting for the theft or loss of a firearm within a specified time after the owner has become aware of its loss.[12]
- Waiting period: ACPM supports legislation to require anyone who purchases a firearm to wait at least 5 days before taking delivery of the firearm.[13]
- Enforcement: ACPM supports the aggressive enforcement of current laws against the illegal purchase, possession, and sale of guns.[13]
- Straw man sales: ACPM supports penalties and prosecution of individuals who legally purchase firearms for those who are banned from possessing them.[11]

Assault Weapons and High-Capacity Weapons

ACPM supports:

- Bans on the possession, manufacture, transfer, sale, and import of assault weapons, defined as certain semi-automatic firearms with features, such as the ability to accept large-capacity magazines, that are useful in criminal and military applications, but unnecessary in shooting sports or self-defense.[14]
- Laws that prohibit the use of armor-piercing rounds that disproportionately affect law enforcement officers.

Mental Health

ACPM supports:

- Improved access to mental health care and reducing the risk of firearm-related deaths and injuries through effective treatment and prevention.[11]
- Fully funding the federal incentives for states to provide information about disqualifying mental illnesses to the National Instant Check System for firearm purchasers.[12]
- Ensured access to mental health care for the diagnosis and treatment of mental illnesses and substance use disorders.[11]
- Legislation that protects patient–physician confidentiality.[11]

Research Funding

ACPM supports:

- Removing the Dickey amendment from the Federal Omnibus Spending Bill.
- Adequate funding of federal agencies to study the effect of gun violence and unintentional gun-related injury on public health and safety.[15]
- A regular report from the U.S. Surgeon General on the state of the problem of firearm violence in the U.S. and progress toward solutions.[12]
- Repeal of the 2717(c) firearms provision of the Affordable Care Act that prohibits DHHS from collecting information regarding presence of firearms in home.[14]
- Unrestricted access to data for research to enable the development of evidence-based policies to reduce the rate of firearm injuries and deaths.[15]
- Additional research on proposed or current policy proposals, laws, and regulations for which there are limited or conflicting data on their effectiveness in reducing preventable firearm-related injuries and death.[15]
- Adequate funding of the National Violent Death Reporting System within the U.S. Centers for Disease Control and Prevention (CDC) that collects detailed surveillance data on firearm-related homicides, suicides, and unintentional deaths.[14]

Safe Gun Storage Laws

ACPM supports:

- Laws that subject guns to consumer product regulations regarding child access, safety, and design. These include trigger locks, lock boxes, personalized safety mechanisms, and trigger pressures that are too high for young children.[14]
- Child Access Protection (CAP) laws that impose criminal penalties on those who do not store their firearms appropriately.[14]
- Expansion of CAP laws to make it a felony offense for a gun owner if a child is injured as a result of accessing an unsecured gun.[14]

Physician Counseling

ACPM opposes:

- Any state and/or federal legislation that interferes with a physician's free speech and patient–physician relationship.
- Any laws or regulations that forbid physicians to discuss a patient's or their parent's/guardian's gun ownership.

ACPM supports:

- Physician assessment and intervention, when appropriate, with patients who are at high risk for injuring themselves or others due to firearm access.[15]
- Physicians' ability to speak openly to their patients about firearms, fully answering questions, and advising them on the course of behaviors that promote health and safety.[15,16]
- Physicians' ability to document these conversations in the medical record as they are required to do with the discussion of other health-related behaviors.[15]

Evidence Base for Policy Recommendations

Gun Sales and Background Checks

Guns are sold in both primary and secondary markets. Primary markets include licensed gun dealers who follow mandated background check procedures. However, up to 40% of gun sales take place in secondary markets where people are allowed to sell from their personal supply without the involvement of licensed dealers or background checks.[17] These secondary markets include sales online and at gun shows.[17] Secondary markets and theft are responsible for the majority of guns supplied to criminals.[17]

The regulation of these secondary markets has shown to be beneficial. In a systematic review of the literature assessing published studies on the effects of gun laws from 1950 to 2014, it was found that in states that require background checks for all gun sales there were lower rates of intimate partner homicides and male suicides.[18] Additionally in a cross-sectional study, states with universal background checks were shown to have a 48% lower rate of gun trafficking.[19] Fewer regulations on background checks can lead to a higher prevalence of guns, which in turn leads to a three times higher homicide rate of law enforcement officers as determined by an analysis of the Federal Bureau of Investigation database.[20]

Assault Weapons and Large-Capacity Magazines

Assault weapons include military-style semi-automatic weapons with a detachable magazine capable of holding more than ten rounds. The Federal Assault Weapons Ban of 1994 imposed a 10-year ban on the "manufacture, transfer, and possession" of semi-automatic firearms with certain features useful for criminal activity, but unnecessary in shooting sports and self-defense.[21] These features included the ability to accept large-capacity ammunition magazines, along with threaded barrels for attaching silencers, flash hiders, folding rifle stocks, and pistol grips on rifles.[21] Owing to the availability of non-banned "substitute" assault weapons and magazines, the gradual nature of the ban's expected impact, and the paucity of data for mass shootings, it is difficult to assess the national impact of this law on violent crime.[21] However, the limited available data indicate that assault-type weapons and semi-automatic handguns are used in the majority of mass shootings.[21] Further, gun attacks with semi-automatic firearms tend to result in more fired shots, wounded people, and inflicted wounds per victim compared with attacks with other firearms.[21] Given the public health burden associated with mass shootings, the Federal Assault Weapons Ban should be re-enacted with explicit attention given to the status of imported guns and magazines, and no loopholes allowing for cosmetic changes to weapons.

Mental Health

Although accounting for only 3%–5% of violent events overall, mental illness is an important factor in firearm-related suicide.[22] Those with substance abuse disorders are seven times more likely to be involved in violent events than those with mental illness alone.[22] Concomitant substance abuse and mental illness greatly increases the risk of violence.[22] However, it is difficult to determine which specific individuals will become violent and when.[22] Early identification and treatment is critical to the reduction of detrimental outcomes in individuals suffering from mental illness.[22–24] Thus, access to mental

health care is critical for all individuals who have a mental illness or substance use disorder.

Research Funding

A 1993 study funded by CDC's National Center for Injury Prevention identified gun ownership as a risk factor for homicide in the home.[25] Subsequently, the Dickey amendment to the 1996 Omnibus Consolidated Appropriations Bill stated that for the 1997 fiscal year no funds provided to CDC could be used to advocate or promote gun control. Subsequent attempts to remove the Dickey amendment have failed and, although the amendment only bans gun control advocacy and promotion, it has impacted federal-level funding of firearm-related epidemiologic, intervention, and evaluation research.[26] Following the Sandy Hook Elementary shooting in 2013, President Barack Obama issued an executive order to CDC to research the causes of gun violence but funding to support this order remains limited.[26] It is necessary for Congress to provide adequate funding to conduct proper research to study the causes and consequences of firearm violence, the outcome of legislation and strategies to reduce firearm-related injuries.

Safe Gun Storage Laws

Safe gun storage, including guns unloaded and locked and ammunition stored separately, reduces unintentional injury and suicide risk for children and adolescents.[14] CAP laws enacted in 18 states and the District of Columbia hold the adult gun owner criminally responsible if a minor uses a gun that has been stored insecurely; however, these laws do not generally specify the mode of safe storage.[21] In a longitudinal study from 1976 to 2001, CAP laws were associated with an 8.3% reduction in firearm suicides in those aged 14–17 years.[27] Additionally, CAP laws were associated with fewer unintentional firearm deaths in children aged <15 years with a reduction in incidence of 23%.[28] Another longitudinal study of state hospital data from 1988 to 2003 showed that CAP laws were associated with lower rates of nonfatal firearm injuries in those aged <18 years.[29] CAP laws have proven to be effective in addressing multiple levels of gun violence that affects children and should be expanded.

Table 1. Summary of Recommendations From Other Professional Organizations

National professional organization	Expanded background checks	Restrictions on assault weapons	Mental health services	Increased research funding	Expanded gun storage laws	Physician counseling allowance
American Academy of Family Physicians[15,39]	Recommend	Recommend	Recommend	Recommend	Recommend	Recommend
American Academy of Pediatrics[14,15]	Recommend	Recommend	Recommend	Recommend	Recommend	Recommend
American Bar Association[15,40]	Recommend	Recommend	Recommend	Recommend	Recommend	Recommend
American College of Emergency Physicians[15,41]	Recommend	Recommend	Recommend	Recommend	Not addressed	Recommend
American College of Physicians[11,15]	Recommend	Recommend	Recommend	Recommend	Recommend	Recommend
American College of Surgeons[15,42]	Recommend	Recommend	Recommend	Recommend	Recommend	Recommend
American Congress of Obstetricians and Gynecologists[15,43]	Recommend	Recommend	Recommend	Recommend	Not addressed	Recommend
American Pediatric Surgical Association[44]	Recommend	Recommend	Recommend	Recommend	Recommend	Recommend
American Psychological Association[15,23]	Recommend	Recommend	Recommend	Recommend	Recommend	Recommend
American Public Health Academy[15,45]	Recommend	Recommend	Recommend	Recommend	Not addressed	Recommend
Association of State and Territorial Health Officials[46]	Not addressed	Not addressed	Recommend	Recommend	Recommend	Recommend
National Physicians Alliance[16,47]	Recommend	Recommend	Recommend	Recommend	Recommend	Recommend

Physician Counseling

Patients trust their physicians to advise them on issues that affect their health, and doctors can play an important role in reducing firearm-related injuries and deaths.[30] A systematic review of studies assessing patient interventions conducted 1992–2014 identified 13 studies of healthcare provider interventions designed to reduce firearm-related risks.[31] Two high-quality RCTs demonstrated that provider interventions increased the use of firearm cable locks and decreased risky behavior, such as weapons carriage.[32,33] Additionally, two quasi-experimental studies linked brief provider counseling with improved firearm storage among family medicine patients and families seeking care at a pediatric clinic.[34,35] In the pediatric clinic, this intervention was paired with the supply of free firearm safety locks. Although one study found that firearm-owning parents of adolescents diagnosed with major depression rarely removed firearms from the house according to provider recommendations, two separate studies found that physician interventions were associated with reduced firearm access among admitted adult patients and suicidal teens treated in the emergency department.[36–38] Although the remaining patient-level interventions, most of which were systematically determined to be underpowered, low quality, or not theoretically based, failed to detect changes in firearm safety behaviors following patient interventions, physician counseling appears to improve firearm storage practices, particularly when paired with the provision of free firearm safety devices.[31]

Conclusions

Firearm-related injuries and deaths continue to pose a significant public health threat in the U.S. Since 2002, ACPM has officially advocated for research to characterize the public health burden associated with firearms, policies to reduce the rate of firearm injuries and deaths in the U.S., and action to implement firearm policies in order to reduce the associated public health impact. Recommendations on gun violence prevention have been established by other professional organizations and are listed in Table 1 and in detail in Appendix Table 1 (available online). These recommendations are overwhelmingly consistent with those of ACPM. The implementation of the preceding recommendations would make critical steps forward toward gun violence prevention.

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Appendix

Supplementary data

Supplementary data associated with this article can be found at http://dx.doi.org/10.1016/j.amepre.2016.09.023.

Living Wage Ordinance

Update 7/18/18

Section 6 of 2017 Wisconsin Act 327, effective April 18, 2018, repealed Wis. Stat. § 104.001(3) which provided the legal authority for Eau Claire County to have a minimum or Living Wage Ordinance.

This means that Eau Claire County cannot enter into new contracts on or after April 18, 2018 with a living or minimum wage requirement. Existing contracts entered into during the time Chapter 2.95, the Living Wage Ordinance was in effect can remain unless they are renewed, modified or extended. Therefore, existing Eau Claire County contracts that include living wage requirements will continue throughout 2018 unless particular contracts are renewed, modified or extended. Multiyear contracts where costs or other terms are negotiated annually would be modified as of the date the terms of the contract change. Purchasing Director Frank Draxler will continue to manage the living wage contract process.

Ordinance #16-17/006 - TO CREATE CHAPTER 2.95 OF THE CODE: LIVING WAGE

On July 19, 2016, the Eau Claire County Board with a vote of 18 for and 11 against passed the Original Ordinance 16-17/006 as amended by Amendment #1, Amendment #2 and Amendment #7

Living Wage Ordinance FAQs

Additional Resources
Fact Sheet drafted by Supervisor Smiar
Fact Sheet drafted by Co. Administrator Schauf
Proposed Ordinance 16-17/006 *(April 2016)*
Fiscal Note *(July 2016, Scott Rasmussen- Finance Director)*

On June 17, 2016 the Human Resources Committee requested an extension and offered an
Analysis and Recommendation report.

Supervisor Wilkie offered an Amendment 1 - to HR Analysis and Recommendation report at June 21, 2016 County Board Meeting

Amendment 1 - to Ordinance offered by Supervisor Smiar
Revised Amendment #1 Offered and Approved by the Human Services Board on June 27, 2016
Amendment 2 - Offered and Approved by the Finance & Budget Committee on June 16, 2016

Amendment 4 - Offered by Supervisor Beckfield (July 14,2016)

Amendment 5 - Offered by Supervisor Beckfield (July 14, 2016)
Amendment 6 - Offered by Supervisor Beckfield (July 14, 2016)
Amendment 7 - Offered by Supervisor Smiar (July 15, 2016)
Amendment 8 - Offered by Supervisor Beckfield (July 19, 2016)

Report of the Human Services Board - June 27, 2016

Fact Sheet Response - Supervisor Conlin (*July 15, 2016 revision*)
Response to Supervisor Conlin Fact Sheet - prepared by Supervisor Smiar
Fact Sheet - ADRC *(updated July 14, 2016)*

2006-2016 **National** Poverty Levels

Correspondence Forwarded from Supervisor Mortimer

April 29 - Lutheran Social Services
July 15 - Brotoloc

Cost Options
Version 1 (Original Ordinance) - Poverty Scale 110-130% (updated)
Version 2 (Amendment No.1) - Poverty Scale 100-115%
Version 3 - Poverty Scale 100-110% *for comparison purposes*
Poverty Scale Constant 100%

A survey was sent to vendors who provide contracted services to the Aging and Disability Resource Center and the Dept. of Human Services. Below are documents in regards to that survey. A hard copy of the survey results is available by request.
2015 Vendor Listing >/= $30k
Living Wage Survey
Summary of Living Wage Survey (ADRC)
Summary of Living Wage Survey (Department of Human Services)
Summary of Living Wage Survey (Non-DHS Contracts)

Letter from Chamber of Commerce Board Chair - July 14, 2016

http://www.countyhealthrankings.org/our-approach/health-factors/income

Income

Income provides economic resources that shape choices about housing, education, child care, food, medical care, and more. Wealth, the accumulation of savings and assets, helps cushion and protect us in times of economic distress. As income and wealth increase or decrease, so does health.

Factor Tabs

- Description(active tab)
- Measurement Strategy
- References

Description

Why Is Income Important to Health?

Income can come from jobs, investments, government assistance programs or retirement plans. Income allows families and individuals to purchase health insurance and medical care, but also provides options for healthy lifestyle choices. Poor families and individuals are most likely to live in unsafe homes and neighborhoods, often with limited access to healthy foods, employment options, and quality schools.

While the starkest difference in health is between those with the highest and lowest incomes, this relationship persists throughout all income brackets. Adults in the highest income brackets are healthier than those in the middle class and will live, on average, more than six years longer than those with the lowest incomes [1].

The ongoing stress and challenges associated with poverty can lead to cumulative health damage, both physical and mental. Chronic illness is more likely to affect those with the lowest incomes, and children in low income families are sicker than their high income counterparts. Low income mothers are more likely than higher income mothers to have pre-term or low birthweight babies, who are at higher risk for chronic diseases and behavioral problems [1].

Income inequality is a measure of the divide between the poor and the affluent. Income inequality in our communities affects how long and how well we live and is particularly harmful to the health of poorer individuals [3]. Income inequality within US communities can have broad health impacts, including increased risk of mortality, poor health, and increased cardiovascular disease risks. Inequalities in a community can accentuate differences in social class and status and serve as a social stressor. Communities with greater income inequality can experience loss of social connections, or how we relate to one another, and decreases in trust or social support and sense of community for all residents.

Communities can adopt and implement policies that help reduce and prevent poverty, now and for future generations. The greatest health improvements may be made by increasing income at the lower levels, where small increases can have the greatest impacts.

What Is the *County Health Rankings* Measurement Strategy?

The *County Health Rankings* use two measures to report on income levels in communities:

1. Children in poverty--the percentage of children living in poverty, as defined by the federal poverty threshold--based on data from the Census' Small Area Income and Poverty Estimates (SAIPE) and
2. Income inequality-- the ratio of household income at the 80th percentile level with that at the 20th percentile from the American Community Survey.

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Raising minimum wage good for public health, not just wallets: Advocates call for federal increase

1. Kim Krisberg

Last year, Minnesota legislators successfully enacted a raise in the minimum wage, taking Minnesota from one of the lowest-paying minimum wage states to one of the highest. State Health Commissioner Edward Ehlinger described the move as the greatest legislative victory of the year.

Ni'Jean Gibson, right, assists a customer in February 2014 at a Gap store in San Francisco. The company raised its minimum wage in June. Advocates are calling Congress to do the same, citing the relationship between income and health.

Photo by Justin Sullivan, courtesy Getty Images

"I'd argue that it was the biggest public health achievement in that legislative session — and probably in the four years I've been health commissioner," Ehlinger, MD, MSPH, an APHA member, told *The Nation's Health*. "Even the tobacco tax increase the year before is not as powerful as the minimum wage increase."

In August, thousands of low-wage workers in Minnesota experienced the first in a series of incremental wage increases that will eventually reach $9.50 per hour by mid-2016. Prior to the new law, the state's minimum wage for large employers was just $6.15 an hour — significantly lower than the federal minimum wage of $7.25. Small employers will raise their minimum wage to $7.75 by mid-2016, as well.

In the run-up to the vote, Ehlinger and his colleagues at the Minnesota Department of Health played an active role in educating policymakers and the public on the health benefits of raising the minimum wage and the evidence-based associations between income and health status.

Just a few months before the vote, the health department released a white paper on income and health, which showed that income is not only tied to health, but to the factors that create the opportunities for better health, such as safe homes, nutritious foods and good schools.

"If you look at the conditions that impact health, income is right at the top of the list," Ehlinger said. "Anything we can do to help enhance economic stability will have a huge public health benefit. This is a major public health issue."

The movement to raise the minimum wage has experienced great momentum in recent years, especially at the state and local levels. In 2014, lawmakers in 10 states and Washington, D.C., enacted minimum wage increases, while voters in four states approved ballot measures. A number of localities have taken action as well — for example, Seattle's City Council voted last year to raise its minimum wage to $15 an hour, making it the highest in the nation. At the national level, President Barack Obama took executive action to raise the minimum wage to $10.10 for federal contract workers; similar legislation to raise the federal minimum wage for all Americans has stalled in Congress. APHA has shown support for raising the minimum wage, including advocacy on a Senate bill last year that would have increased it nationally. The issue is expected to come up again in Congress.

For a growing chorus of public health practitioners, raising the minimum wage is a fundamental step in addressing two key determinants of health: income and poverty.

"Income affects everything," said Rajiv Bhatia, MD, MPH, founder and director of the Civic Engine, a consulting group focused on health and sustainability. "Income may not be the strongest risk factor for any particular disease or outcome, but it's a risk factor for all of them."

Bhatia previously worked at the San Francisco Department of Public Health, where he led an assessment on the health benefits of a local living wage ordinance that would raise the hourly wage to $11. The study, which was published in 2001 in APHA's *American Journal of Public Health,* found that the wage increase would decrease the risk of premature death by 5 percent for adults ages 24 to 44 living in households with an income of about $20,000. In addition, the children of such workers would experience substantially increased odds of high school completion and a 22 percent decrease in the risk of early childbirth.

More recently, Bhatia authored a 2014 report for Human Impact Partners on a legislative proposal to raise California's minimum wage to $13 by 2017. That report, "Health Impacts of Raising California's Minimum Wage," found that the wage increase would prevent nearly 400 premature deaths among lower-income Californians each year. The report also noted that nationwide, people with incomes above the federal poverty line typically live more than five years longer than those below the poverty line. Bhatia noted that growing public outcry to raise wages for those at the bottom of the economic ladder presents public health practitioners with the perfect opportunity to speak out.

"When the public is calling for something, you have a safe path to get behind it," he told *The Nation's Health*. "I think this is an interesting test for public health."

Indeed, a number of local minimum wage campaigns have attracted the support of health organizations. In Illinois, the AIDS Foundation of Chicago is a coalition member of Raise Illinois, a campaign to increase the state minimum wage to $10.65. According to Suraj Madoori, MPH, MSJ, MA, manager of the foundation's HIV Prevention Justice Alliance, supporting the campaign was a natural fit, as the research shows that "poverty and HIV go hand in hand — HIV is becoming a disease of poverty in many ways, especially in communities of color.

“You can raise your health status and lower your risk for so many other conditions because you don’t face the psychological stress of trying to find housing or making sure your family can eat,” he said. “By having the ability to get out of poverty, you can really think beyond those basic needs.”

To the west in Oakland, California, the Street Level Health Project joined the steering committee of Lift Up Oakland, which campaigned in support of a successful 2014 ballot measure that raised the minimum wage to $12.25. Joel Aguiar, interim executive director of the Street Level Health Project, which provides health and social services to underserved immigrant communities, said the additional income will have a “huge effect” on the ability of low-wage immigrant workers to care for their health. “It’ll mean someone who might not have been able to pay rent one month will not become homeless,” Aguiar said. “This isn’t just a workers’ rights issue — this is a public health issue.”

President Barack Obama greets a Costco bakery worker in January 2014 in Lanham, Maryland. Obama has called on Congress to raise the minimum wage, but legislation has stalled.

Photo by Mike Theiler, courtesy Getty Images

Unfortunately, minimum wage campaigns rarely go unopposed, with opponents arguing that wage increases are bad for business. However, the U.S. Department of Labor cites research finding that minimum wage increases have no “discernable effect” on employment, and that most small business owners believe higher wages are offset by decreased employee turnover and increased consumer spending power. In fact, research is finding that higher wages also benefit state health care spending.

In an October 2014 report from the Center for American Progress, “A Win-Win for Working Families and State Budgets: Pairing Medicaid Expansion and a $10.10 Minimum Wage,” authors found that higher minimum wages reduce enrollment in traditional Medicaid — the portion of the health insurance program in which states pay a substantial share.

Combined with an expansion in Medicaid eligibility, which was authorized via the Affordable Care Act and funded via federal dollars, a $10.10 minimum wage would reduce states’ pre-health reform Medicaid spending by more than $2.5 billion each year, the report found.

“The public health community may not feel like it has a set of tools to advocate for policies that raise wages,” said report co-author Rachel West, MPP, senior policy analyst with the Poverty to Prosperity Program at the Center for American Progress. “But with Medicaid expansion — this is one policy that directly addresses economic challenges and builds a bridge to health care access.”

For APHA member Rex Archer, MD, MPH, director of health for the Kansas City, Missouri, Health Department, achieving a "living wage has become one of the most important public health issues for us, period." According to Archer, 47 percent of annual deaths in Kansas City are attributable to six root social factors, including individual- and community-level poverty and income inequality. In fact, average life expectancy varies by more than 10 years across Kansas City ZIP codes, with those at the bottom rung characterized by much higher rates of poverty and much lower family incomes.

"We can't treat our way out of this problem," he said. "We can't ignore the stress of not having a living wage and what that's doing to our population."

To learn more about efforts to raise the U.S. minimum wage, visit www.raisetheminimumwage.com.

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The police and neighborhood safety

by James Q. Wilson and George L. Kelling

Broken Windows

In the mid-1970s The State of New Jersey announced a "Safe and Clean Neighborhoods Program," designed to improve the quality of community life in twenty-eight cities. As part of that program, the state provided money to help cities take police officers out of their patrol cars and assign them to walking beats. The governor and other state officials were enthusiastic about using foot patrol as a way of cutting crime, but many police chiefs were skeptical. Foot patrol, in their eyes, had been pretty much discredited. It reduced the mobility of the police, who thus had difficulty responding to citizen calls for service, and it weakened headquarters control over patrol officers.

Many police officers also disliked foot patrol, but for different reasons: it was hard work, it kept them outside on cold, rainy nights, and it reduced their chances for making a "good pinch." In some departments, assigning officers to foot patrol had been used as a form of punishment. And academic experts on policing doubted that foot patrol would have any impact on crime rates; it was, in the opinion of most, little more than a sop to public opinion. But since the state was paying for it, the local authorities were willing to go along.

Five years after the program started, the Police Foundation, in Washington, D.C., published an evaluation of the foot-patrol project. Based on its analysis of a carefully controlled experiment carried out chiefly in Newark, the foundation concluded, to the surprise of hardly anyone, that foot patrol had not reduced crime rates. But residents of the foot patrolled neighborhoods seemed to feel more secure than persons in other areas, tended to believe that crime had been reduced, and seemed to take fewer steps to protect themselves from crime (staying at home with the doors locked, for example). Moreover, citizens in the foot-patrol areas had a more favorable opinion of the police than did those living elsewhere. And officers walking beats had higher morale, greater job satisfaction, and a more favorable attitude toward citizens in their neighborhoods than did officers assigned to patrol cars.

These findings may be taken as evidence that the skeptics were right- foot patrol has no effect on crime; it merely fools the citizens into thinking that they are safer. But in our view, and in the view of the authors of the Police Foundation study (of whom Kelling was one), the citizens of Newark were not fooled at all. They knew what the foot-patrol officers were doing, they knew it was different from what motorized officers do, and they knew that having officers walk beats did in fact make their neighborhoods safer.

But how can a neighborhood be "safer" when the crime rate has not gone down—in fact, may have gone up? Finding the answer requires first that we understand what most often frightens people in public places. Many citizens, of course, are primarily frightened by crime, especially crime involving a sudden, violent attack by a stranger. This risk is very real, in Newark as in many large cities. But we tend to overlook another source of fear—the fear of being bothered by disorderly people. Not violent people, nor, necessarily, criminals, but disreputable or obstreperous or unpredictable people: panhandlers, drunks, addicts, rowdy teenagers, prostitutes, loiterers, the mentally disturbed.

What foot-patrol officers did was to elevate, to the extent they could, the level of public order in these neighborhoods. Though the neighborhoods were predominantly black and the foot patrolmen were mostly white, this "order-maintenance" function of the police was performed to the general satisfaction of both parties.

One of us (Kelling) spent many hours walking with Newark foot-patrol officers to see how they defined "order" and what they did to maintain it. One beat was typical: a busy but dilapidated area in the heart of Newark, with many abandoned buildings, marginal shops (several of which prominently displayed knives and straight-edged razors in their windows), one large department store, and, most important, a train station and several major bus stops. Though the area was run-down, its streets were filled with people, because it was a major transportation center. The good order of this area was important not only to those who lived and worked there but also to many others, who had to move through it on their way home, to supermarkets, or to factories.

The people on the street were primarily black; the officer who walked the street was white. The people were made up of "regulars" and "strangers." Regulars included both "decent folk" and some drunks and derelicts who were always there but who "knew their place." Strangers were, well, strangers, and viewed suspiciously, sometimes apprehensively. The officer—call him Kelly—knew who the regulars were, and they knew him. As he saw his job, he was to keep an eye on strangers, and make certain that the disreputable regulars observed some informal but widely understood rules. Drunks and addicts could sit on the stoops, but could not lie down. People could drink on side streets, but not at the main intersection. Bottles had to be in paper bags. Talking to, bothering, or begging from people waiting at the bus stop was strictly forbidden. If a dispute erupted between a businessman and a customer, the businessman was assumed to be right, especially if the customer was a stranger. If a stranger loitered, Kelly would ask him if he had any means of support and what his business was; if he gave unsatisfactory answers, he was sent on his way. Persons who broke the informal rules, especially those who bothered people waiting at bus stops, were arrested for vagrancy. Noisy teenagers were told to keep quiet.

These rules were defined and enforced in collaboration with the "regulars" on the street. Another neighborhood might have different rules, but these, everybody understood, were the rules for *this* neighborhood. If someone violated them, the regulars not only turned to Kelly for help but also ridiculed the violator. Sometimes what Kelly did could be described as "enforcing the law," but just as often it involved taking informal or extralegal steps to help protect what the neighborhood had decided was the appropriate level of public order. Some of the things he did probably would not withstand a legal challenge.

A determined skeptic might acknowledge that a skilled foot-patrol officer can maintain order but still insist that this sort of "order" has little to do with the real sources of community fear—that is, with violent crime. To a degree, that is true. But two things must be borne in mind. First, outside observers should not assume that they know how much of the anxiety now endemic in many big-city neighborhoods stems from a fear of "real" crime and how much from a sense that the street is disorderly, a source of distasteful, worrisome encounters. The people of Newark, to judge from their behavior and their remarks to interviewers, apparently assign a high value to public order, and feel relieved and reassured when the police help them maintain that order.

Second, at the community level, disorder and crime are usually inextricably linked, in a kind of developmental sequence. Social psychologists and police officers tend to agree that if a window in a building is broken and is left unrepaired, all the rest of the windows will soon be broken. This is as true in nice neighborhoods as in rundown ones. Window-breaking does not necessarily occur on a large scale because some areas are inhabited by determined window-breakers whereas others are populated by window-lovers; rather, one unrepaired broken window is a signal that no one cares, and so breaking more windows costs nothing. (It has always been fun.)

Philip Zimbardo, a Stanford psychologist, reported in 1969 on some experiments testing the broken-window theory. He arranged to have an automobile without license plates parked with its hood up on a street in the Bronx and a comparable automobile on a street in Palo Alto, California. The car in the Bronx was attacked by "vandals" within ten minutes of its "abandonment." The first to arrive were a family—father, mother, and young son—who removed the radiator and battery. Within twenty-four hours, virtually everything of value had been removed. Then random destruction began—windows were smashed, parts torn off, upholstery ripped. Children began to use the car as a playground. Most of the adult "vandals" were well-dressed, apparently clean-cut whites. The car in Palo Alto sat untouched for more than a week. Then Zimbardo smashed part of it with a sledgehammer. Soon, passersby were joining in. Within a few hours, the car had been turned upside down

and utterly destroyed. Again, the "vandals" appeared to be primarily respectable whites.

Untended property becomes fair game for people out for fun or plunder and even for people who ordinarily would not dream of doing such things and who probably consider themselves law-abiding. Because of the nature of community life in the Bronx—its anonymity, the frequency with which cars are abandoned and things are stolen or broken, the past experience of "no one caring"—vandalism begins much more quickly than it does in staid Palo Alto, where people have come to believe that private possessions are cared for, and that mischievous behavior is costly. But vandalism can occur anywhere once communal barriers—the sense of mutual regard and the obligations of civility—are lowered by actions that seem to signal that "no one cares."

We suggest that "untended" behavior also leads to the breakdown of community controls. A stable neighborhood of families who care for their homes, mind each other's children, and confidently frown on unwanted intruders can change, in a few years or even a few months, to an inhospitable and frightening jungle. A piece of property is abandoned, weeds grow up, a window is smashed. Adults stop scolding rowdy children; the children, emboldened, become more rowdy. Families move out, unattached adults move in. Teenagers gather in front of the corner store. The merchant asks them to move; they refuse. Fights occur. Litter accumulates. People start drinking in front of the grocery; in time, an inebriate slumps to the sidewalk and is allowed to sleep it off. Pedestrians are approached by panhandlers.

At this point it is not inevitable that serious crime will flourish or violent attacks on strangers will occur. But many residents will think that crime, especially violent crime, is on the rise, and they will modify their behavior accordingly. They will use the streets less often, and when on the streets will stay apart from their fellows, moving with averted eyes, silent lips, and hurried steps. "Don't get involved." For some residents, this growing atomization will matter little, because the neighborhood is not their "home" but "the place where they live." Their interests are elsewhere; they are cosmopolitans. But it will matter greatly to other people, whose lives derive meaning and satisfaction from local attachments rather than worldly involvement; for them, the neighborhood will cease to exist except for a few reliable friends whom they arrange to meet.

Such an area is vulnerable to criminal invasion. Though it is not inevitable, it is more likely that here, rather than in places where people are confident they can regulate public behavior by informal controls, drugs will change hands, prostitutes will solicit, and cars will be stripped. That the drunks will be robbed by boys who do it as a lark, and the prostitutes' customers will be robbed by men who do it purposefully and perhaps violently. That muggings will occur.

Among those who often find it difficult to move away from this are the elderly. Surveys of citizens suggest that the elderly are much less likely to be the victims of crime than younger persons, and some have inferred from this that the well-known fear of crime voiced by the elderly is an exaggeration: perhaps we ought not to design special programs to protect older persons; perhaps we should even try to talk them out of their mistaken fears. This argument misses the point. The prospect of a confrontation with an obstreperous teenager or a drunken panhandler can be as fear-inducing for defenseless persons as the prospect of meeting an actual robber; indeed, to a defenseless person, the two kinds of confrontation are often indistinguishable. Moreover, the lower rate at which the elderly are victimized is a measure of the steps they have already taken—chiefly, staying behind locked doors—to minimize the risks they face. Young men are more frequently attacked than older women, not because they are easier or more lucrative targets but because they are on the streets more.

Nor is the connection between disorderliness and fear made only by the elderly. Susan Estrich, of the Harvard Law School, has recently gathered together a number of surveys on the sources of public fear. One, done in Portland, Oregon, indicated that three fourths of the adults interviewed cross to the other side of a street when they see a gang of teenagers; another survey, in Baltimore, discovered that nearly half would cross the street to avoid even a single strange youth. When an interviewer asked people in a housing project where the most dangerous spot was, they mentioned a place where young persons gathered to drink and play music, despite the fact that not a single crime had occurred there. In Boston public housing projects, the greatest fear was expressed by persons living in the buildings where disorderliness and incivility, not crime, were the greatest. Knowing this helps one understand the significance of such otherwise harmless displays as subway graffiti. As Nathan Glazer has written, the proliferation of graffiti, even when not obscene, confronts the subway rider with the inescapable knowledge that the environment he must endure for an hour or more a day is uncontrolled and

uncontrollable, and that anyone can invade it to do whatever damage and mischief the mind suggests."

In response to fear people avoid one another, weakening controls. Sometimes they call the police. Patrol cars arrive, an occasional arrest occurs but crime continues and disorder is not abated. Citizens complain to the police chief, but he explains that his department is low on personnel and that the courts do not punish petty or first-time offenders. To the residents, the police who arrive in squad cars are either ineffective or uncaring: to the police, the residents are animals who deserve each other. The citizens may soon stop calling the police, because "they can't do anything."

The process we call urban decay has occurred for centuries in every city. But what is happening today is different in at least two important respects. First, in the period before, say, World War II, city dwellers- because of money costs, transportation difficulties, familial and church connections—could rarely move away from neighborhood problems. When movement did occur, it tended to be along public-transit routes. Now mobility has become exceptionally easy for all but the poorest or those who are blocked by racial prejudice. Earlier crime waves had a kind of built-in self-correcting mechanism: the determination of a neighborhood or community to reassert control over its turf. Areas in Chicago, New York, and Boston would experience crime and gang wars, and then normalcy would return, as the families for whom no alternative residences were possible reclaimed their authority over the streets.

Second, the police in this earlier period assisted in that reassertion of authority by acting, sometimes violently, on behalf of the community. Young toughs were roughed up, people were arrested "on suspicion" or for vagrancy, and prostitutes and petty thieves were routed. "Rights" were something enjoyed by decent folk, and perhaps also by the serious professional criminal, who avoided violence and could afford a lawyer.

This pattern of policing was not an aberration or the result of occasional excess. From the earliest days of the nation, the police function was seen primarily as that of a night watchman: to maintain order against the chief threats to order—fire, wild animals, and disreputable behavior. Solving crimes was viewed not as a police responsibility but as a private one. In the March, 1969, Atlantic, one of us (Wilson) wrote a brief account of how the police role had slowly changed from maintaining order to fighting crimes. The change began with the creation of private detectives (often ex-criminals), who worked on a contingency-fee basis for individuals who had suffered losses. In time, the detectives were absorbed in municipal agencies and paid a regular salary simultaneously, the responsibility for prosecuting thieves was shifted from the aggrieved private citizen to the professional prosecutor. This process was not complete in most places until the twentieth century.

In the 1960s, when urban riots were a major problem, social scientists began to explore carefully the order maintenance function of the police, and to suggest ways of improving it—not to make streets safer (its original function) but to reduce the incidence of mass violence. Order maintenance became, to a degree, coterminous with "community relations." But, as the crime wave that began in the early 1960s continued without abatement throughout the decade and into the 1970s, attention shifted to the role of the police as crime-fighters. Studies of police behavior ceased, by and large, to be accounts of the order-maintenance function and became, instead, efforts to propose and test ways whereby the police could solve more crimes, make more arrests, and gather better evidence. If these things could be done, social scientists assumed, citizens would be less fearful.

A great deal was accomplished during this transition, as both police chiefs and outside experts emphasized the crime-fighting function in their plans, in the allocation of resources, and in deployment of personnel. The police may well have become better crime-fighters as a result. And doubtless they remained aware of their responsibility for order. But the link between order-maintenance and crime-prevention, so obvious to earlier generations, was forgotten.

That link is similar to the process whereby one broken window becomes many. The citizen who fears the ill-smelling drunk, the rowdy teenager, or the importuning beggar is not merely expressing his distaste for unseemly behavior; he is also giving voice to a bit of folk wisdom that happens to be a correct generalization—namely, that serious street crime flourishes in areas in which disorderly behavior goes unchecked. The unchecked panhandler is, in effect, the first broken window. Muggers and robbers, whether opportunistic or professional, believe they reduce their chances of being caught or even identified if they operate on streets where potential victims are already intimidated by prevailing conditions. If the neighborhood cannot keep

a bothersome panhandler from annoying passersby, the thief may reason, it is even less likely to call the police to identify a potential mugger or to interfere if the mugging actually takes place.

Some police administrators concede that this process occurs, but argue that motorized-patrol officers can deal with it as effectively as foot patrol officers. We are not so sure. In theory, an officer in a squad car can observe as much as an officer on foot; in theory, the former can talk to as many people as the latter. But the reality of police-citizen encounters is powerfully altered by the automobile. An officer on foot cannot separate himself from the street people; if he is approached, only his uniform and his personality can help him manage whatever is about to happen. And he can never be certain what that will be—a request for directions, a plea for help, an angry denunciation, a teasing remark, a confused babble, a threatening gesture.

In a car, an officer is more likely to deal with street people by rolling down the window and looking at them. The door and the window exclude the approaching citizen; they are a barrier. Some officers take advantage of this barrier, perhaps unconsciously, by acting differently if in the car than they would on foot. We have seen this countless times. The police car pulls up to a corner where teenagers are gathered. The window is rolled down. The officer stares at the youths. They stare back. The officer says to one, "C'mere." He saunters over, conveying to his friends by his elaborately casual style the idea that he is not intimidated by authority. What's your name?" "Chuck." "Chuck who?" "Chuck Jones." "What'ya doing, Chuck?" "Nothin'." "Got a P.O. [parole officer]?" "Nah." "Sure?" "Yeah." "Stay out of trouble, Chuckie." Meanwhile, the other boys laugh and exchange comments among themselves, probably at the officer's expense. The officer stares harder. He cannot be certain what is being said, nor can he join in and, by displaying his own skill at street banter, prove that he cannot be "put down." In the process, the officer has learned almost nothing, and the boys have decided the officer is an alien force who can safely be disregarded, even mocked.

Our experience is that most citizens like to talk to a police officer. Such exchanges give them a sense of importance, provide them with the basis for gossip, and allow them to explain to the authorities what is worrying them (whereby they gain a modest but significant sense of having "done something" about the problem). You approach a person on foot more easily, and talk to him more readily, than you do a person in a car. Moreover, you can more easily retain some anonymity if you draw an officer aside for a private chat. Suppose you want to pass on a tip about who is stealing handbags, or who offered to sell you a stolen TV. In the inner city, the culprit, in all likelihood, lives nearby. To walk up to a marked patrol car and lean in the window is to convey a visible signal that you are a "fink."

The essence of the police role in maintaining order is to reinforce the informal control mechanisms of the community itself. The police cannot, without committing extraordinary resources, provide a substitute for that informal control. On the other hand, to reinforce those natural forces the police must accommodate them. And therein lies the problem.

Should police activity on the street be shaped, in important ways, by the standards of the neighborhood rather than by the rules of the state? Over the past two decades, the shift of police from order-maintenance to law enforcement has brought them increasingly under the influence of legal restrictions, provoked by media complaints and enforced by court decisions and departmental orders. As a consequence, the order maintenance functions of the police are now governed by rules developed to control police relations with suspected criminals. This is, we think, an entirely new development. For centuries, the role of the police as watchmen was judged primarily not in terms of its compliance with appropriate procedures but rather in terms of its attaining a desired objective. The objective was order, an inherently ambiguous term but a condition that people in a given community recognized when they saw it. The means were the same as those the community itself would employ, if its members were sufficiently determined, courageous, and authoritative. Detecting and apprehending criminals, by contrast, was a means to an end, not an end in itself; a judicial determination of guilt or innocence was the hoped-for result of the law-enforcement mode. From the first, the police were expected to follow rules defining that process, though states differed in how stringent the rules should be. The criminal-apprehension process was always understood to involve individual rights, the violation of which was unacceptable because it meant that the violating officer would be acting as a judge and jury—and that was not his job. Guilt or innocence was to be determined by universal standards under special procedures.

Ordinarily, no judge or jury ever sees the persons caught up in a dispute over the appropriate level of neighborhood order. That is true not only because most cases are handled informally on the street but also because no universal standards are available to settle arguments over disorder, and thus a judge may not be any wiser or more effective than a police officer. Until quite recently in many states, and even today in some places, the police made arrests on such charges as "suspicious person" or "vagrancy" or "public drunkenness"—charges with scarcely any legal meaning. These charges exist not because society wants judges to punish vagrants or drunks but because it wants an officer to have the legal tools to remove undesirable persons from a neighborhood when informal efforts to preserve order in the streets have failed.

Once we begin to think of all aspects of police work as involving the application of universal rules under special procedures, we inevitably ask what constitutes an "undesirable person" and why we should "criminalize" vagrancy or drunkenness. A strong and commendable desire to see that people are treated fairly makes us worry about allowing the police to rout persons who are undesirable by some vague or parochial standard. A growing and not-so-commendable utilitarianism leads us to doubt that any behavior that does not "hurt" another person should be made illegal. And thus many of us who watch over the police are reluctant to allow them to perform, in the only way they can, a function that every neighborhood desperately wants them to perform.

This wish to "decriminalize" disreputable behavior that "harms no one"- and thus remove the ultimate sanction the police can employ to maintain neighborhood order—is, we think, a mistake. Arresting a single drunk or a single vagrant who has harmed no identifiable person seems unjust, and in a sense it is. But failing to do anything about a score of drunks or a hundred vagrants may destroy an entire community. A particular rule that seems to make sense in the individual case makes no sense when it is made a universal rule and applied to all cases. It makes no sense because it fails to take into account the connection between one broken window left untended and a thousand broken windows. Of course, agencies other than the police could attend to the problems posed by drunks or the mentally ill, but in most communities especially where the "deinstitutionalization" movement has been strong—they do not.

The concern about equity is more serious. We might agree that certain behavior makes one person more undesirable than another but how do we ensure that age or skin color or national origin or harmless mannerisms will not also become the basis for distinguishing the undesirable from the desirable? How do we ensure, in short, that the police do not become the agents of neighborhood bigotry?

We can offer no wholly satisfactory answer to this important question. We are not confident that there is a satisfactory answer except to hope that by their selection, training, and supervision, the police will be inculcated with a clear sense of the outer limit of their discretionary authority. That limit, roughly, is this—the police exist to help regulate behavior, not to maintain the racial or ethnic purity of a neighborhood.

Consider the case of the Robert Taylor Homes in Chicago, one of the largest public-housing projects in the country. It is home for nearly 20,000 people, all black, and extends over ninety-two acres along South State Street. It was named after a distinguished black who had been, during the 1940s, chairman of the Chicago Housing Authority. Not long after it opened, in 1962, relations between project residents and the police deteriorated badly. The citizens felt that the police were insensitive or brutal; the police, in turn, complained of unprovoked attacks on them. Some Chicago officers tell of times when they were afraid to enter the Homes. Crime rates soared.

Today, the atmosphere has changed. Police-citizen relations have improved—apparently, both sides learned something from the earlier experience. Recently, a boy stole a purse and ran off. Several young persons who saw the theft voluntarily passed along to the police information on the identity and residence of the thief, and they did this publicly, with friends and neighbors looking on. But problems persist, chief among them the presence of youth gangs that terrorize residents and recruit members in the project. The people expect the police to "do something" about this, and the police are determined to do just that.

But do what? Though the police can obviously make arrests whenever a gang member breaks the law, a gang can form, recruit, and congregate without breaking the law. And only a tiny fraction of gang-related crimes can be solved by an arrest;

thus, if an arrest is the only recourse for the police, the residents' fears will go unassuaged. The police will soon feel helpless, and the residents will again believe that the police "do nothing." What the police in fact do is to chase known gang members out of the project. In the words of one officer, "We kick ass." Project residents both know and approve of this. The tacit police-citizen alliance in the project is reinforced by the police view that the cops and the gangs are the two rival sources of power in the area, and that the gangs are not going to win.

None of this is easily reconciled with any conception of due process or fair treatment. Since both residents and gang members are black, race is not a factor. But it could be. Suppose a white project confronted a black gang, or vice versa. We would be apprehensive about the police taking sides. But the substantive problem remains the same: how can the police strengthen the informal social-control mechanisms of natural communities in order to minimize fear in public places? Law enforcement, per se, is no answer: a gang can weaken or destroy a community by standing about in a menacing fashion and speaking rudely to passersby without breaking the law.

We have difficulty thinking about such matters, not simply because the ethical and legal issues are so complex but because we have become accustomed to thinking of the law in essentially individualistic terms. The law defines *my* rights, punishes *his* behavior and is applied by *that* officer because of *this* harm. We assume, in thinking this way, that what is good for the individual will be good for the community and what doesn't matter when it happens to one person won't matter if it happens to many. Ordinarily, those are plausible assumptions. But in cases where behavior that is tolerable to one person is intolerable to many others, the reactions of the others—fear, withdrawal, flight—may ultimately make matters worse for everyone, including the individual who first professed his indifference.

It may be their greater sensitivity to communal as opposed to individual needs that helps explain why the residents of small communities are more satisfied with their police than are the residents of similar neighborhoods in big cities. Elinor Ostrom and her co-workers at Indiana University compared the perception of police services in two poor, all-black Illinois towns—Phoenix and East Chicago Heights with those of three comparable all-black neighborhoods in Chicago. The level of criminal victimization and the quality of police-community relations appeared to be about the same in the towns and the Chicago neighborhoods. But the citizens living in their own villages were much more likely than those living in the Chicago neighborhoods to say that they do not stay at home for fear of crime, to agree that the local police have "the right to take any action necessary" to deal with problems, and to agree that the police "look out for the needs of the average citizen." It is possible that the residents and the police of the small towns saw themselves as engaged in a collaborative effort to maintain a certain standard of communal life, whereas those of the big city felt themselves to be simply requesting and supplying particular services on an individual basis.

If this is true, how should a wise police chief deploy his meager forces? The first answer is that nobody knows for certain, and the most prudent course of action would be to try further variations on the Newark experiment, to see more precisely what works in what kinds of neighborhoods. The second answer is also a hedge—many aspects of order maintenance in neighborhoods can probably best be handled in ways that involve the police minimally if at all. A busy bustling shopping center and a quiet, well-tended suburb may need almost no visible police presence. In both cases, the ratio of respectable to disreputable people is ordinarily so high as to make informal social control effective.

Even in areas that are in jeopardy from disorderly elements, citizen action without substantial police involvement may be sufficient. Meetings between teenagers who like to hang out on a particular corner and adults who want to use that corner might well lead to an amicable agreement on a set of rules about how many people can be allowed to congregate, where, and when.

Where no understanding is possible—or if possible, not observed—citizen patrols may be a sufficient response. There are two traditions of communal involvement in maintaining order: One, that of the "community watchmen," is as old as the first settlement of the New World. Until well into the nineteenth century, volunteer watchmen, not policemen, patrolled their communities to keep order. They did so, by and large, without taking the law into their own hands—without, that is, punishing persons or using force. Their presence deterred disorder or alerted the community to disorder that could not be

deterred. There are hundreds of such efforts today in communities all across the nation. Perhaps the best known is that of the Guardian Angels, a group of unarmed young persons in distinctive berets and T-shirts, who first came to public attention when they began patrolling the New York City subways but who claim now to have chapters in more than thirty American cities. Unfortunately, we have little information about the effect of these groups on crime. It is possible, however, that whatever their effect on crime, citizens find their presence reassuring, and that they thus contribute to maintaining a sense of order and civility.

The second tradition is that of the "vigilante." Rarely a feature of the settled communities of the East, it was primarily to be found in those frontier towns that grew up in advance of the reach of government. More than 350 vigilante groups are known to have existed; their distinctive feature was that their members did take the law into their own hands, by acting as judge, jury, and often executioner as well as policeman. Today, the vigilante movement is conspicuous by its rarity, despite the great fear expressed by citizens that the older cities are becoming "urban frontiers." But some community-watchmen groups have skirted the line, and others may cross it in the future. An ambiguous case, reported in The Wall Street Journal involved a citizens' patrol in the Silver Lake area of Belleville, New Jersey. A leader told the reporter, "We look for outsiders." If a few teenagers from outside the neighborhood enter it, "we ask them their business," he said. "If they say they're going down the street to see Mrs. Jones, fine, we let them pass. But then we follow them down the block to make sure they're really going to see Mrs. Jones."

Though citizens can do a great deal, the police are plainly the key to order maintenance. For one thing, many communities, such as the Robert Taylor Homes, cannot do the job by themselves. For another, no citizen in a neighborhood, even an organized one, is likely to feel the sense of responsibility that wearing a badge confers. Psychologists have done many studies on why people fail to go to the aid of persons being attacked or seeking help, and they have learned that the cause is not "apathy" or "selfishness" but the absence of some plausible grounds for feeling that one must personally accept responsibility. Ironically, avoiding responsibility is easier when a lot of people are standing about. On streets and in public places, where order is so important, many people are likely to be "around," a fact that reduces the chance of any one person acting as the agent of the community. The police officer's uniform singles him out as a person who must accept responsibility if asked. In addition, officers, more easily than their fellow citizens, can be expected to distinguish between what is necessary to protect the safety of the street and what merely protects its ethnic purity.

But the police forces of America are losing, not gaining, members. Some cities have suffered substantial cuts in the number of officers available for duty. These cuts are not likely to be reversed in the near future. Therefore, each department must assign its existing officers with great care. Some neighborhoods are so demoralized and crime-ridden as to make foot patrol useless; the best the police can do with limited resources is respond to the enormous number of calls for service. Other neighborhoods are so stable and serene as to make foot patrol unnecessary. The key is to identify neighborhoods at the tipping point—where the public order is deteriorating but not unreclaimable, where the streets are used frequently but by apprehensive people, where a window is likely to be broken at any time, and must quickly be fixed if all are not to be shattered.

Most police departments do not have ways of systematically identifying such areas and assigning officers to them. Officers are assigned on the basis of crime rates (meaning that marginally threatened areas are often stripped so that police can investigate crimes in areas where the situation is hopeless) or on the basis of calls for service (despite the fact that most citizens do not call the police when they are merely frightened or annoyed). To allocate patrol wisely, the department must look at the neighborhoods and decide, from first-hand evidence, where an additional officer will make the greatest difference in promoting a sense of safety.

One way to stretch limited police resources is being tried in some public housing projects. Tenant organizations hire off-duty police officers for patrol work in their buildings. The costs are not high (at least not per resident), the officer likes the additional income, and the residents feel safer. Such arrangements are probably more successful than hiring private watchmen, and the Newark experiment helps us understand why. A private security guard may deter crime or misconduct by

his presence, and he may go to the aid of persons needing help, but he may well not intervene—that is, control or drive away—someone challenging community standards. Being a sworn officer—a "real cop"—seems to give one the confidence, the sense of duty, and the aura of authority necessary to perform this difficult task.

Patrol officers might be encouraged to go to and from duty stations on public transportation and, while on the bus or subway car, enforce rules about smoking, drinking, disorderly conduct, and the like. The enforcement need involve nothing more than ejecting the offender (the offense, after all, is not one with which a booking officer or a judge wishes to be bothered). Perhaps the random but relentless maintenance of standards on buses would lead to conditions on buses that approximate the level of civility we now take for granted on airplanes.

But the most important requirement is to think that to maintain order in precarious situations is a vital job. The police know this is one of their functions, and they also believe, correctly, that it cannot be done to the exclusion of criminal investigation and responding to calls. We may have encouraged them to suppose, however, on the basis of our oft-repeated concerns about serious, violent crime, that they will be judged exclusively on their capacity as crime-fighters. To the extent that this is the case, police administrators will continue to concentrate police personnel in the highest-crime areas (though not necessarily in the areas most vulnerable to criminal invasion), emphasize their training in the law and criminal apprehension (and not their training in managing street life), and join too quickly in campaigns to decriminalize "harmless" behavior (though public drunkenness, street prostitution, and pornographic displays can destroy a community more quickly than any team of professional burglars).

Above all, we must return to our long-abandoned view that the police ought to protect communities as well as individuals. Our crime statistics and victimization surveys measure individual losses, but they do not measure communal losses. Just as physicians now recognize the importance of fostering health rather than simply treating illness, so the police—and the rest of us—ought to recognize the importance of maintaining, intact, communities without broken windows.

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ENVIRONMENTAL HEALTH

Understanding Concentrated Animal Feeding Operations and Their Impact on Communities

NALBOH
National Association of Local Boards of Health

Understanding Concentrated Animal Feeding Operations and Their Impact on Communities

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Foreword

The National Association of Local Boards of Health (NALBOH) is pleased to provide *Understanding Concentrated Animal Feeding Operations and Their Impact on Communities* to assist local boards of health who have concerns about concentrated animal feeding operations (CAFOs) or large industrial animal farms in their communities. The Environmental Health Services Branch of the Centers for Disease Control and Prevention (CDC), National Center for Environmental Health (NCEH) encouraged the development of this product and provided technical oversight and financial support. This publication was supported by Cooperative Agreement Number 5U38HM000512. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC.

The mission of NALBOH is to strengthen boards of health, enabling them to promote and protect the health of their communities, through education, technical assistance, and advocacy. Boards of health are responsible for fulfilling three public health core functions: assessment, policy development, and assurance. For a health agency, this includes overseeing and ensuring that there are sufficient resources, effective policies and procedures, partnerships with other organizations and agencies, and regular evaluation of an agency's services.

NALBOH is confident that *Understanding Concentrated Animal Feeding Operations and Their Impact on Communities* will help local board of health members understand their role in developing ways to mitigate potential problems associated with CAFOs. We trust that the information provided in this guide will enable board of health members to develop and sustain monitoring programs, investigate developing policy related to CAFOs, and create partnerships with other local and state agencies and officials to improve the health and well-being of communities everywhere.

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Introduction

Livestock farming has undergone a significant transformation in the past few decades. Production has shifted from smaller, family-owned farms to large farms that often have corporate contracts. Most meat and dairy products now are produced on large farms with single species buildings or open-air pens (MacDonald & McBride, 2009). Modern farms have also become much more efficient. Since 1960, milk production has doubled, meat production has tripled, and egg production has quadrupled (Pew Commission on Industrial Animal Farm Production, 2009). Improvements to animal breeding, mechanical innovations, and the introduction of specially formulated feeds and animal pharmaceuticals have all increased the efficiency and productivity of animal agriculture. It also takes much less time to raise a fully grown animal. For example, in 1920, a chicken took approximately 16 weeks to reach 2.2 lbs., whereas now they can reach 5 lbs. in 7 weeks (Pew, 2009).

New technologies have allowed farmers to reduce costs, which mean bigger profits on less land and capital. The current agricultural system rewards larger farms with lower costs, which results in greater profit and more incentive to increase farm size.

AFO vs. CAFO

A CAFO is a specific type of large-scale industrial agricultural facility that raises animals, usually at high-density, for the consumption of meat, eggs, or milk. To be considered a CAFO, a farm must first be categorized as an animal feeding operation (AFO). An AFO is a lot or facility where animals are kept confined and fed or maintained for 45 or more days per year, and crops, vegetation, or forage growth are not sustained over a normal growing period (Environmental Protection Agency [EPA], 2009). CAFOs are classified by the type and number of animals they contain, and the way they discharge waste into the water supply. CAFOs are AFOs that contain at least a certain number of animals, or have a number of animals that fall within a range and have waste materials that come into contact with the water supply. This contact can either be through a pipe that carries manure or wastewater to surface water, or by animal contact with surface water that runs through their confined area. (See Appendix A)

History

AFOs were first identified as potential pollutants in the 1972 Clean Water Act. Section 502 identified "feedlots" as "point sources" for pollution along with other industries, such as fertilizer manufacturing. Consequently, a permit program entitled the National Pollutant Discharge Elimination System (NPDES) was created which set effluent limitation guidelines and standards (ELGs) for CAFOs. CAFOs have since been regulated by NPDES or a state equivalent since the mid-1970s. The definitions of what was considered an AFO or CAFO were created by the EPA for the NPDES process in 1976. These regulations remained in effect for more than 25 years, but increases and changes to farm size and production methods required an update to the permit system.

The regulations guiding CAFO permits and operations were revised in 2003. New inclusions in the 2003 regulations were that all CAFOs had to apply for a NPDES permit even if they only discharged in the event of a large storm. Large poultry operations were included in the regulations, regardless of their waste disposal system, and all CAFOs that held a NPDES permit were required to develop and implement a nutrient management plan. These plans had CAFOs identify ways to treat or process waste in a way that maintained nutrient levels at the appropriate amount.

The 2003 CAFO rule was subsequently challenged in court. A Second Circuit Court of Appeals decision required alteration to the CAFO permitting system. In *Water Keeper et al. vs. the EPA*, the court directed the EPA to remove the requirement for all CAFOs to apply for NPDES. Instead, the court required that nutrient management plans be submitted with the permit application, reviewed by officials and the public, and the terms of the plan be incorporated into the permit.

As a result of this court decision, the CAFO rule was again updated. The current final CAFO rule, which was revised in 2008, requires that only CAFOs which discharge or propose to discharge waste apply for permits. The EPA has also provided clarification in the discussion surrounding the rule on how CAFOs should assess whether they discharge or propose to discharge. There is also the opportunity to receive a no discharge certification for CAFOs that do not discharge or propose to discharge. This certification demonstrates that the CAFO is not required to acquire a permit. And while CAFOs were required to create nutrient management plans under the 2003 rule, these plans were now included with permit applications, and had a built-in time period for public review and comment.

Benefits of CAFOs

When properly managed, located, and monitored, CAFOs can provide a low-cost source of meat, milk, and eggs, due to efficient feeding and housing of animals, increased facility size, and animal specialization. When CAFOs are proposed in a local area, it is usually argued that they will enhance the local economy and increase employment. The effects of using local materials, feed, and livestock are argued to ripple throughout the economy, and increased tax expenditures will lead to increase funds for schools and infrastructure.

Environmental Health Effects

The most pressing public health issue associated with CAFOs stems from the amount of manure they produce. CAFO manure contains a variety of potential contaminants. It can contain plant nutrients such as nitrogen and phosphorus, pathogens such as *E. coli*, growth hormones, antibiotics, chemicals used as additives to the manure or to clean equipment, animal blood, silage leachate from corn feed, or copper sulfate used in footbaths for cows.

Depending on the type and number of animals in the farm, manure production can range between 2,800 tons and 1.6 million tons a year (Government Accountability Office [GAO], 2008). Large farms can produce more waste than some U.S. cities—a feeding operation with 800,000 pigs could produce over 1.6 million tons of waste a year. That amount is one and a half times more than the annual sanitary waste produced by the city of Philadelphia, Pennsylvania (GAO, 2008). Annually, it is estimated that livestock animals in the U.S. produce each year somewhere between 3 and 20 times more manure than people in the U.S. produce, or as much as 1.2–1.37 billion tons of waste (EPA, 2005). Though sewage treatment plants are required for human waste, no such treatment facility exists for livestock waste.

While manure is valuable to the farming industry, in quantities this large it becomes problematic. Many farms no longer grow their own feed, so they cannot use all the manure they produce as fertilizer. CAFOs must find a way to manage the amount of manure produced by their animals. Ground application of untreated manure is one of the most common disposal methods due to its low cost. It has limitations, however, such as the inability to apply manure while the ground is frozen. There are also limits as to how many nutrients from manure a land area can handle. Over application of livestock wastes can overload

soil with macronutrients like nitrogen and phosphorous and micronutrients that have been added to animal feed like heavy metals (Burkholder et al., 2007). Other manure management strategies include pumping liquefied manure onto spray fields, trucking it off-site, or storing it until it can be used or treated. Manure can be stored in deep pits under the buildings that hold animals, in clay or concrete pits, treatment lagoons, or holding ponds.

Animal feeding operations are developing in close proximity in some states, and fields where manure is applied have become clustered. When manure is applied too frequently or in too large a quantity to an area, nutrients overwhelm the absorptive capacity of the soil, and either run off or are leached into the groundwater. Storage units can break or become faulty, or rainwater can cause holding lagoons to overflow. While CAFOs are required to have permits that limit the levels of manure discharge, handling the large amounts of manure inevitably causes accidental releases which have the ability to potentially impact humans.

The increased clustering and growth of CAFOs has led to growing environmental problems in many communities. The excess production of manure and problems with storage or manure management can affect ground and surface water quality. Emissions from degrading manure and livestock digestive processes produce air pollutants that often affect ambient air quality in communities surrounding CAFOs. CAFOs can also be the source of greenhouse gases, which contribute to global climate change.

All of the environmental problems with CAFOs have direct impact on human health and welfare for communities that contain large industrial farms. As the following sections demonstrate, human health can suffer because of contaminated air and degraded water quality, or from diseases spread from farms. Quality of life can suffer because of odors or insect vectors surrounding farms, and property values can drop, affecting the financial stability of a community. One study found that 82.8% of those living near and 89.5% of those living far from CAFOs believed that their property values decreased, and 92.2% of those living near and 78.9% of those living far from CAFOs believed the odor from manure was a problem. The study found that real estate values had not dropped and odor infestations were not validated by local governmental staff in the areas. However, the concerns show that CAFOs remain contentious in communities (Schmalzried and Fallon, 2007). CAFOs are an excellent example of how environmental problems can directly impact human and community well-being.

Groundwater

Groundwater can be contaminated by CAFOs through runoff from land application of manure, leaching from manure that has been improperly spread on land, or through leaks or breaks in storage or containment units. The EPA's 2000 National Water Quality Inventory found that 29 states specifically identified animal feeding operations, not just concentrated animal feeding operations, as contributing to water quality impairment (Congressional Research Service, 2008). A study of private water wells in Idaho detected levels of veterinary antibiotics, as well as elevated levels of nitrates (Batt, Snow, & Alga, 2006). Groundwater is a major source of drinking water in the United States. The EPA estimates that 53% of the population relies on groundwater for drinking water, often at much higher rates in rural areas (EPA, 2004). Unlike surface water, groundwater contamination sources are more difficult to monitor. The extent and source of contamination are often harder to pinpoint in groundwater than surface water contamination. Regular testing of household water wells for total and fecal coliform bacteria is a crucial element in monitoring groundwater quality, and can be the first step in discovering contamination issues related to CAFO discharge. Groundwater contamination can also affect surface water (Spellman &

Whiting, 2007). Contaminated groundwater can move laterally and eventually enter surface water, such as rivers or streams.

When groundwater is contaminated by pathogenic organisms, a serious threat to drinking water can occur. Pathogens survive longer in groundwater than surface water due to lower temperatures and protection from the sun. Even if the contamination appears to be a single episode, viruses could become attached to sediment near groundwater and continue to leach slowly into groundwater. One pollution event by a CAFO could become a lingering source of viral contamination for groundwater (EPA, 2005).

Groundwater can still be at risk for contamination after a CAFO has closed and its lagoons are empty. When given increased air exposure, ammonia in soil transforms into nitrates. Nitrates are highly mobile in soil, and will reach groundwater quicker than ammonia. It can be dangerous to ignore contaminated soil. The amount of pollution found in groundwater after contamination depends on the proximity of the aquifer to the CAFO, the size of the CAFO, whether storage units or pits are lined, the type of subsoil, and the depth of the groundwater.

If a CAFO has contaminated a water system, community members should be concerned about nitrates and nitrate poisoning. Elevated nitrates in drinking water can be especially harmful to infants, leading to blue baby syndrome and possible death. Nitrates oxidize iron in hemoglobin in red blood cells to methemoglobin. Most people convert methemoglobin back to hemoglobin fairly quickly, but infants do not convert back as fast. This hinders the ability of the infant's blood to carry oxygen, leading to a blue or purple appearance in affected infants. However, infants are not the only ones who can be affected by excess nitrates in water. Low blood oxygen in adults can lead to birth defects, miscarriages, and poor general health. Nitrates have also been speculated to be linked to higher rates of stomach and esophageal cancer (Bowman, Mueller, & Smith, 2000). In general, private water wells are at higher risk of nitrate contamination than public water supplies.

Surface Water

The agriculture sector, including CAFOs, is the leading contributor of pollutants to lakes, rivers, and reservoirs. It has been found that states with high concentrations of CAFOs experience on average 20 to 30 serious water quality problems per year as a result of manure management problems (EPA, 2001). This pollution can be caused by surface discharges or other types of discharges. Surface discharges can be caused by heavy storms or floods that cause storage lagoons to overfill, running off into nearby bodies of water. Pollutants can also travel over land or through surface drainage systems to nearby bodies of water, be discharged through manmade ditches or flushing systems found in CAFOs, or come into contact with surface water that passes directly through the farming area. Soil erosion can contribute to water pollution, as some pollutants can bond to eroded soil and travel to watersheds (EPA, 2001). Other types of discharges occur when pollutants travel to surface water through other mediums, such as groundwater or air.

Contamination in surface water can cause nitrates and other nutrients to build up. Ammonia is often found in surface waters surrounding CAFOs. Ammonia causes oxygen depletion from water, which itself can kill aquatic life. Ammonia also converts into nitrates, which can cause nutrient overloads in surface waters (EPA, 1998). Excessive nutrient concentrations, such as nitrogen or phosphorus, can lead to eutrophication and make water inhabitable to fish or indigenous aquatic life (Sierra Club Michigan Chapter, n.d.). Nutrient over-enrichment causes algal blooms, or a rapid increase of algae growth in an aquatic environment (Science Daily, n.d.). Algal blooms can cause a spiral of environmental problems to an aquatic system. Large groups of algae can block sunlight from underwater plant life, which are

habitats for much aquatic life. When algae growth increases in surface water, it can also dominate other resources and cause plants to die. The dead plants provide fuel for bacteria to grow and increased bacteria use more of the water's oxygen supply. Oxygen depletion once again causes indigenous aquatic life to die. Some algal blooms can contain toxic algae and other microorganisms, including *Pfiesteria*, which has caused large fish kills in North Carolina, Maryland, and the Chesapeake Bay area (Spellman & Whiting, 2007). Eutrophication can cause serious problems in surface waters and disrupt the ecological balance.

Water tests have also uncovered hormones in surface waters around CAFOs (Burkholder et al., 2007). Studies show that these hormones alter the reproductive habits of aquatic species living in these waters, including a significant decrease in the fertility of female fish. CAFO runoff can also lead to the presence of fecal bacteria or pathogens in surface water. One study showed that protozoa such as *Cryptosporidium parvum* and *Giardia* were found in over 80% of surface water sites tested (Spellman & Whiting, 2007). Fecal bacteria pollution in water from manure land application is also responsible for many beach closures and shellfish restrictions.

Air Quality

In addition to polluting ground and surface water, CAFOs also contribute to the reduction of air quality in areas surrounding industrial farms. Animal feeding operations produce several types of air emissions, including gaseous and particulate substances, and CAFOs produce even more emissions due to their size. The primary cause of gaseous emissions is the decomposition of animal manure, while particulate substances are caused by the movement of animals. The type, amount, and rate of emissions created depends on what state the manure is in (solid, slurry, or liquid), and how it is treated or contained after it is excreted. Sometimes manure is "stabilized" in anaerobic lagoons, which reduces volatile solids and controls odor before land application.

The most typical pollutants found in air surrounding CAFOs are ammonia, hydrogen sulfide, methane, and particulate matter, all of which have varying human health risks. Table 1 on page 6 provides information on these pollutants.

Most manure produced by CAFOs is applied to land eventually and this land application can result in air emissions (Merkel, 2002). The primary cause of emission through land application is the volatilization of ammonia when the manure is applied to land. However, nitrous oxide is also created when nitrogen that has been applied to land undergoes nitrification and denitrification. Emissions caused by land application occur in two phases: one immediately following land application and one that occurs later and over a longer period as substances in the soil break down. Land application is not the only way CAFOs can emit harmful air emissions—ventilation systems in CAFO buildings can also release dangerous contaminants. A study by Iowa State University, which was a result of a lawsuit settlement between the Sierra Club and Tyson Chicken, found that two chicken houses in western Kentucky emitted over 10 tons of ammonia in the year they were monitored (Burns et al., 2007).

Most studies that examine the health effects of CAFO air emissions focus on farm workers, however some have studied the effect on area schools and children. While all community members are at risk from lowered air quality, children take in 20-50% more air than adults, making them more susceptible to lung disease and health effects (Kleinman, 2000). Researchers in North Carolina found that the closer children live to a CAFO, the greater the risk of asthma symptoms (Barrett, 2006). Of the 226 schools that were included in the study, 26% stated that there were noticeable odors from CAFOs outdoors, while 8% stated

Table 1 Typical pollutants found in air surrounding CAFOs.

CAFO Emissions	Source	Traits	Health Risks
Ammonia	Formed when microbes decompose undigested organic nitrogen compounds in manure	Colorless, sharp pungent odor	Respiratory irritant, chemical burns to the respiratory tract, skin, and eyes, severe cough, chronic lung disease
Hydrogen Sulfide	Anaerobic bacterial decomposition of protein and other sulfur containing organic matter	Odor of rotten eggs	Inflammation of the moist membranes of eye and respiratory tract, olfactory neuron loss, death
Methane	Microbial degradation of organic matter under anaerobic conditions	Colorless, odorless, highly flammable	No health risks. Is a greenhouse gas and contributes to climate change.
Particulate Matter	Feed, bedding materials, dry manure, unpaved soil surfaces, animal dander, poultry feathers	Comprised of fecal matter, feed materials, pollen, bacteria, fungi, skin cells, silicates	Chronic bronchitis, chronic respiratory symptoms, declines in lung function, organic dust toxic syndrome

they experience odors from CAFOs inside the schools. Schools that were closer to CAFOs were often attended by students of lower socioeconomic status (Mirabelli, Wing, Marshall, & Wilcosky, 2006).

There is consistent evidence suggesting that factory farms increase asthma in neighboring communities, as indicated by children having higher rates of asthma (Sigurdarson & Kline, 2006; Mirabelli et al., 2006). CAFOs emit particulate matter and suspended dust, which is linked to asthma and bronchitis. Smaller particles can actually be absorbed by the body and can have systemic effects, including cardiac arrest. If people are exposed to particulate matter over a long time, it can lead to decreased lung function (Michigan Department of Environmental Quality [MDEQ] Toxics Steering Group [TSG], 2006). CAFOs also emit ammonia, which is rapidly absorbed by the upper airways in the body. This can cause severe coughing and mucous build-up, and if severe enough, scarring of the airways. Particulate matter may lead to more severe health consequences for those exposed by their occupation. Farm workers can develop acute and chronic bronchitis, chronic obstructive airways disease, and interstitial lung disease. Repeated exposure to CAFO emissions can increase the likelihood of respiratory diseases. Occupational asthma, acute and chronic bronchitis, and organic dust toxic syndrome can be as high as 30% in factory farm workers

(Horrigan, Lawrence, & Walker, 2002). Other health effects of CAFO air emissions can be headaches, respiratory problems, eye irritation, nausea, weakness, and chest tightness.

There is evidence that CAFOs affect the ambient air quality of a community. There are three laws that potentially govern CAFO air emissions—the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as the Superfund Act), the Emergency Planning & Community Right to Know Act (EPCRA), and the Clean Air Act (CAA). However, the EPA passed a rule that exempts all CAFOs from reporting emissions under CERCLA. Only CAFOs that are classified as large are required to report any emission event of 100 pounds of ammonia or hydrogen sulfide or more during a 24-hour period locally or to the state under EPCRA (Michigan State University Extension, n.d.). The EPA has also instituted a voluntary Air Quality Compliance Agreement in which they will monitor some CAFO air emissions, and will not sue offenders but instead charge a small civil penalty. These changes have attracted criticism from environmental and community leaders who state that the EPA has yielded to influence from the livestock industry. The changes also leave ambiguity as to whether emission standards and air quality near CAFOs are being monitored.

Greenhouse Gas and Climate Change

Aside from the possibility of lowering air quality in the areas around them, CAFOs also emit greenhouse gases, and therefore contribute to climate change. Globally, livestock operations are responsible for approximately 18% of greenhouse gas production and over 7% of U.S. greenhouse gas emissions (Massey & Ulmer, 2008). While carbon dioxide is often considered the primary greenhouse gas of concern, manure emits methane and nitrous oxide which are 23 and 300 times more potent as greenhouse gases than carbon dioxide, respectively. The EPA attributes manure management as the fourth leading source of nitrous oxide emissions and the fifth leading source of methane emissions (EPA, 2009).

The type of manure storage system used contributes to the production of greenhouse gases. Many CAFOs store their excess manure in lagoons or pits, where they break down anaerobically (in the absence of oxygen), which exacerbates methane production. Manure that is applied to land or soil has more exposure to oxygen and therefore does not produce as much methane. Ruminant livestock, such as cows, sheep, or goats, also contribute to methane production through their digestive processes. These livestock have a special stomach called a rumen that allows them to digest tough grains or plants that would otherwise be unusable. It is during this process, called enteric fermentation, that methane is produced. The U.S. cattle industry is one of the primary methane producers. Livestock production and meat and dairy consumption has been increasing in the United States, so it can only be assumed that these greenhouse gas emissions will also rise and continue to contribute to climate change.

Odors

One of the most common complaints associated with CAFOs are the odors produced. The odors that CAFOs emit are a complex mixture of ammonia, hydrogen sulfide, and carbon dioxide, as well as volatile and semi-volatile organic compounds (Heederik et al., 2007). These odors are worse than smells formerly associated with smaller livestock farms. The anaerobic reaction that occurs when manure is stored in pits or lagoons for long amounts of time is the primary cause of the smells. Odors from waste are carried away from farm areas on dust and other air particles. Depending on things like weather conditions and farming techniques, CAFO odors can be smelled from as much as 5 or 6 miles away, although 3 miles is a more common distance (State Environmental Resource Center, 2004).

Because CAFOs typically produce malodors, many communities want to monitor emissions and odors. Quantifying odor from industrial farming can be challenging because it is a mixture of free and particle-bound compounds, which can make it hard to identify what specifically is causing the odor. Collecting data on specific gases, such as hydrogen sulfide, can be used as a proxy for odor levels.

CAFO odors can cause severe lifestyle changes for individuals in the surrounding communities and can alter many daily activities. When odors are severe, people may choose to keep their windows closed, even in high temperatures when there is no air conditioning. People also may choose to not let their children play outside and may even keep them home from school. Mental health deterioration and an increased sensitization to smells can also result from living in close proximity to odors from CAFOs. Odor can cause negative mood states, such as tension, depression, or anger, and possibly neurophysciatric abnormalities, such as impaired balance or memory. People who live close to factory farms can develop CAFO-related post traumatic stress disorder, including anxiety about declining quality of life (Donham et al., 2007).

Ten states use direct regulations to control odors emitted by CAFOs. They prohibit odor emissions greater than a set standard. States with direct regulations use scentometers, which measure how many times an odor has to be doused with clean air before the smell is undetectable. An additional 34 states have indirect methods to reduce CAFO odors. These include: setbacks, which specify how far CAFO structures have to be from other buildings; permits, which are the most typical way of regulating CAFOs; public comment or involvement periods; and operator or manure placement training.

Insect Vectors

CAFOs and their waste can be breeding grounds for insect vectors. Houseflies, stable flies, and mosquitoes are the most common insects associated with CAFOs. Houseflies breed in manure, while stable and other flies breed in decaying organic material, such as livestock bedding. Mosquitoes breed in standing water, and water on the edges of manure lagoons can cause mosquito infestations to rise. Flies can change from eggs to adults in only 10 days, which means that substances in which flies breed need to be cleaned up regularly.

Flies are typically considered only nuisances, although insects can agitate livestock and decrease animal health. The John Hopkins Bloomberg School of Public Health found evidence that houseflies near poultry operations may contribute to the dispersion of drug-resistant bacteria (Center for Livable Future, 2009). Since flies are attracted to and eat human food, there is a potential for spreading bacteria or pathogens to humans, including microbes that can cause dysentery and diarrhea (Bowman et al., 2000). Mosquitoes spread zoonotic diseases, such as West Nile virus, St. Louis encephalitis, and equine encephalitis.

Residences closest to the feeding operations experience a much higher fly population than average homes. To lower the rates of insects and any accompanying disease threats, standing water should we cleaned or emptied weekly, and manure or decaying organic matter should be removed twice weekly (Purdue Extension, 2007). For more specific insect vector information, please refer to NALBOH's vector guide (*Vector Control Strategies for Local Boards of Health*).

Pathogens

Pathogens are parasites, bacterium, or viruses that are capable of causing disease or infection in animals or humans. The major source of pathogens from CAFOs is in animal manure. There are over 150 pathogens in manure that could impact human health. Many of these pathogens are concerning because

they can cause severe diarrhea. Healthy people who are exposed to pathogens can generally recover quickly, but those who have weakened immune systems are at increased risk for severe illness or death. Those at higher risk include infants or young children, pregnant women, the elderly, and those who are immunosuppressed, HIV positive, or have had chemotherapy. This risk group now roughly compromises 20% of the U.S. population.

Table 2 Select pathogens found in animal manure.

Pathogen	Disease	Symptoms
Bacillus anthracis	Anthrax	Skin sores, headache, fever, chills, nausea, vomiting
Escherichia coli	Colibacilosis, Coliform mastitis-metris	Diarrhea, abdominal gas
Leptospira pomona	Leptospirosis	Abdominal pain, muscle pain, vomiting, fever
Listeria monocytogenes	Listerosis	Fever, fatigue, nausea, vomiting, diarrhea
Salmonella species	Salmonellosis	Abdominal pain, diarrhea, nausea, chills, fever, headache
Clostirdum tetani	Tetanus	Violent muscle spasms, lockjaw, difficulty breathing
Histoplasma capsulatum	Histoplasmosis	Fever, chills, muscle ache, cough rash, joint pain and stiffness
Microsporum and *Trichophyton*	Ringworm	Itching, rash
Giardia lamblia	Giardiasis	Diarrhea, abdominal pain, abdominal gas, nausea, vomiting, fever
Cryptosporidium species	Cryptosporidosis	Diarrhea, dehydration, weakness, abdominal cramping

Sources of infection from pathogens include fecal-oral transmission, inhalation, drinking water, or incidental water consumption during recreational water activities. The potential for transfer of pathogens among animals is higher in confinement, as there are more animals in a smaller amount of space. Healthy or asymptomatic animals may carry microbial agents that can infect humans, who can then spread that infection throughout a community, before the infection is discovered among animals.

When water is contaminated by pathogens, it can lead to widespread outbreaks of illness. Salmonellosis, cryptosporidiosis, and giardiasis can cause nausea, vomiting, fever, diarrhea, muscle pain, and death, among other symptoms. *E.coli* is another serious pathogen, and can be life-threatening for the young, elderly, and immunocompromised. It can cause bloody diarrhea and kidney failure. Since many CAFO use sub-therapeutic antibiotics with their animals, there is also the possibility that disease-resistant bacteria can emerge in areas surrounding CAFOs. Bacteria that cannot be treated by antibiotics can have very serious effects on human health, potentially even causing death (Pew Charitable Trusts, n.d.).

There is also the possibility of novel (or new) viruses developing. These viruses generate through mutation or recombinant events that can result in more efficient human-to-human transmission. There has been some speculation that the novel H1N1 virus outbreak in 2009 originated in swine CAFOs in Mexico. However, that claim has never been substantiated. CAFOs are not required to test for novel viruses, since they are not on the list of mandatory reportable illness to the World Organization for Animal Health.

Antibiotics

Antibiotics are commonly administered in animal feed in the United States. Antibiotics are included at low levels in animal feed to reduce the chance for infection and to eliminate the need for animals to expend energy fighting off bacteria, with the assumption that saved energy will be translated into growth. The main purposes of using non-therapeutic doses of antimicrobials in animal feed is so that animals will grow faster, produce more meat, and avoid illnesses. Supporters of antibiotic use say that it allows animals to digest their food more efficiently, get the most benefit from it, and grow into strong and healthy animals.

The trend of using antibiotics in feed has increased with the greater numbers of animals held in confinement. The more animals that are kept in close quarters, the more likely it is that infection or bacteria can spread among the animals. Seventy percent of all antibiotics and related drugs used in the U.S. each year are given to beef cattle, hogs, and chickens as feed additives. Nearly half of the antibiotics used are nearly identical to ones given to humans (Kaufman, 2000).

There is strong evidence that the use of antibiotics in animal feed is contributing to an increase in antibiotic-resistant microbes and causing antibiotics to be less effective for humans (Kaufman, 2000). Resistant strains of pathogenic bacteria in animals, which can be transferred to humans thought the handling or eating of meat, have increased recently. This is a serious threat to human health because fewer options exist to help people overcome disease when infected with antibiotic-resistant pathogens. The antibiotics often are not fully metabolized by animals, and can be present in their manure. If manure pollutes a water supply, antibiotics can also leech into groundwater or surface water.

Because of this concern for human health, there is a growing movement to eliminate the non-therapeutic use of antibiotics with animals. In 2001, the American Medical Association approved a resolution to ban all low-level use of antibiotics. The USDA has developed guidelines to limit low-level use, and some major meat buyers (such as McDonald's) have stopped using meat that was given antibiotics that are also used for humans. The World Health Organization is also widely opposed to the use of antibiotics, calling for a cease of their low-level use in 2003. Some U.S. legislators are seeking to ban the routine use of antibiotics with livestock, and there has been legislation proposed to solidify a ban. The Preservation of Antibiotics for Medical Treatment Act (PAMTA), which was introduced in 2009, has the support of over 350 health,

consumer, and environmental groups (H.R. 1549/S. 619). The act, if passed, would ban seven classes of antibiotics important to human health from being used in animals, and would restrict other antibiotics to therapeutic and some preventive uses.

Other Effects – Property Values

Most landowners fear that when CAFOs move into their community their property values will drop significantly. There is evidence that CAFOs do affect property values. The reasons for this are many: the fear of loss of amenities, the risk of air or water pollution, and the increased possibility of nuisances related to odors or insects. CAFOs are typically viewed as a negative externality that can't be solved or cured. There may be stigma that is attached to living by a CAFO.

The most certain fact regarding CAFOs and property values are that the closer a property is to a CAFO, the more likely it will be that the value of the property will drop. The exact impact of CAFOs fluctuates depending on location and local specifics. Studies have found differing results of rates of property value decrease. One study shows that property value declines can range from a decrease of 6.6% within a 3-mile radius of a CAFO to an 88% decrease within 1/10 of a mile from a CAFO (Dakota Rural Action, 2006). Another study found that property value decreases are negligible beyond 2 miles away from a CAFO (Purdue Extension, 2008). A third study found that negative effects are largest for properties that are downwind and closest to livestock (Herriges, Secchi, & Babcock, 2005). The size and type of the feeding operation can affect property value as well. Decreases in property values can also cause property tax rates to drop, which can place stress on local government budgets.

Considerations for Boards of Health

Right-to-Farm Laws

With all of the potential environmental and public health effects from CAFOs, community members and health officials often resort to taking legal action against these industrial animal farms. However, there are some protections for farms in place that can make lawsuits hard to navigate. Right-to-farm laws were created to address conflicts between farmers and non-farming neighbors. They seek to override common laws of nuisance, which forbid people to use their property in ways that are harmful to others, and protect farmers from unreasonable controls on farming.

All 50 states have some form of right-to-farm laws, but most only offer legal protections to farms if they meet certain specifications. Generally, they must be in compliance with all environmental regulations, be properly run, and be present in a region first before suburban developments, often a year before the plaintiff moves to that area. These right-to-farm laws were originally created in the late 1970s and early 1980s to protect family farms from suburban sprawl, at a time when large industrial farms were not the norm. As industrial farms grew in size and number, the agribusiness industry lobbied for and achieved the passage of stricter laws in the 1990s, many of which are now being challenged in court by homeowners and small family farmers. Opponents to these laws argue that they deprive them of their use of property and therefore violate the Fifth Amendment to the Constitution.

Some state courts have overturned their strict right-to-farm laws, such as Iowa, Michigan, Minnesota, and Kansas. Others such as Vermont have rewritten their laws. Vermont's updated right-to-farm bill

protects established farm practices as long as there is not a substantial adverse effect on health, safety, or welfare.

Boards of health need to be aware of what legal protection their state offers farms. Right-to-farm laws can hinder nuisance complaints brought about by community members. State laws can prevent local government or health officials from regulating industrial farms.

Board of Health Involvement with CAFOs

Boards of health are responsible for fulfilling the three public health core functions: assessment, policy development, and assurance. Boards of health can fulfill these functions through addressing problems stemming from CAFOs in their communities. Specific public health services that can tackled regarding CAFOs include monitoring health status, investigating health problems, developing policies, enforcing regulations, informing and educating people about CAFOs, and mobilizing community partnerships to spread awareness about environmental health issues related to CAFOs.

Assessment: Board of health members should ensure that there is an effective method in place for collecting and tracking public complaints about CAFOs and large animal farms. Since environmental health specialists at local health departments are often responsible for investigating complaints, the board of health must take measures to ensure that they are properly trained and educated about CAFOs. It is possible that the board of health may be responsible or choose to do some investigations itself. Schmalzried and Fallon (2008) advocate that local health districts adopt a proactive approach for addressing public concerns about CAFOs, stating that health districts can offer some services that may help ease public frustration with CAFOs. A fly trapping program can establish a baseline for the average number of flies present prior to the start-up of CAFOs or large animal farms, which can then establish if a fly nuisance exists in the area. Testing for water quality and quantity can provide evidence if CAFOs are suspected of affecting private water supplies. Boards of health can also monitor exposure incidences that occur in emergency rooms to determine if migrant or farm workers are developing any adverse health conditions as a result of their work environments. Establishing these programs benefit both members of the community and provide information to future animal farm operators, and local boards of health should recommend them if they've been receiving complaints about CAFOs.

Policy Development: Boards of health in many states can adopt health-based regulations about CAFOs, however, they may be met with some resistance. Humbolt County, Iowa, adopted four health-based ordinances concerning CAFOs that became models for regulations in other states, but the Iowa Supreme Court ruled the ordinances were irreconcilable with state laws. Boards of health that choose to regulate CAFOs can also be subject to pressure from outside forces, including possible lawsuits or withdrawal of funding. Boards of health should also consider working with other local officials to institute regulations on CAFOs, such as zoning ordinances.

Assurance: Boards of health can execute the assurance function by advocating for or educating about better environmental practices with CAFOs. Board members may receive complaints from the public about CAFOs, and boards can hold public meetings to receive complaints and hear public testimony about farms. If boards of health are not capable of regulating industrial farms in their communities, they can still try to collaborate with other local agencies that have jurisdiction. Board of health members can educate other local agencies and public officials about CAFOs and spread awareness about the environmental and health hazards. They can request a public hearing with the permitting agency of the

CAFO to express their concerns about the potential health effects. They can also work with agricultural and farm representatives to teach better environmental practices and pollution reduction techniques.

In many states, boards of health are empowered to adopt more stringent rules than the state law if it is necessary to protect public health. Board of health members should examine their state laws before they take any action regarding CAFOs to determine the most appropriate course of action. Any process should include an investigative period to gather evidence, public hearings, and a time for public review of draft policies.

Board of Health Case Studies

Tewksbury Board of Health, Massachusetts

Locals have complained about Krochmal Farms, a pig farm, for many years, but complaints have increased recently. The addition of a hog finishing facility to the farm coincided with the time that community member complaints grew. Most complaints are centered on the odor coming from the farm. The complaints were originally just logged when phone calls were received; however, the health department added a data tracking system as the number of complaints increased. After a complaint is received, the sanitarian or health director does a site visit to investigate.

The health director in Tewksbury filed an order of prohibition against the farm, which is allowed under Massachusetts law 111, section 143, for anything that threatens public health. The order of prohibition was appealed and the matter was taken to the board of health for a grievance hearing. The board of health hearing included months of testimony about the pig farm. The board of health is also doing a site assignment, which determines if a location is appropriate for treating, storing, or disposing of waste, including agricultural waste. The site assignment process includes both the Department of Environmental Protection (DEP) and the local board of health. The board of health holds a public hearing process, while the DEP reviews the site assignment application. The board of health grants the site assignment only if it is concurrently approved by the DEP.

The health director in Tewksbury points out that the only laws the board of health is able to regulate the farm under are nuisance laws. There have been efforts by the community to do a home rule petition to address the air quality and pest management complaints. The home rule petition is currently working its way through the Massachusetts state house. The status of the petition is unknown.

The board of health has tried to work directly with the pig farm to manage complaints. The farm contains manure composting facilities and the health district has requested advance notice to warn the community before manure is treated or applied to the soil. The farm has adopted a new manure management system. This system uses Rapp technology to control odors and reduce ammonia and hydrogen sulfide levels. However, questions still remain as to whether this addition will fully solve the odor issue. Typically, systems using Rapp technology include an oil cap that floats on manure holding pools and helps seal odors inside. These techniques have been researched and proven to reduce odors. However, the Tewksbury farm did not install the oil cap, and it is unknown whether the exclusion of the cap will hinder the technology's ability to reduce odors.

The complaints about the farm primarily concern the odor that emanates from the farm. The complaints do include mention of health side effects, including nausea and burning eyes. The health director has also heard concerns about potential environmental effects from the pig manure. Community members are

worried the manure runoff is entering and contaminating Sutton Brook, since there has been flooding in that area. There has been no confirmation of this occurring. The board of health is aware that the farm has a nutrient management plan, but they are not allowed to request and find out what is incorporated in that plan.

The Tewksbury piggery is technically not classified as a CAFO, though it is believed to be the largest pig farm in the commonwealth of Massachusetts. The area around it has become densely populated and the community members state that they just want to live peacefully with the farm. The board of health has submitted multiple grant applications to study the health effects associated with the farm. After the site assignment process is complete, the board of health will decide how it will regulate the farm. At the beginning of 2010, the board of health was still working on drafting regulations for the pig farms.

Wood County Board of Health, Ohio

Wood County, Ohio, contains two existing large dairy farms, both of which were proposed in 2001 to be expanded to over 1500 cows each. It is also the site for three other proposed dairy farms. There is a large community effort that supports restricting the operation and expansion of these farms, mainly represented by the community group Wood County Citizens Opposed to Factory Farms. The Wood County Board of Health became involved in investigating these dairy farms through this community group and other local officials. The Trustees of Liberty Township requested assistance from the Wood County Board of Health in supporting a moratorium on factory farm operations until local regulations were in effect. The trustees believed that manure runoff from the farms could contaminate local waterways, lower the ground water table, increase the presence of insect vectors, and devalue local properties.

The Wood County Health Director, in cooperation with the board of health, contacted nearby counties to determine what actions they had taken against farms in their communities. While the health director and board of health investigated action in the form of a nuisance regulation against the farms, they were advised that nuisance lawsuits filed against farms in Ohio were held to a tough standard, and they would be forced to demonstrate with scientific proof that the farms have a substantial adverse effect on health. They found that no other board of health in Ohio had opted to regulate farming operations and relied on the enforcement of existing state laws.

The board of health held a public forum to hear public opinion regarding the industrial farms. Ultimately, the Wood County Board of Health took actions other than regulations to help protect the health and environment of its community. They helped community members protect the safety of their water wells by offering free and low cost water well testing and inspections. They tested area ditch and water ways for fecal coliform bacteria, phosphorous, and nitrates to monitor the impact of farm runoff. They also purchased fly traps to monitor and count fly types to determine if the farms have caused an increase in insect vectors. Board of health members also met with state officials from the Ohio EPA in an effort to facilitate cooperation regarding the factory farms. While the Wood County Board of Health and Health Department chose not to institute any local regulations, they continue to monitor the situation and respond to community complaints.

Cerro Gordo County Board of Health, Iowa

Officials in Cerro Gordo County, Iowa, began looking into regulating animal feeding operations after the number of hog farms in Iowa started to grow. Floods in North Carolina and new regulations in Colorado meant that many hog farms began relocating to Iowa. Many citizens had concerns over the effects of

CAFOs, and the Iowa State Association of Counties wanted to review air quality issues. Officials in Cerro Gordo County originally began working on a regulation that required inspections and was based on public health concerns, since farms were already exempt from any regulations related to zoning. However, Iowa state senators soon introduced legislation that passed and prevented any animal feeding operations from being regulated from a public health angle as well.

As Iowans were now prevented from regulating animal feeding operations in terms of zoning or public health, officials in Cerro Gordo County decided to place a moratorium on the construction of new animal feeding operations in that county. They wanted to temporarily stop the growth of animal feeding operations until they could get better science about their effects. Cerro Gordo County Ordinance #40, the "Animal Confinement Moratorium Ordinance," went into effect on May 14, 2002. Since the moratorium did not address public health or zoning, officials were able to get around the rules and still have a way to temporarily control animal feeding operation growth in their county. The ordinance placed "a 1-year moratorium on any new construction, expansion, or activity occurring on land used for the production, care, feeding, or housing of animals." The ordinance also afforded "local public health officials adequate time to appropriately assess health and environmental concerns that may be related to confined animal feeding operations and concentration of animals; establish objective measurable standards of enforcement; exercise the Board of Health's responsibility to protect and improve the health of the public; refrain from impacting farm operators unfairly; and provide penalties for violations of the provisions hereof pursuant to Chapter 137, Code of Iowa" (Cerro Gordo County, 2002).

The moratorium was first adopted by the Cerro Gordo County Board of Health. It was then presented to the county board of supervisors by the health director on behalf of the board of health. Before the board of health adopted the moratorium, they held an investigative meeting in which representatives from the Iowa Farm Bureau and other industry spokespeople exchanged opinions on the issue of animal feeding operations. The moratorium was created through a collaboration between local and county officials—health department staff, the board of health, and the board of supervisors. The moratorium did not receive any help or backing from state officials, who were concerned about the political nature of the ordinance. However it did receive backing from a *Globe Gazette* editorial.

The moratorium was immediately met with resistance from state officials. The Cerro Gordo County Board of Supervisors was contacted by a local legislator, and the Iowa Farm Bureau stated they would challenge the county budget. The Iowa Farm Bureau threatened to take the county to court. There were concerns over the cost of a court trial, which was estimated to be as high as $60,000. The county attorney doubted the legality of the moratorium and ultimately recommended removing it. The moratorium was in effect until June of 2005, when it was repealed by the county board of supervisors.

Since the moratorium was repealed there have been a few hog farms built in Cerro Gordo County, but the decline in pork prices has prevented any large growth of hog farms. Health officials believe that if the county had not implemented the animal confinement moratorium, there would have been many more farms built in their county, since many hog farms were built in counties south of Cerro Gordo County. There is now a process for siting new animal confinement operations in Iowa that uses a Master Matrix scoring system. The Cerro Gordo County Board of Supervisors tracks the Master Matrix system, but so far no animal feeding operations in Iowa who have applied using this system have been denied the right to build.

Conclusion

Concentrated animal feeding operations or large industrial animal farms can cause a myriad of environmental and public health problems. While they can be maintained and operated properly, it is important to ensure that they are routinely monitored to avoid harm to the surrounding community. While states have differing abilities to regulate CAFOs, there are still actions that boards of health can and should take. These actions can be as complex as passing ordinances or regulations directed at CAFOs or can be simply increasing water and air quality testing in the areas surrounding CAFOs. Since CAFOs have such an impact locally, boards of health are an appropriate means for action. Boards of health should take an active role with CAFOs, including collaboration with other state and local agencies, to mitigate the impact that CAFOs or large industrial farms have on the public health of their communities.

Appendix A: Regulatory Definitions of Large CAFOs, Medium CAFOs, and Small CAFOs

Animal Sector	Size Thresholds (number of animals)		
	Large CAFOs	**Medium CAFOs[1]**	**Small CAFOs[2]**
Cattle or cow/calf pairs	1,000 or more	300-999	Less than 300
Mature dairy cattle	700 or more	200-699	Less than 200
Veal calves	1,000 or more	300-999	Less than 300
Swine (over 55 pounds)	2,500 or more	750-2,500	Less than 750
Swine (under 55 pounds)	10,000 or more	3,000-9,999	Less than 3,000
Horses	500 or more	150-499	Less than 150
Sheep or lambs	10,000 or more	3,000-9,999	Less than 3,000
Turkeys	55,000 or more	16,500-54,999	Less than 16,500
Laying hens or broilers[3]	30,000 or more	9,000-29,999	Less than 9,000
Chickens other than laying hens[4]	125,000 or more	37.500-124,999	Less than 37,500
Laying hens[4]	82,000 or more	25,000-81,999	Less than 25,000
Ducks[4]	30,000 or more	10,000-29,999	Less than 10,000
Ducks[3]	5,000 or more	1,500-4,999	Less than 1,500

Data: Environmental Protection Agency

1 Must also meet one of two “method of discharge” criteria to be defined as a CAFO or must be designated.

2 Never a CAFO by regulatory definition, but may be designated as a CAFO on a case-by-case basis.

3 Liquid manure handling system

4 Other than a liquid manure handling system

Appendix B: Additional Resources

American Public Health Association. *Precautionary moratorium on new concentrated animal feed operations*. http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1243

Center for a Livable Future. http://www.livablefutureblog.com/

Environmental Health Sciences Research Center. *Iowa concentrated animal feeding operation air quality study*. http://www.public-health.uiowa.edu/ehsrc/CAFOstudy.htm

Environmental Protection Agency. *Animal feeding operations*. http://cfpub.epa.gov/npdes/home.cfm?program_id=7

Food and Water Watch. http://www.foodandwaterwatch.org/

Impacts of CAFOs on Rural Communities. http://web.missouri.edu/ikerdj/papers/Indiana%20--%20CAFOs%20%20Communities.htm#_ftn1

Land Stewardship Project. http://www.landstewardshipproject.org/index.html

Midwest Environmental Advocates. http://www.midwestadvocates.org/

National Agriculture Law Center. *Animal feeding operations reading room*. http://www.nationalaglawcenter.org/readingrooms/afos

National Association of Local Boards of Health. *Vector control strategies for local boards of health*. http://www.nalboh.org/publications.htm

Pew Charitable Trusts. *Human health and industrial farming*. http://www.saveantibiotics.org/index.html

Pew Commission on Industrial Animal Farm Production. http://www.ncifap.org/

Purdue Extension. *Concentrated animal feeding operations*. http://www.ansc.purdue.edu/CAFO/

State Environmental Resource Center. http://serconline.org

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BOARD GOVERNANCE

ENVIRONMENTAL HEALTH

COMMUNITY HEALTH

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Information Sheet – 3/27/2019 Board of Health Meeting

Agenda Item 3.a

Overview on Water as a Public Health Issue

The corresponding presentation and discussion about water resources and public health seeks to: 1) explain the importance of surface and ground water quality and quantity to human health and welfare; 2) highlight ECCCHD's many programs and roles that contribute to water preservation and enhancement; 3) provide insight into the water science and outreach initiatives that are emerging at the local, regional, and state level (*see attached articles from March 2019 Wisconsin Counties Magazine*); and 4) describe the value of engagement and advocacy by ECCCHD and Board of Health in these efforts. The attached supplemental documents and links in this information sheet aim to provide additional context for this discussion.

Localized drinking water crises across the globe and recent research in Wisconsin (*attached article from March 2013 Journal of Environmental Health*), specifically in Southwestern Wisconsin (https://www.jsonline.com/story/news/local/wisconsin/2019/01/02/well-water-contamination-widespread-southwestern-wisconsin/2466508002/) and Kewaunee County (https://www.postcrescent.com/story/news/investigations/2017/06/08/fecal-microbes-found-60-percent-sampled-kewaunee-county-wells/382399001/) have prompted unprecedented interest and concern about groundwater quality being expressed to local and state government. Health Departments and State agencies in Wisconsin have been inundated with inquiries about the topic and it has become apparent that much more information and outreach is needed to better understand the extent and contributing factors to groundwater pollution in Wisconsin and to help ensure that residents have a safe drinking water supply. Consequently, there is significant interest and momentum at the state and local level for increased data collection, related science, funding, and regulation regarding water resources, and specifically groundwater.

At the county level, groundwater and surface water are a significant focus, as evidenced by the following efforts that ECCCHD and Eau Claire County Land Conservation have been involved in recently. In 2018, the Eau Claire County Groundwater Advisory Committee recently completed an updated to the County Groundwater Management Plan entitled "State of the Groundwater in Eau Claire County, Wisconsin – 2018" (https://www.co.eau-claire.wi.us/home/showdocument?id=25741). This was the first update of the report since 1994 and was followed by committee members and technical staff participating in Wisconsin ThinkWater School, which sought to grow skills that would improve the effectiveness of the committee to achieve its priority recommendations (*see attached summary of the team's program map*). In 2017, the Eau Claire River Watershed Coalition completed a watershed management plan entitled "Healthy Soils & Healthy Waters: A Community Strategy for the Eau Claire River Watershed" (https://www.co.eau-claire.wi.us/home/showdocument?id=19288). Currently, there is a County Special Committee (https://www.co.eau-claire.wi.us/government/boards-commissions-and-councils/ag-ordinance-review-committee) that has been tasked with reviewing pertinent regulations concerning agriculture in Eau Claire County and providing recommendations for new and modified local ordinances to the County Board.

Prepared by Matt Steinbach, Environmental Sciences

Health Department Role in Water Resources Protection and Management

Board of Health
March 27, 2019

Eau Claire City-County
Health Department

Water Importance in Public Health

- Surface Water vs. Groundwater
  - Drinking water
  - Fish and wildlife dependence
  - Welfare and safety
- Quality vs. Quantity

Eau Claire City-County
Health Department

Environmental Sciences Programs

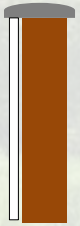
- Private Onsite Wastewater Treatment Systems (POWTS)
  - Soil evaluations
    - ✓ Subdivision and plat review
    - ✓ System design
  - Design approval and permit issuance
  - Construction inspections
  - Tracking system maintenance
- Drinking Water
  - Public systems
    - ✓ Municipal well sampling assistance
    - ✓ Transient Non-Community (TN) Contract
  - Private wells
    - ✓ Permit review and issuance
    - ✓ Construction inspection
  - Well abandonment
  - Laboratory testing and consultation

Eau Claire City-County
Health Department

- Beach Monitoring
  - Weekly sampling and laboratory testing for bacteria
  - Algae surveillance
- Technical Resource (Collaboration)
  - Local Departments, Boards and Committees
    - ✓ Planning initiatives
    - ✓ Policy development and administration
    - ✓ Emergency preparedness and response
    - ✓ Climate change mitigation and adaptation
  - Watershed Coalitions, Lake Districts and Associations
- Partnerships
  - Public health and conservation organizations
  - Internal and external government
  - Universities and schools

Eau Claire City-County
Health Department

2018 Environmental Sciences Accomplishments



151 Private Well Permits Issued

Well Inspections Completed 203

1,293 EC Co. Drinking Water Samples Analyzed

Beach Samples Analyzed for Bacteria 459

215 Sanitary (POWTS) Permits Issued

POWTS Maintenance Reports Due 3,256

Eau Claire City-County Health Department

Status of Water in Eau Claire Co.

*7.8%	Private well results of at least 10 mg/L for nitrate (since 2015)
*22.5%	Private well results positive for coliform bacteria (since 2015)
83.3%	Monitored Beaches in EC Co. considered “unsafe” for 3+ days in 2018
36	Lakes and stream segments in EC Co. listed as impaired by WDNR in 2018
20%	Estimated percentage of EC Co. septic systems that are failing
13.9	Million gallons of water used per day in Eau Claire

**** Limited to ECCCHD Data***

Eau Claire City-County
Health Department

Recent Local Efforts

- County Groundwater Advisory Committee
  - State of the Groundwater in Eau Claire County – 2018
  - ThinkWater Training and Wisconsin Water Thinkers Network
- Eau Claire River Watershed Coalition
  - Healthy Soils & Healthy Waters
- Ordinance review and update
  - Agriculture Ordinance Review Special Committee
    - ✓ Representatives from government, agriculture, environmental and conservation
    - ✓ Farm tour and background presentations
      - Animal waste storage, livestock siting, erosion and runoff
    - ✓ Local ordinance recommendations
  - County Comprehensive Zoning Update
    - ✓ Subtitle I: Zoning Regulations
    - ✓ Subtitle III: Subdivision Control

Eau Claire City-County
Health Department

Emerging Priority in Wisconsin

- Significant focus on groundwater
  - Emerging research has prompted unprecedented call for action
  - Surface water remains a concern

- Political support
  - 2019 Proclaimed the Year of Clean Drinking Water during Governor Evers' 1st State of the State Address
  - Evers' Biennial Budget Proposal
    - ✓ Increased funding for water science, protection and enhancement
    - ✓ Increased accessibility to funding for resolving polluted drinking water supplies
  - State Legislative Task Force on Water Quality

Eau Claire City-County
Health Department

Potential Future Efforts by Health Department & Board of Health

- Expanded data collection and enhanced management
  - Targeted collection and research
  - GIS mapping and modeling
  - Increased consolidation and sharing
- Expanded programs and resources
  - Outreach and education
  - Climate Change research and planning
- Partnerships and collaboration
  - Academic research opportunities
  - Public health and conservation
- Advocacy at all levels of government
  - New and expanded local regulations
  - State and Federal funding and regulations

Eau Claire City-County
Health Department

Supplemental Data and Informational Links

- Wisconsin Counties Magazine - March 2019
- Private Drinking Water Quality in Rural Wisconsin: Journal of Environmental Health - March 2013
- Appleton Post-Crescent Article on Kewaunee Co. Research
- Milwaukee Journal Sentinel Article on Southwestern Wisconsin Research
- Wisconsin Watch Nitrate Article - November 2015
- Wisconsin Groundwater Coordinating Council
  - 2018 Report to Legislature
- UWSP Well Water Viewer

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Information Sheet – 09/26/2018 Board of Health Meeting

Agenda Item 5.a

2018 State of Groundwater Report and Health Department Role

County residents rely almost exclusively on groundwater for drinking, sanitation, agriculture, and industry. Groundwater also feeds many of our lakes, rivers, and streams that we rely on for fishing, tourism, and ecological health. Therefore, there is a high need in our community to protect, preserve, and promote this resource for the health and wellbeing of our citizens and community. ECCCHD has been delegated authority to administer portions of the Wisconsin Well Code. We support access to safe drinking water through a variety of programs, including private well testing, septic system inspection, testing of non-community drinking wells (rural gas stations, restaurants), and providing technical assistance to municipal waterworks in Eau Claire County (except City of Eau Claire). In addition, ECCCHD staff provide a support role to the Eau Claire County Groundwater Advisory Committee (GWAC). This involvement relates to Strategic Plan Strategies 3.1 (build health in all policies) and 3.3 (engage impacted populations).

The duties of GWAC are to monitor state and federal regulation of groundwater as well as emerging local groundwater issues; oversee the development and implementation of a comprehensive, county-wide groundwater management plan; and perform other tasks as directed by the Planning and Development Committee. The committee relies on community input and technical expertise from UW-Eau Claire Geology faculty, as well as input from support staff from a variety of agencies.

In 1994, the Groundwater Advisory Committee developed a county-wide groundwater management plan. This plan has become outdated with the expansion of unsewered subdivisions and industries such as large-scale animal operations and industrial sand mines. Recognizing the need for an updated management plan, the committee recommended that staff and committee members collaborate on an updated plan that highlights current assets and potential risks related to groundwater quantity and quality in Eau Claire, as well as groundwater education needs.

The result of this collaboration is the 2018 State of Groundwater Report. The full report is available at https://www.co.eau-claire.wi.us/home/showdocument?id=25741. This report prioritizes several goals related to understanding and developing appropriate regulations for groundwater quality issues, groundwater quantity issues, and goals for improving outreach and information sharing with the public, related to groundwater issues. These goals have deadlines between 2019 and 2021.

Prepared by Audrey Boerner, Environmental Sciences

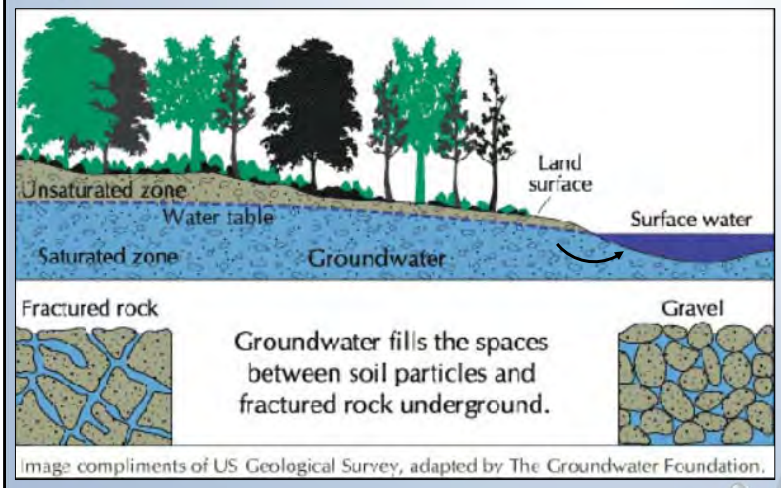
State Of Groundwater In Eau Claire County – 2018

Groundwater Advisory Committee

Report to

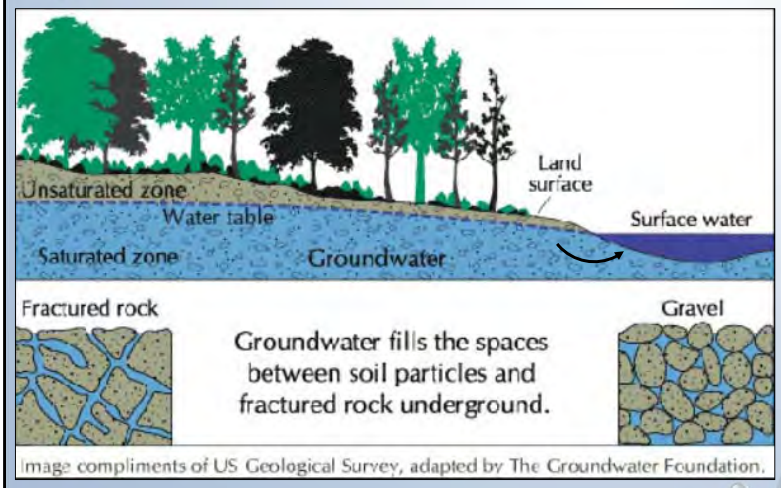
Board of Health

Groundwater in Eau Claire County



Groundwater dynamics: Our aquifers are made of sandstone – water is present in the subsurface in the spaces between the sand grains (see gravel diagram). This type of aquifer is easy for groundwater to be withdrawn by wells, and easy to “recharge” with rainwater that falls on the surface. Groundwater is also connected to surface water and generally feeds our lakes and streams. This supplies water ~55 degrees F to lakes and rivers year round (good trout fishing!).

Groundwater in Eau Claire County

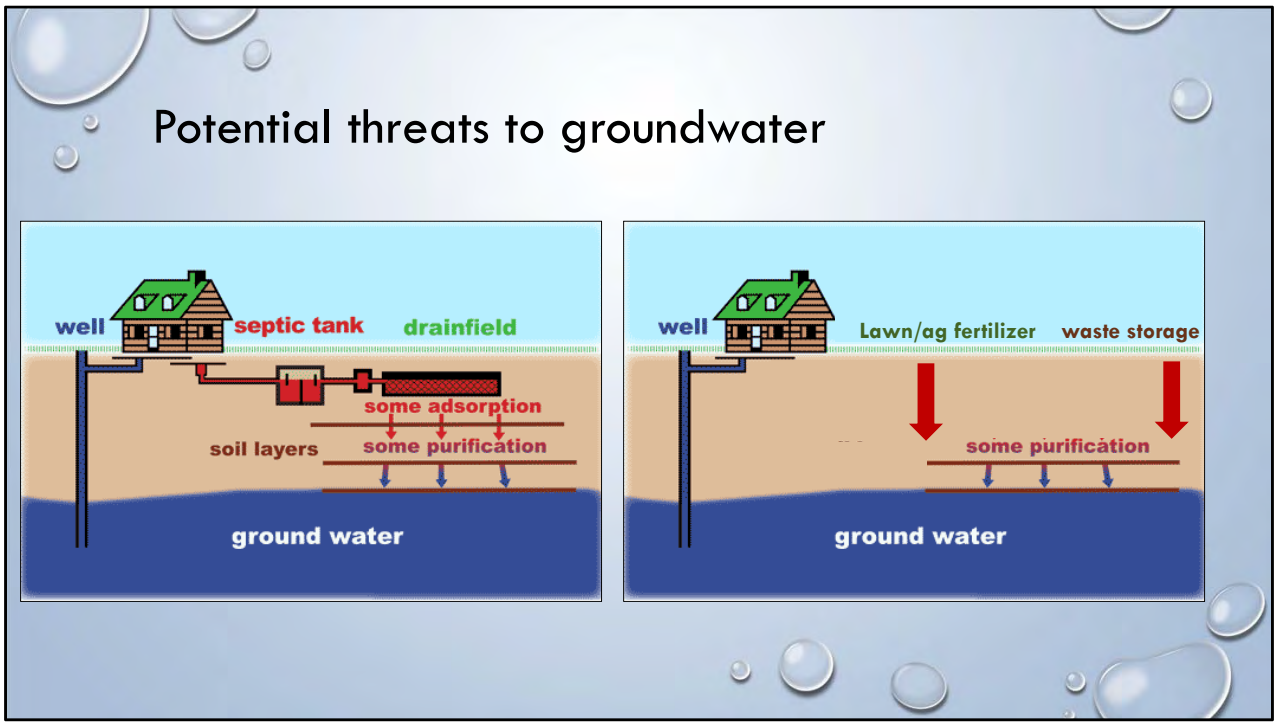


Estimated groundwater use: 6 - 7.4 billion gal/year

Includes ~9,000 private wells

Approximately 47 gal/day per person

Groundwater supplies the overwhelming majority of water – estimated to be over 94%--for domestic, commercial, industrial, and ag use (including public and private drinking water). Residential water use is believed to have declined by ~15 gal/day/person since 1990. High-capacity wells are used for agriculture, industry, and public water supply. Private wells have a much lower capacity. About 42% of groundwater withdrawals by high-capacity wells is for public & domestic use.



When potential contaminants are introduced to the surface or subsurface, over time, they may enter groundwater. Some breakdown of these contaminants can happen in the soil. Some contaminants do not break down at all. Once they have entered the groundwater, they can enter a private or public well.

County Groundwater Concerns

Water Quality:

Nitrate & phosphorous

Bacteria

Pharmaceuticals/personal care products

Lawn & ag chemicals

Temperature

Impact of changing land use?

Impact of climate change?

Water Quantity:

High-Capacity well use (municipal, industry, ag)

Impacts to surface water, wetlands

Supply in shallow private wells

Impact of changing land use?

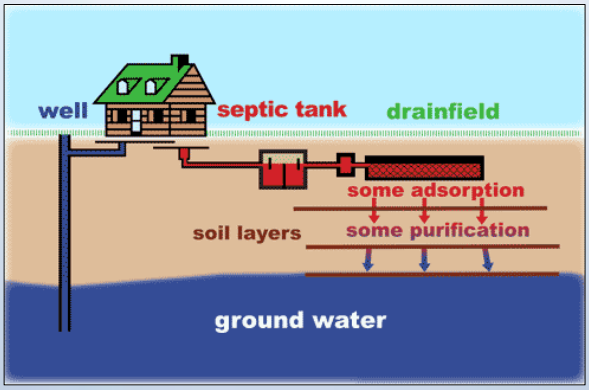
Impact of climate change?

Health Department protection of groundwater

WELLS:
Encourage annual testing

Provide treatment options if needed

Exploratory testing



SEPTICS:
Permits are required

Inspection/pumping every 3 years

ECCCHD administers the Sanitary Code. Sanitary permits are required before POWTS can be installed, repaired, modified. For most, inspection or pumping is required every 3 years. ECCCHD reminds homeowners of when their septic maintenance is due.
ECCCHD staff also support the County Groundwater advisory committee to bring a public health lens to county-wide decisions and issues related to groundwater.

Eau Claire County Groundwater Management Plan

2018 State of Groundwater plan:

- Provided update to 1994 management plan
- Includes updated water sampling & use information
- Potential impact of future land use & climate change
- State & local regulations of groundwater resources
- Priority recommendations for next 3 years

2018 Groundwater Plan: https://www.co.eau-claire.wi.us/home/showdocument?id=25741

Priority Recommendations

1. QUANTITY	2. QUALITY	3. EDUCATION
-Groundwater model -Review efficacy of ordinances/ regulations	-Continued well testing, targeting gap areas -Map Groundwater Environmentally Sensitive Areas -Review efficacy of ordinances/ regulations	-Update county groundwater website -Provide information to home buyers, builders, realtors -Provide public portal to water testing results

Groundwater Priority Recommendations
Quantity Goals
Identify flow model grant sources
Review existing regulations
Complete Groundwater flow model
Explore protection regulations if needed
Education: June & Dec. 2019
Jan 2019
Jan 2020
Jan 2021
Jan 2022
Animal Waste Ordinance update with NR-151 Standards
Review existing regulations
Complete county wide testing
Define Sensitive Areas
Explore protection regulations if needed
Quality Goals

Eau Claire County

- Planning & Development
    - Land use, subdivisions
    - Agricultural
    - Industrial

Eau Claire City/County Health

Cities/Villages

General public

Involved parties in 2018 State of Groundwater Plan.