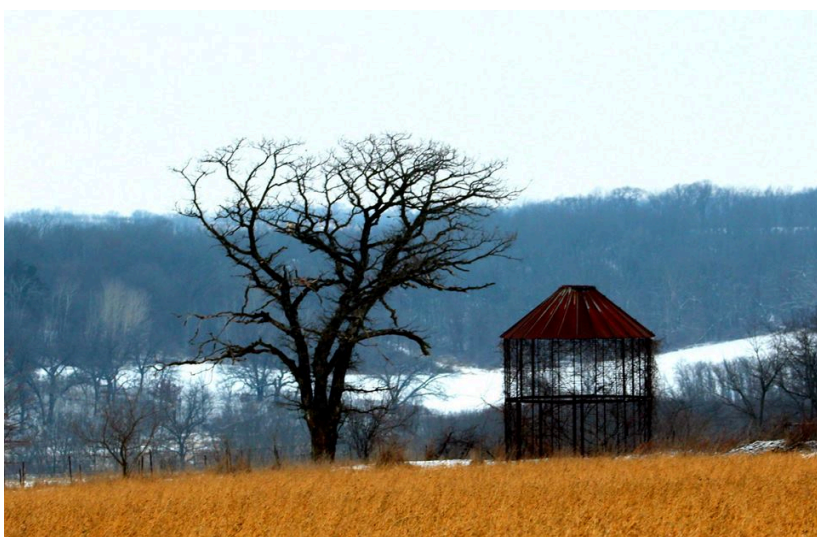




# Lafayette County, WI

Community Health Needs Assessment  
2015



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## **Acknowledgements**

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School Districts of Lafayette County

Lafayette County Libraries

Lafayette County Postal Offices

Employees of Lafayette County Health Department and Home Care

Local banks of Lafayette County

Local restaurants of Lafayette County

Memorial Hospital of Lafayette County

Lafayette County Board of Health

Lafayette County Board of Supervisors

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Adam's Lutheran Church in Argyle

## **Executive Summary**

Presented in this publication is the 2015 Lafayette County Community Health Needs Assessment. It was developed with the support of multiple local organizations and partners.

The Community Health Needs Assessment is a process for examining the health of a community. Importantly, the assessment will serve as a baseline for evaluating progress toward the State's *Healthiest Wisconsin 2020 Objectives*. These objectives are designed to improve the health of all Wisconsin residents and strive to make Wisconsin one of the healthiest states in the U.S. Additionally, this assessment will mark our progress toward the national goals set forth by the Centers for Disease Control and Prevention, the *Healthy People 2020* objectives.

Completion of a community health needs assessment is required of local health departments by law. There are many benefits as a result of this process. Primary data was collected through the use of a community member survey and key stakeholder interviews and surveys. Secondary data was compiled and examined. The issues were explored and a list of priorities developed based on the information collected. A comprehensive overview of the health status of the Lafayette County community based on the data is provided in this publication.

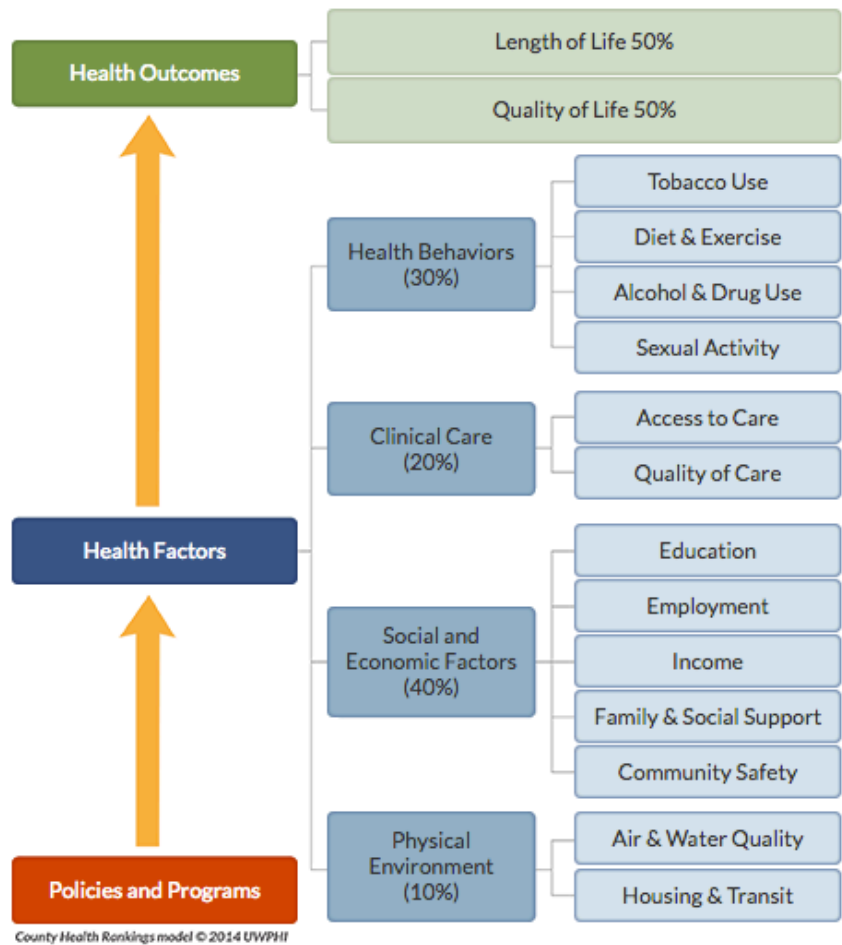
A community needs healthy and productive people to thrive. Addressing the identified priorities will require collaboration and involvement from multiple community partners, including policy-makers, clinicians, academics, employers, schools, and many others. The information presented in this document can be used to work towards making Lafayette County a healthier place to live, work, learn, and play.



## Secondary Data

### Wisconsin County Health Rankings

The County Health Rankings is an interactive ranking system of Wisconsin counties based on health care, health outcomes, health behaviors, and health determinants. The model to the right is used in the County Health Rankings, which constitutes the rational for the ranking methodology.



For the year 2015, Lafayette County ranked *18 out of 72* counties in Wisconsin for the overall ranking. Below is Lafayette County's ranking for the individual categories.

### Overall Rankings for Lafayette County (2015)

Mortality 30  
Morbidity 13  
Health factors 22  
Health behaviors 3  
Clinical care 71  
Social & Economic 23  
Physical Environment 42

The following population statistics are based on the Wisconsin County Health Rankings and other nationally accumulated data sources. The 2015 Lafayette County Snapshot is available in the Appendix.

## Population Demographics

Total Population = 16,847

### Age:

Age Category	Lafayette Population Estimate	Percent of the Population
<b>Under 5 years</b>	1,073	6.4%
<b>5 to 9 years</b>	1,150	6.8%
<b>10 to 14 years</b>	1,231	7.3%
<b>15 to 19 years</b>	1,134	6.7%
<b>20 to 24 years</b>	911	5.4%
<b>25 to 34 years</b>	1,904	11.3%
<b>35 to 44 years</b>	1,835	10.9%
<b>45 to 54 years</b>	2,599	15.4%
<b>55 to 59 years</b>	1,272	7.6%
<b>60 to 64 years</b>	1,050	6.2%
<b>65 to 74 years</b>	1,369	8.1%
<b>75 to 84 years</b>	961	5.7%
<b>85 years and over</b>	358	2.1%

### Gender:

	Estimate
<b>Male</b>	8,500
<b>Female</b>	8,347

### Race:

	Lafayette Percent	WI Percent
White	97.5%	88.6%
Black or African American	0.6%	7.2%
American Indian	0.6%	1.6%
Asian	0.5%	2.8%
Some other race	1.7%	1.9%

3.3% of Lafayette County residents are estimated to be Hispanic regardless of race.

### Population over selected years categorized by age:

Age	2010	2011	2012	2013	2014 (current)
<b>Under 18 years</b>	4,319	4,285	4,223	4,142	4,197
<b>Under 5 years</b>	1,176	1,130	1,094	1,079	1,077
<b>5 to 13 years</b>	2,129	2,194	2,176	2,127	2,170
<b>14 to 17 years</b>	1,014	961	953	936	950
<b>18 to 64 years</b>	9,894	9,980	9,940	9,876	9,881
<b>18 to 24 years</b>	1,303	1,308	1,318	1,352	1,393
<b>25 to 44 years</b>	3,729	3,759	3,710	3,596	3,583
<b>45 to 64 years</b>	4,862	4,913	4,912	4,928	4,905
<b>65 years and over</b>	2,580	2,688	2,709	2,748	2,775
<b>85 years and over</b>	338	351	369	369	372

Source: US Census Bureau, ACS Demographic Estimates, 5-year Estimates, 2010-2014  
<http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>

### *Population Density:*

In 2010, there were 26.6 persons per square mile in Lafayette, which is considerably less compared to Wisconsin's average of 105.0 people per square mile (US Census Bureau, 2010). Lafayette County is considered completely rural. There are no metropolitan or micropolitan classified areas within the county.

Source: US Census Bureau, QuickFacts

## **Health Outcomes**

### *Premature Death:*

Premature death calculates the years of potential life lost before age 75 per 100,000 population (age-adjusted). Deaths occurring before the age of 75 contribute to the total years of potential life lost. This is a measure of premature mortality focusing on preventable deaths.

- 5,551 are the number of years of potential life lost calculated for Lafayette County (The target value is 5,200).
- This value has been trending down since 2009 for Lafayette.

Source: 2015 County Health Rankings

### *Low Birth Weight:*

The County Health Rankings evaluate low birth weight, as it is an indicator of multiple factors. It represents maternal exposure to health risks and the infant's current and future risk of morbidity, as well as premature mortality risk.

- The percentage of live births with low birth weight (<2500 grams) was 5.9% in Lafayette County. (The target value is 5.9%).
- Lafayette County performs above the Wisconsin average of 7.0%.

Source: 2015 County Health Rankings

**The following health outcome measures use data presented by the 2015 County Health Rankings. The data is age-adjusted from the Behavioral Risk Factor survey based on years 2006-2012. Target value refers to the top US performers, those in the 90<sup>th</sup> percentile.**

### *General Health Status:*

Self-reported health status is a widely used measure of people's health-related quality of life. The Behavioral Risk Factor Survey asks people to rate their health as excellent, very good, good, fair, or poor. The target value is 10%.

- Percentage of adults reporting fair or poor health in Lafayette County was 12%.
- This is an improvement from 2010, which showed 14% of people reported fair or poor health.

### *Poor Physical Health Days:*

The measure of poor physical health days is based on responses to the question: *"Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?"*

- The average number of physically unhealthy days was 2.5 in Lafayette County.
- The target value for this measure was 2.5, so Lafayette is part of the top US performers.

#### *Poor Mental Health Days:*

- The average number of poor mental health days reported by members of Lafayette County was 2.2.
- The target value is 2.3 days.
- The average number of poor mental health days has increased from 1.7 days reported in the 2010 community health assessment.

## **Health Determinants**

### Health Care

Lafayette County does rather poor when it comes to health care, receiving an overall ranking of 71 out of 72 in the area of clinical care for the 2015 County Health Rankings.

#### *Health Insurance coverage:*

Lack of health insurance coverage is a barrier to accessing health care services. Uninsured adults under the age of 65 are represented in the percentage, based on 2012 data.

- Lafayette County has 14% of the adult population uninsured. This is an improvement from the 2010 community health assessment.
- However, it is below the Wisconsin average of 10% and the target value of 11%.
- It would be interesting to see a more up-to-date percentage as it has been five years since the enactment of the Affordable Care Act in 2010.

Source: 2015 County Health Rankings

#### *Medicaid Recipients:*

Below are the reports for those residents in Lafayette County currently enrolled in BadgerCare. The number of residents enrolled in BadgerCare continues to steadily increase.

<b>Age Group</b>	<b>Category</b>	<b>Aug 2015</b>	<b>Sep 2015</b>	<b>Oct 2015</b>	<b>Nov 2015</b>	<b>Dec 2015</b>	<b>Jan 2016</b>
Adult	Parents/Caretakers	418	430	434	427	427	437
	Pregnant Women	45	50	54	54	55	51
	Extensions	49	48	41	52	53	53
	Exiting Youths	0	0	1	2	2	2
	Childless Adults	267	266	266	259	266	274
Child	Children	1,229	1,247	1,281	1,255	1,252	1,257
	Extensions	109	119	103	116	117	117
<b>Total</b>		<b>2,117</b>	<b>2,160</b>	<b>2,180</b>	<b>2,165</b>	<b>2,172</b>	<b>2,191</b>

Source: Wisconsin Department of Health Services. BadgerCare Plus Enrollment by County.  
<https://www.dhs.wisconsin.gov/badgercareplus/bcpcounty.pdf>



#### *Primary Care Provider Rate:*

Access to care involves not only financial access to insurance, but also physical access to providers. The measure is a ratio of the population to total primary care physicians. It should be noted this measure does not include physician assistants or nurse practitioners, which are critical members of the Lafayette County Memorial Hospital health care team.

- Lafayette County's current ratio is 4,213: 1 based on 2012 data.
- This is much higher than the target ratio of 1,045:1 and Wisconsin's average of 1,215:1.

Source: 2015 County Health Rankings

#### *Preventable Hospital Stays:*

The measure represents the number of hospital stays for conditions that could be treated on an outpatient basis per 1,000 Medicare enrollees.

- There were 64 preventable hospital stays per 1,000 in Lafayette based on 2012 data.
- The target value is 51 for every 1,000.
- While Lafayette performs poorly on this measure, it is an improvement from the 2010 community assessment, which listed 94 preventable hospital stays per 1,000.

Source: 2015 County Health Rankings

#### *Oral Health:*

Untreated dental conditions can lead to serious health complications. Having access to dentists is one barrier in receiving care.

- The ratio of Lafayette County population to dentist is 3,353:1 based on 2013 data.
- The target ratio is 1,377:1.
- 32% of residents reported not having a dental visit in the last year based on data between 2005-2011.

Source: 2015 County Health Rankings

#### *Mammography Screening:*

Breast cancer is the second most common cancer among women and is very cost intensive.

Mammography screening leads to earlier diagnosis and reduces mortality. The percentage of female Medicare enrollees' ages 67-69 who received a mammography screening based on 2012 data was the measure used by the County Health Rankings.

- 60.5% of women in Lafayette of the analyzed age reported receiving a mammography.
- The target percentage is 70.7%.

Source: 2015 County Health Rankings

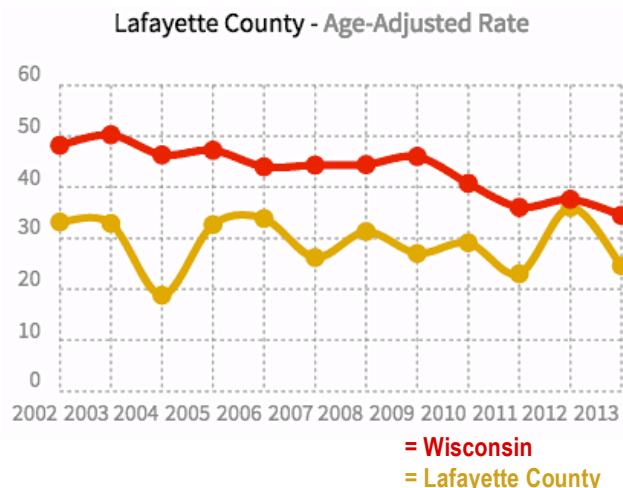
## Chronic Disease

### Asthma:

Asthma affects people of all ages, but often starts in childhood. It may be caused by a genetic component as well as early exposure to second hand smoke, infections, and allergens. Exposure to air pollution, tobacco smoke, or pollen can trigger an asthma attack.

- In 2013, 24.59 Emergency Room visits per 10,000 (age-adjusted) were asthma related in Lafayette County.
- The state average is 34.48.
- The graph to the right shows the rate of Emergency Room visits related to asthma from 2002-2013 in Lafayette County compared to Wisconsin.

Sources: Wisconsin Department of Health Services, Asthma Data, <https://www.dhs.wisconsin.gov/epht/asthma.htm>; Wisconsin Environmental Public Health Tracking Program, <http://gis.wi.gov/DHS/tracking/#/report>



### Diabetes:

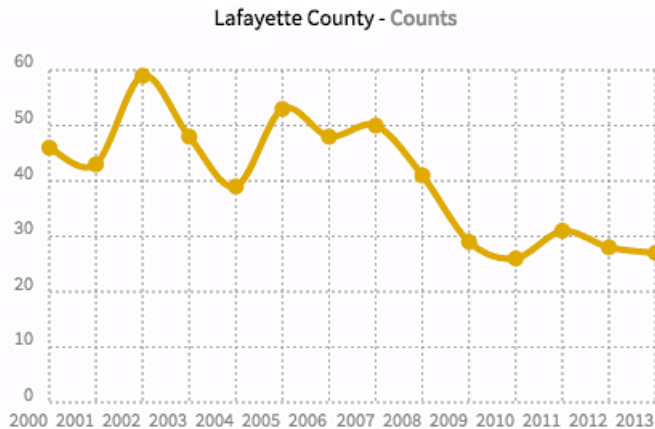
- The percentage of diabetes related hospitalizations has risen from 15.8% in 2006 to 17.8% according to 2010 data.
- Hospital charges related to diabetes was estimated at 8.5 million in 2010 for Lafayette County.
- The percentage of Lafayette County adults diagnosed with diabetes in 2012 was 8.8% (CDC).

2010 Hospitalizations – Lafayette County				
	Total Number	Number Diabetes-related (% of total)	Total Charges	Diabetes-related Charges (% of total charges)
All Ages	1,567	283 (17.8%)	\$35,491,900	\$8,545,600 (24.1%)

Source: The 2011 Burden of Diabetes in Wisconsin report, <https://www.dhs.wisconsin.gov/publications/p0/p00284.pdf>  
CDC Diabetes and Data and Statistics, <http://www.cdc.gov/diabetes/atlas/countydata/atlas.html>

### Heart Disease:

Heart disease is one of the leading causes of death in Wisconsin and the number one cause of death in Lafayette County (WDHS, 2015). Chronic heart disease has been shown to both decrease quality of life and increase medical costs. Some types of heart disease are due to genetics. There are many risk factors for heart disease that can be affected by an individual's health behaviors.



- The age-adjusted rate of hospitalizations for heart attacks among persons 35 and over per 10,000 people in Lafayette County was 24.81 in 2013.
- The number of hospitalizations for heart attacks in Lafayette has been declining since 2000. Refer to the graph on the left.

Source: Wisconsin Environmental Public Health Tracking Program,  
<http://gis.wi.gov/DHS/tracking/#/report>

Number of hospitalization for heart attack of people 35 years and older in Lafayette County.

### Number of Hospitalizations in Lafayette County (2013)

Disease Condition	Age Category				Total
	<18	18-44	45-64	65+	
<b>Injury-Related (All)</b>	8	26	28	41	103
○ Hip Fractures	--	--	--	5	6
○ Poisonings	--	1	--	--	6
<b>Psychiatric</b>	9	22	19	3	53
<b>Coronary Heart Disease</b>	--	-	9	28	40
<b>Cancer (All)</b>	--	4	25	23	53
○ Female Breast Cancer	--	--	--	--	2
○ Colo-rectal	--	--	--	6	10
○ Lung	--	--	--	--	2
<b>Diabetes</b>	--	--	--	4	15
<b>Alcohol-Related</b>	--	2	7	--	9
<b>Drug-Related</b>	--	3	--	--	3
<b>Pneumonia &amp; Influenza</b>	5	--	21	50	77
<b>Cerebrovascular Disease</b>	--	--	10	28	38
<b>Asthma</b>	0	2	2	3	7
<b>Chronic Obstructive Pulmonary Disease</b>	--	--	10	20	31
<b>Total Hospitalizations</b>	229	310	359	561	1,459
<b>Preventable Hospitalizations</b>	6	14	62	157	239

Specific disease conditions were analyzed to determine the number of admissions based on condition. According to the data provided Injury- related conditions and Pneumonia and Influenza were the top two reasons for hospitalization. All possible reasons for hospital admission were not included in the data.

Source: Wisconsin Department of Health Services, Public Health Profiles 2015,  
<https://www.dhs.wisconsin.gov/stats/phprofiles/lafayette.htm>

### *Cancer:*

Cancer may start anywhere in the body when abnormal cells grow out of control and crowd out normal cells. Cancer is a complex disease caused by multiple factors such as, tobacco use, diet, exercise, genetic factors, environmental exposure to chemicals and radiation, and certain types of infections. According to the American Cancer Society, 1 in every 2 males and 1 in every 3 females in the US will develop some type of cancer in his/her lifetime (ACS, 2014). The table below outlines the incidence of cancer and deaths attributed to cancer in Lafayette County.

### **Cancer Incidence and Mortality, 2009-2013**

	Lafayette County Incidence		Wisconsin Incidence	Lafayette County Mortality	
	Total Cases	Average Rate	Average Rate	Total Deaths	Average Rate
All Cases	414	400.1	468.2	180	165.8
Breast (Female)	48	89.0	127.2	X*	X
Colon/Rectum	43	41.5	39.1	22	20.6
Kidney & Renal Pelvis	22	20.8	17.2	X	X
Leukemia	12	11.4	17.0	X	X
Lung	53	47.5	61.1	40	35.4
Myeloma	7	6.5	6.9	X	X
Non-Hodgkin Lymphoma	15	14.8	20.8	X	X
Oral Cavity & Pharynx	15	15.7	11.8	X	X
Ovary	6	12.9	12.3	X	X
Pancreas	14	12.3	12.9	13	11.5
Prostate	63	121.1	122.0	13	26.8
Skin (melanoma)	21	20.2	21.5	X	X
Thyroid	10	12.3	12.8	X	X
Urinary Bladder	22	19.8	23.1	11	10.1
Uterine	11	21.6	28.8	X	X

*\*An "X" indicates that the value is less than 10 but more than zero, and has been marked this way to protect confidentiality.*

Incidence refers to the total number of new cases within the specified time period. Average rates are age-adjusted rate per 100,000 population. Wisconsin incidence average rate was included as a comparison to Lafayette County cancer incidence.

Source: American Cancer Society, 2014, <http://www.cancer.org/cancer/cancerbasics/lifetime-probability-of-developing-or-dying-from-cancer>

Wisconsin Dept. of Health Services, Division of Public Health, Office of Health Informatics. Wisconsin Interactive Statistics on Health (WISH) data query system, <https://www.dhs.wisconsin.gov/wish/index.htm>. Cancer Module, accessed 2/26/2016.

## Health Behaviors

The type of health behaviors individuals partake in can affect their health. Poor diet, being overweight or obese, physical inactivity, use of tobacco or alcohol, and engaging in risky sexual behaviors can lead to the development of chronic health conditions, such as heart disease, stroke, diabetes, or cancer (Spring, et. al., 2012). Looking at Lafayette County's health behaviors provides insight into the county's health and the possible trajectory of future medical concerns.

### *Overweight and Obesity:*

- Wisconsin has the 14<sup>th</sup> highest adult obesity rate in the nation (RWJF, 2015).
- Based on 2011 data, 31% of Lafayette County residents reported being obese (a BMI of 30 or higher). This continues to trend upwards.
- Lafayette has a higher percentage of obesity compared to the state's average of 29%.

Source: 2015 County Health Rankings; Trust for America's Health and RWJF, 2015

<http://stateofobesity.org/states/wi/>

### *Physical Activity:*

Engaging in physical activity on a regular basis can decrease one's risk of cardiovascular disease, type 2 diabetes, and metabolic syndrome. In addition regular physical activity can reduce one's risk of dying early (CDC, 2015).

- 18% of people in Lafayette County aged 20 and older reported no leisure time physical activity based on data from 2011.
- Lafayette performs better than the state average of 21%.
- In comparison only 41% of Lafayette County residents have access to locations for physical activity, compared to the state's average of 83%.

Source: 2015 County Health Rankings; CDC, Division of Nutrition, Physical Activity, and Obesity,

<http://www.cdc.gov/physicalactivity/basics/pa-health/>

### *Diet:*

- 10% of Lafayette County residents are food insecure. Wisconsin's average is 13%.
- 4% of Lafayette County residents have limited access to healthy foods.
- Based on the above measures the County Health Rankings provides a food environment index score using a scale of 0 (worst) to 10 (best). Lafayette has an index score of 8.6, which suggests the food environment is relatively good for residents.
- The state's food environment index is 8.0.

Source: 2015 County Health Rankings

### *Tobacco:*

The effects of tobacco, specifically smoking, have been extensively studied. Smoking is directly related to deaths caused by respiratory disease, lung cancer, and cardiovascular disease. There is also a hefty financial cost associated with smoking. In 2009, it was estimated \$3.0 billion in health care costs were paid in Wisconsin as a result of disease caused by smoking.

- 8% of Lafayette County adults currently smoke.
- This is lower than Wisconsin's average of 18% of adults being current smokers.
- 15.6% of Wisconsin middle and high school youth smoke. (County data unavailable).

Source: 2015 County Health Rankings; The Burden of Tobacco in Wisconsin 2015, <http://uwm.edu/cuir/wp-content/uploads/sites/111/2015/04/Burden-of-Tobacco-2015.pdf>



### *Alcohol Use:*

Excessive drinking is a risk factor for adverse health effects, such as sexually transmitted infections, hypertension, acute myocardial infarction, unintended pregnancy, fetal alcohol poisoning, motor vehicle accidents, and interpersonal violence (CDC, 2016). Excessive alcohol consumption was estimated to cost \$249 billion in the United States (CDC, 2016).

- 18% of Lafayette County residents report binge or heavy drinking. Wisconsin's average is 24%. Lafayette does poorly in comparison to the target value of 10%.
- Lafayette has seen an increase in binge drinking from the 2010 community health assessment, which reported 16.2%.
- In Lafayette 50% of driving deaths involved alcohol. Wisconsin's average is 39%, whereas the US top performers only had alcohol involved in 14% of driving deaths.
- Significant public health benefits could be achieved by lowering the amount of binge drinking and driving while intoxicated by county residents.

Source: CDC, Alcohol and Public Health, 2016, <http://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm>; 2015 County Health Rankings

### *Sexually Transmitted Disease:*

- The rate of newly diagnosed chlamydia cases, in Lafayette County (per 100,00) was 125 based on 2012 data.
- This is well below Wisconsin's average rate of 414, but Lafayette has been trending up since 2010.
- Of note, this rate only includes chlamydia. Chlamydia is the most common STI in North America, according to the 2015 County Health Rankings.

Source: 2015 County Health Rankings

### *Violent Crime:*

Violent crime is defined as face-to-face confrontation between victim and perpetrator, such as homicide, forcible rape, robbery, and aggravated assault. A safe physical environment is necessary to promote positive health behaviors like exercising outdoors.

- Data from 2010-2012 shows, Lafayette has a rate of 28 violent crime offenses per 100,000.
- Lafayette ranks second with Richland County for lowest violent crime rate.
- This is an improvement from the rate reported in the 2010 community health assessment, 54.
- Wisconsin's current average is 255 per 100,000.

Source: 2015 County Health Rankings

## Social Determinants of Health

More than health status or health behaviors impact health. The World Health Organization (WHO) defines social determinants of health as “the conditions in which people are born, grow, work, live, and age.” A person’s level of education, employment status, income, and home life can impact their health status. For example, children living in poverty are more likely to have lower cognitive function as an adult (Braveman & Gottlieb, 2014). Research has also shown individuals with chronic exposure to social and environmental stressors are more at risk for health complications like high cholesterol and high blood pressure (Braveman & Gottlieb, 2014). In addition, social, economic, and education factors influence a person’s ability to understand health information, access health care, apply health messages, and make healthy behavioral choices (Wisconsin Center for Health Equity, 2013). Awareness of Lafayette County’s social determinants is an important component to understanding the county’s health.

### Education:

	Lafayette County	Wisconsin	US
<b>High School Education or higher</b>	89.9%	90.8%	86.3%
<b>Bachelor’s Degree or higher</b>	17.3%	27.4%	29.3%

Source: ACS, Education Characteristics 5-year estimates 2010-2014

### Household Characteristics

- Based on the 2015 County Health Rankings data from 2009-2013, 26% of Lafayette County children live in a household headed by a single parent.
- Wisconsin’s average is 31%.
- Below is a table of other household characteristics in Lafayette.

	Lafayette County	WI
<b>Family households (families)</b>	69.7%	64.1%
<b>Married-couple household with Children under 18</b>	21.5%	18.9%
<b>Nonfamily Households</b>	30.3%	35.9%
<b>Householder living alone</b>	25.9%	29.0%
<b>Householder living alone 65 years and over</b>	11.8%	10.6%

Source: US Census Bureau, ACS Social Characteristics, 5-year Estimates, 2010-2014; 2015 County Health Rankings

### Income Inequality:

The County Health Rankings measure income inequality using a “ratio of household income at the 80th percentile to that at the 20th percentile, i.e., when the incomes of all households in a county are listed from highest to lowest, the 80<sup>th</sup> percentile is the level of income at which only 20% of households have higher incomes, and the 20<sup>th</sup> percentile is the level of income at which only 20% of households have lower incomes. A higher inequality ratio indicates greater division between the top and bottom ends of the income spectrum.”

- Lafayette County had a ratio of 3.8. Ranking in the top 20 best performing counties in the state.
- Wisconsin's average ratio is 4.3.

Source: 2015 County Health Rankings

### Poverty

	Lafayette County	Wisconsin	US
<b>All People living in Poverty</b>	11.2%	13.3%	15.6%
<b>Children under 18 years living in poverty</b>	17.5%	18.5%	21.9%
<b>People 65 years and older living in poverty</b>	6.9%	7.7%	9.4%

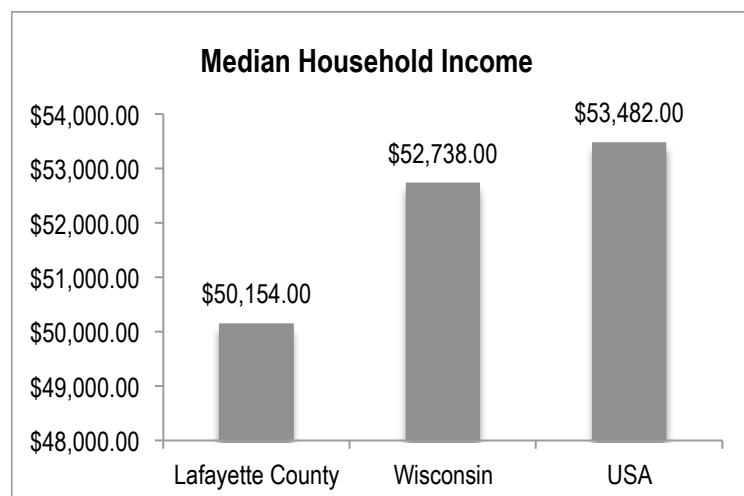
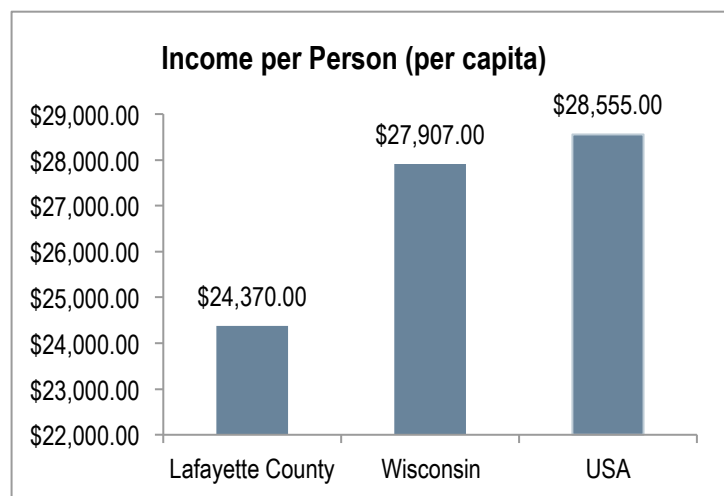
ACS Poverty Status in the Past 12 months 2010-2014 5-year estimates

### Unemployment Rates (2005-2015)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015(Jan)
<b>Lafayette</b>	4.1%	4.1%	4.1%	4.2%	7.2%	7.2%	6.4%	5.6%	5.4%	4.3%	4.5%
<b>Wisconsin</b>	4.7%	4.7%	4.9%	4.9%	8.6%	8.7%	7.8%	7.0%	6.8%	5.5%	5.4%

Source: Office of Economic Advisors- Wisconsin Department of Workforce Development, 2015 not seasonally adjusted, with 2014 benchmark <http://worknet.wisconsin.gov/worknet/dalaus.aspx?menuselection=da>

The graphs below indicate the median family income and the per capita income for families in Lafayette County compared to Wisconsin and USA averages.



Source: US Census Bureau, ACS Social Characteristics, 5-year Estimates, 2010-2014

Looking at income and employment status can be useful when assessing the health of a community, since many gain access to healthcare through employers or private purchase.

### Employers

The manufacturing of cheese is one of the main forms of employment in Lafayette. County government jobs are the next largest employer, most notably through the county owned nursing home and hospital.

#### Top employers in Lafayette County

Employer	Number of Employees (June 2010)
LACTALIS USA, Belmont INC	100-249
BETIN INC	100-249
Mexican Cheese Producers, INC	100-249
County of Lafayette (General medical and surgical hospitals)	50-99
County of Lafayette (Executive and Legislative Offices)	50-99
Shullsburg Creamery II LLC	50-99
School District of Black Hawk	50-99
County of Lafayette (Nursing Care Facilities)	50-99
Darlington Community School District	50-99
Shullsburg Public School	50-99

Source: Office of Economic Advisors- Wisconsin Department of Workforce Development, 2013 Lafayette County Economic and Workforce Profile,  
[http://worknet.wisconsin.gov/worknet\\_info/downloads/CP/lafayette\\_profile.pdf](http://worknet.wisconsin.gov/worknet_info/downloads/CP/lafayette_profile.pdf)

### Commuting Patterns

#### People who live in Lafayette Co., WI, work in:

<u>Workplace</u>	<u>Estimated # of Workers</u>
Lafayette Co., WI	4,200
Green Co., WI	1,150
Grant Co., WI	891
Iowa Co., WI	782
Dane Co., WI	663
Dubuque Co., IA	477
Jo Daviess Co., IL	263
Stephenson Co., IL	58
Rock Co., WI	19
Monroe Co., WI	14

A large number of Lafayette county residents are working in different counties. Lafayette is a rural county with more metropolis areas and subsequently a greater variety of job opportunities found in surrounding counties. This results in the average Lafayette County residence traveling slightly longer distances to work. Mean travel time to work is 24.9 minutes for Lafayette County residents compared to Wisconsin's mean travel time to work of 21.8 minutes.

Source: Office of Economic Advisors- Wisconsin Department of Workforce Development, 2013 Lafayette County Economic and Workforce Profile, Based on U.S. Dept. of Commerce, Census Bureau, American Community Survey 2007-2011, Table S0801  
[http://worknet.wisconsin.gov/worknet\\_info/downloads/CP/lafayette\\_profile.pdf](http://worknet.wisconsin.gov/worknet_info/downloads/CP/lafayette_profile.pdf)  
ACS Commuting Characteristics 2010-2014

### *Inadequate Social Support:*

According to the County Health Rankings, social support networks are strong predictors of individuals' health behaviors. Consequently people with poor family support, minimal interaction with others, or limited community involvement are at an increased risk of morbidity and mortality.

- Lafayette County had 14.8 membership associations per 10,000 population, compared to Wisconsin's average of 11.8.
- The 2014 County Health Rankings reported data on the percentage of people reporting no social/emotional support.
  - 13% of Lafayette County residents are without social/ emotional support, compared to 17% of Wisconsin residents.
  - Lafayette has improved by 4% on this measure since 2010.

Source: 2015 County Health Rankings; 2014 County Health Rankings

## **Physical Environment**

### *Air Quality:*

According to the County Health Rankings, elevated air pollution can have negative impacts on health by decreasing lung function, chronic bronchitis, asthma, and other adverse pulmonary effects. Fine particulate matter is emitted from forest fires, or formed from gases emitted from power plants, industries, and automobiles.

- The average daily density of fine particulate matter in micrograms per cubic meter was 11.9 in Lafayette County.
- The states average was 11.5, and the target value is 9.5.

Source: 2015 County Health Rankings

### *Drinking water violations:*

Over the years the County Health Rankings has used various measures to assess water quality. In the 2015 rankings, drinking water violations was used. Contaminants in drinking water are estimated to sicken 1.1 million people in the US each year.

- In Lafayette County, 8% of the population was potentially exposed to water exceeding a violation limit between 2013-2014.
- Lafayette ranks 60 out of 72 other counties in Wisconsin.
- The state's average is 5%, and the target value is 0%.
- This is an area Lafayette County could improve on.

Source: 2015 County Health Rankings

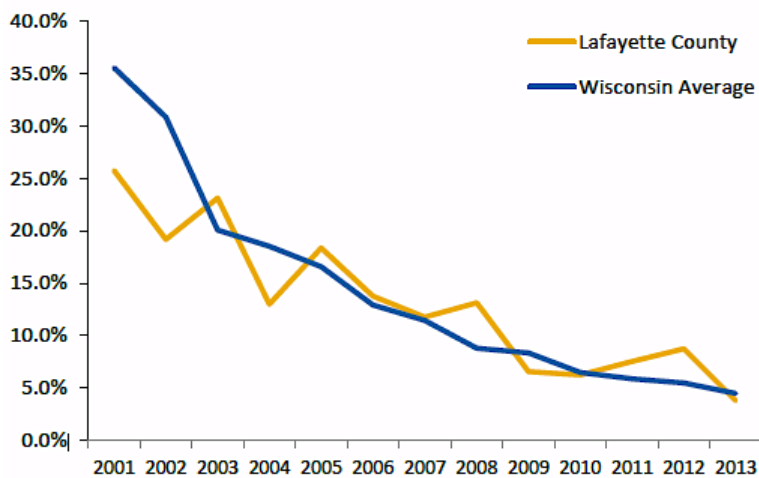


### Child lead poisoning:

According to the Wisconsin Department of Health Services, lead poisoning can lower IQ and attention span, cause learning disabilities and developmental delays, as well as have various other health and behavioral effects in young children. Most exposure to lead occurs in buildings built before 1978 with lead-based paints or lead-tainted dust in the environment. In 2012, the CDC lowered the intervention blood lead level from 10 micrograms per deciliter (mcg/dL) to 5mcg/dL.

## CHILDHOOD LEAD POISONING

PERCENT OF TESTED CHILDREN WITH BLOOD LEAD  $\geq 5$   $\mu\text{g/dL}$



- Based on 2014 data, 4.3% of tested children under age 6 in Lafayette County had blood lead levels higher than 5mcg/dL.
- Wisconsin had an average of 4.5% of children with blood lead levels higher than 5mcg/dL.
- The chart below shows the number and rate of children who tested positive for lead poisoning from 2011-2013.

**Lafayette County Blood Lead Testing Data for Children Less than 6 Years of Age**

Year	Number tested 5mcg/dL or above	Rate of 5mcg/dL or above	Number tested 10mcg/dL or above	Rate of 10mcg/dL or above
2011	15	9.3	2	1.2
2012	11	8.3	2	1.5
2013	6	3.6	1	0.6

\*Rate is number of children with an elevated blood lead level divided by the number of children tested in the specific county.

Sources: Wisconsin Department of Health Services, Wisconsin Childhood lead Poisoning Prevention Program, Blood lead Testing and Lead Exposure Data 2011-2013

<https://www.dhs.wisconsin.gov/publications/p0/p00665.pdf>

Wisconsin Environmental Public Health Tracking Program, 2015 Lafayette County Environmental Health Profile, <https://www.dhs.wisconsin.gov/publications/p0/p00719-lafayette.pdf>

2014 Report on Childhood Lead Poisoning in Wisconsin,

<https://www.dhs.wisconsin.gov/publications/p01202.pdf>

## **Primary Data**

### **Community Survey and Stakeholder Interviews**

#### **Introduction**

A community survey and stakeholder survey and interviews were included as part of the Lafayette County Community Health Needs Assessment. They provide an opportunity to discuss the perceptions of health and public health, the factors influencing health, the health system, and health resources in the county. The overall goal was to find out: *“What is important to Lafayette County?”*, *“How is quality of life perceived in Lafayette County?”* and *“What assets does the County have or need in order to improve health?”* Use of a community survey and stakeholder survey and interviews were identified as the best approach for gathering this information from the population. When the community becomes involved in the discussion and is part of identifying top priorities, it instills a sense of ownership for the betterment of Lafayette County. The public and key stakeholders are a critical component for sustainable change to occur. The survey results are analyzed and disseminated in order to influence health program decisions, to increase the understanding of the relationship between health behavior and health status, and to support health policy decisions.

#### **Part 1 – Stakeholder Interviews/ Survey**

Key stakeholder interviews and surveys were used to ascertain opinions from a broad range of individuals identified as influential in the community. Questions were asked concerning the perceived scope of health and healthcare, factors of good and poor health, availability of resources, and specific roles each interviewee would take to support public health efforts in Lafayette County. The core questions were designed to gather information about key stakeholders’ general understanding and expectation of health, public health, and the healthcare system.

The overall purpose for the stakeholder interview and survey was to:

- a) *Obtain a better understanding of key stakeholder’s understanding and expectations of healthcare and public health in Lafayette County.*
- b) *Identify the stakeholder’s greatest health concerns in the county.*
- c) *Learn what motivates stakeholders to commit to help achieve and support a healthy community.*
- d) *Gain qualitative data to complement the secondary quantitative data.*

#### **Stakeholder Interview/Survey Methodology**

To gain increased input, stakeholders were given the option to take an online survey or participate in a traditional interview via phone or in-person. The list of questions developed to guide and focus the interviews was transcribed to an online survey format (Appendix). An online survey does not allow for the in-depth conversation that can occur with an interview. However, it was decided having the option to complete a survey would allow stakeholders, who have limited time or otherwise would not have participated in an interview, the opportunity to share their thoughts and opinions. Questions similar to the 2010 stakeholder interview were used to identify changing perceptions.

The University of Wisconsin- Madison Master of Public Health candidate, Marlaina Morrissey conducted the stakeholder interviews in person or over the phone.

The opportunity to participate in the stakeholder interview/ survey was extended to several individuals. The final group of participants was ultimately the result of self-selection. Interviews were conducted with County employees and elected officials, police department members, religious officials, school district employees, business owners, and private citizens, to name a few. Key stakeholders were invited to participate in the interview by an initial contact email sent by the Health Department Director informing them of the purpose for interviews (Appendix). The Master of Public Health candidate sent a follow up email to arrange a time and method of communication based on their preference. The survey link was provided in the second email.

A total of 17 stakeholders completed the online survey. Six stakeholders were available for an interview. Responses from interviews were recorded in writing. All responses (interview and surveys) were kept strictly confidential. Respondents were assured only comments relevant to overall themes of the interview would be in the final report and no identifying individual attributions would be made.

Ample time was allowed to fully explore the interviewee's insight on these topics, while being respectful of the stakeholder's time. The online survey provided sufficient space for writing. Asking the stakeholder if he/ she had any further questions closed the interview and survey.

### **Key Stakeholder Summary of Results**

A summary of the key answers based on general themes for each individually asked question is listed below.

#### **Definition of Health**

Question: *What is your definition of health? Describe the role health plays in the community?*

The majority of respondents identified health as matter of holistic well being. The importance of physical, emotional, mental and spiritual health was a general theme. This is consistent with the World Health Organization's (WHO) definition of health. Exercise, diet, feelings of happiness, and financial stability were listed as associated factors of health. Others pointed out that the definition of health was dependent on the individual.

Many respondents identified a healthy community as an important factor and essential to promote productivity. Additionally, the role of health in a community was linked to the health care system. It was noted facilities, providers, and the environment needed to be able to provide health services and support healthy living. The importance of a strong county health care system was also identified as important for the community's economy.

## **Definition, Role, and Scope of Public Health**

Question: *How do you define public health? What do you see as its role in the community?*

The common definition of public health from respondents involved the health of the community. Stakeholders were consistent in their view of public health being an essential component of the community. One respondent stated it was the “backbone” of the community health system.

The majority of respondents identified public health as a cornerstone to relay information and education on up-to-date health issues to the community. Disease prevention and health promotion were commonly referred to as roles of public health. Disaster preparedness, outbreak management, and vaccinations were listed as some examples.

It is interesting to note a subset of respondents identified public health as a source to provide access to medical services for individuals and families who could not otherwise afford them. Home care services, such as care of the home bound and medication management were also associated with public health. This may have to do with the current organization of public health and home care in Lafayette County.

A few respondents credited public health as being an instigator for collaboration between the different county agencies.

## **Factors Contributing to Good Health**

Question: *What factors contribute to good health in Lafayette? With respect to health and healthcare, what are Lafayette County’s strengths? What is being done well?*

A variety of responses were given to this question. The general theme focused on the physical, environmental, and social determinants of health. Locally grown foods and the rise of farmers markets in the community were commonly identified as contributors to good health. The option for physical activity and the opportunity to participate in multiple recreational activities were also highlighted.

A couple of respondents noted the advantages of the rural environment. Examples listed included, improved air quality and the slower more relaxed environment compared to “city-living,” and the benefit of multi-generational interaction among family members.

The general consensus was the accessible healthcare system in Lafayette County is a major strength. The communication and collaboration between the health department, hospital, clinic, local pharmacy, home care, and human services was frequently mentioned. Additionally, a number of respondents acknowledged the importance of the Lafayette County Health Department in disseminating relevant health information, providing preventative health care such as vaccinations and nursing care in the schools.

## **Factors Contributing to Poor Health**

*Question: What factors contribute to poor health in Lafayette? Describe ways to address these factors contributing to poor health? What barriers do you see in addressing these factors?*

An individual's lifestyle behavior and choices was a common theme. The easy access and overuse of alcohol, tobacco, illegal drugs, in addition to unhealthy eating and lack of exercise activities were frequently listed. Multiple stakeholders mentioned the individual's responsibility resulting in poor health outcomes.

On the other end of the spectrum, the majority of respondents also recognized the impact of poverty and a person's social economic status on poor health outcomes. Stakeholders noted unemployment and poverty make it difficult for individuals to practice a healthy lifestyle or access care. This indicates there is some understanding of the socio-ecological model. This is the idea that a person's health is not solely dependent on the individual but rather multiple layers including the social environment.

A few stakeholders also noted challenges in reaching the Hispanic population. There was concern of stereotyping and poor access potentially impacting the health of the Hispanic population. The local hospital and clinic have Spanish written material but hardly any Spanish-speaking employees, which contributes to the language barrier.

Education was the most frequently listed recommendation to address the factors contributing to poor health. Outreach to the community in addition to developing and strengthening partnerships between local stakeholders, was also suggested.

Some stakeholders noted an individual's attitude might inhibit attempts to improve poor health. The "rural culture" of independence, not seeking healthcare, and a mentality of "work hard/ play hard" was identified as a difficult barrier to overcome. Others noted a breakdown of communication between stakeholders and the community, lack of funding, in addition to differing opinions could make it difficult for the community to improve health.

## **Health Issues Prioritization (highest to lowest)**

Respondents were asked to list what they thought to be the top three health problems in Lafayette County. A list of example problems was provided. Stakeholders were encouraged to choose any three issues they thought needed the most attention and were not limited to the example list.

The following ordered list is a summary of the most-often through the least-often suggested health topics by stakeholders:

1. Drug and Alcohol Issues
2. Obesity and Overweight
3. Healthy Lifestyle Behaviors
4. Aging Problems
5. Farm/ Rural Safety
6. Mental Health and Emotional Well-being



7. Access to care
8. Minority concerns (Hispanic, undocumented laborers, Amish)
9. Dental Health
10. Cancer
11. Family Dysfunction
12. Substandard Housing
13. Income
14. General Health

Discussion around the topics occurred in the interviews and some respondents left comments in the survey. Some notes from the interviews and surveys include:

- Drug and alcohol issues and obesity and overweight issues were equally the most frequently chosen priority by stakeholders.
- Many noted how Lafayette County is an aging population. There was concern over the availability of well-run housing options such as assisted living or nursing homes and adequate medical services.
- One respondent made a point to comment on the need for access to transportation in order to access health care services.
- Those who mentioned family dysfunction talked in the context of changing morals, single parent households, and lack of time for families to spend together.
- General health includes the singular mention of diabetes, coronary heart disease, prenatal care, preventative health measures, and the health care system. Prenatal care was noted to be important in relation to the recent closure of the obstetrics unit at Lafayette County Memorial Hospital. One respondent brought up concern that the health care system was more concerned about “money making,” and it had lost its focus of improving health.

After listing their top health priorities, respondents were asked how they thought these specific issues could be addressed in the community. This was followed by a question on barriers that may arise in addressing these issues.

### **Local Solutions and Barriers to Support**

Question: *How should Lafayette County go about addressing these health needs, and what services or resources should be used?*

Education and awareness were the most frequently mentioned solutions. Health fairs, farm safety education sessions, or healthy food choice promotion in grocery stores were suggested. Others mentioned the need for affordable services, such as affordable weight loss programs, healthy foods, and services for older adults to stay in home.

Collaboration among stakeholders and public and private organizations was also frequently mentioned. Collaboration was mentioned in the form of starting community gardens, working with businesses to implement incentive programs to promote employee health, and working together to apply for grants to secure funding. One respondent wrote about the need to, “optimize resources and create sustainable mechanisms to support health.”

In regards to minority health an on-site interpreter was suggested to be present certain days of the month at the local clinic. This would facilitate better communication between Hispanic non-English speaking patients and providers.

Question: *What barriers exist in this county to creating programs/ solutions for our health problems, and how would you suggest addressing them?*

The lack of financial resources was by far the most frequently mentioned barrier to creating solutions or programs. One respondent suggested, “monetizing” the loss productivity that occurs as a result of non-communicable disease such as obesity in order to argue for increased funding.

Individual’s and the community’s unwillingness to change or engage with programs was noted. The culture of alcohol and unhealthy eating being ingrained in the community may be difficult to overcome or prevent adoption of recommended solutions.

The substantial role the local county government plays in matters of health care decision was also mentioned by a number of respondents. Currently, a large proportion of the health care system is owned and run by the county government. It was suggested the lack of health care knowledge of those in power might hinder the acceptance and use of creative solutions to improve health. Inter-department controversies or misunderstandings may also create obstacles to the development of solutions.

### **Community Support**

Question: *What role could you play in addressing the health needs/ improving the health of Lafayette County? How might you involve others?*

Almost all respondents expressed a willingness to engage with the community in order to make Lafayette County a healthier place to live. Many noted they could act as an example, advocate for change, or work with their specific entities such as library, school, business, department, church, or town to assist with programs that promote health. There was interest in working in partnerships to achieve specific and common health goals. A few respondents also noted the need for community members to become more engaged in efforts to improve health. Those who did not know how they could contribute were open to suggestions.

## **Part 2 - Community Survey**

### **Community Survey Methodology**

A community survey was developed and disseminated to county residents through social media networks and made available online. Many questions from the 2010 Lafayette County Needs Assessment survey were incorporated into the current survey. This provides opportunity to compare past and present county resident perspectives on the health of Lafayette County. In the 2010 health assessment the community survey was mailed to randomly selected residents resulting in 87 responses. This time around the goal was to obtain an increased number of varied responses from county residents. The use of online and social media surveys is a relatively new venture in data collection. This type of sampling method is non-randomized, so it is more difficult to confidently generalize the results. The Community Health Needs Assessment, being similar to a quality improvement project, does not require the strict scientific methodology of a research study. However, attempts were made to improve generalizability of the survey results, which are described below. A copy of the survey can be found in the Appendix.

To notify the county residents of the survey, a link with a brief description was posted on the health department website. The health department and staff also posted the link in their social media feeds periodically throughout the survey open period. A link was also posted on Lafayette-Grant County WI Scanner, Lafayette County Wisconsin, and Blanchardville's 125 Anniversary Celebration, three Facebook pages for Lafayette County residents with many followers. Flyers were hung in every town at banks, libraries, schools, Laundromats, post offices, and select restaurants directing people to the Lafayette County Health Department website to complete the survey. Argyle and Darlington school districts were both amenable to posting a survey link on their school websites in September. This was in attempts to capture the parent population. Darlington UMC, Our Savior's Jordan Lutheran Church in Argyle and Adam's Lutheran Church in Argyle were churches willing to place an announcement about the survey in their weekly bulletins. In attempts to encourage complete responses participants were incentivized with a chance to enter a drawing for one of four gift cards to a local community supported agriculture (CSA) site. Upon finishing the survey, those interested in entering the drawing clicked on a link, which led them to another survey to leave a phone number or email address. The two surveys were independent of each other to ensure anonymity of the community health survey. Those who filled out a paper copy could fill out a separate piece of paper leaving their contact information, which was separated from the rest of the survey prior to entering their responses.

The Hispanic, Amish/ Mennonite, and older adult populations were three populations the health department was most concerned would not be captured in an online survey. To target older adults, the health department distributed paper copies of the survey at Senior Day at the Fair and a couple foot care clinics they operate on a monthly basis. Paper copies were also left at two Amish and Mennonite food stores within the county. The women storefront workers were only willing to take one to two paper copies and prepaid return envelopes for their father or elder to review. As no identify information was asked on the survey, it cannot be determined if a person of Amish or Mennonite background completed the survey. As a means to target the

Hispanic population, the online survey was designed with the option to be taken in Spanish. In addition, flyers translated in Spanish were distributed to local Hispanic owned businesses in Darlington. In the future, it may be more effective to have a booth at the community Cinco de Mayo celebration in Darlington with paper versions of the survey or a computer set up for people to complete the survey on the spot. Unfortunately, the survey was not completed and ready for dissemination until the end of June.

## Community Survey Results

### *Demographics*

A total of 198 Lafayette County residents completed more than 80% of the survey. Three completed surveys were discarded for lack of evidence indicating county residency, e.g., no zip code listed. 83% of respondents were female compared to only 15% male. There was decent dispersions of respondents between the ages of 18-75+. Surprisingly, given the use of an online survey, the age group 19-29 had the fewest number of respondents. Only two respondents indicated they were Hispanic or Latino. The top four zip codes represented were 53530 (Darlington), 53586 (Shullsburg), 53504 (Argyle), and 53516 (Blanchardville), respectively. Darlington and Shullsburg are the most populous areas of the county followed by Belmont and Benton. Consequently, it is interesting to see Argyle and Blanchardville areas more represented in the survey. Residents in these areas may have been more susceptible to survey advertising. However, there is representation from all major population areas in the county. 96% of respondents had a high school degree or higher. The household income of 56% of respondents was \$75,000 or less. Household income of \$0-\$25,000 encompassed 13% of respondents, \$25,001-\$50,000 was 22%, and \$50,001-\$75,000 was 21%. This is similar to the average household income of county residents.

Zip code:	Percent
<b>53504- Argyle</b>	13.5%
<b>53510- Belmont</b>	4.7%
<b>53516- Blanchardville</b>	10.4%
<b>53530- Darlington</b>	42.2%
<b>53541- Gratiot</b>	2.6%
<b>53565- Willow Springs</b>	2.6%
<b>53586- Shullsburg</b>	14.5%
<b>53587- South Wayne</b>	4.1%
<b>53803- Benton</b>	5.2%
<b>53818- Northwest corner of the county</b>	0.5%

Respondents Age	Percent
75+ (≤1940)	17%
65-74 (1950-1941)	11%
50-64 (1965-1951)	27%
40-49 (1975-1966)	16%
30-39 (1985-1976)	26%
18-29 (1997-1986)	4%

193 residents entered valid zip code, 5 paper versions indicating Lafayette County residency were included in data analysis.

The first section of the survey asked participants to answer how they feel about the following statements.

***“What things are most important in order to have a healthy county?”***

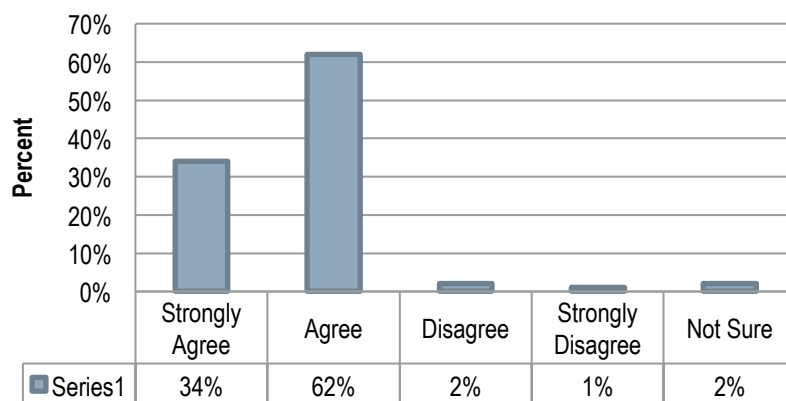
This question was asked to analyze what county members identify as important components for a healthy county. Respondents were asked to pick five choices, which were not ranked. Access to health care, good schools, and job opportunities were the top three choices most frequently chosen by respondents. For the “other” category people left comments such as, “Doctors that know what they are doing,” “Local food options,” “Mental health resources,” and “Good leadership, low crime.” Six respondents who filled out a paper survey recorded more than five responses. This did not alter the top three choices.

Rank	Choice	Percent
1	Access to Health Care	76%
2	Good Schools	72%
3	Job Opportunities	57%
4	Low Crime, Safe Neighborhoods	56%
5	Affordable Housing	36%
6	Emergency Preparedness	32%
6	Healthy Behaviors & Lifestyles	32%
7	Transportation	27%
7	Clean Environment	27%
8	Access to Technology	21%
8	Religious or Spiritual Values	21%
9	Parks and Recreation	16%
10	Arts & Cultural Events	5%
10	Other	5%

The above table ranks the choices most frequently chosen by respondents as important for a healthy county.

***“Lafayette County is a safe place to live.”***

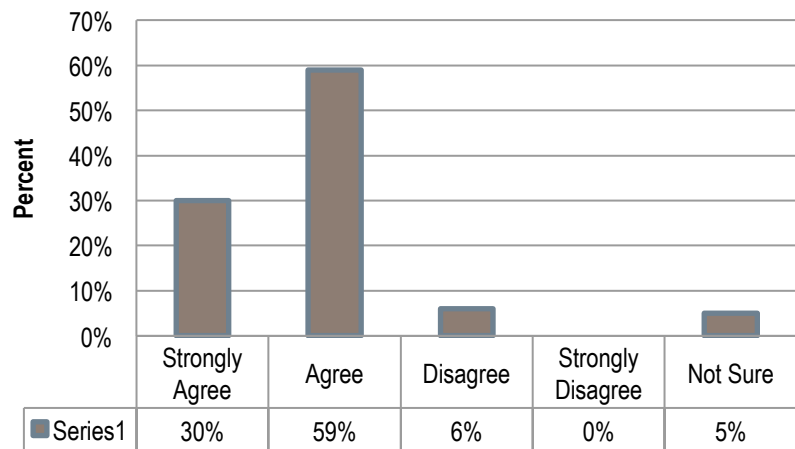
Assessing one’s opinion of how safe a county, or any given location, is to live in can provide further insight into how safe residents may feel at home, in the workplace, in school, at playgrounds, parks, and even shopping centers in Lafayette County. The vast majority of respondents agree (62%) or strongly agree (34%) Lafayette County is a safe place to live. Only 2% disagree, 1% strongly disagree, and 2% were not sure about Lafayette being a safe place to live.





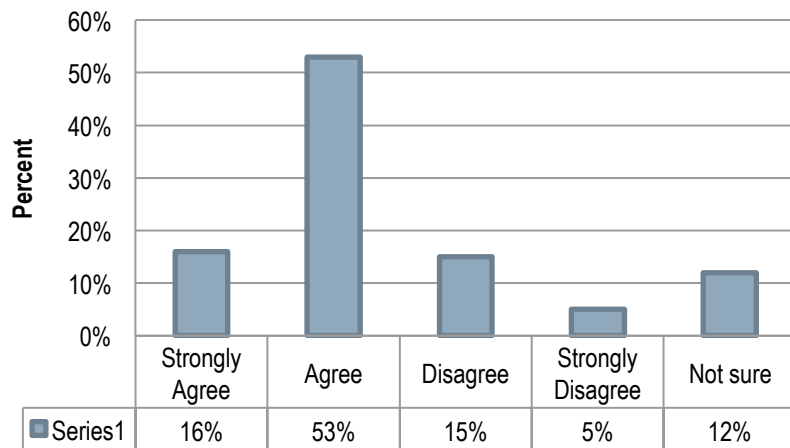
***“Lafayette County is a good place to raise children.”***

How county residents rate their county in terms of ability to raise children can provide insight into the quality and safety of schools, childcare programs, and after school programs, as well as areas for recreation and play in the county. The majority of respondents agree (59%) and strongly agree (30%) with the statement. 6% of respondents disagree, while 5% were not sure. There appears to be general satisfaction with Lafayette’s environment for raising children. However, there is room for improvement.



***“Lafayette County is a good place to grow old.”***

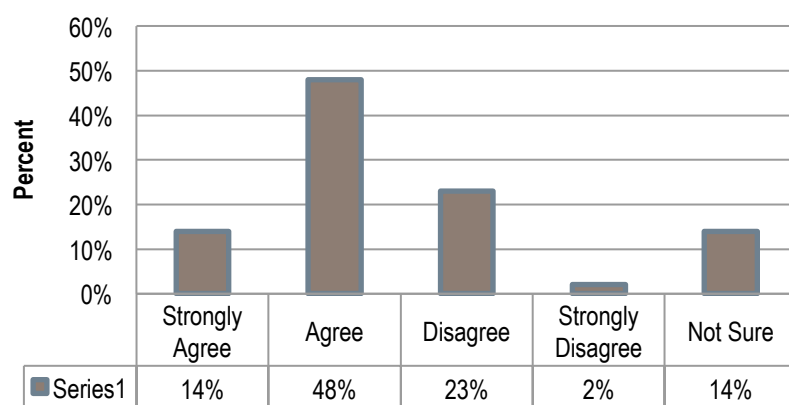
Overall, 53% agreed and 16% strongly agreed with this statement. However, it is concerning that 15% of respondents disagree, 5% strongly disagree, and 12% were not sure whether Lafayette County is a good place to grow old. A greater percentage of respondents’ disagreed/ strongly disagreed with this statement compared to the 2010 needs



assessment. Lafayette County is an aging county, which means more residents will be in need of health care services. Improvement in this area can have the potential to positively impact the county and many residents.

***“There is plenty of help for individuals and families in times of need in Lafayette County.”***

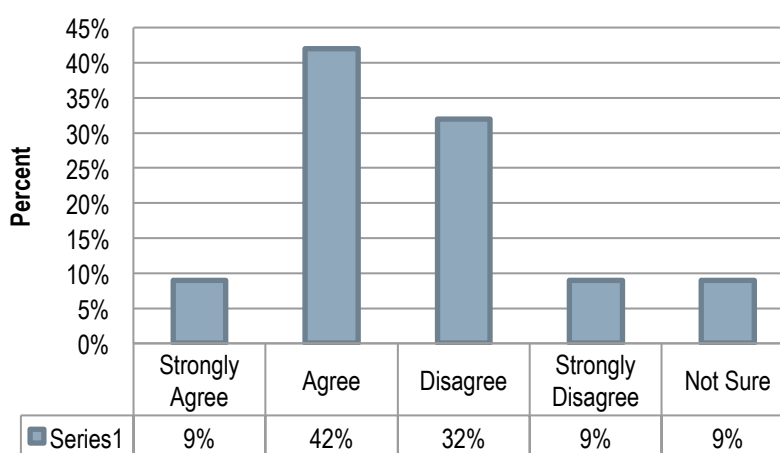
We can gain insight into the social support available in Lafayette by assessing residents’ beliefs of Lafayette County’s ability to provide for individuals and families. Social support ranges from neighbors, support groups, faith community outreach, community organizations, and emergency financial assistance. The majority of respondents agree (48%) or strongly agree (14%) that there is plenty of help for Lafayette County individuals and families. However, the percentage of residents who disagree (23%), strongly disagree (2%), and are not sure (14%) is quite alarming. Those who disagree with this statement has more than tripled compared to the



2010 results. This shows that there are areas of social support that need improvement. It may also highlight that the county needs education on current available supports, as 14% of respondents were unsure of the help available for county residents.

***“There is a good healthcare system in Lafayette County.”***

Understanding how people feel about the quality of health care available in the community can help one better understand the needs of the community. Responses were relatively dispersed among the categories, with a slight majority agreeing (42%) that there is a good health care system. The percentage of respondents who agree/ strongly agree



with this statement is down 13% from the 2010 survey. Such responses show there are a good number of residents who are not pleased with the current health care system, and since 2010, residents perspectives of the healthcare system have worsened. Improvement in the health care system would be beneficial to meet community members’ health needs.

**Next respondents were asked to answer more specific questions about their health, health care, and methods of obtaining health related information.**

***“Do you have health insurance?”***

97% of respondents reported having health insurance. Only 3% did not have insurance. The increase in the percentage of residents with health insurance coverage may be due to enactment of the Affordable Care Act.

***“Have you seen a healthcare provider in the last 12 months?”***

The overwhelming majority, 92%, has seen a health care provider. Only 8% have not seen a health care provider.

***“What was your reason for seeking medical care?”***

Reason for seeking medical care	Percentage
<b>Primary care well visit (yearly physical)</b>	69%
<b>Treatment for sudden illness</b>	22%
<b>Treatment for chronic illness</b>	17%
<b>Accident (fall, car crash)</b>	7%
<b>Other</b>	12%

For respondents who sought medical care, they most frequently went for a primary care visit. Additional answers respondents entered in the comment section for “other” included: “Cardiologist,” “blood work,” “follow up care for illness,” “Specialty clinics,” “in house nurse visits,” “therapy after surgery,” and “medical check for prescriptions.”

***“Was there a time in the past 12 months when you needed medical care but did not get it?”***

11% of respondents reported there was a time in the past 12 months when they did not get needed medical care. 89% of respondents denied having trouble receiving medical care.

***For the 11%, or 22 out of 198 respondents, that did not receive needed medical care the following are reasons why:***

Reasons for not receiving medical care	Number of respondents
My insurance would not cover what I needed	6
I could not get an appointment	3
I couldn't pay for health services	3
Hospital would not take my insurance	1
I did not have a way to get there	1
I did not know where to go	0
Language Barrier	0
Doctor would not take my insurance	0
Other	7

The 7 respondents who chose “Other” listed the following comments: “No 24h pharmacy,” “They did not offer the services I required,” “Couldn't get an appointment,” “Doctors leaving,” and dissatisfaction with the quality of care.

***“When you seek medical care, where do you generally go for treatment?”***

Where seek medical care	Percent
Primary Health Care Provider (in Lafayette County)	42%
Primary Health Care Provider (outside of Lafayette)	51%
Emergency Room	1%
Other	6%

Interestingly less than half of respondents reported receiving primary care in Lafayette County (42%). 51% reported receiving primary care outside of Lafayette County. Only 1% went to an emergency room, which is assuring, as this is a very expensive means to receive health care. 6% of those who chose “other,” listed “chiropractic care,” “Iowa County,” “Dane County,” and “Monroe County.”

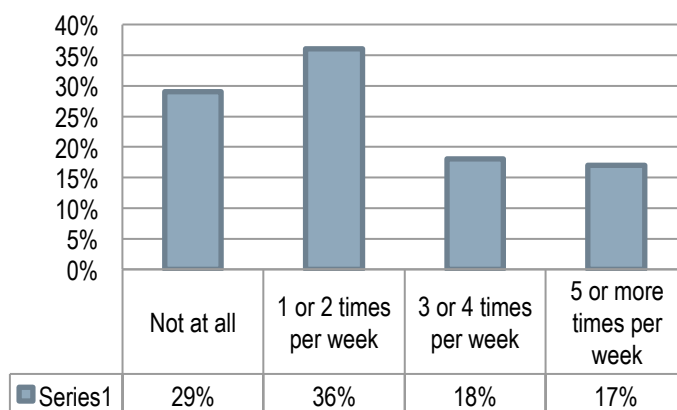
***“How would you describe your overall health status?”***



***“What things do you think prevent you from being healthy?”***

Not enough money was the most frequently chosen response (42%) inhibiting health. No local grocery stores was chosen by 19% of respondents, no place to safely exercise (12%), and cost of housing (12%). 30% of respondents chose “other” and left comments. Comment themes included, lack of time, no motivation, “lazy,” or a pre-existing medical condition.

***“How many days per week do you exercise at least 30 minutes?”***



***“In the last 12 months has a doctor, nurse, or other health professional asked or talked to you about any of the following factors:”***

Topics covered with health care providers	Percent
<b>Your physical activity or exercise</b>	62%
<b>Your weight</b>	61%
<b>Your diet or eating habits</b>	53%
<b>Alcohol use</b>	11%
<b>Drug use</b>	4%
<b>Sexual activity</b>	3%

***“Have you been told by a doctor, nurse, or other health profession that you have any of the following conditions:”***

The top five reported medical conditions are as follows. High blood pressure and obesity/overweight were each reported by 41% of respondents. Followed by 35% of respondents reporting arthritis and 31% reporting high cholesterol. Depression or anxiety disorder was reported by 29% of respondents.

***“In the past 12 months you...”***

Activity	Percent
Got a flu shot,	64%
Wore a helmet while riding a bike or motorcycle,	7%
Wore a seat belt when you drove or rode in a car or truck,	91%
Stayed home from work, school, or some other activity because you were feeling "down" or "blue,"	13%
Drove a car/truck/ATV/UTV/boat after drinking alcohol or taking drugs,	11%
Used cocaine, marijuana, or other illegal drugs,	1%
Used tobacco (snuff, chew, spit tobacco, cigarettes, cigars, or e-cigarettes),	17%
Had more than 6 alcohol drinks at one time,	23%
Couldn't pay for a drug the doctor wanted you to take	8%
Had unprotected sex with more than one partner,	2%

This question was asked to gauge what healthy and unhealthy activities respondents were partaking in. The majority of respondents reported wearing a seat belt when driving (91%) and receiving a flu shot (64%). Few respondents reported partaking in a negative health activity. With any type of questionnaire or survey people are more likely to underreport negative health habits. However, 23% of respondents did report consuming more than 6 alcoholic drinks at one time.

***“In the past 12 months have you or anyone in your household needed or used any of the following services?”***

Service	Needed	Used	Total Responses
Help with utilities or food	17	12	29
Shelter or temporary housing	1	2	3
Help with transportation, child care, or after school care	10	3	13
Relief for caregivers of older or handicapped children/ adults	6	4	10
Individual or family counseling	5	7	12
Help with job training	2	2	4
Help finding a job	11	3	14
Debt counseling	8	3	11
Services for a disabled person	7	8	15

\*Note this chart is reported based on the *number* of respondents, not percentages.

The question was answered by less than one-third of respondents. Suggesting many respondents did not need these services or the question was too complicated or time-consuming to answer. Of those who answered this question, a total of 29 respondents, used or needed help with utilities of food. 11 respondents reported needing help with finding a job but only three respondents used this service. Additionally, 10 respondents reported needing help with transportation, childcare, or after school care, and only three respondents used these services.

***“Have you used any of the following services through the Lafayette County Health Department?”***

Health Department Services	Percent
<b>Immunizations/ Flu Shots</b>	88%
<b>School Nursing</b>	22%
<b>Well Water Testing Kits</b>	18%
<b>Foot Care</b>	15%
<b>Loan Closet</b>	13%
<b>Lead Testing</b>	9%
<b>Breast Pumps</b>	9%
<b>Communicable Disease Information</b>	8%
<b>Radon Kits</b>	6%

This question was asked to gauge insight into what resources respondents were using from the Lafayette County Health Department. This was one of the few questions that was not answered by all respondents. Only 128 respondents reported using any services from the health department. Immunizations/ Flu shots (88%) and School Nursing (22%) being the most commonly used services. Community members may not be aware of the services provided by the health department and further advertising may be useful.

***“Where do you get your local news?”***

The most commonly listed news sources included Facebook, Google, and online news websites for Internet services. Radio stations listed were WEKZ, WDMP, 99.3, and 93.7. Most commonly listed newspapers included the Republic Journal, WI State Journal, Monroe Times, Monroe Times, and the Pecatonica Valley Leader. TV channels viewed by respondents included, Channel 3, NBC 15, and Channel 27.

*Respondents had the option to leave additional comments at the end of the survey. Common themes included the following:*

Many respondents expressed concern about the current state of Lafayette County’s health care system. Some are not satisfied with the quality of care and would like it improved. Others recognized the need to maintain current health services such as the health department, home care, and the hospital. The need to address the aging population and services they may need was also mentioned by respondents who left comments. The other common comment was on the need to promote healthy lifestyles such as exercise and healthy eating by improving accessibility.



## **Summary of Key Findings from the Community Survey:**

In the first question respondents were asked to select the five most important things in order to have a healthy county. The four most frequently chosen choices were access to health care, good schools, job opportunities, and low crime, safe neighborhoods. The vast majority of respondents, over 88%, agreed or strongly agreed that Lafayette County was a safe place to live and a good place to raise children. This reflects positively on Lafayette County, suggesting Lafayette is doing well to meet two out of the four criteria respondents think are important to have a healthy county.

Respondents to the community survey showed dissatisfaction with the health care system in Lafayette County. This is reflected in over half of respondents choosing to seek health care outside of Lafayette County. A strong health care system within Lafayette County is important for the community and its residents. Not only in the form of physical health maintenance, but also economic health. As described in the secondary data section, the county owned hospital and nursing home are of the top ten employers in the county. Stakeholders identified economic stability and financial resources as an important part of people's health. Community member survey takers also recognized the importance of having adequate job opportunities in order to have a healthy county. Without financial stability, people may not have the resources to care for their physical or mental health.

A concerning number of respondents were not confident that Lafayette County was a good place to grow old. 32% of respondents disagreed, strongly disagreed, or were unsure about Lafayette being a good place to grow old. Additionally, many respondents, over 35%, disagreed, strongly disagreed, or were unsure, about the amount of help for county individuals and families. Lafayette County is an aging population. The older adult population often needs health care services more frequently than younger populations. They may also be more in need for social service supports. For respondents to express greater dissatisfaction from the previous 2010 survey is concerning. This highlights the need to improve these areas in order to improve the health of the county.

In regards to respondents' specific health, they reported themselves as relatively healthy. Only 3% of respondents did not have health insurance. The main reason for seeking medical care was for a primary care well visit. 11% reported inability to receive needed medical care. Insurance not covering needed services, inability to pay for services, and inability to get an appointment were the most frequently chosen causes for not receiving care.

The majority of respondents listed their health as very good or good (77%). Respondents rated their access to fruits and vegetables as fair to good. More than 60% of respondents reported exercising zero to two times per week. Not enough money was the most frequently chosen reason keeping respondents from being healthy. Of the 143 respondents who reported having a medical condition; high blood pressure, overweight/ obesity, and arthritis were the top three conditions. Over 60% of respondents received a flu shot in the last year, and 91% wore a seat belt when in a car. 23% of respondents reported drinking more than six alcoholic drinks at one time, 17% used tobacco, and 11% drove after drinking alcohol or taking drugs.

## Community Ranking of Health Priorities

One of the main reasons for a community survey is to evaluate the conditions Lafayette County residents view as the most significant health priorities. The last question of the survey asked respondents to identify health problems they felt had the largest impact on the health of the county. There were 13 options, and respondents picked their top five. An option could only be chosen once, and no more than five options could be selected. Respondents did not rank their options. The top three priorities selected were based on the frequency of times the option was chosen by respondents. For example, 'drug and alcohol issues' was chosen by 57% of respondents as being a problem in the county.

The top three health problems with the largest impact on the community identified by Lafayette County survey respondents are Drug and Alcohol Issues, Aging Problems, and Overweight/ Obesity.

Rank	Problem	Percent
1	Drug and Alcohol Issues	57%
2	Aging Problems	53%
3	Overweight/ Obesity	51%
4	Healthy Lifestyle Choices/ Behaviors	50%
5	Access to Care	47%
6	Motor Vehicle Accidents/ ATV Accidents	33%
7	Emotional Well-Being	32%
8	Rural Safety/ Farm Safety	26%
9	Environmental Health	17%
10	Diabetes	15%
11	Prenatal Care	14%
12	Dental Health	13%
13	Infant Mortality	1%
	Other	5%

An 'other' option was given to determine if there were other issues not listed that respondents were concerned about. Less than 10 respondents chose this option. Comments included, "Hispanics," "Lack of resources," "gluten allergy," and governmental concerns.

# **Final Health Priority Ranking**

## **Health Priorities 2015**

- 1. Alcohol and Drug Issues**
- 2. Healthy Lifestyle Choices/ Behaviors**
- 3. Aging Problems and Concerns**

### *Rationale for Selection:*

Subjective and objective data was used to determine the top health priorities. Evidence of the problems was determined using objective data. To best identify the greatest concerns of the general public and key stakeholders they were asked to rank the health issues they deemed most important in the survey and interviews. Common trends were identified from the primary and secondary data sources in order to generate the health priorities list.

The 2010 community health needs assessment identified healthy lifestyle choices with an emphasis on obesity and overweight. This provided a platform to also address drug and alcohol issues. For the 2015 community health needs assessment the general public and key stakeholders both identified drug and alcohol issues as the number one health priority. Based on the general consensus it would be beneficial to have an increased focus on drug and alcohol issues in Lafayette County.

Healthy lifestyle choices and overweight and obesity were both ranked in the top four health issues for Lafayette County by the general public and key stakeholders. The lifestyle behaviors and choices people partake in can have an affect their health and weight, consequently increasing the risk for developing chronic disease. It is the preference of and more realistic for the Lafayette County Health Department to focus on lifestyle choices, as it provides room to develop broader programming. Comments were left by the general public and key stakeholders about the need for greater affordability and availability of local healthy foods, in addition to exercise opportunities. Addressing these concerns could affect the healthy choices a person makes, consequently impacting their health or weight.

The third priority was identified as aging problems and concerns. Secondary data indicates that Lafayette County is an aging population, with this comes increased health burdens on the county. It was listed as the second highest priority in the community survey and the fourth most important issue identified by stakeholders. A large number of community members disagreed that Lafayette was a good place to grow old. Based on these rankings and information it was decided to include aging problems as a third priority.

To ensure the health priority selections were valid secondary and national level data was assessed to observe how the priorities aligned. It was found both local and national data support the need to prioritize these three issues. As previously listed, 50% of motor vehicle deaths involved alcohol, the percentage of Lafayette County residents who are overweight is 31% and this is increasing, plus the population is aging with only one skilled nursing facility within the county and limited local home care resources available (County Health Rankings, 2015; ACS, 2010-2014). The health burden these issues can have on the county are significant, and the community is concerned. These issues were selected as the top health priorities of Lafayette County and deserve attention by the local healthcare system, the community, and other key stakeholders.

## **Next Steps**

The Lafayette County Health Department strives to uphold the ideals of public health by “preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, communities and individuals.” The information outlined above with the succeeding priorities identified will be influential in guiding some of the activities and programs coordinated by the Lafayette County Health Department. Helping them comply with their public health mission.

Previously, as a result of the 2010 Community Health Needs Assessment, Lafayette County developed a strategic plan. The second strategic initiative embedded the two identified priorities and outlined objectives. In the beginning the health department continued working with the Live Well Lafayette Coalition to focus on prevention programming. However, participation seems to have faded over the last year or two. The Live Well Lafayette Coalition is composed of people from various disciplines and Lafayette County organizations. In addition the health department continued to offer foot care clinics to the older adult population, targeting immunizations to children, older adults, and the underinsured and uninsured. There was not much focus placed explicitly on addressing the overweight/ obesity priority.

For the 2015 health needs assessment the Lafayette County Health Department will begin discussions with local organizations and community members who have a vested interest in these priorities. They may reach out to stakeholders who expressed concern over specific issues or have specialty knowledge on a certain problem.

The health department will also work to revive the Live Well Lafayette Coalition through presentation of this assessment. This is a coalition designed to bring interdisciplinary perspectives and individuals together with the common goal of improving the health of Lafayette County residents. If Lafayette County Health Department can be the instigator of outreach to bring together stakeholders and community members sustainable improvement is possible.

To evaluate progress, the health department could look to the County Health Rankings. Although, one should be weary, as the years of data used for the County Health Rankings can vary. Often, the data used is a couple years old and the County Health Rankings uses data trends to determine the current years ranking. It would also be recommended to annually review current programs and services offered through the health department to determine if they are addressing the identified priorities. For example, in 2014 the Lafayette County Health Department put together a report on the services and programs they offered. A review such as this is useful for the health department to ensure they are addressing the priorities deemed meaningful to community members and stakeholders.

## **References**

- American Cancer Society. (2014). Lifetime risk of developing or dying from cancer. Retrieved December 2015, from <http://www.cancer.org/cancer/cancerbasics/lifetime-probability-of-developing-or-dying-from-cancer>
- Bravemen, P. & Gottlieb, L. (2014). The social determinants of health: it's time to consider the causes of the causes. *Public Health Reports* 129(2) 19-31.
- Centers for Disease Control and Prevention (CDC). (2012). *Diabetes and Data and Statistics: County Data*. Retrieved from <http://www.cdc.gov/diabetes/atlas/countydata/atlas.html>
- Centers for Disease Control and Prevention (CDC). (2015). *The benefits of physical activity*. Retrieved November 2015, from <http://www.cdc.gov/physicalactivity/basics/pa-health/>
- Centers for Disease Control and Prevention (CDC). (2016). Fact sheets- alcohol use and your health. Retrieved January 2016, from <http://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm>
- County Health Rankings and Roadmaps. (2014). Wisconsin: Lafayette County. Retrieved July 2015, from <http://www.countyhealthrankings.org>
- County Health Rankings and Roadmaps. (2015). Wisconsin: Lafayette County. Retrieved July 2015, from <http://www.countyhealthrankings.org>
- Department of Workforce Development (2013). 2013 Lafayette County Economic and Workforce Profile. Retrieved from [http://worknet.wisconsin.gov/worknet\\_info/downloads/CP/lafayette\\_profile.pdf](http://worknet.wisconsin.gov/worknet_info/downloads/CP/lafayette_profile.pdf)
- Department of Workforce Development (2015). Local area unemployment statistics. Retrieved November 2015, from <http://worknet.wisconsin.gov/worknet/dalass.aspx?menuselection=da>
- Lafayette County. (2010). *Community health needs assessment: Live well Lafayette*. Retrieved from <http://www.lafayettecountyhealthdepartment.org/LiveWellLafayette.pdf>
- Palmer, K. A. and Prosser, E. C. (2015). *Burden of tobacco in Wisconsin: 2015 edition*. University of Wisconsin-Milwaukee, Center for Urban Initiatives and Research, Milwaukee, WI.
- Spring, B., Moller, A. C., & Coons, M. J. (2012). Multiple health behaviors: overview and implications. *Journal of Public Health* 34(1)i3-i10. Doi: 10.1093/pubmed/fdr111
- The State of Obesity. (2015). The state of obesity in Wisconsin. Retrieved from <http://stateofobesity.org/states/wi/>
- U.S. Census Bureau. (2010-2014a). *Lafayette county commuting characteristics*. American Community Survey (ACS) 5 year estimates. Retrieved November 2015, from [www.factfinder.census.gov](http://www.factfinder.census.gov)
- U.S. Census Bureau. (2010-2014b). *Lafayette county demographic estimates*. American Community Survey (ACS) 5 year estimates. Retrieved November 2015, from <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>
- U.S. Census Bureau. (2010-2014c). *Lafayette county education characteristics*. American Community Survey (ACS) 5 year estimates. Retrieved November 2015, from [www.factfinder.census.gov](http://www.factfinder.census.gov)
- U.S. Census Bureau. (2010-2014d). Poverty status in the past 12 months, Lafayette county. American Community Survey (ACS) 5 year estimates. Retrieved November 2015, from [www.factfinder.census.gov](http://www.factfinder.census.gov)

- U.S. Census Bureau. (2010-2014e). *Lafayette county social characteristics*. American Community Survey (ACS) 5 year estimates. Retrieved November 2015, from [www.factfinder.census.gov](http://www.factfinder.census.gov)
- U.S. Census Bureau. (2015). *QuickFacts: Lafayette County*. Retrieved November 2015, from <http://www.census.gov/quickfacts/table/PST045214/00,55,55065>
- Wisconsin Center for Health Equity. (2013). Social, economic, and education factors that influence health. *Healthiest Wisconsin 2020 Focus Area Profile*. Retrieved from [http://www.wche.org/uploads/8/8/9/8/8898682/hw2020\\_see\\_profile\\_20131101b\\_finalforweb.pdf](http://www.wche.org/uploads/8/8/9/8/8898682/hw2020_see_profile_20131101b_finalforweb.pdf)
- Wisconsin Department of Health Services. (2011). *The 2011 burden of diabetes in Wisconsin*. Retrieved from <https://www.dhs.wisconsin.gov/publications/p0/p00284.pdf>
- Wisconsin Department of Health Services. (2014). Report on childhood lead poisoning in Wisconsin. Retrieved from <https://www.dhs.wisconsin.gov/publications/p01202.pdf>
- Wisconsin Department of Health Services. (2014). Wisconsin childhood lead poisoning prevention program: Blood lead testing and lead exposure data. Retrieved from <https://www.dhs.wisconsin.gov/publications/p0/p00665.pdf>
- Wisconsin Department of Health Services. (2015). *Asthma Data*. Retrieved December 2015, from <https://www.dhs.wisconsin.gov/epht/asthma.htm>
- Wisconsin Department of Health Services. (2015). *BadgerCare Plus- by County/ Tribe*. Retrieved December 2015, from <https://www.dhs.wisconsin.gov/badgercareplus/bcpcounty.pdf>
- Wisconsin Department of Health Services. (2015). *Public health profiles 2015: Lafayette county*. Retrieved from <https://www.dhs.wisconsin.gov/stats/phprofiles/lafayette.htm>
- Wisconsin Department of Health Services (2015). WISH- Wisconsin interactive statistics on health. Division of Public Health, Office of Health Informatics. Retrieved January 2016, from <https://www.dhs.wisconsin.gov/wish/index.htm>
- Wisconsin Environmental Public Health Tracking Program. (2015). Asthma-Emergency Department Visits for Asthma. Retrieved December 2015, from <http://gis.wi.gov/DHS/tracking/#/report>
- Wisconsin Environmental Public Health Tracking Program. (2015). Lafayette County Environmental Health Profile. Retrieved from, <https://www.dhs.wisconsin.gov/publications/p0/p00719-lafayette.pdf>
- World Health Organization (WHO). n.d. Social determinants of health. Retrieved on 3/1/2016 from [http://www.who.int/social\\_determinants/en/](http://www.who.int/social_determinants/en/)



## **Appendix**

Community Member Survey  
Stakeholder Email Letter  
Stakeholder Interview/ Survey Questions  
2015 Lafayette County Snapshot (County Health Rankings)  
2015 Lafayette County Environmental Health Profile  
2013 Lafayette County Economic and Workforce Profile  
Wisconsin Childhood Lead Poisoning Prevention Program: County Lead Exposure Data (2011-2013)

## Community Member Survey (Paper Copy Version)

The Lafayette County Health Department would like to invite all residents to participate in the 2015 Community Health Needs Assessment survey. Every 5 years the LCHD conducts a countywide Community Health Needs Assessment. The data from the assessment will help guide programs and funding to improve health in the areas identified by you, the voices of Lafayette County.

Your opinion matters! Please take this survey and pass it along to other Lafayette County community members!! We request only one survey response per person be submitted.

On behalf of the Lafayette County Health Department we want to thank you for taking the time to complete the survey. Those who complete the survey have the option to enter a drawing for one of four \$25 gift certificates to a Lafayette County CSA (Community Supported Agriculture) farm.

For more information visit [www.lafayettecountyhealthdepartment.org](http://www.lafayettecountyhealthdepartment.org) or feel free to give us a call at 608-776-4895

### 1. What things are most important in order to have a healthy county? Choose up to five.

- |  |   |
|--|---|
| <input type="checkbox"/> Transportation                | <input type="checkbox"/> Healthy Behaviors & Lifestyles |
| <input type="checkbox"/> Low Crime, Safe Neighborhoods | <input type="checkbox"/> Job Opportunities              |
| <input type="checkbox"/> Emergency Preparedness        | <input type="checkbox"/> Access to Health Care          |
| <input type="checkbox"/> Parks and Recreation          | <input type="checkbox"/> Clean Environment              |
| <input type="checkbox"/> Religious or Spiritual Values | <input type="checkbox"/> Affordable Housing             |
| <input type="checkbox"/> Good Schools                  | <input type="checkbox"/> Arts & Cultural Events         |
| <input type="checkbox"/> Access to technology          | <input type="checkbox"/> Other (please specify) _____   |

\_\_\_\_\_  
Please rate the following statements.

**2. Lafayette County is a safe place to live.** (Consider how safe you feel at home, in the workplace, in schools, at parks, and shopping centers in Lafayette County.)

☐ Strongly Agree    ☐ Agree    ☐ Disagree    ☐ Strongly Disagree    ☐ Not Sure

**3. Lafayette County is a good place to raise children.** (Consider the quality and safety of schools and childcare programs, after school programs, places to play in this county, and health care for children.)

☐ Strongly Agree    ☐ Agree    ☐ Disagree    ☐ Strongly Disagree    ☐ Not Sure

**4. Lafayette County is a good place to grow old.** (Consider the county's elder-friendly housing, transportation to medical services, recreation, and services for the elderly including memory care.)

☐ Strongly Agree    ☐ Agree    ☐ Disagree    ☐ Strongly Disagree    ☐ Not Sure

**5. There is plenty of help for individuals and families in times of need in Lafayette County.** (Consider social support: neighbors, support groups, faith community outreach, and community organizations. Also consider emergency housing/ financial assistance.)

☐ Strongly Agree    ☐ Agree    ☐ Disagree    ☐ Strongly Disagree    ☐ Not Sure

**6. There is a good healthcare system in Lafayette County.** (Consider the cost and quality, number of options, and availability of medical care, preventative health care, long term care [nursing homes] and mental health care in Lafayette County.)

\_\_\_\_Strongly Agree    \_\_\_\_Agree    \_\_\_\_Disagree    \_\_\_\_Strongly Disagree    \_\_\_\_Not Sure

**7. Have you seen a healthcare provider in the last 12 months?** (Healthcare provider includes Medical Doctor, Nurse Practitioner or Physician Assistant)

Yes\_\_\_\_    No\_\_\_\_

**8. If you saw a health care provider, what was your reason for seeking medical care?**

If you sought medical care more than once please select all that apply.

\_\_\_\_Primary care well visit (yearly physical)    \_\_\_\_Treatment for sudden illness  
\_\_\_\_Treatment for chronic illness    \_\_\_\_Accident (fall, car crash, sudden injury)  
\_\_\_\_Other (please specify) \_\_\_\_\_

**9. Was there a time in the past 12 months when you needed medical care but did not get it?** (Medical care includes doctor's visits, tests, procedures, prescription medication and hospitalizations).

Yes\_\_\_\_    No\_\_\_\_

**10. If you did not get needed medical care, please describe why you were unable to receive care.**

\_\_\_\_I couldn't pay for health services    \_\_\_\_I did not know where to go  
\_\_\_\_Doctor would not take my insurance or Medicaid    \_\_\_\_Hospital would not take my insurance  
\_\_\_\_I did not have a way to get there    \_\_\_\_Language barrier  
\_\_\_\_I could not get an appointment    \_\_\_\_Other (please specify)\_\_\_\_\_  
\_\_\_\_My insurance would not cover what I needed

**11. When you seek medical care, where do you generally go for treatment?**

\_\_\_\_Primary Health Care Provider (in Lafayette County)  
\_\_\_\_Primary Health Care Provider (outside of Lafayette County)    \_\_\_\_Other (please specify)  
\_\_\_\_Emergency Room

**12. Have you used any of the following services through the Lafayette County Health Department?** Please select all that apply.

\_\_\_\_Immunizations/Flu Shots    \_\_\_\_Radon Kits    \_\_\_\_Loan Closet  
\_\_\_\_Foot Care    \_\_\_\_Well Water Testing Kits    \_\_\_\_School Nursing  
\_\_\_\_Communicable Disease Information    \_\_\_\_Lead Testing  
\_\_\_\_Breast Pump

**13. Are you aware that Lafayette County offers skilled nursing and therapy visits through their Home Care program?**

☐ Yes ☐ No

**14. Have you or a family member used Lafayette County Home Care services?**

☐ Yes ☐ No  
☐ I don't know

**15. If you have used Lafayette County Home Care services, did you find them valuable?**

☐ Yes ☐ No  
☐ Undecided

**16. Have you used home care services other than through Lafayette County Home Care?**

☐ Yes ☐ No  
☐ I don't know

Comments: \_\_\_\_\_

**17. Do you have health insurance?**

Yes \_\_\_\_\_ No \_\_\_\_\_ I don't know \_\_\_\_\_

**18. Which health insurance carrier do you have?**

<input type="checkbox"/> Medicaid (BadgerCare+, Continuous, IRIS, ForwardHealth)	<input type="checkbox"/> Medicare
<input type="checkbox"/> Private Insurance, I bought my own	<input type="checkbox"/> Veterans Health Care (VA)
<input type="checkbox"/> Private Insurance, through employer	<input type="checkbox"/> Tricare (through military service)
<input type="checkbox"/> I am covered on my parent's plan	<input type="checkbox"/> Other

**19. How would you describe your overall health status?**

☐ Excellent ☐ Very Good ☐ Good ☐ Fair ☐ Poor

**20. What things do you think prevent you from being healthy? Select all that apply.**

<input type="checkbox"/> No healthy food choices in my neighborhood	<input type="checkbox"/> Air quality
<input type="checkbox"/> Lack of access to healthcare services	<input type="checkbox"/> No place to safely exercise
<input type="checkbox"/> Cost of housing	<input type="checkbox"/> Water quality
<input type="checkbox"/> No local farmers markets or community gardens	<input type="checkbox"/> No local grocery store
<input type="checkbox"/> No way to get to free parks or community recreation	<input type="checkbox"/> No health insurance
<input type="checkbox"/> There are no free parks or community recreation in my neighborhood	<input type="checkbox"/> Other (please specify)
<input type="checkbox"/> Not enough money	_____

**21. How many days per week do you exercise at least 30 minutes?**

☐ Not at all  
☐ 1 or 2 times per week  
☐ 3 or 4 times per week  
☐ 5 or more times per week

**22. How would you rate your access to healthy foods (fresh fruits, vegetables, lean meats, dairy) in your area?**

☐ Poor  
☐ Fair  
☐ Good  
☐ Very Good

**24. Have you been told by a doctor, nurse, or other health professional that you have any of the following conditions:** Please

select all that apply

- ☐ Depression or Anxiety Disorder
- ☐ High Blood Pressure
- ☐ High Cholesterol
- ☐ Diabetes (not during pregnancy)
- ☐ Pre-diabetes
- ☐ Asthma
- ☐ Osteoporosis
- ☐ Overweight/ Obesity
- ☐ COPD
- ☐ Cancer (please list) \_\_\_\_\_
- ☐ Heart Disease
- ☐ Oral Health
- ☐ Arthritis
- ☐ Alzheimer's/ Dementia
- ☐ Stroke
- ☐ Sexually Transmitted Disease

**23. In the last 12 months has a doctor, nurse, or other health professional asked or talked to you about any of the following risk factors:** Please select all that apply

- ☐ Your weight
- ☐ Your physical activity or exercise
- ☐ Your diet or eating habits
- ☐ Alcohol use
- ☐ Drug use
- ☐ Sexual activity

**26. In the past 12 months, you...** Please select all that apply

- ☐ Got a flu shot,
- ☐ Wore a helmet while riding a bike or – motorcycle,
- ☐ Wore a seat belt when you drove or rode in a car or truck,
- ☐ Stayed home from work, school, or some other activity because you were feeling "down" or "blue,"
- ☐ Drove a car/truck/ATV/UTV/boat after drinking alcohol or taking drugs,
- ☐ Used cocaine, marijuana, or other illegal drugs,
- ☐ Had unprotected sex with more than one partner,
- ☐ Used tobacco (snuff, chew, tobacco pipe, cigarettes, cigars, or e-cigarettes),
- ☐ Had more than 6 alcohol drinks at one time.

**25. Where do you get your local news?**

Please list sources in the space below.

- ☐ Newspaper \_\_\_\_\_
- ☐ Radio station \_\_\_\_\_
- ☐ TV \_\_\_\_\_
- ☐ The internet \_\_\_\_\_
- ☐ Other \_\_\_\_\_

**27. In the past 12 months have you or anyone in your household needed or used any of the following services? Choose all that apply.**

	Needed	Used
Help with utilities or food	<input type="checkbox"/>	<input type="checkbox"/>
Shelter or temporary housing	<input type="checkbox"/>	<input type="checkbox"/>
Help with transportation, child care or after school care	<input type="checkbox"/>	<input type="checkbox"/>
Relief for caregivers of older or handicapped children/ adults	<input type="checkbox"/>	<input type="checkbox"/>
Individual or family counseling	<input type="checkbox"/>	<input type="checkbox"/>
Help with job training	<input type="checkbox"/>	<input type="checkbox"/>
Help finding a job	<input type="checkbox"/>	<input type="checkbox"/>
Debt counseling	<input type="checkbox"/>	<input type="checkbox"/>
Services for a disabled person	<input type="checkbox"/>	<input type="checkbox"/>

**28. Please select 5 problems you feel have the largest impact on the community:**

- |   |   |
|---|---|
| <input type="checkbox"/> Access to care                 | <input type="checkbox"/> Aging Problems (Alzheimer's, falls, hearing/vision loss) |
| <input type="checkbox"/> Diabetes                       | <input type="checkbox"/> Prenatal Care (health care during pregnancy)             |
| <input type="checkbox"/> Overweight/ obesity            | <input type="checkbox"/> Healthy Lifestyle Choices/ Behaviors                     |
| <input type="checkbox"/> Environmental Health           | <input type="checkbox"/> Emotional Well-Being (anxiety, depression, suicide)      |
| <input type="checkbox"/> Drug and Alcohol Issues        | <input type="checkbox"/> Motor Vehicle Accidents/ ATV Accidents                   |
| <input type="checkbox"/> Dental Health                  | <input type="checkbox"/> Rural Safety/ Farm Safety                                |
| <input type="checkbox"/> Infant Mortality (child death) | <input type="checkbox"/> Other: _____   |

**29. Please list any comments or suggestions you have in regards to improving the health of Lafayette County Residents:**



**30. What is your gender identity?**

- ☐ Male  
☐ Female  
☐ Other  
☐ Decline to answer

**31. In what year were born? (write a 4-digit birth year; for example, 1976)**

\_\_\_\_\_

**32. The zip code where you live is:**

\_\_\_\_\_

**33. How many people currently live in your household (including yourself)?**

- ☐ 1 (myself)  
☐ 2  
☐ 3-4  
☐ 5-6  
☐ 7-8  
☐ 9+

**34. The highest grade you finished in school was:**

- ☐ Grade School (1st - 8th)  
☐ Some High School, No Diploma  
☐ High School Diploma or GED  
☐ Vocational or Trade School  
☐ Some College, No Degree  
☐ College Degree  
☐ Some Graduate School, No Degree  
☐ Graduate Degree

**35. Is your primary language Spanish?**

- ☐ Yes ☐ No

**36. Identify your level of employment below:**

- ☐ Employed Full Time  
☐ Employed Part Time  
☐ Unemployed  
☐ Retired  
☐ Student  
☐ Unable to work because of a disability  
☐ Stay at Home Parent

**37. Your household's income (before taxes) from all sources this year will be:**

- ☐ 0-\$25,000  
☐ \$25,001-\$50,000  
☐ \$50,001-\$75,000  
☐ \$75,001-\$100,000  
☐ \$100,001-\$150,000  
☐ \$150,001+  
☐ Prefer not to answer

**38. Please select one or more of the following race categories that you feel best identifies you:**

- ☐ American Indian, Spanish American Indian or Alaska Native  
☐ Asian  
☐ Black or African American  
☐ Native Hawaiian or Other Pacific Islander  
☐ White  
☐ Decline to answer  
☐ Other (please specify) \_\_\_\_\_

**39. Are you Hispanic/ Latino (Cuban, Puerto Rican, South or Central American or other Spanish culture or origin regardless of race)?**

- ☐ Yes ☐ No

The Lafayette County Health Department would like to thank you for providing your valued input on the health of Lafayette.

If you want to be entered into the drawing for one of four \$25 gift certificates to a Lafayette County CSA (Community Supported Agriculture) farm write your phone number or email address below.

The email address and/or phone number you provide will not be associated with your responses to the previous survey.

Phone Number: \_\_\_\_\_

Email Number: \_\_\_\_\_

## Stakeholder Email Letter Invitation

Dear Community Stakeholder,

Local health departments in Wisconsin are required to complete a community health needs assessment every 5 years. Lafayette County Health Department completed its last assessment in 2010. This year we have the help of a University of Wisconsin Masters of Public Health student.

The needs assessment process is two-fold.:

*Part one*—is the compilation of basic statistical data (such as demographic, socioeconomic and health indicators) to paint a picture of the county. The point is to profile the strengths and needs of the county, as well as specify what the key health impacts are to residents.

*Part two*—primary data collection

1. First, is in the form of a brief online survey we have made available to the general “county resident consumer.”
2. Secondly, we want to assure key stakeholders (health care providers, partner agencies, elected officials, schools, businessmen, etc.) have an opportunity to provide feedback regarding health concerns and community strengths.

This is where you come in – **you have been identified as a key stakeholder and we feel your input is important.** *What would be the best way to collect feedback from you/*

***Do you prefer:***

- Personal interview (in person or via phone)
- Online survey completion

Our MPH student, Marlaina Morrissey, will follow up with you to work out a schedule that fits your needs. Please know that your input is valuable to the success of this assessment, and we appreciate your support.

Thank you.

Sue

Sue Matye RN, BSN

*Director/Health Officer*

*Lafayette County Health Dept.*

*Phone: 608.776.4895*

*Fax: 608.776.4885*

## Community Stakeholder Interview/Survey Questions 2015

First and Last Name:

Job Title:

Your thoughtful responses to the following questions are greatly appreciated and will help direct programs at the Lafayette County Health Department!

1. What is your definition of health? Describe the role health plays in the community?
2. How do you define public health? What do you see as its role in the community?
3. What factors contribute to good health in Lafayette? With respect to health and healthcare, what are Lafayette County's strengths? What is being done well?
4. What factors contribute to poor health in Lafayette? Describe ways to address these factors contributing to poor health? What barriers do you see in addressing these factors?
5. In your opinion, what are the top three health problems in Lafayette county, and why?  
Examples: Access to Care, Diabetes, Overweight/Obesity, Environmental Health, Drug and Alcohol Issues, Dental Health, Infant Mortality, Aging Problems, Prenatal Care, Health Lifestyle Choices/ Behaviors, Emotional Well-Being, Motor Vehicle/ ATV accidents, Rural/ Farm Safety, etc.
6. How should Lafayette County go about addressing these health needs, and what services or resources should be used?
7. What barriers exist in this county to creating programs/ solutions for our health problems, and how would you suggest addressing them?
8. What role could you play in addressing the health needs/ improving the health of Lafayette County? How might you involve others?
9. Is there anything else you would like to comment on regarding improving the health of Lafayette County?

# County Health Rankings & Roadmaps

Building a Culture of Health, County by County

## Lafayette (LA)

	Lafayette County	Error Margin	Top U.S. Performers^	Wisconsin	Rank (of 72)
<b>Health Outcomes</b>					<b>18</b>
<b>Length of Life</b>					<b>30</b>
Premature death	5,551	4,140-6,963	5,200	5,881	
<b>Quality of Life</b>					<b>13</b>
Poor or fair health	12%	7-19%	10%	12%	
Poor physical health days	2.5	1.6-3.4	2.5	3.2	
Poor mental health days	2.2	1.4-2.9	2.3	3.0	
Low birthweight	5.9%	4.7-7.1%	5.9%	7.0%	
<b>Health Factors</b>					<b>22</b>
<b>Health Behaviors</b>					<b>3</b>
Adult smoking	8%	5-13%	14%	18%	
Adult obesity	31%	25-37%	25%	29%	
Food environment index	8.6		8.4	8.0	
Physical inactivity	18%	13-24%	20%	21%	
Access to exercise opportunities	41%		92%	83%	
Excessive drinking	18%	11-27%	10%	24%	
Alcohol-impaired driving deaths	50%		14%	39%	
Sexually transmitted infections	125		138	414	
Teen births	18	15-23	20	27	
<b>Clinical Care</b>					<b>71</b>
Uninsured	14%	12-15%	11%	10%	
Primary care physicians	4,213:1		1,045:1	1,215:1	
Dentists	3,353:1		1,377:1	1,631:1	
Mental health providers	671:1		386:1	623:1	
Preventable hospital stays	64	54-74	41	51	
Diabetic monitoring	92%	78-100%	90%	90%	
Mammography screening	60.5%	46.5-74.5%	70.7%	70.2%	
<b>Social &amp; Economic Factors</b>					<b>23</b>
High school graduation	91%		93%	88%	
Some college	58.1%	54.3-61.9%	71.0%	65.9%	
Unemployment	5.5%		4.0%	6.7%	
Children in poverty	20%	15-25%	13%	18%	
Income inequality	3.8	3.5-4.1	3.7	4.3	
Children in single-parent households	26%	21-32%	20%	31%	
Social associations	14.8		22.0	11.8	
Violent crime	28		59	255	
Injury deaths	75	58-96	50	63	
<b>Physical Environment</b>					<b>42</b>
Air pollution - particulate matter	11.9		9.5	11.5	
Drinking water violations	8%		0%	5%	
Severe housing problems	13%	11-14%	9%	15%	
Driving alone to work	77%	74-79%	71%	80%	
Long commute - driving alone	35%	32-38%	15%	26%	

^ 10th/90th percentile, i.e., only 10% are better.

\* Data supplied on behalf of state

Note: Blank values reflect unreliable or missing data

2015





# LAFAYETTE COUNTY ENVIRONMENTAL HEALTH PROFILE

2015



WISCONSIN ENVIRONMENTAL PUBLIC HEALTH  
TRACKING PROGRAM





# HOW TO USE THIS PROFILE



Below you will find our suggestions for how to use this profile. This profile contains many data points unique to environmental health. As you explore the information on the following pages, consider how it might be put to good use in your community. We are here to help you along the way. If you have questions about how to integrate these data into your work, [let us know!](#)

## COMMUNITY HEALTH ASSESSMENTS

Data from the profiles can be used in your health department or hospital's community health assessments to help meet state and federal requirements.

## ACCREDITATION

The profiles can be used to address the Public Health Accreditation Board's accreditation standards. For instance, [Standard 1.3: Analyze public health data to identify trends in health problems, environmental public health hazards, and social and economic factors that affect the public's health.](#)

## GRANT PROPOSALS

Data in this profile can help you and your team develop a rationale for funding requests. These data can help justify existing programs and show where there is still work to be done.

## EDUCATION AND OUTREACH

When creating programs and outreach materials for your community, these data can help you build your case and show the extent of a problem. Communities have used their profile data to target education efforts to areas with the most need.

## POLICY DEVELOPMENT

This profile contains measures that can be used to justify the need for a policy. If a policy is put in place, these data can be used as baseline measures with which to monitor changes over time.

How have you used your county's profile? [Tell us about it!](#)

[dhstracking@wi.gov](mailto:dhstracking@wi.gov)  
608-267-2488



# LAFAYETTE COUNTY

## DASHBOARD | 2015 ENVIRONMENTAL HEALTH PROFILE



### AIR QUALITY

#### Ozone

● 0.0 | Annual days above standard  
Wisconsin: 0.7

#### Particulate Matter 2.5

● 0.0 | Annual days above standard  
Wisconsin: 0.1



### WATER QUALITY

#### Arsenic

● 0.4 | Average concentration in µg/L  
Wisconsin: 1.3

#### Nitrate

● 0.3 | Average concentration in mg/L  
Wisconsin: 1.5



### HOME HAZARDS

#### Carbon Monoxide (CO)

● 7.1 | Rate of ER visits per 100,000 people  
Wisconsin: 8.2

#### Childhood Lead Poisoning

● 3.8% | Percent with blood lead ≥5 µg/L  
Wisconsin: 4.5%



### BIRTH OUTCOMES

#### Low Birth Weight

● 8.0% | Percent of births <2500 grams  
Wisconsin: 7.3%

#### Preterm Birth

● 11.0% | Percent of births <37 weeks gestation  
Wisconsin: 10.3%



### HEALTH INDICATORS

#### Heat Stress

● 25.6 | Rate of ER visits per 100,000 people  
Wisconsin: 16.5

#### Melanoma

● 23.4 | Rate of cases per 100,000 people  
Wisconsin: 18.4

#### Lung Cancer

● 43.7 | Rate of cases per 100,000 people  
Wisconsin: 62.0

#### Asthma

● 360.0 | Rate of ER visits per 100,000 people\*  
Wisconsin: 376.0

\*This indicator is represented per 10,000 people on the data portal.

● Above state value

● At or below state value

^ Data are suppressed

| [References on next page](#)



WISCONSIN ENVIRONMENTAL PUBLIC HEALTH TRACKING PROGRAM

[dhs.wi.gov/epht](http://dhs.wi.gov/epht) | [dhstracking@wi.gov](mailto:dhstracking@wi.gov) | 608-267-2488

Wisconsin Department of Health Services | Division of Public Health | Bureau of Environmental and Occupational Health

# DASHBOARD DATA DETAILS

Below are the abbreviated references for the data presented in the dashboard. Note that some measures have more years of data available on the Wisconsin Tracking portal, available at [dhs.wi.gov/epht](https://dhs.wi.gov/epht). For additional details on the data, see page 15. For more information about age-adjustment and other terms referenced in this profile, visit the Wisconsin Tracking Program "Glossary of Terms," available at [dhs.wisconsin.gov/epht/glossary.htm](https://dhs.wisconsin.gov/epht/glossary.htm).



## AIR QUALITY

Particulate Matter 2.5 (PM<sub>2.5</sub>) and Ozone: Monitored and modeled estimates of air quality readings  
Source: National Environmental Public Health Tracking Network, Centers for Disease Control and Prevention  
Year displayed: 2011



## WATER QUALITY

Arsenic and Nitrate: Measured concentrations from public water systems  
Source: National Environmental Public Health Tracking Network, Centers for Disease Control and Prevention  
Years displayed: Averaged data from 2011-2013



## HOME HAZARDS

Childhood Lead Poisoning: Reported blood lead test results  
Source: Wisconsin Childhood Lead Poisoning Prevention Program, Bureau of Environmental and Occupational Health, Division of Public Health, Wisconsin Department of Health Services  
Year displayed: 2013

Carbon Monoxide (CO) Poisoning: Age-adjusted rate of emergency room visits related to CO poisoning  
Source: Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services  
Years displayed: Averaged data from 2009-2013



## BIRTH OUTCOMES

Low Birth Weight and Preterm Birth: Wisconsin birth certificate data  
Source: Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services  
Years displayed: Averaged data from 2011-2013



## HEALTH INDICATORS

Heat Stress: Age-adjusted rate of emergency room visits related to heat stress  
Source: Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services  
Years displayed: Averaged data from 2009-2013

Melanoma and Lung Cancer: Age-adjusted rate of cases reported by health care providers  
Source: Wisconsin Cancer Reporting System, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services  
Years displayed: Averaged data from 2006-2010

Asthma: Age-adjusted rate of emergency room visits related to asthma  
Source: National Environmental Public Health Tracking Network, Centers for Disease Control and Prevention  
Year displayed: 2012



# AIR QUALITY LAFAYETTE COUNTY

Air pollution means substances are in the air that should not be there – or should be there in smaller amounts. Two important pollutants to consider for the health of a community are fine particulate matter and ozone. Particulate matter describes microscopic particles that settle in our lungs after being inhaled. The "2.5" in "particulate matter 2.5 (PM<sub>2.5</sub>)" refers to the size of the particles, which are smaller than the width of a human hair. Ozone is created as a result of emissions from vehicles and industrial facilities. Both particulate matter and ozone can trigger health problems, especially in people with breathing conditions like asthma. Levels of these contaminants are measured by monitoring stations set up around the state.

● 0.0

**OZONE**  
ANNUAL DAYS ABOVE STANDARD  
STATEWIDE: 0.7

● 0.0

**PARTICULATE MATTER 2.5**  
ANNUAL DAYS ABOVE STANDARD  
STATEWIDE: 0.1

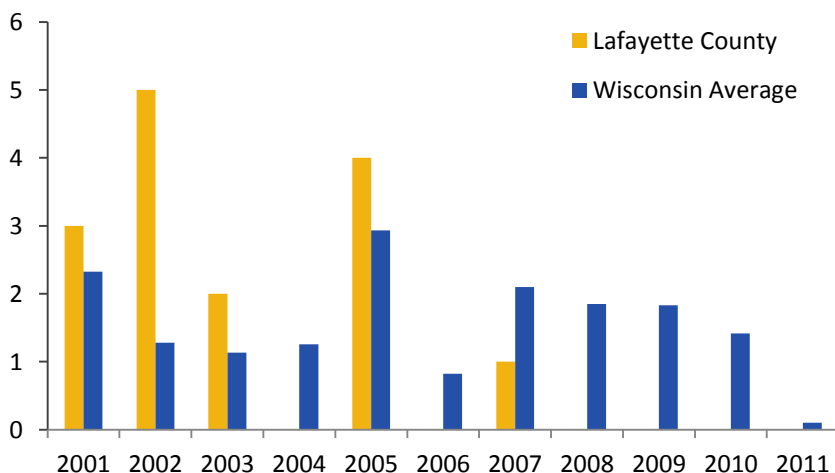
● 10.2

**PARTICULATE MATTER 2.5**  
ANNUAL AVERAGE (µg/m<sup>3</sup>)  
STATEWIDE: 9.4

● Above state value    ● At or below state value    ^ Suppressed

## OZONE

ANNUAL DAYS ABOVE STANDARD



## OZONE

The chart to the left provides a year-to-year comparison of the number of days in which ozone was above the standard set by the US Environmental Protection Agency. The fewer days above the standard, the better.

TAKE A CLOSER LOOK AT THE DATA:

[dhs.wi.gov/epht](https://dhs.wi.gov/epht)







# AIR QUALITY

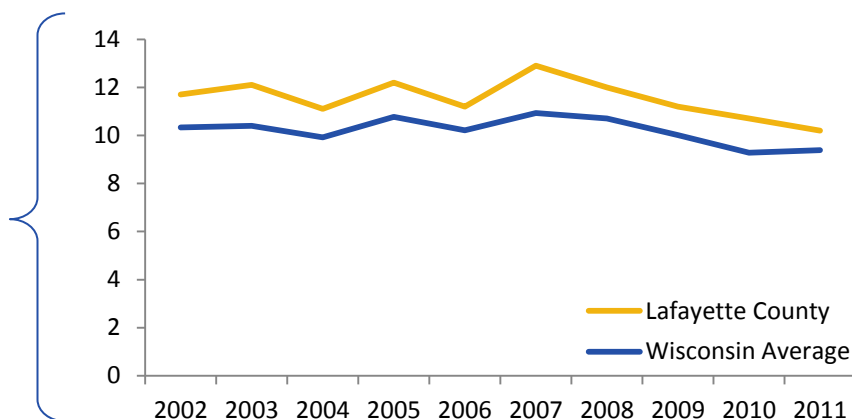
LAFAYETTE COUNTY

## PARTICULATE MATTER 2.5

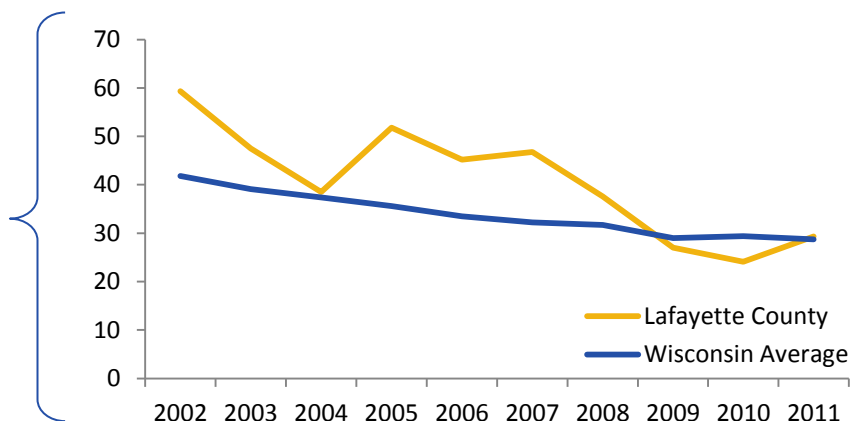
Particulate matter 2.5 (PM<sub>2.5</sub>) is so tiny that it can settle in a person's lungs or bloodstream after being inhaled. These particles are more common near busy roads and in areas with dusty industries. PM has been linked to heart attacks and asthma attacks. Below are three charts showing how the annual average of PM<sub>2.5</sub>, heart attack rates, and asthma emergency room visits have fluctuated over the 2002-2011 time period. In most Wisconsin counties, there has been a downward trend in all three measures over time.

For more information on ozone and particulate matter, please visit [dhs.wisconsin.gov/epht/criteria pollutants.htm](https://dhs.wisconsin.gov/epht/criteria pollutants.htm).

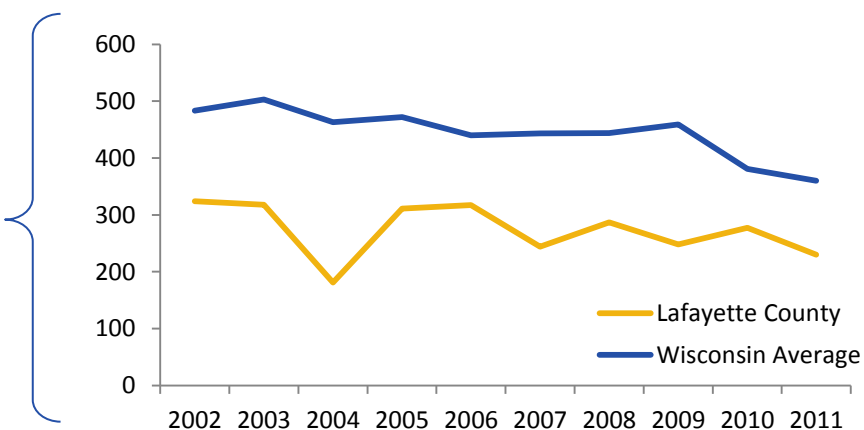
### PARTICULATE MATTER 2.5 ANNUAL AVERAGE ( $\mu\text{g}/\text{m}^3$ )



### HEART ATTACK HOSPITALIZATIONS Rate per 10,000 people



### ASTHMA EMERGENCY ROOM VISITS Rate per 100,000 people

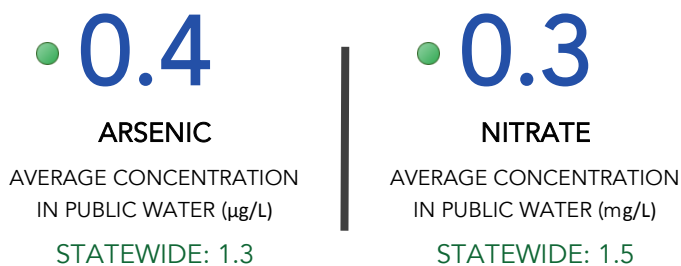




# WATER QUALITY

## LAFAYETTE COUNTY

Water that is piped into your home, school, or workplace comes from either a public water system or a private well. Two important water contaminants to consider for the health of a community are arsenic and nitrate. Potential health effects of drinking water with high levels of arsenic include skin damage, circulatory system problems, and cancers (such as bladder and lung cancer). Some studies have also found evidence of a link between exposure to high nitrate levels in drinking water early in pregnancy and certain birth defects. Infants who consume drinking water with high nitrate levels are at risk of shortness of breath and blue baby syndrome.



● Above state value    ● At or below state value    ^ Suppressed

### PUBLIC DRINKING WATER

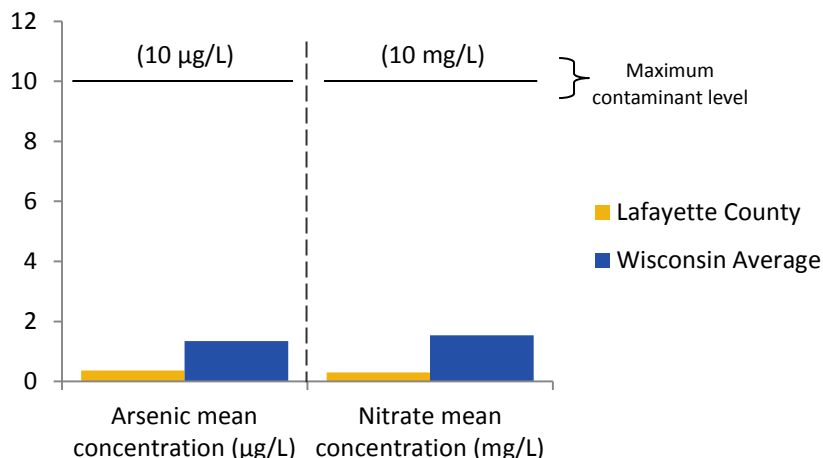
About two-thirds of Wisconsin residents obtain water from public water systems. Data presented on this page are collected from public water systems.

Levels of contaminants in public water systems are monitored and regulated by the Wisconsin Department of Natural Resources. All counties reported arsenic and nitrate mean concentrations below the maximum contaminant levels established by the US Environmental Protection Agency.

For more information and to explore data about other drinking water contaminants in Wisconsin, visit [dhs.wi.gov/epht](https://dhs.wi.gov/epht).

### ARSENIC AND NITRATE

MEAN CONCENTRATION LEVELS IN PUBLIC WATER (2011-2013)



TAKE A CLOSER LOOK AT THE DATA:

[dhs.wi.gov/epht](https://dhs.wi.gov/epht)





# WATER QUALITY LAFAYETTE COUNTY

## PRIVATE DRINKING WATER

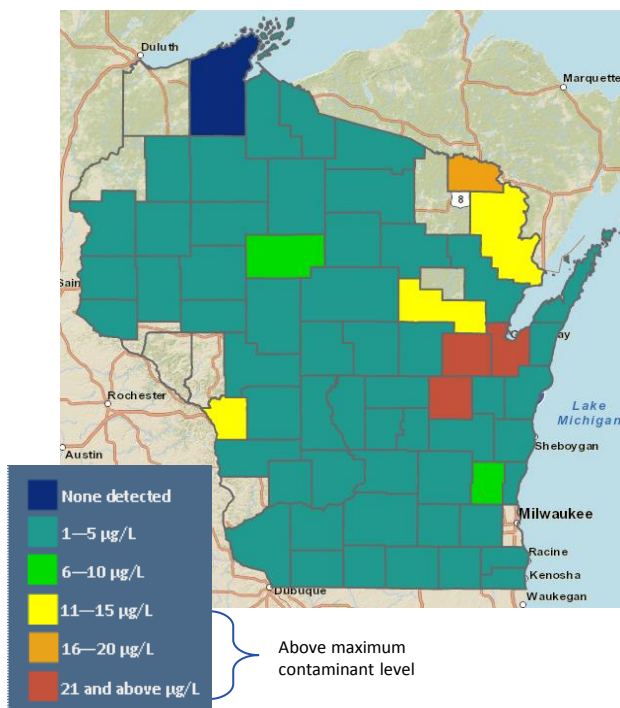
About one-third of Wisconsin residents obtain water from private wells. Private water wells are those that are owned by individuals. Private well owners are responsible for monitoring and testing their wells. Regulations are in place to guide the creation of new wells, but requirements are limited once a well is in place. As a result, not all private wells are regularly monitored for contamination.

The Wisconsin Environmental Public Health Tracking Program worked to improve access to private well data by partnering with the University of Wisconsin-Stevens Point's Center for Watershed Science to support a mapping tool. This tool provides private well data for multiple contaminants at county, township, and section levels. The well data were voluntarily submitted by homeowners and represent data from the past 25 years. The data do not include water quality information for all known private wells.

County-specific measures for arsenic and nitrate in private wells are displayed below. Seven counties have reported average concentrations of arsenic above the 10 µg/L maximum contaminant level. For nitrate, all counties are below the 10 mg/L maximum contaminant level. To explore data for the other water contaminants, visit [bit.ly/wellwaterviewer](http://bit.ly/wellwaterviewer).

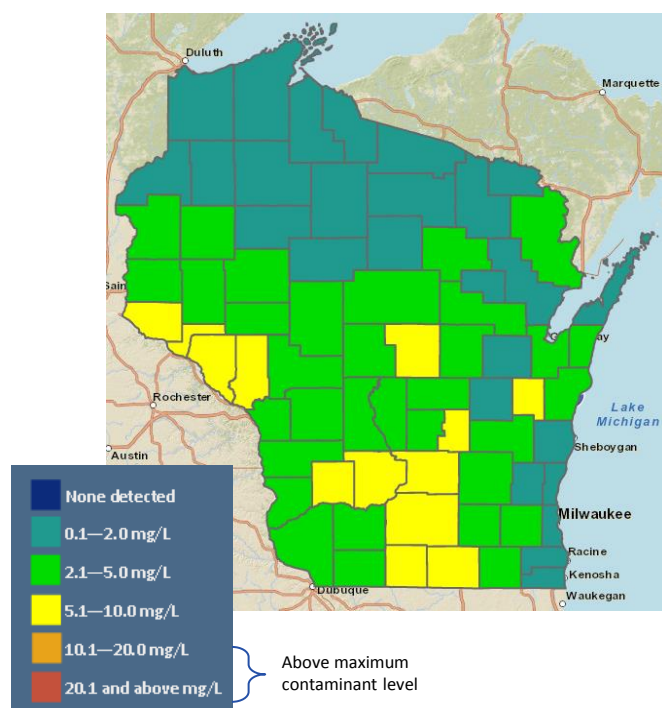
## ARSENIC IN PRIVATE WELLS

AVERAGE CONCENTRATION (µg/L)



## NITRATE IN PRIVATE WELLS

AVERAGE CONCENTRATION (mg/L)



The arsenic data displayed include results of 15,230 samples collected from 1988-2014. The nitrate data displayed include results of 113,465 samples collected from 1972-2014. The number of samples collected varies from year to year; accordingly, some years are better represented than others. Note that the level of precision between the arsenic and nitrate values is different in the map legends; this is related to the level of detection capabilities of the laboratory equipment.





# HOME HAZARDS

## LAFAYETTE COUNTY

Lead and carbon monoxide (CO) poisoning are two home hazards monitored by the Wisconsin Environmental Public Health Tracking Program. Carbon monoxide poisoning prevents oxygen from getting to the body, which can damage tissue and even cause death. In children, lead poisoning slows growth and development, particularly in the brain. Lead poisoning is also associated with increased incarceration and poor academic outcomes.

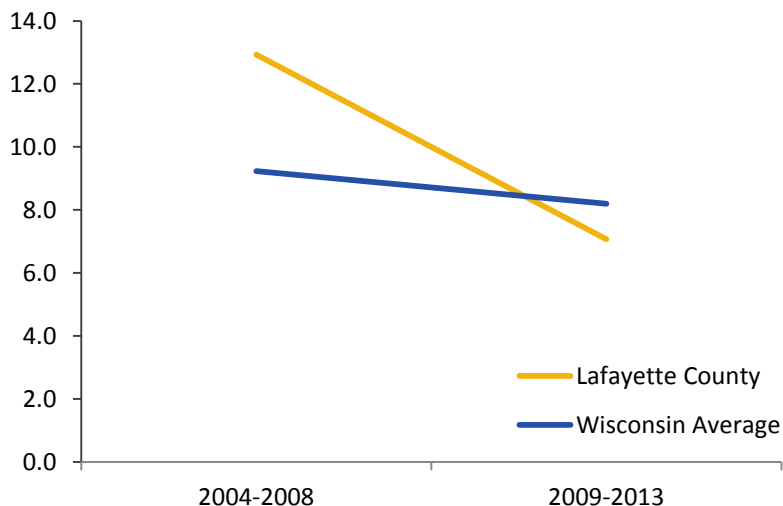
● **7.1**  
**CARBON MONOXIDE POISONING**  
 RATE OF ER VISITS  
 RELATED TO CO PER 100,000  
 STATEWIDE: 8.2

● **3.8%**  
**CHILDHOOD LEAD POISONING**  
 PERCENT OF TESTED CHILDREN  
 WITH BLOOD LEAD  $\geq 5$   $\mu\text{g/dL}$   
 STATEWIDE: 4.5%

● Above state value    ● At or below state value    ^ Suppressed

### CARBON MONOXIDE

#### RATE OF ER VISITS PER 100,000 PEOPLE



### CARBON MONOXIDE POISONING

Carbon monoxide (CO) is a toxic, colorless, and odorless gas. CO is created whenever fuel or other materials are burned. Wisconsin state law requires that all homes have a carbon monoxide detector on every level.

The chart to the left presents age-adjusted rates of emergency room visits for CO poisoning. For more information on carbon monoxide poisoning, please visit [dhs.wisconsin.gov/air/co.htm](https://dhs.wisconsin.gov/air/co.htm).

TAKE A CLOSER LOOK AT THE DATA:

[dhs.wi.gov/epht](https://dhs.wi.gov/epht)





# HOME HAZARDS

## LAFAYETTE COUNTY

### CHILDHOOD LEAD POISONING

Wisconsin statute defines lead poisoning in a child as a blood lead level of 10 or more  $\mu\text{g}/\text{dL}$  (Wis. Stat. § 254.11[9]). However, in 2012, the Centers for Disease Control and Prevention recommended the lead poisoning reference value be lowered to greater than or equal to 5  $\mu\text{g}/\text{dL}$ .

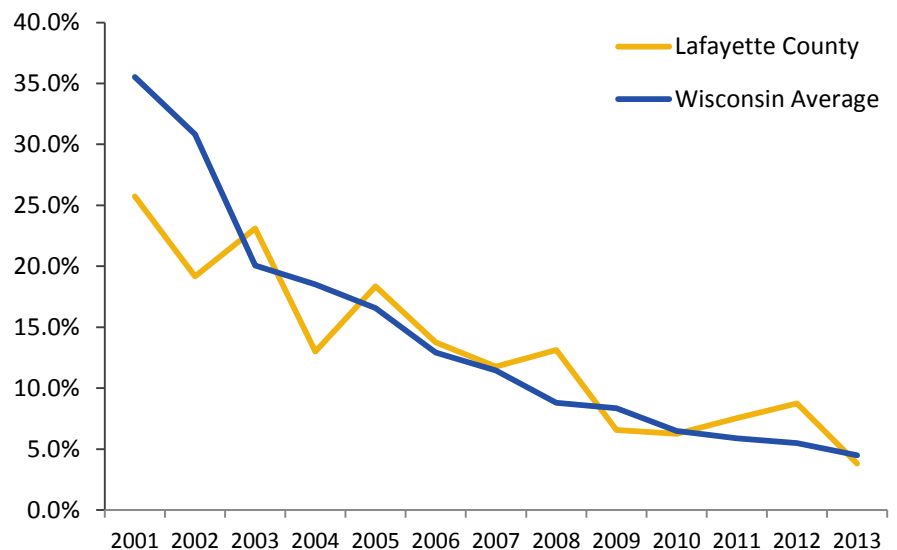
This decision was made due to the overwhelming evidence that blood lead levels below 10  $\mu\text{g}/\text{dL}$  can cause damage to the brain and other parts of the body.

There is no safe level of lead in the human body. Even very low levels of exposure can cause adverse health effects.

The percentage of children tested with a blood lead level greater than or equal to 5  $\mu\text{g}/\text{dL}$  has declined over the past 13 years in most Wisconsin counties. This decline is due in part to prevention and outreach efforts that have happened throughout the state. Together we have made great progress, but there is still work to be done to eliminate lead poisoning for all children.

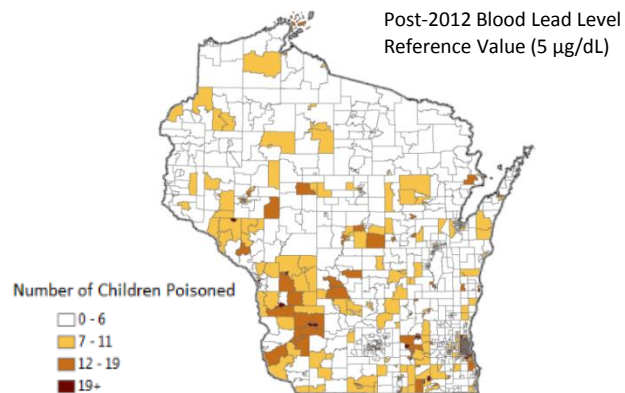
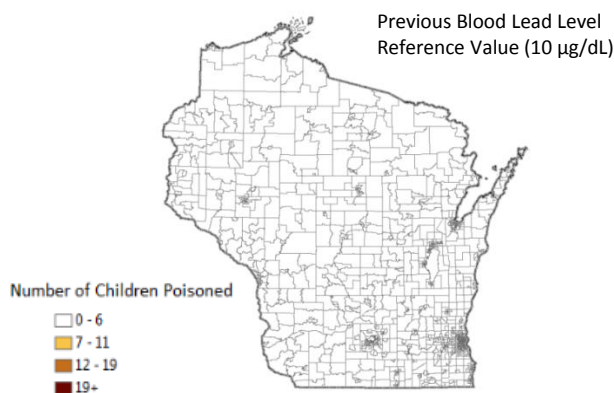
### CHILDHOOD LEAD POISONING

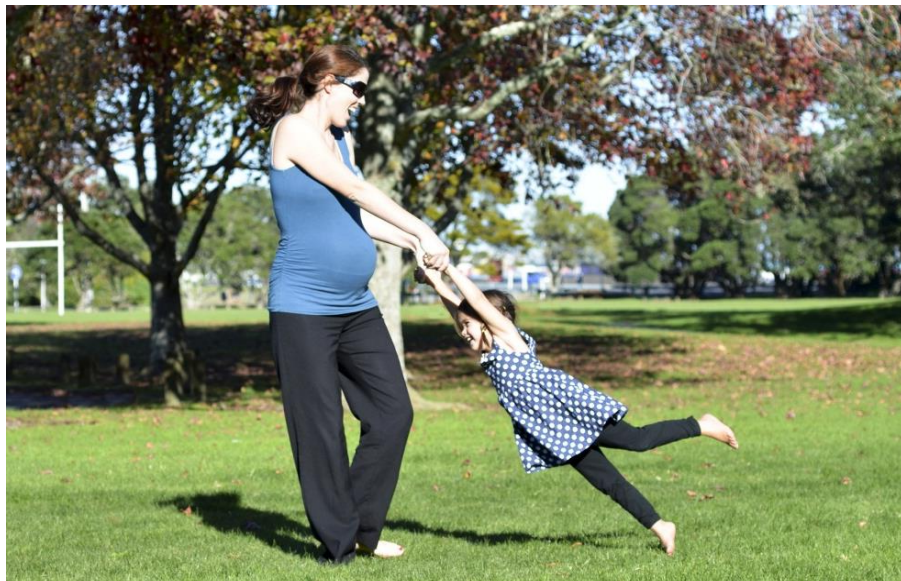
PERCENT OF TESTED CHILDREN WITH BLOOD LEAD  $\geq 5 \mu\text{g}/\text{dL}$



The change in reference value for lead poisoning from  $\geq 10 \mu\text{g}/\text{dL}$  to  $\geq 5 \mu\text{g}/\text{dL}$  had a substantial impact on the number of Wisconsin children recognized as being affected by lead poisoning. The maps below illustrate that change. The map on the left shows the number of children who were considered lead poisoned at the previous level. The map on the right shows the number of children who are considered lead poisoned at the new level. For more information on preventing and remediating lead exposure, please visit the Wisconsin Lead Program website, [dhs.wi.gov/lead](http://dhs.wi.gov/lead).

### CENSUS TRACT-LEVEL COUNTS OF CHILDHOOD LEAD POISONING (2009-2011)





# BIRTH OUTCOMES LAFAYETTE COUNTY

Reproduction is complex, and many factors affect a mother's ability to conceive, carry a baby to term, and deliver a baby without complications. Environmental factors such as air pollution and exposure to contaminated drinking water can increase the likelihood of low birth weight and preterm births. Low birth weight has also been linked to exposure during pregnancy to lead, solvents, pesticides, and polycyclic aromatic hydrocarbons (a group of over 100 contaminants produced by burning fuels like coal).

• **8.0%**

## LOW BIRTH WEIGHT

PERCENT BIRTHS  
<2,500 GRAMS

STATEWIDE: 7.3%

• **11.0%**

## PRETERM BIRTH

PERCENT BIRTHS  
<37 WEEKS GESTATION

STATEWIDE: 10.3%

• Above state value    • At or below state value    ^ Suppressed

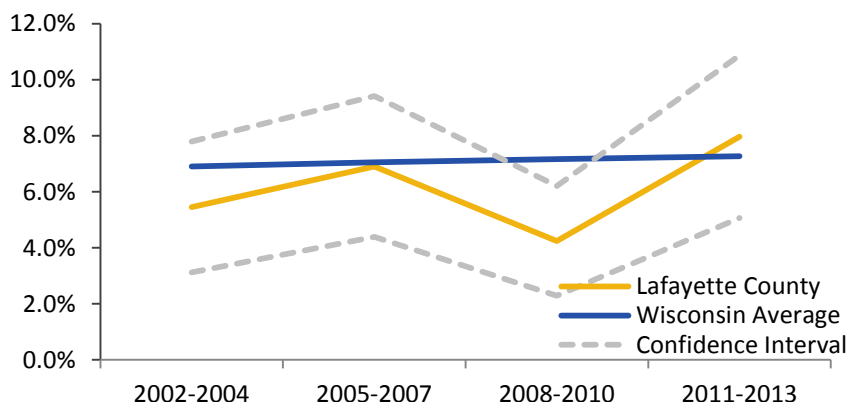
## LOW BIRTH WEIGHT

Low birth weight – being born with a weight under 2,500 grams – can occur as a result of slow fetal growth over a full-term pregnancy, being born preterm, or both. The figure to the left provides a comparison between the county-level percentage of low birth weight babies and the percentage of low birth weight babies in Wisconsin from 2002-2013.

Confidence intervals based on the county rate have been added to the chart to the left. They are denoted with dotted gray lines. These confidence intervals indicate the precision of the estimated values. The closer the dotted lines are to the county line, the better (or more precise) the estimate.

## LOW BIRTH WEIGHT

PERCENT OF BIRTHS BELOW 2,500 GRAMS



TAKE A CLOSER LOOK AT THE DATA:

[dhs.wi.gov/epht](https://dhs.wi.gov/epht)





# BIRTH OUTCOMES

LAFAYETTE COUNTY

## PRETERM BIRTH

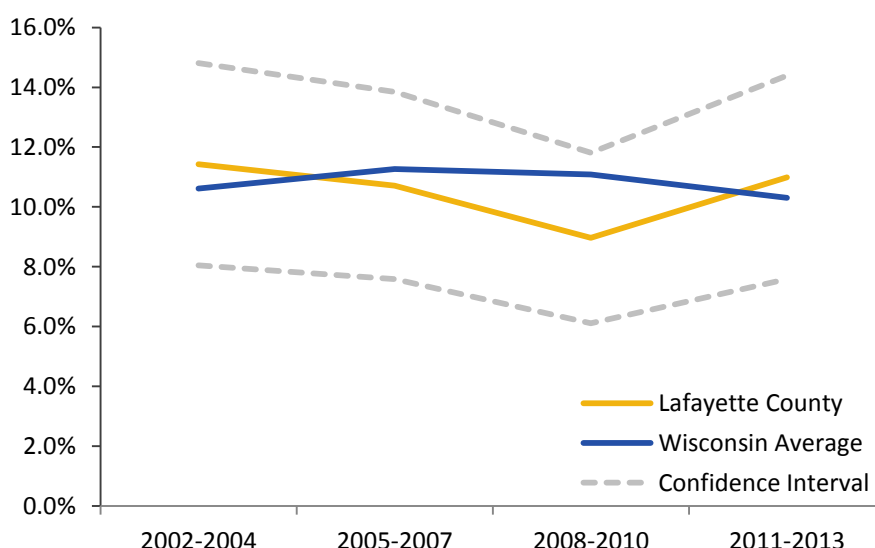
A baby is considered to be preterm if he or she is born before completing 37 weeks of gestation. Many women who have preterm birth have no known risk factors. Women have the best chance of preventing preterm birth by being healthy before and during pregnancy and receiving high-quality prenatal care. Environmental factors can also play a role, as research has shown a relationship between exposure to air pollution, lead, solvents, and tobacco smoke during pregnancy and a higher risk of preterm birth.

The figure to the right provides a comparison between the percentage of preterm babies at the county level and the percentage of preterm babies in Wisconsin from 2002-2013.

Confidence intervals based on the county rate have been added to the chart to the right. They are denoted with dotted gray lines, which indicate the precision of the estimated values. The closer the dotted lines are to the county line, the better (or more precise) the estimate.

For more information on preterm births, visit [dhs.wi.gov/epht/premature.htm](https://dhs.wi.gov/epht/premature.htm).

### PRETERM BIRTHS PERCENT OF BIRTHS <37 WEEKS GESTATION



## BIRTH DEFECTS

A birth defect is a problem that happens while the baby is developing in the mother's body. Most birth defects happen during the first three months of pregnancy. A birth defect may affect how a baby's body looks, works, or both.

Many birth defects are known to be related to environmental factors. Birth defects such as spina bifida, cleft lip/palate, gastroschisis, hypospadias, Down syndrome, and heart defects have all been linked to living near hazardous waste sites. Some birth defects have also been linked to disinfection by-products in drinking water. Some studies have also found evidence of a link between exposure to high nitrate levels in drinking water early in pregnancy and certain birth defects.

The causes of most birth defects remain unknown. With the data collected through the National Environmental Public Health Tracking Program, researchers will be better equipped to study the relationship between birth defects and the environment.

The Wisconsin Environmental Public Health Tracking Program obtains data on 10 types of birth defects from the Birth Defect Prevention and Surveillance Program at the Wisconsin Department of Health Services. The Birth Defects Registry is a passive surveillance system for which reporting by health care providers is optional. Much of this data is available on our web portal, which can be found at [dhs.wisconsin.gov/epht/birthdefects.htm](https://dhs.wisconsin.gov/epht/birthdefects.htm).





# HEALTH INDICATORS LAFAYETTE COUNTY

Heat stress, melanoma, lung cancer, and asthma are four of the many health indicators collected by the Wisconsin Environmental Public Health Tracking Program. Each of these indicators is strongly linked to one or more environmental factors.

● **25.6**

**HEAT STRESS**  
RATE OF ER VISITS  
PER 100,000 PEOPLE  
STATEWIDE: 16.5

● **23.4**

**MELANOMA**  
RATE OF CASES  
PER 100,000 PEOPLE  
STATEWIDE: 18.4

● **43.7**

**LUNG CANCER**  
RATE OF CASES  
PER 100,000 PEOPLE  
STATEWIDE: 62

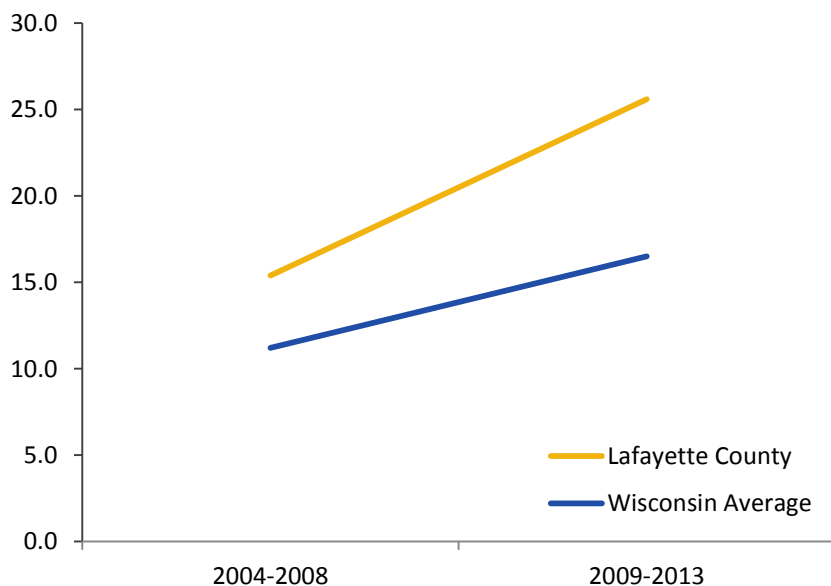
● **360.0**

**ASTHMA**  
RATE OF ER VISITS  
PER 100,000 PEOPLE  
STATEWIDE: 376

● Above state value    ● At or below state value    ^ Suppressed

## HEAT STRESS

RATE OF ER VISITS PER 100,000 PEOPLE



## HEAT STRESS

Heat stress encompasses a range of conditions including heat rash, heat syncope, heat cramps, and heat exhaustion. Any individual can develop heat stress when involved in intense physical activity or when exposed to high environmental temperatures.

In this profile, heat stress is measured by emergency room visits related to heat. For more information on heat stress, visit [bit.ly/cdcheatstress](http://bit.ly/cdcheatstress).

TAKE A CLOSER LOOK AT THE DATA:

[dhs.wi.gov/epht](http://dhs.wi.gov/epht)



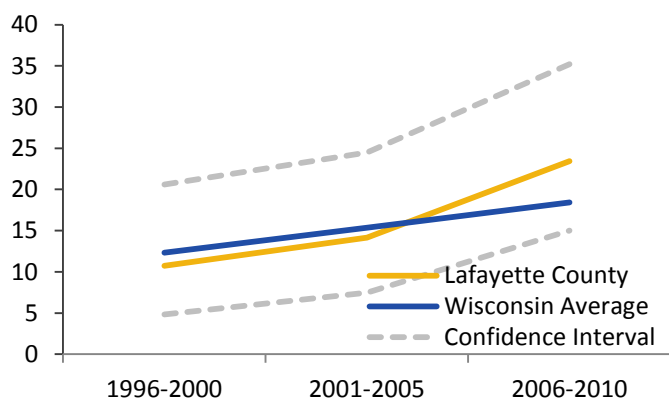


### MELANOMA AND LUNG CANCER

Cancer is a term used for diseases in which abnormal cells divide without control and are able to invade other body tissues. There are more than 100 different types of cancer. Melanoma is a cancer of the skin pigment cells and is the most dangerous type of skin cancer. Lung cancer forms in the tissues of the lung, usually in the cells lining the air passages, and is the leading cause of cancer deaths in the United States.

#### MELANOMA

RATE OF CASES PER 100,000 PEOPLE



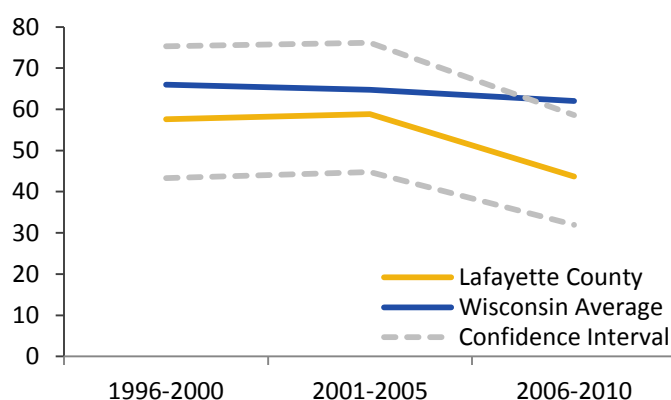
Both melanoma and lung cancer are strongly linked to environmental causes. Melanoma is linked to ultraviolet (UV) radiation exposure, and lung cancer is related to radon and environmental tobacco smoke. In this profile, melanoma and lung cancer data are presented as age-adjusted rates of new cases per 100,000 people.

The rate of melanoma in Wisconsin is increasing over time, and nearly all Wisconsin counties are following the same upward trend. The rate of lung cancer has held relatively steady in Wisconsin, with more variability by county. Confidence intervals based on the county rate have been added to the charts above. They are denoted with dotted gray lines, which indicate the precision of the estimated values. The closer the dotted lines are to the county line, the better (or more precise) the estimate.

For more information on melanoma, visit [dhs.wisconsin.gov/epht/melanoma.htm](https://dhs.wisconsin.gov/epht/melanoma.htm). To read more about lung cancer, visit [dhs.wisconsin.gov/epht/lung.htm](https://dhs.wisconsin.gov/epht/lung.htm).

#### LUNG CANCER

RATE OF CASES PER 100,000 PEOPLE



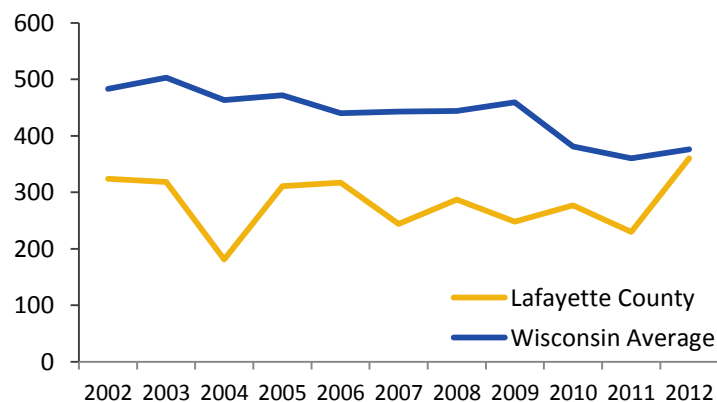
#### ASTHMA

Asthma is a disease that affects breathing and may restrict the ability to get oxygen to the lungs. Symptoms of asthma often occur because a person is exposed to a trigger such as outdoor air pollution.

In this profile, asthma is measured by the rate of asthma-related emergency room visits per 100,000 people. The overall rate of asthma emergency room visits in Wisconsin has declined slightly since 2002. Rates at the county level are more variable. For more information about asthma, visit [dhs.wisconsin.gov/asthma/Index.htm](https://dhs.wisconsin.gov/asthma/Index.htm)

#### ASTHMA

RATE OF ER VISITS PER 100,000 PEOPLE



# DATA DETAILS



## AIR QUALITY

### Particulate Matter 2.5 (PM<sub>2.5</sub>)

**Measures:** Annual Average PM<sub>2.5</sub> (µg/m<sup>3</sup>), Percent of days above standard set by the US Environmental Protection Agency

**Source:** National Environmental Public Health Tracking Network, Centers for Disease Control and Prevention

**Years displayed:** 2002-2011, data from 2011 are displayed on the dashboard

**Data details:** These measures include monitored and modeled estimates of PM<sub>2.5</sub> levels. Modeled estimates are used to fill in gaps for days when monitoring does not occur or in counties where monitors do not exist. The data downloaded from the national portal for percent of days above standard were multiplied by 365 to get number of days above US Environmental Protection Agency standard. The US Environmental Protection Agency's National Ambient Air Quality Standard (NAAQS) for a 24-hour average PM<sub>2.5</sub> concentration is 35 µg/m<sup>3</sup>.

### Ozone

**Measure:** Number of days above standard set by the US Environmental Protection Agency

**Source:** National Environmental Public Health Tracking Network, Centers for Disease Control and Prevention

**Years displayed:** 2001-2011, data from 2011 are displayed on the dashboard

**Data details:** This measure is the number of days with maximum eight-hour average ozone concentration over the Environmental Protection Agency's National Ambient Air Quality Standard (NAAQS) of 0.075 ppm. This measure includes monitored and modeled estimates of ozone levels. Modeled estimates are used to fill in gaps for days when monitoring does not occur or in counties where monitors do not exist.

### Heart Attack

**Measure:** Age-adjusted rate of hospitalizations among persons age 35 and over per 10,000 people

**Source:** National Environmental Public Health Tracking Network, Centers for Disease Control and Prevention

**Years displayed:** 2002-2011

**Data details:** These data are collected from inpatient hospital records. This measure includes cases with an ICD-9 code of 410.0-410.92. The National Environmental Public Health Tracking Network suppresses data for counties with fewer than six hospitalizations per 100,000 to protect confidentiality. However, counties with zero cases are not suppressed. Direct age-adjustment is conducted using the 2000 US standard population.



## HEALTH INDICATORS

### Asthma

**Measures:** Annual age-adjusted rate of emergency department visits per 100,000 people

**Source:** National Environmental Public Health Tracking Network, Centers for Disease Control and Prevention

**Years displayed:** 2002-2012, data from 2012 are displayed on the dashboard

**Data details:** These data are collected from emergency room visit records. This measure includes cases with an ICD-9 code of 493. The National Environmental Public Health Tracking Network suppresses data for counties with fewer than six visits per 100,000 to protect confidentiality. However, counties with zero cases are not suppressed. Direct age-adjustment is conducted using the 2000 US standard population. On the National Environmental Public Health Tracking portal, this measure is calculated per 10,000 people. For use in this profile, it is converted to per 100,000 people.

### Lung Cancer and Melanoma

**Measure:** Age-adjusted rates of cases among persons age 35 and over per 100,000 people

**Source:** Wisconsin Cancer Reporting System, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services

**Years displayed:** 1996-2010, data from 2006-2010 are displayed on the dashboard

**Data details:** Rates are calculated from counts of cancer cases reported to the Wisconsin Cancer Reporting System by health care providers in Wisconsin. Data for counties with fewer than six cases are suppressed to protect confidentiality. However, counties with zero cases are not suppressed. Direct age-adjustment is conducted using the 2000 US standard population.

### Heat Stress

**Measure:** Age-adjusted rate of emergency department visits per 100,000 people

**Source:** Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services

**Years displayed:** 2004-2013, data from 2009-2013 are displayed on the dashboard

**Data details:** These data are collected from emergency room visit records. This measure includes cases with an ICD-9 code of 992.0-992.9, or cause of injury code E900.0 or E900.9. Data for counties with fewer than five visits are suppressed to protect confidentiality. However, counties with zero visits are not suppressed. Direct age-adjustment is conducted using the 2000 US standard population.





## WATER QUALITY

### Arsenic

**Measures:** Mean concentration of arsenic (µg/L) in public drinking water

**Source:** National Environmental Public Health Tracking Network, Centers for Disease Control and Prevention

**Years displayed:** Averaged data from 2011-2013

**Data details:** Arsenic concentrations in drinking water are based on samples taken from public community water systems. Because many counties did not have any samples for a given year, three years of data were aggregated (2011-2013). Some counties had multiple arsenic mean values (from different water systems), so the values were first averaged within a given county and then averaged across the years.

### Nitrate

**Measure:** Mean concentration of nitrate (mg/L) in public drinking water

**Source:** National Environmental Public Health Tracking Network, Centers for Disease Control and Prevention

**Years displayed:** Averaged data from 2011-2013

**Data details:** Nitrate concentrations in drinking water are based on samples taken from public community water systems. Because many counties did not have any samples for a given year, we aggregated three years of data (2011-2013). Some counties had multiple nitrate mean values (from different water systems), so the values were first averaged within a given county and then averaged across the years.



## HOME HAZARDS

### Lead Poisoning

**Measure:** Percent of children tested who had a blood lead level  $\geq 5$  µg/dL

**Source:** Wisconsin Childhood Lead Poisoning Prevention Program, Bureau of Environmental and Occupational Health, Division of Public Health, Wisconsin Department of Health Services

**Years displayed:** 2001-2013, data from 2013 displayed on dashboard

**Data details:** Wisconsin blood lead testing data from children less than six years of age are reported to the Wisconsin Childhood Lead Poisoning Prevention Program. Data are de-duplicated such that they contain the most recent confirmatory (venous) test following an elevated screening (capillary) test. If no confirmatory test for the individual is available, the most recent screening test result is used.

### Carbon Monoxide Poisoning

**Measure:** Annual average rate of emergency room visits, age adjusted per 100,000 people

**Source:** Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services

**Years displayed:** 2004-2013, data averaged from 2009-2013 displayed on dashboard

**Data details:** This measure includes carbon monoxide poisonings that were unintentional (fire- or non-fire-related) and of unknown intent. These data are collected from emergency room visit records. The measure includes cases with an ICD-9 code of 986 or cause of injury code E868.2, E868.3, E868.8, E868.9, E982.0, E982.1, E818, E825, E838, E844, E867, E868, or E890-E899. Data for counties with fewer than five visits are suppressed to protect confidentiality. However, data from counties with zero visits are not suppressed. Direct age-adjustment is conducted using the 2000 US standard population.



## BIRTH OUTCOMES

### Low Birth Weight

**Measures:** Percentage of babies weighing <2,500 grams at birth among all babies born to county residents

**Source:** Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services

**Years displayed:** 2002-2013, data from 2011-2013 are displayed on dashboard

**Data details:** Data are from Wisconsin resident birth certificates. Birth weight in grams is reported by the hospital or attending clinical staff.

### Preterm Birth

**Measure:** Percentage of babies born at <37 weeks gestation among all babies born to county residents

**Source:** Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services

**Years displayed:** 2002-2013, data from 2011-2013 are displayed on dashboard

**Data details:** Data are from Wisconsin resident birth certificates. The last menstrual period a mother had prior to confirmed pregnancy is used to determine weeks of gestation. If data from this source are not available, the attending clinician's estimated weeks of gestation is used.



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## SPECIAL THANKS

Iowa Environmental Public Health Tracking Program

Wisconsin Environmental Public Health Tracking Program's Technical Advisory Group

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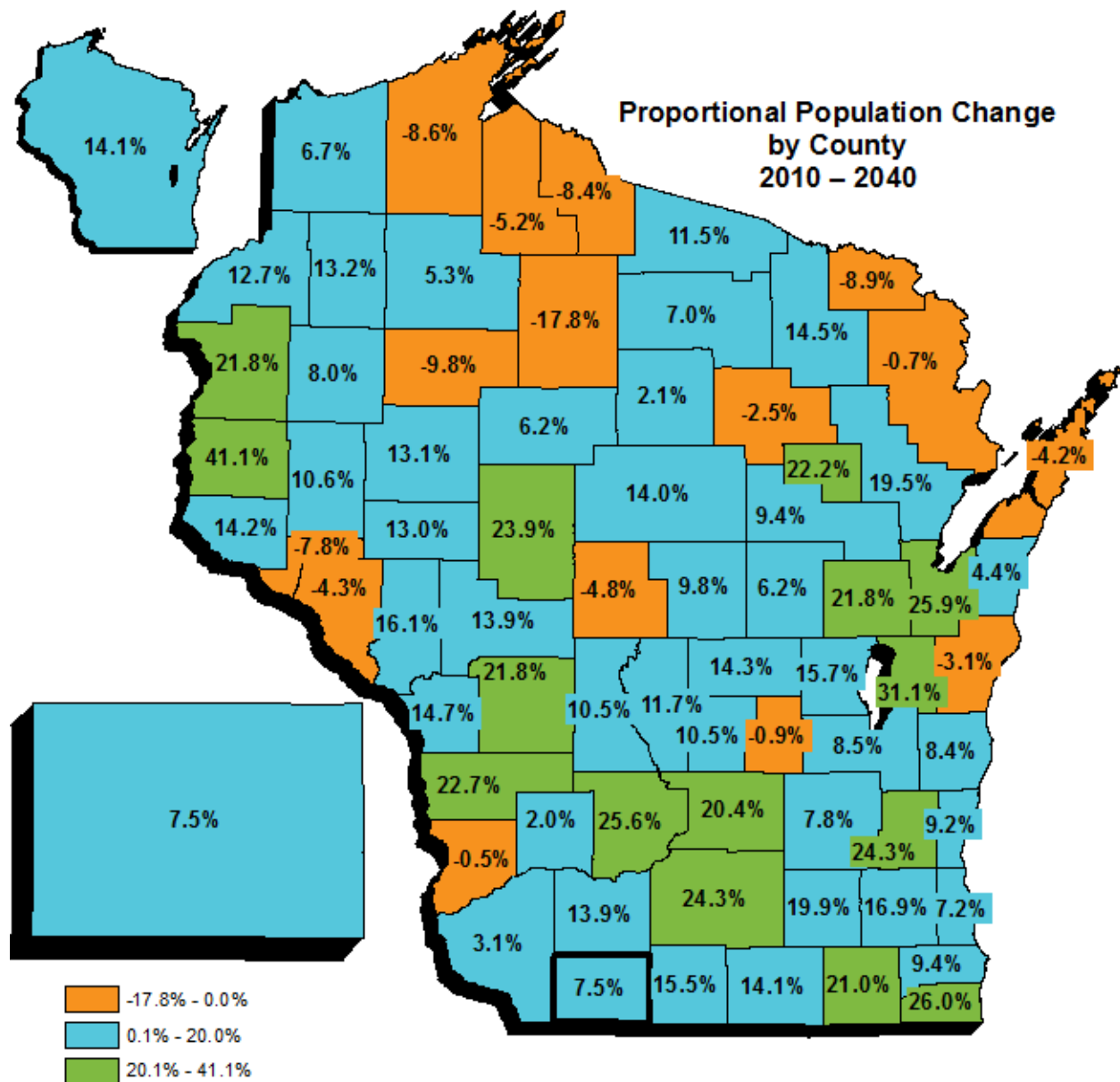
Sarah Mattes, Tobacco Prevention and Control Program, Wisconsin Department of Health Services

Kevin Masarik, Center for Watershed Science and Education, University of Wisconsin-Extension



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Bureau of Environmental and Occupational Health  
Wisconsin Environmental Public Health Tracking Program  
dhstracking@wi.gov | dhs.wisconsin.gov/epht  
APRIL 2015 | P-00719

# 2013 Lafayette County Economic and Workforce Profile



Source: WI Dept. of Administration Demographic Services, December 2013

## Unsteady as She Goes

### Economic Situation

The economy continues to improve, albeit at a less than desirable pace. U.S. Gross Domestic Product (GDP) is up 9.2 percent through sixteen quarters since the trough of June 2009. That is the slowest rate of GDP recovery of all post-WWII business cycles.

Our economy is largely based on consumption. Nearly 70 percent of U.S. GDP is consumption or consumer spending. Consumption is being dampened on a number of fronts: real earnings have been flat for a decade; spending supported by home equity has dropped by about \$1.3 trillion since the housing bust; revolving credit has fallen by \$130 billion; interest income is down \$400 billion as the Federal Reserve Bank maintains near-zero interest rates; and our savings rate has turned around from nearly zero, but that has pulled another \$350 billion

out of the consumption contribution to economic growth. The sum total affect is an absence of \$2.2 trillion of spending in a \$16.9 trillion dollar economy, almost 13 percent.

Add in the fact that private non-residential investment is down about \$500 billion and businesses and banks are sitting on a couple trillion dollars in cash.

Also in the mix is a decline in federal, state, and local spending. Between the national sequestration and state and local budget cuts, government spending has been a drag on the economy. During this recovery, government spending is down 1.7 percent. Moreover, the rate at which federal, state and local spending growth will be reestablished will be substantially below historical rates, certainly in the short-term.

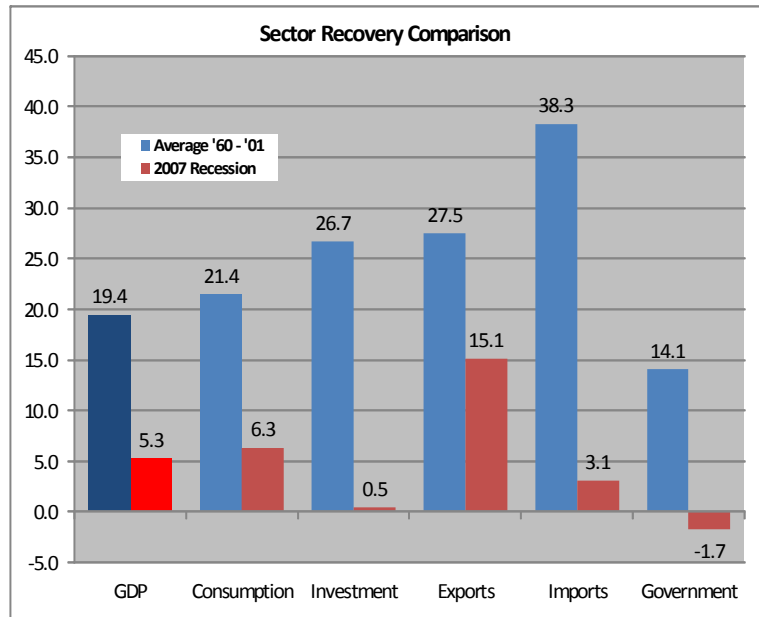
GDP growth is projected to be about 1.8 percent for 2013. Interest rates are expected to remain relatively low, with the Federal Reserve Bank holding the Fed Funds rate near zero into 2015. The outlook for economic growth in the next year is for continued growth at sub-potential rates. U.S. GDP is expected to growth at 2.8 percent in 2014, with growth picking up in the later half of the year. Global activities will have a significant influence on U.S. and Wisconsin economic growth in the near-term as will U.S. government fiscal policy.

### Employment Situation

Employment continues to rise as well and the unemployment rate continues to fall, but both are being hampered by the slower than desired economic pace, plus a couple other concerns.

The U.S. and Wisconsin unemployment rates are on a downward trend that is expected to continue. As of October 2013, the seasonally adjusted U.S. unemployment rate is 7.3 percent, down from 7.9 percent in October of 2012. Wisconsin's unemployment rate has also tracked lower over the period and is below than the U.S. rate. Wisconsin's seasonally adjusted unemployment rate was 6.5 percent in October 2013, down from 6.8 percent a year earlier.

Wisconsin jobs have increased during the recovery. The state has added 122,000 private sector jobs since bottoming out in January of 2010, a full six months after the economic recovery began. Over 39,000 of those jobs have been in the manufacturing sector. Neither U.S. or Wisconsin jobs levels have breached the 2007 prerecession peaks. At the current pace



Source: William Testa, Federal Reserve Bank of Chicago

## 2013 Lafayette County Workforce Profile

of job growth, it is expected that Wisconsin jobs will reach new levels in the third quarter of 2015. A spurt of economic growth would hasten the jobs breach timing and spur self-sustaining economic growth. The source of that spurt is not yet visible.

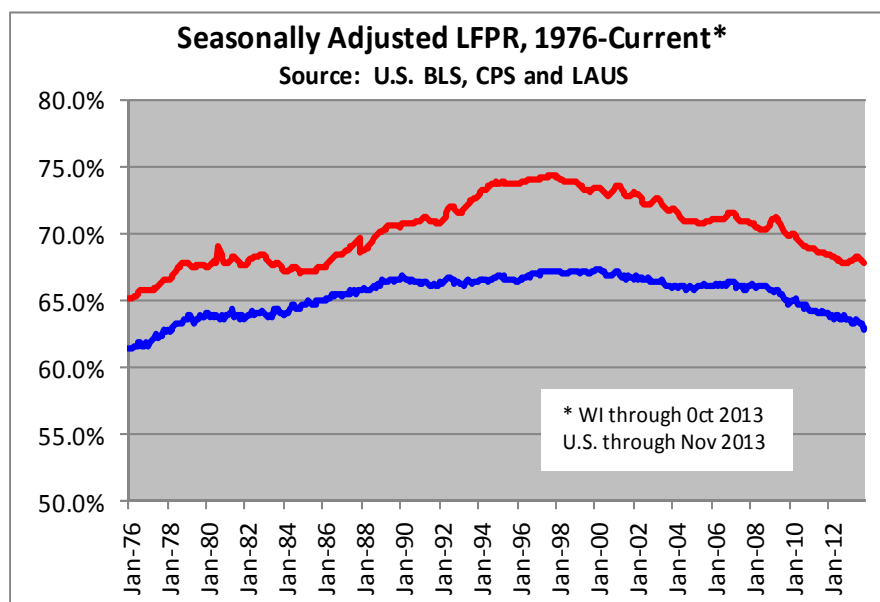
In addition to the subpar pace of economic growth, concomitant business practices are holding back more robust job growth. Above we mentioned that business investment was \$500 billion short of prerecession levels. Adding employment insult to injury, the investments businesses are making are primarily in equipment and software — labor saving investments. Investments in new structures, which would lead to increased employment, are still lagging. Moreover, the slow pace of economic activity allows firms to meet their incremental product demand with self-financed productivity increases versus bank-financed production line expansions.

One of the other concerns mentioned earlier, is that the downward path of the unemployment rate is due in part to job increases and in part to labor force dynamics. While employment has increased and unemployment has decreased, the size of the workforce has also decreased. Wisconsin employment decreased almost 150,000 from its peak in February 2008 to its trough in December 2009, and recovered 59,000 since.\* By comparison, Wisconsin's workforce peaked in April 2009, lost 93,000 by September 2012, and recovered only 31,000 people by July 2013. Employment has continued to grow, while the workforce has begun to shrink again. Wisconsin's labor force participation rate has dropped from 71.6 in 2006 to 67.8 today. Both numbers are well off the highs of 74.3 reached back in 1997 and there is little chance for significant upward movement from here on out.

The dearth of qualified workers will continue to challenge the state for years to come. Not only is the problem one of worker quality, it is also one of quantity. The grey tsunami of Baby Boomers nearing the end of their work life cannot be halted. Perhaps, at best, it can be delayed a few years. Even so, only 5 percent of Boomers plan to extend their working years full-time in the job they now have. The flattening (even declining) workforce will affect most industries — construction, manufacturing, retail, information, finance, professional services, education, health care and government.

Attracting and retaining talent should be by now the most critical undertaking of businesses and communities over the foreseeable future. Technology can be substituted to alleviate some of the quantity problem, but more sophisticated technology will require more sophisticated workers. Firms that *invest* in training and attracting talent will have a competitive advantage in producing higher-margin products. Communities that *invest* in attracting and retaining talent will raise the quality of life in their communities that will perpetuate the further attraction of skilled workers and citizens.

\* Employment in this case is measured from a household survey as opposed to jobs numbers that are derived from an business establishment survey.





## Population and Demographics

### Lafayette County's 10 Most Populous Municipalities

	Apr 1, 2010 Census	Jan 1, 2013 Estimate	Numeric Change	Proportional Change
<b>United States</b>	308,400,408	315,090,923	6,690,515	2.2%
<b>Wisconsin</b>	5,686,986	5,717,110	30,124	0.5%
<b>Lafayette County</b>	16,836	16,883	47	0.3%
Darlington, City	2,451	2,426	-25	-1.0%
Shullsburg, City	1,226	1,224	-2	-0.2%
Belmont, Village	986	989	3	0.3%
Benton, Village	973	968	-5	-0.5%
Darlington, Town	875	888	13	1.5%
Wiota, Town	857	856	-1	-0.1%
Argyle, Village	856	856	0	0.0%
Belmont, Town	767	783	16	2.1%
Willow Springs, Town	758	762	4	0.5%
Blanchardville, Village *	648	645	-3	-0.5%

\*Lafayette County portion only.

Source: Demographic Services Center, Wisconsin Department of Administration

Lafayette County added an estimate of 47 residents from April 2010 to January 2013, ranking as the 57th largest county in the state at the end of the period. The rate of increase, 0.3 percent, is lower than the state growth of 0.5 percent and significantly lower than the nation's increase of 2.2 percent.

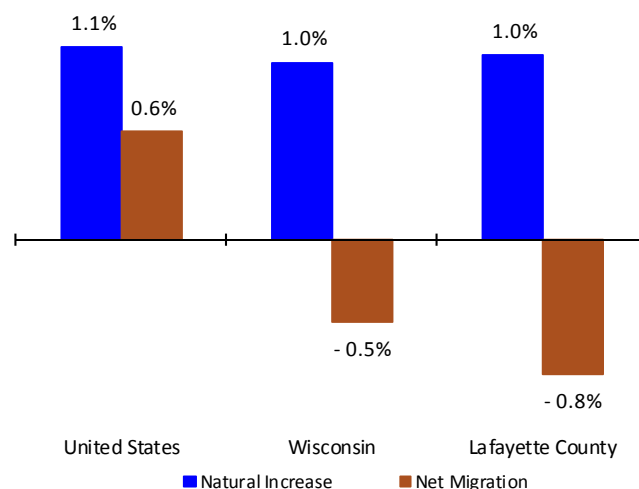
Population change is driven by two factors: natural change and migration. A natural increase of the population occurs when there are more births than deaths. Migration affects net employment change in an area positively when the number of people moving into the area is larger than the number of people moving out. In the case of Lafayette County, growth comes from natural increase. As shown on the chart below, Iowa's rate of natural increase was 1.0 percent, while its rate of net migration was -0.8 percent. Iowa County's natural increase was in line with the state's 1.0 percent and the nation's 1.1 percent. The county's migration rate was below the state's rate of -0.5 percent and contrasted with the nation's 0.6 percent.

The table above lists Iowa County's ten most populous municipalities as of January 2013. The concentration of the population across municipalities is relatively low, with the largest municipality, Darlington, accounting for only 14 percent of the population. The population across the rest of the top municipalities is more evenly distributed. The ten largest counties account for 62 percent of the county's population.

The county's small addition of residents is driven by relatively small municipalities. With the largest numerical and percent increases in the group of top municipalities, the towns of Belmont and Darlington added 29 residents for a combined rise of percent. The City of Darlington posted the largest numerical and percent declines, with a contraction of -1.0 percent (25 residents).

The small net increase in population was quite dispersed across municipalities. The top ten municipalities accounted for 0.0 percent of the county's increase in population.

Components of Population Change



Source: Demographic Services Center, Wisconsin Department of Administration



## Commuting Patterns

## Commuting Patterns for Lafayette County, WI

## People who work in Lafayette Co., WI, live in:

<u>Residence</u>	<u>Estimated # of Workers</u>
Lafayette Co., WI	4,200
Grant Co., WI	523
Green Co., WI	248
Jo Daviess Co., IL	180
Iowa Co., WI	136
Dubuque Co., IA	61
Stephenson Co., IL	26
Lake Co., IL	17
Chippewa Co., WI	16
Dane Co., WI	7

## People who live in Lafayette Co., WI, work in:

<u>Workplace</u>	<u>Estimated # of Workers</u>
Lafayette Co., WI	4,200
Green Co., WI	1,150
Grant Co., WI	891
Iowa Co., WI	782
Dane Co., WI	663
Dubuque Co., IA	477
Jo Daviess Co., IL	263
Stephenson Co., IL	58
Rock Co., WI	19
Monroe Co., WI	14

U.S. Dept. of Commerce, Census Bureau, American Community Survey 2007-2011, Table S0801

The five-year estimates of the American Community Survey (ACS) provide basic data on commuting patterns by county. According to the latest available tabulations, more than half of Lafayette County's employed residents work in another county. This is a very high level of out-commute. The statewide average indicates that 34 percent of workers commute out of the county in which they reside. Being a rural county, Lafayette County's commuting pattern is shaped by its relative proximity to the more urban Green County and by the attraction of the Madison metro area.

The main counties of work for those who commute out of Lafayette County include Green (1,150), Grant (891), Iowa (782), and Dane (663). For those who commute to Jefferson County for work, the main counties of residence are Grant (523) and Green (248).

Lafayette County's commuting pattern is associated with a transfer of personal income from other counties to Lafayette County. In 2012, there was a net transfer of earnings of nearly \$129 million into Lafayette County, which resulted from the difference between the earnings of workers from outside the county (\$162 million) and the earnings of county residents working outside the county (\$33 million).

Another measure of worker mobility can be observed in the average time and distance traveled to work each day. The table below indicates that Lafayette County's average travel time is above the state average (24.8 minutes versus 21.5 minutes).

## Travel Time to Work (in Minutes)

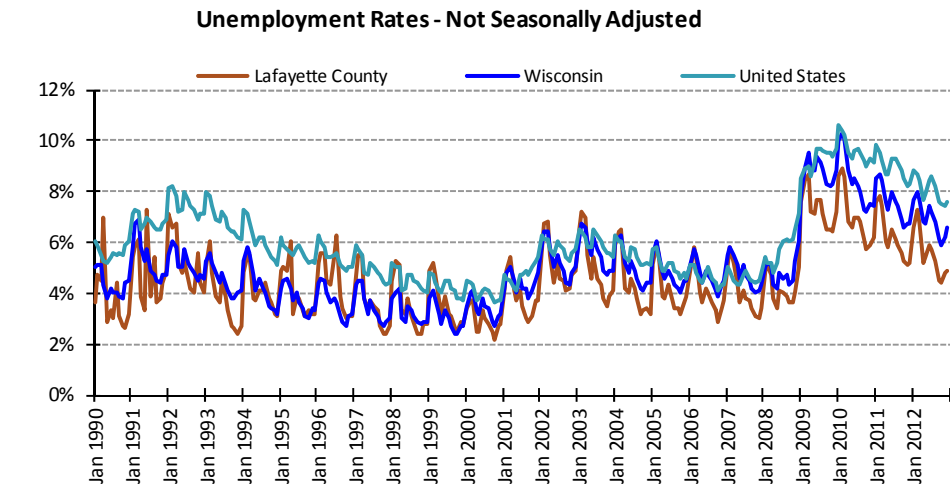
	< 10	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 44	45 to 59	60+	Average
Lafayette Co. Estimate	22.7%	14.8%	10.7%	11.7%	5.1%	12.0%	7.4%	7.3%	8.3%	24.8
Wisconsin Estimate	18.8%	17.5%	16.4%	14.8%	6.4%	10.6%	5.4%	5.3%	4.6%	21.5

U.S. Dept. of Commerce, Census Bureau, American Community Survey 2007-2011, Table S0801

## Labor Force Dynamics

The chart to the right plots the monthly rates of unemployment for Lafayette County, Wisconsin and the U.S. over the last two decades.

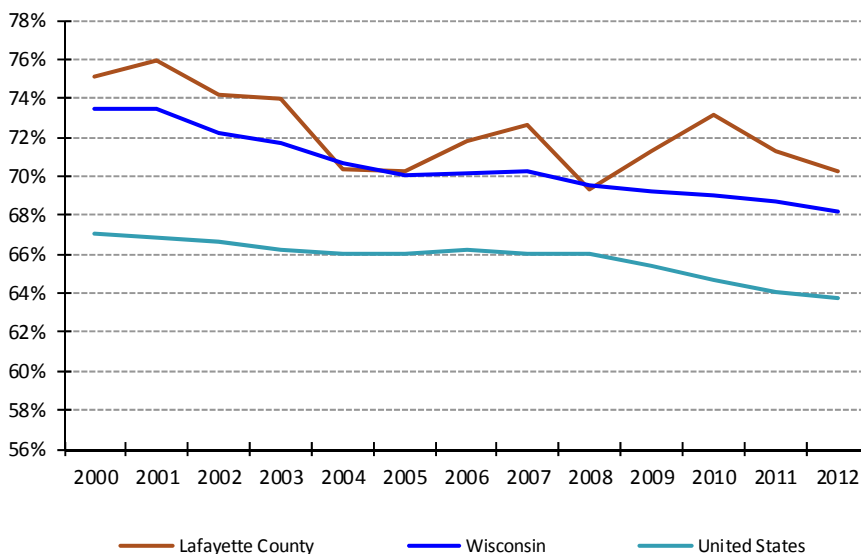
A first approximation to the dynamics of unemployment in Lafayette County, Wisconsin and the U.S. since the early 1990s indicates that unemployment in Lafayette County followed the state and national trends in general, although fluctuating more intensely in the 1990s. As in the state and the nation, the unemployment rate in Lafayette County declined in the second half of the 1990s, reaching a historical low level towards the end of the decade.



Source: Local Area Unemployment Statistics, Bureau of Labor Statistics

The rate of unemployment climbed up again in the early 2000s recession, to levels that were, on average, lower for the nation and higher for the state, always relative to the previous recession. An important difference with the 1990s is that the recovery after the early 2000s recession was relatively weak in terms of job creation. As the chart shows, the employment recovery between 2003 and 2007 did not result in a significant decline in the unemployment rate. This is explained by an unprecedented low rate of job creation in the early phase of the last employment upturn. The subsequent increase in job creation was interrupted by the Great Recession, which was characterized by a rapid and massive destruction of jobs across regions, industrial sectors and demographic groups.

### Labor Force Participation Rates



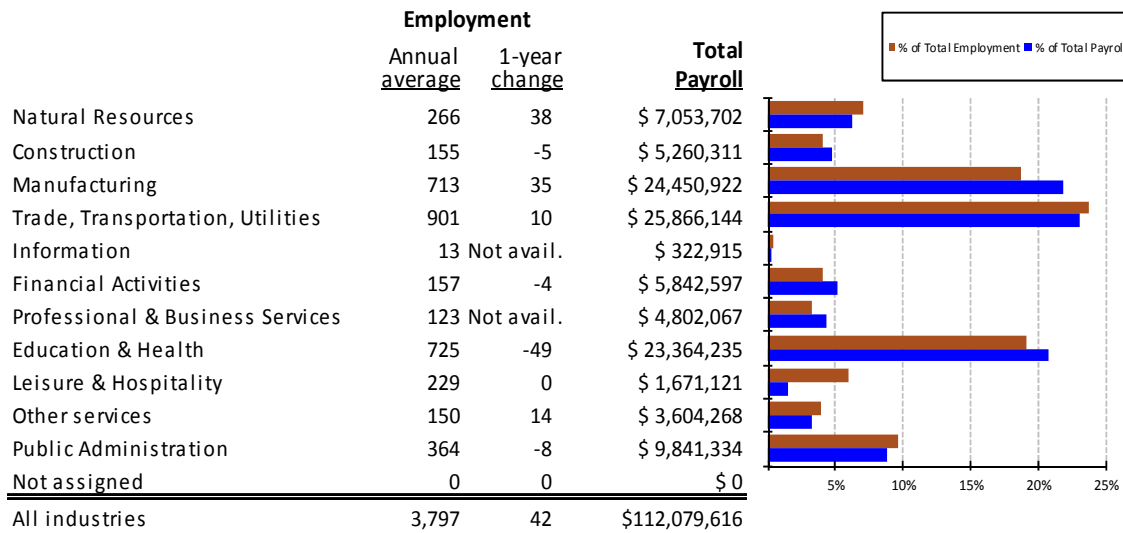
Source: Current Population Survey, U.S. Department of Commerce, Census Bureau

The labor force participation rate (LFPR) is the labor force (sum of employed and unemployed) divided by the population ages 16 and older. Lafayette County's annual average LFPR stood at 70.2 percent in 2012, 6 percentage points above the nation (63.7 percent) and 2 points above the state (68.2 percent).

The chart to the left shows yearly rates of labor force participation. Three aspects are salient, namely, (i) the persistently high LFPR of Lafayette and Wisconsin relative to the U.S.; (ii) the downward trend observed at the state and national levels; and (iii) the sideways movement of Lafayette's LFPR since 2004.

## Industry Employment and Wages

### 2012 Employment and Wage Distribution by Industry in Lafayette County



Source: WI DWD, Bureau of Workforce Training, Quarterly Census Employment and Wages, June 2013

The largest industry sector in Lafayette County is trade, transportation and utilities, with an employment share of 23.7 and payroll share of 23.1 percent. Close in second place are the education and health and manufacturing sectors, with employment shares of 19.1 and 18.8 and payroll shares of 20.8 and 21.8 percent, respectively. The relationship between employment and payroll shares shows that average annual wages are just below-average in the trade, transportation and utilities and health and education sectors and are somewhat above average in manufacturing.

The table at the bottom shows the average annual wages by sector in Lafayette County and Wisconsin, including the share of annual wages by industry relative to the state and the annual change in Lafayette County.

#### Average Annual Wage by Industry Division in 2012

	Average Annual Wage		Percent of Wisconsin	1-year % change
	Wisconsin Average Annual Wage	Lafayette County Average Annual Wage		
All industries	\$ 41,985	\$ 29,518	70.3%	2.5%
Natural Resources	\$ 33,047	\$ 26,518	80.2%	6.9%
Construction	\$ 51,670	\$ 33,937	65.7%	5.4%
Manufacturing	\$ 52,413	\$ 34,293	65.4%	1.9%
Trade, Transportation & Utilities	\$ 35,946	\$ 28,708	79.9%	5.7%
Information	\$ 56,015	\$ 24,840	44.3%	Not avail.
Financial Activities	\$ 58,493	\$ 37,214	63.6%	-4.3%
Professional & Business Services	\$ 49,451	\$ 39,041	78.9%	Not avail.
Education & Health	\$ 43,781	\$ 32,227	73.6%	5.3%
Leisure & Hospitality	\$ 15,221	\$ 7,297	47.9%	0.0%
Other Services	\$ 23,598	\$ 24,028	101.8%	-3.0%
Public Administration	\$ 42,198	\$ 27,037	64.1%	2.0%

Source: WI DWD, Workforce Training, QCEW, June 2013

Lafayette County's annual average wage was \$29,518 in 2012, which represents a 70.3 percent of the statewide average of \$41,985. Compared with the state-wide averages, all sectors but other services reported lower average annual wages.

The highest-paying sector in 2012 was the quite small professional and business services, with an average wage of \$39,041, or 78.9 percent of the corresponding statewide average annual wage. This sector is followed by financial activities, with an average annual wage of \$37,214, manufacturing (\$34,293), construction (\$33,937), and education and health (\$32,227).

The only high paying sector that posted an employment expansion in 2012 was manufacturing, while the other three sectors lost jobs in 2012.

Lafayette County's lowest-paying sector in 2012 was leisure and hospitality, with a strikingly low average annual wage of \$7,297, or 47.9 percent of the statewide average, followed quite distantly by the other services sector, with \$24,028, and the information sector with \$24,840. The leisure and hospitality and information sectors have average annual wages of less than half the statewide average.

## Prominent Industries and Employers

Prominent Industries in Lafayette County

Industry Sub-sectors (3-digit NAICS)	Average Employment				Average Monthly Wages				
	2012 Avg. Lafayette County	2007 Average	5-year Percent Change Lafayette County	Wisconsin	2012 Avg. Lafayette County	2007 Avg.	Wisconsin	5-year Percent Change Lafayette County	Wisconsin
Food Manufacturing	596	381	56.4%	-0.4%	\$ 2,726	\$3,252	\$ 3,804	-16.2%	14.3%
Educational Services	558	553	0.9%	7.1%	\$ 2,637	\$2,590	\$ 3,873	1.8%	13.0%
Truck Transportation	325	329	-1.2%	-13.5%	\$ 3,462	\$3,330	\$ 3,431	4.0%	-1.1%
Executive, Legislative, and Other General Govt	263	363	-27.5%	-12.7%	\$ 2,312	\$2,527	\$ 3,228	-8.5%	0.5%
Merchant Wholesalers, Nondurable Goods	191	170	12.4%	-5.9%	\$ 2,379	\$2,268	\$ 4,316	4.9%	10.7%
Animal Production	181	129	40.3%	29.2%	\$ 2,096	\$1,985	\$ 2,211	5.6%	5.3%
Food Services and Drinking Places	149	195	-23.6%	-3.5%	\$ 599	\$619	\$ 1,056	-3.2%	6.5%
Merchant Wholesalers, Durable Goods	138	150	-8.0%	-5.2%	\$ 3,243	\$4,029	\$ 4,947	-19.5%	10.7%
Gasoline Stations	134	167	-19.8%	-2.9%	\$ 863	\$775	\$ 1,561	11.4%	1.9%
Specialty Trade Contractors	126	160	-21.3%	-31.0%	\$ 2,346	\$2,974	\$ 3,519	-21.1%	-4.5%

Note: \* data suppressed for confidentiality and not available for calculations

The table above offers a closer look at the structure and dynamics of employment and wages in Lafayette County, focusing on the largest 3-digit industries that compose the 2-digit sectors examined in the previous page.

The largest employing industries in Lafayette County are dominated by the “Food Manufacturing” and “Educational Services” industries. These two industries alone account for nearly a quarter of total employment. The prominent industries, in turn, concentrate 62 percent of total employment.

The fastest growing 3-digit prominent industry is “Food Manufacturing,” with an impressive 5-year growth rate of 56 percent that contrasts with a decline of -0.4 percent at the state level. The second fastest growth is observed in “Animal Production,” with a growth rate of 40 percent, somewhat higher than the statewide growth of 29 percent statewide. The largest relative employment declines in the group are posted by “Executive, Legislative and Other General Government” (-27.5 percent) and “Food Services and Drinking Places” (-24 percent).

“Truck Transportation” is the highest paying prominent industry, with an average monthly wage of \$3,462, and “Food Services and Drinking Places” is the lowest paying prominent industry, with an average monthly wage of \$599. In terms of wage change, it is worth noting the fast expansion of the lower paying “Gasoline Stations,” the relatively slow growth of “Educational Services,” and the sharp declines of “Specialty Contractors” and “Merchant Wholesales, Durable Goods.”

The table below identifies the county’s largest employers. The group is dominated by employers in the “Food Manufacturing” and “Educational Services” industries. The leading employers are three cheese manufacturers (Lactalis USA Belmont, Betin and Mexican Cheese Producers). The education sector, in turn, is also represented by three employers: the School District of Black, the Darlington Community School District and Shullsburg Public School.

Prominent Employers in Lafayette County

Establishment	Service or Product	Number of Employees (June 2010)
LACTALIS USA BELMONT INC	Cheese manufacturing	100-249 employees
BETIN INC	Cheese manufacturing	100-249 employees
MEXICAN CHEESE PRODUCERS, INC.	Cheese manufacturing	100-249 employees
COUNTY OF LAFAYETTE	General medical and surgical hospitals	50-99 employees
COUNTY OF LAFAYETTE	Executive and legislative offices, combined	50-99 employees
SHULLSBURG CREAMERY II LLC	Dairy product merchant wholesalers	50-99 employees
SCHOOL DISTRICT OF BLACK	Elementary and secondary schools	50-99 employees
COUNTY OF LAFAYETTE	Nursing care facilities	50-99 employees
DARLINGTON COMMUNITY SCHOOL DISTRICT	Elementary and secondary schools	50-99 employees
SHULLSBURG PUBLIC SCHOOL	Elementary and secondary schools	50-99 employees

Source: WI DWD, Bureau of Workforce Training, QCEW, OEA special request, Sept. 2013

## Personal Income

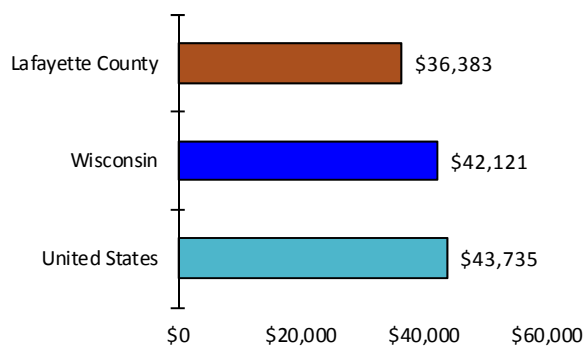


	2002 Nominal Total Personal Income (in thousands)	2002 Total Personal Income in 2012 dollars (in thousands)	2012 Total Personal Income (in thousands)	Nominal change in Total Personal Income (2002 - 2012)	Inflation-adjusted change in Total Personal Income (2002 - 2012)
United States	\$9,145,998,000	\$11,672,408,365	\$13,729,063,000	50.1%	17.6%
Wisconsin	\$169,440,687	\$216,245,498	\$241,200,961	42.4%	11.5%
Lafayette County	\$384,580	\$490,813	\$613,165	59.4%	24.9%

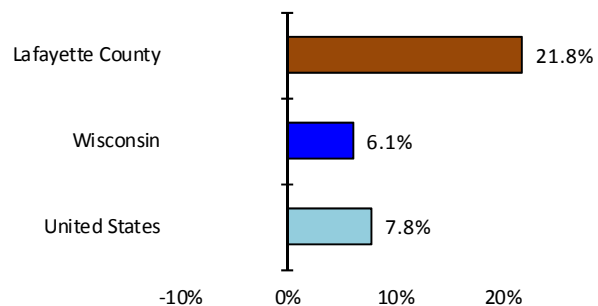
Source: Bureau of Economic Analysis

Total Personal Income (TPI) is the sum of three components, namely (i) employment earnings; (ii) property income (dividends, interest and rental income); and (iii) personal current transfers receipts (government payments like social security, Medicare, Medicaid and unemployment insurance). Lafayette County's TPI in 2012 was \$613 hundred thousand, or around 0.3 percent of the state's \$241 billion total. Its 10-year inflation-adjusted TPI growth was 24.9 percent, significantly faster than the state rate of 11.5 percent and the national rate of 17.6 percent.

**2012 Per Capita Personal Income**



**Inflation-adjusted change in Per Capita Personal Income (2002 - 2012)**



Source: Bureau of Economic Analysis

Per Capita Personal Income (PCPI) is TPI divided by the total population. This average income figure is often used as a measure of economic development and standard of living. In 2012, Lafayette County's PCPI was \$36,383, a much lower figure than the state's \$42,121 and the nation's \$43,735. Lafayette County's PCPI ranks 50th in Wisconsin, being the third in the Wisconsin's Southwest Workforce Development Area after Iowa County (\$40,991) and Green County (\$39,681).

Another relevant measure of personal income is its inflation-adjusted change over time. This is one of the most important indicators of economic performance at the county level. In 2002-2012, inflation-adjusted growth of Lafayette County's PCPI was 21.9 percent, well above the state's 6.1 percent and the nation's 7.8 percent. Lafayette's PCPI growth ranks 6th highest in Wisconsin, being the highest in the Southwest WDA followed by Richland County (13.4%) .

### For More Information:

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## Wisconsin Childhood Lead Poisoning Prevention Program Blood Lead Testing and Lead Exposure Data

The burden of childhood lead exposure in Wisconsin changed dramatically in 2012 when the Centers for Disease Control and Prevention (CDC) lowered the intervention blood lead level (BLL) from 10 micrograms per deciliter (mcg/dL) to 5 mcg/dL. **In 2013, 4,865 Wisconsin children were found to have BLLs of 5 mcg/dL or more, which is more than four times the number (1031) of Wisconsin children with BLLs of 10 mcg/dL or more (CDC's definition of lead poisoning from 1991 – 2012).** Without public health intervention, the 4,865 children found with BLL of 5 mcg/dL or more in 2013 will likely cost Wisconsin billions of dollars in reduced intelligence quotient (IQ), lifetime earnings losses and the associated societal costs for health care, education and correctional services.

### Blood Lead Testing Data Report

This report presents data from the Wisconsin Childhood Lead Poisoning Prevention Program. Shown here are statewide time trends and numbers of children by local health department jurisdiction. The data show that the new intervention BLL means that many more Wisconsin children are now exposed to levels of lead sufficiently high that CDC recommends comprehensive public health interventions including environmental investigation of the home for lead hazards. Finally, the report includes CDC's 2012 recommendations for confirmatory testing (Table 1), follow-up blood lead testing (Table 2) and interventions (Table 3).

### Change in the Intervention Blood Lead Level

In May 2012, CDC<sup>1</sup> lowered the intervention BLL from 10 mcg/dL to 5 mcg/dL and referred to this BLL as a “reference value.” While no level of lead in the blood is safe, this reference value was selected to identify those children whose BLLs were in the top 2.5 percent of U.S. children. CDC intends to update this reference value every four years as the population distribution of BLLs change.

CDC's decision to lower the intervention BLL was based on a large body of research that shows that BLLs less than 10 mcg/dL in young children damage the brain and impair the cardiovascular, endocrine and immune systems, causing lifelong health, learning and behavior problems. Lead exposure interferes with the normal development of a child's brain and can contribute to failure in school and juvenile delinquency. Lead exposures have also been associated with negative outcomes later in life such as hypertension, heart and kidney disease, memory loss and Alzheimer's disease, panic attacks and depression, decreased sperm counts and other fertility problems, miscarriage, increased risk of adult criminality, and overall mortality.

One study<sup>2</sup> demonstrated that as blood lead rises from 5 to 10 mcg/dL, children lose approximately 5 IQ points compared to peers whose lead exposure is below 5 mcg/dL. The research has also shown that the initial increase of a BLL from 0 to 10 mcg/dL has a more

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<sup>1</sup> Advisory Committee for Childhood Lead Poisoning Prevention of the Centers for Disease Control and Prevention (2012), *Low level lead exposure harms children: A renewed call for primary prevention*.

<sup>2</sup> Jusko TA, et. al. (2008), Environmental Health Perspectives, *Blood lead concentrations less than 5 mcg/dl and child intelligence at 6 years of age*.





damaging impact on IQ than subsequent increases in BLLs above 10 mcg/dL. Two studies<sup>3, 4</sup> showed that as the BLL rises from less than 1 mcg/dL to 30 mcg/dL, the increase in IQ points lost is steepest below 10 mcg/dL. The IQ loss continues as the BLL rises from 10 to 30 mcg/dL, but at a slower rate (see Figure 1). This research supports the need for intervention at lower BLLs in order to prevent IQ loss.

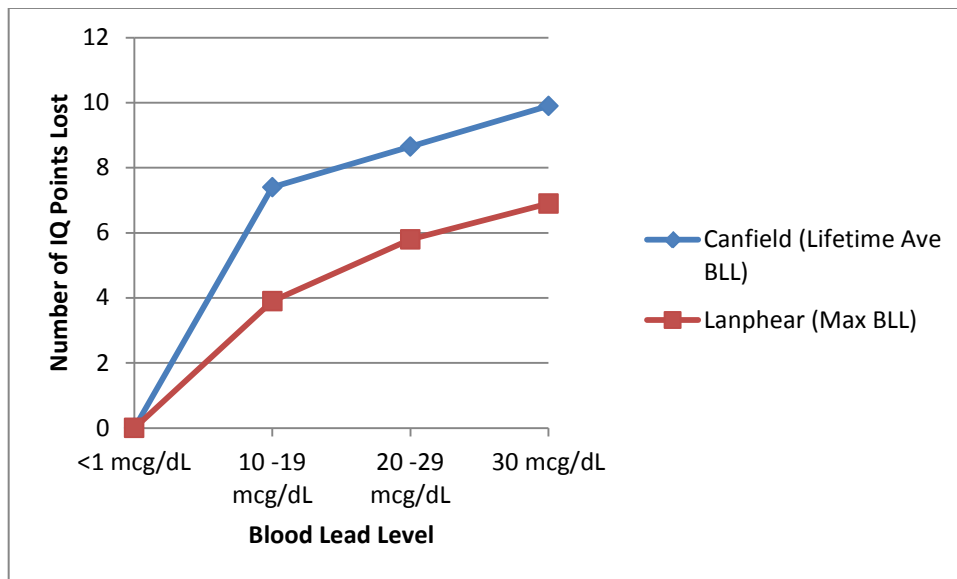


Figure 1. Number of IQ points lost by blood lead level

### How Does This Change Affect Wisconsin Children and Families?

This change increased the number of Wisconsin children under age 6 who are at risk for cognitive deficits and other lifelong health problems due to lead exposure by a factor of more than four (see Figure 2). Note that the number of children *tested* for lead peaked in 2010 at approximately 106,000 and decreased to about 94,000 in 2013 (see Figure 3).

In Wisconsin in the last three years alone, laboratories and health care providers reported nearly 17,000 children with BLLs of 5 mcg/dL or more. Of the 17,000 children, approximately 14,000 had BLLs of 5 to 9 mcg/dL (see Table 4 for 2011 - 2013 data). For these children, CDC recommends comprehensive public health interventions (see Table 3). However, local health departments have not received any additional resources to implement CDC's current recommendations.

The challenge for the future is to assure that Wisconsin children who are exposed to lead get the comprehensive public health services they need to reduce their lead exposures.

<sup>3</sup> Lanphear BP, et. al. (2005), Environmental Health Perspectives, *Low-level environmental lead exposure and children's intellectual function: an international pooled analysis*.

<sup>4</sup> Canfield RL, et. al. (2003) New England Journal of Medicine, *Intellectual impairment in children with blood lead concentrations below 10 µgrams per deciliter*.

Figure 2. Statewide time trend (2001 – 2013) of the number of children with BLLs of 10 mcg/dL and the number of children with BLLs of 5 mcg/dL or more from 2011 to 2013.

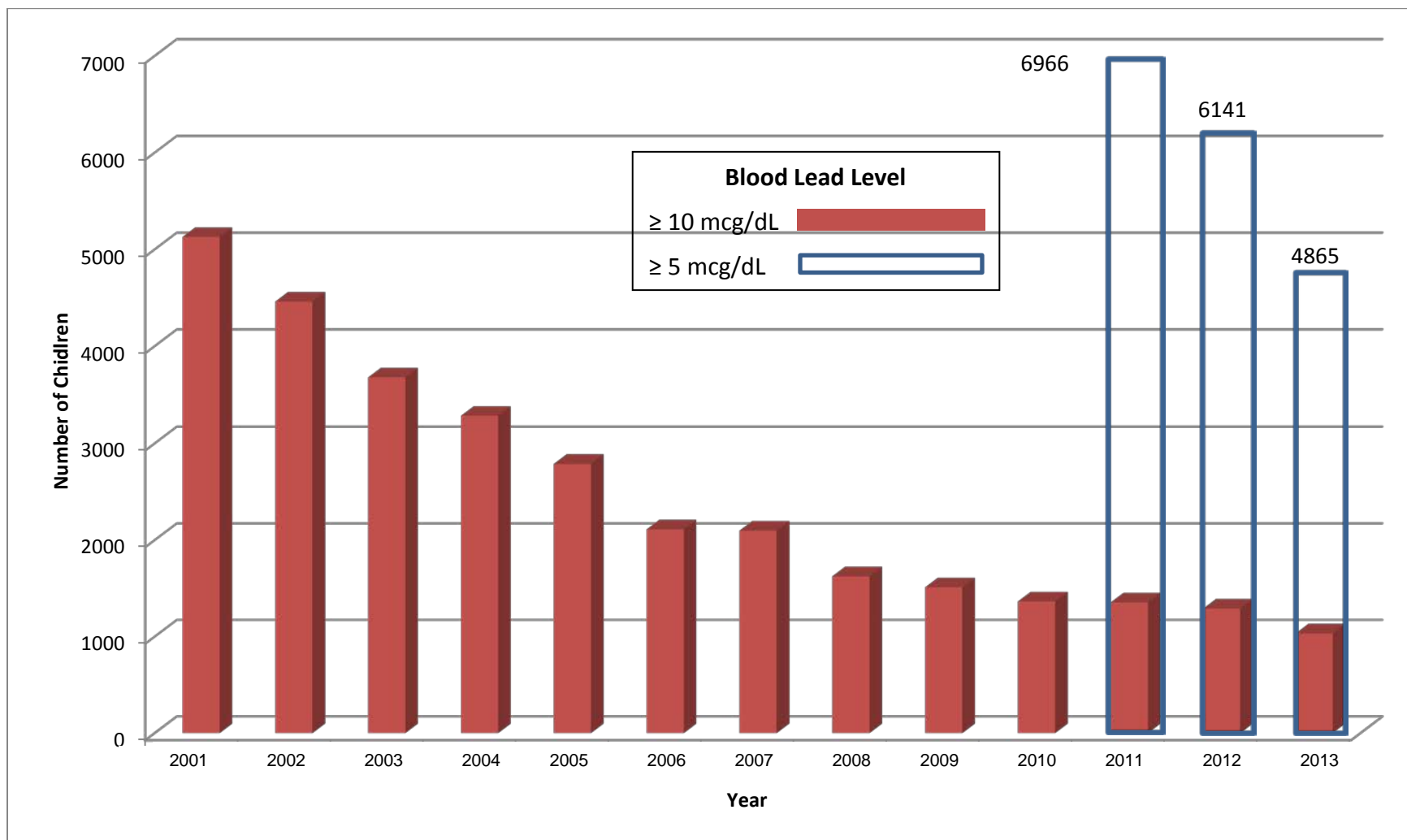


Figure 3. Statewide time trend (2001 – 2013) of the number of children in Wisconsin tested for lead exposure.

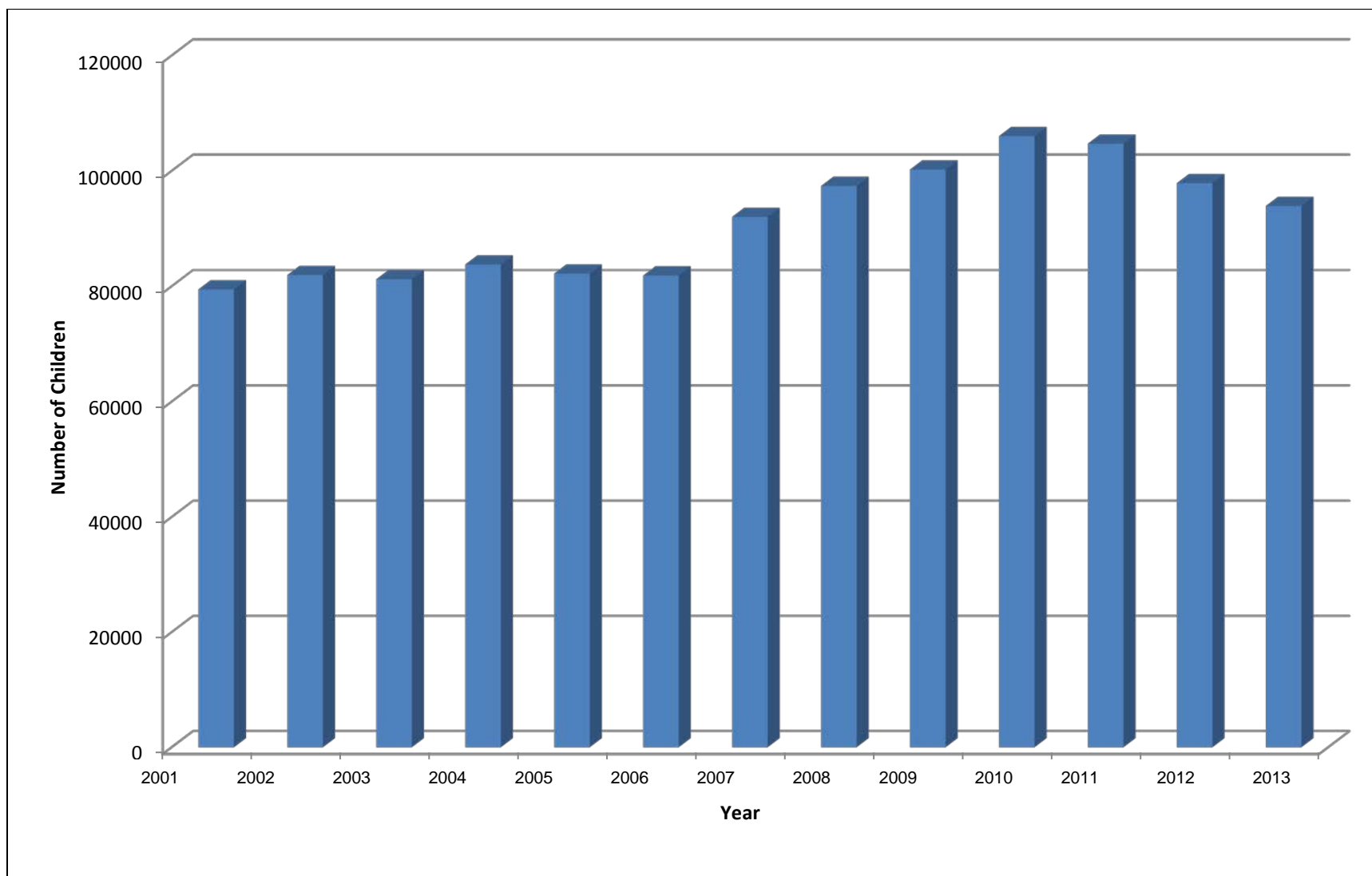


Table 1. Recommended schedule for obtaining a confirmatory venous sample

Blood Lead Level (mcg/dL)	Time to Confirmation Testing
5* - 9	1 – 3 months
10 – 44	1 week – 1 month**
45 – 59	48 hours
60 – 69	24 hours
≥ 70	Urgently as emergency test

\*CDC's 2012 reference value

\*\*The higher the BLL on the screening test, the more urgent the need for confirmatory testing. (Adapted from: Screening Young Children for Lead Poisoning: Guidance for State and Local Public Health Officers. Atlanta: CDC; 1997.)

Table 2. Schedule for follow-up blood lead testing<sup>a</sup>

Venous Blood Lead Level (mcg/dL)	Early Follow-up Testing (2 - 4 tests after identification)	Later Follow-up Testing After Blood Lead Level Declining
5* - 9	3 months **	6 – 9 months
10 – 19	1 – 3 months **	3 – 6 months
20 – 24	1 – 3 months **	1 – 3 months
25 – 44	2 weeks – 1 month	1 month
≥ 45	As soon as possible	As soon as possible

<sup>a</sup>Seasonal variation of BLLs exists and may be more apparent in colder climate areas. Greater exposure in the summer months may necessitate more frequent follow-up tests.

\*CDC's 2012 reference value

\*\*Some case managers or clinicians may choose to repeat blood lead tests on all new patients within a month to ensure that their BLL is not rising more quickly than anticipated.

Table 3. CDC recommended actions based on blood lead level.

Venous Blood Lead Level (mcg/dL)	Interventions
< 5*	<ul style="list-style-type: none"> <li>• Lead education – dietary &amp; environmental</li> <li>• Environmental assessment** for pre-1978 housing</li> <li>• Follow-up BLL monitoring</li> </ul>
≥ 5* – 44	<p>Actions for previous level plus:</p> <ul style="list-style-type: none"> <li>• Environmental investigation and lead hazard reduction</li> <li>• Complete health history and physical exam</li> <li>• Lab work – iron status and consider hemoglobin or hematocrit</li> <li>• Neurodevelopmental monitoring</li> <li>• Abdominal x-ray (if particulate lead ingestion is suspected) with bowel decontamination if indicated</li> </ul>
45 – 69	<ul style="list-style-type: none"> <li>• Actions for previous level plus:</li> <li>• Free erythrocyte protoporphyrin laboratory test</li> <li>• Oral Chelation therapy (consider hospitalization if lead-safe environment cannot be assured)</li> </ul>
≥ 70	<ul style="list-style-type: none"> <li>• Hospitalize and commence chelation therapy (following confirmatory venous blood lead test) in conjunction with consultation from a medical toxicologist or a pediatric environmental health specialty unit</li> <li>• Proceed according to actions for 45-69mcg/dL</li> </ul>

\*CDC's 2012 reference value

\*\*The scope of an “environmental assessment” will vary based on local resources and site conditions. However, this would include at a minimum a visual assessment of paint and housing conditions, but may also include testing of paint, soil, dust, and water and other lead sources. This may include looking for exposure from imported cosmetics, traditional remedies, medicinal powders, pottery, food, toys, etc., which may be more important with low level exposure.

**Table 4. WISCONSIN 2011-2013 BLOOD LEAD TESTING DATA FOR CHILDREN LESS THAN 6 YEARS OF AGE BY LHD**

Source: Wisconsin Blood Lead Testing Data (all data current as of April, 2014)

Tested: Number of unduplicated children with a capillary or venous blood lead test. If a child has a venous test within three months after a capillary test, the data from the venous test are included in this report.

Rate: Number of children with an elevated blood lead level (5 mcg/dL or above and 10 mcg/dL or above) divided by the number of children tested.

Local Health Department	2011 Data					2012 Data					2013 Data				
	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above
ADAMS CO	203	5	2.5	0	0	184	11	6	0	0	166	8	4.8	1	0.6
APPLETON CITY	1251	41	3.3	4	0.3	1127	28	2.5	4	0.4	1071	25	2.3	1	0.1
ASHLAND CO	420	20	4.8	3	0.7	357	22	6.2	3	0.8	350	17	4.8	4	1.1
BARRON CO	503	13	2.6	3	0.6	487	8	1.6	0	0	516	11	2.1	3	0.6
BAYFIELD CO	186	7	3.8	0	0	178	10	5.6	1	0.6	190	2	1.1	1	0.5
BROWN CO	4366	94	2.2	17	0.4	4283	107	2.5	11	0.3	4507	100	2.2	8	0.2
BUFFALO CO	199	24	12.1	4	2	189	13	6.9	2	1.1	186	18	9.7	4	2.2
BURNETT CO	233	13	5.6	0	0	232	11	4.7	0	0	181	8	4.4	1	0.6
CALUMET CO	177	7	4	1	0.6	192	5	2.6	2	1	169	5	3	0	0
CENTRAL RACINE CO	1112	27	2.4	6	0.5	673	19	2.8	4	0.6	1070	21	2	3	0.3
CHIPPEWA CO	806	29	3.6	5	0.6	796	11	1.4	2	0.3	741	9	1.2	3	0.4
CLARK CO	435	14	3.2	1	0.2	420	13	3.1	2	0.5	407	14	3.4	2	0.5
COLUMBIA CO	778	33	4.2	8	1	720	30	4.2	7	1	684	25	3.6	4	0.6
CRAWFORD CO	205	10	4.9	0	0	181	8	4.4	0	0	170	4	2.4	0	0
CUDAHY CITY	485	18	3.7	5	1	431	17	3.9	3	0.7	381	20	5.2	4	1
DE PERE CITY	622	5	0.8	0	0	560	5	0.9	0	0	578	2	0.3	0	0
DODGE CO	908	59	6.5	11	1.2	932	45	4.8	7	0.8	859	34	4	7	0.8
DOOR CO	396	15	3.8	1	0.3	431	12	2.8	1	0.2	368	5	1.4	0	0
DOUGLAS CO	803	21	2.6	3	0.4	826	24	2.9	4	0.5	743	11	1.5	1	0.1
DUNN CO	393	13	3.3	3	0.8	432	12	2.8	1	0.2	332	9	2.7	0	0
EAU CLAIRE CITY/CO	1615	40	2.5	5	0.3	1516	28	1.8	4	0.3	1566	25	1.6	3	0.2



**Table 4. WISCONSIN 2011-2013 BLOOD LEAD TESTING DATA FOR CHILDREN LESS THAN 6 YEARS OF AGE BY LHD**

Source: Wisconsin Blood Lead Testing Data (all data current as of April, 2014)

Tested: Number of unduplicated children with a capillary or venous blood lead test. If a child has a venous test within three months after a capillary test, the data from the venous test are included in this report.

Rate: Number of children with an elevated blood lead level (5 mcg/dL or above and 10 mcg/dL or above) divided by the number of children tested.

Local Health Department	2011 Data					2012 Data					2013 Data				
	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above
FLORENCE CO	42	3	7.1	0	0	26	1	3.8	0	0	34	0	0	0	0
FOND DU LAC CO	1385	68	4.9	9	0.6	1217	70	5.8	10	0.8	1208	54	4.5	13	1.1
FOREST CO	120	6	5	0	0	122	2	1.6	1	0.8	133	3	2.3	0	0
FRANKLIN CITY	548	16	2.9	3	0.5	545	13	2.4	0	0	483	6	1.2	3	0.6
GRANT CO	668	49	7.3	13	1.9	591	62	10.5	10	1.7	582	23	4	4	0.7
GREEN CO	489	18	3.7	2	0.4	453	21	4.6	4	0.9	445	28	6.3	2	0.4
GREEN LAKE CO	254	16	6.3	1	0.4	225	18	8	0	0	260	10	3.8	2	0.8
GREENDALE CITY	210	5	2.4	1	0.5	207	8	3.9	0	0	198	3	1.5	0	0
GREENFIELD CITY	856	34	4	2	0.2	797	16	2	0	0	769	15	2	2	0.3
HALES CORNERS CITY	109	0	0	0	0	128	3	2.3	0	0	105	1	1	1	1
IOWA CO	213	12	5.6	3	1.4	195	11	5.6	1	0.5	193	3	1.6	1	0.5
IRON CO	90	5	5.5	0	0	91	2	2.2	1	1.1	71	5	7	0	0
JACKSON CO	283	7	2.5	1	0.4	270	8	3	1	0.4	256	4	1.6	1	0.4
JEFFERSON CO	734	48	6.5	9	1.2	778	50	6.4	8	1	840	23	2.7	5	0.6
JUNEAU CO	496	18	3.6	2	0.4	444	19	4.3	2	0.5	438	12	2.7	3	0.7
KENOSHA CO	2921	145	5	21	0.7	3000	185	6.2	36	1.2	2672	130	4.9	32	1.2
KEWAUNEE CO	255	4	1.6	0	0	233	7	3	0	0	229	3	1.3	0	0
LA CROSSE CO	1763	97	5.5	13	0.7	1452	44	3	8	0.6	1460	28	1.9	4	0.3
LAFAYETTE CO	162	15	9.3	2	1.2	132	11	8.3	2	1.5	167	6	3.6	1	0.6
LANGLADE CO	257	11	4.3	1	0.4	246	7	2.8	0	0	234	5	2.1	1	0.4
LINCOLN CO	445	18	4	2	0.4	424	15	3.5	3	0.7	361	7	1.9	1	0.3

**Table 4. WISCONSIN 2011-2013 BLOOD LEAD TESTING DATA FOR CHILDREN LESS THAN 6 YEARS OF AGE BY LHD**

Source: Wisconsin Blood Lead Testing Data (all data current as of April, 2014)

Tested: Number of unduplicated children with a capillary or venous blood lead test. If a child has a venous test within three months after a capillary test, the data from the venous test are included in this report.

Rate: Number of children with an elevated blood lead level (5 mcg/dL or above and 10 mcg/dL or above) divided by the number of children tested.

Local Health Department	2011 Data					2012 Data					2013 Data				
	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above
MADISON/DANE CO	5382	130	2.4	17	0.3	4634	96	2.1	12	0.3	4945	62	1.3	9	0.2
MANITOWOC CO	1082	71	6.6	14	1.3	1062	68	6.4	14	1.3	1129	43	3.8	11	1
MARATHON CO	1773	51	2.9	9	0.5	1657	47	2.8	11	0.7	1512	45	3	9	0.6
MARINETTE CO	603	21	3.5	1	0.2	547	16	2.9	2	0.4	588	19	3.2	1	0.2
MARQUETTE CO	219	10	4.6	3	1.4	191	12	6.3	1	0.5	201	10	5	1	0.5
MENASHA CITY	336	10	3	0	0	278	12	4.3	0	0	280	6	2.1	0	0
MILWAUKEE CITY	31650	3888	12.3	876	2.8	29642	3450	11.6	862	2.9	27657	2838	10.3	706	2.6
MONROE CO	937	59	6.3	4	0.4	850	43	5.1	3	0.4	801	37	4.6	5	0.6
NORTH SHORE CITY	1139	39	3.4	5	0.4	1157	29	2.5	3	0.3	927	22	2.4	3	0.3
OAK CREEK CITY	686	25	3.6	5	0.7	630	10	1.6	1	0.2	604	11	1.8	2	0.3
OCONTO CO	372	6	1.6	1	0.3	393	7	1.8	2	0.5	499	11	2.2	2	0.4
ONEIDA CO	433	8	1.9	1	0.2	390	6	1.5	0	0	333	1	0.3	0	0
OUTAGAMIE CO	805	21	2.6	4	0.5	682	27	4	4	0.6	673	15	2.2	2	0.3
OZAUKEE CO	763	22	2.9	3	0.4	883	8	0.9	1	0.1	815	20	2.5	3	0.4
PEPIN CO	104	7	6.7	0	0	103	2	1.9	1	1	101	3	3	0	0
PIERCE CO	466	17	3.6	0	0	484	9	1.9	2	0.4	445	6	1.3	0	0
POLK CO	580	12	2.1	2	0.3	457	13	2.9	0	0	489	11	2.2	2	0.4
PORTAGE CO	1311	36	2.7	4	0.3	1067	23	2.2	5	0.5	901	9	1	1	0.1
PRICE CO	201	22	10.9	1	0.5	167	6	3.6	1	0.6	147	1	0.7	0	0
RACINE CITY	3172	306	9.6	50	1.6	2786	290	10.4	44	1.6	3041	262	8.6	25	0.8
RICHLAND CO	217	27	12.4	3	1.4	199	14	7	1	0.5	192	5	2.6	1	0.5

**Table 4. WISCONSIN 2011-2013 BLOOD LEAD TESTING DATA FOR CHILDREN LESS THAN 6 YEARS OF AGE BY LHD**

Source: Wisconsin Blood Lead Testing Data (all data current as of April, 2014)

Tested: Number of unduplicated children with a capillary or venous blood lead test. If a child has a venous test within three months after a capillary test, the data from the venous test are included in this report.

Rate: Number of children with an elevated blood lead level (5 mcg/dL or above and 10 mcg/dL or above) divided by the number of children tested.

Local Health Department	2011 Data					2012 Data					2013 Data				
	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above
ROCK CO	2482	200	8.1	38	1.5	2347	190	8.1	34	1.4	2290	137	6	26	1.1
RUSK CO	207	16	7.7	1	0.5	185	10	5.4	0	0	148	2	1.4	1	0.7
SAUK CO	946	27	2.9	9	1	861	34	3.9	2	0.2	777	14	1.8	1	0.1
SAWYER CO	296	9	3	0	0	228	1	0.4	0	0	222	0	0	0	0
SHAWANO-MENOMINEE CO	762	38	5	4	0.5	720	18	2.5	3	0.4	635	19	3	2	0.3
SHEBOYGAN CO	1529	114	7.5	24	1.6	1424	133	9.3	36	2.5	1281	102	8	23	1.8
SO MILWAUKEE CITY	476	22	4.6	5	1.1	422	18	4.3	3	0.7	354	7	2	1	0.3
ST CROIX CO	851	11	1.3	1	0.1	775	9	1.2	1	0.1	593	2	0.3	0	0
ST FRANCIS CITY	149	9	6	2	1.3	139	3	2.2	0	0	147	2	1.4	0	0
TAYLOR CO	207	8	3.9	2	1	196	10	5.1	0	0	158	2	1.3	0	0
TREMPEALEAU CO	500	22	4.4	5	1	406	15	3.7	2	0.5	463	14	3	2	0.4
VERNON CO	546	34	6.3	9	1.6	471	27	5.7	3	0.6	423	24	5.7	2	0.5
VILAS CO	363	3	0.8	0	0	345	7	2	2	0.6	300	5	1.7	2	0.7
WALWORTH CO	1455	81	5.6	16	1.1	1231	40	3.2	6	0.5	1244	33	2.7	2	0.2
WASHBURN CO	281	6	2.1	1	0.4	267	7	2.6	2	0.7	147	0	0	0	0
WASHINGTON CO	1142	14	1.2	2	0.2	1012	28	2.8	10	1	994	18	1.8	2	0.2
WATERTOWN CITY	442	35	7.9	5	1.1	585	44	7.5	12	2.1	599	34	5.7	7	1.2
WAUKESHA CO	4911	118	2.4	18	0.4	4746	116	2.4	17	0.4	4627	101	2.2	11	0.2
WAUPACA CO	553	33	6	4	0.7	529	27	5.1	3	0.6	424	18	4.3	4	0.9
WAUSHARA CO	303	14	4.6	0	0	296	13	4.4	1	0.3	303	3	1	2	0.7
WAUWATOSA CITY	945	28	3	5	0.5	908	21	2.3	4	0.4	878	16	1.8	3	0.3

Table 4. WISCONSIN 2011-2013 BLOOD LEAD TESTING DATA FOR CHILDREN LESS THAN 6 YEARS OF AGE BY LHD															
Source: Wisconsin Blood Lead Testing Data (all data current as of April, 2014)															
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Local Health Department	2011 Data					2012 Data					2013 Data				
	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above	Tested	Tested 5 mcg/dL or above	Rate of 5mcg/dL or above	Tested 10 mcg/dL or above	Rate 10 mcg/dL or above
WEST ALLIS CITY	1715	94	5.5	19	1.1	1646	71	4.3	15	0.9	1521	67	4.4	14	0.9
WESTERN RACINE CO	471	20	4.2	0	0	407	11	2.7	2	0.5	315	5	1.6	1	0.3
WINNEBAGO CO	1343	73	5.4	12	0.9	1486	67	4.5	14	0.9	1293	47	3.6	13	1
WOOD CO	1292	46	3.6	5	0.4	1253	21	1.7	4	0.3	1106	14	1.3	3	0.3
<b>STATEWIDE</b>	<b>104798</b>	<b>6966</b>	<b>6.6</b>	<b>1355</b>	<b>1.3</b>	<b>97868</b>	<b>6141</b>	<b>6.3</b>	<b>1291</b>	<b>1.3</b>	<b>93898</b>	<b>4865</b>	<b>5.2</b>	<b>1031</b>	<b>1.1</b>

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