

2015-2016 City of Milwaukee
Community Health Assessment

Appendix C

MHD-Identified Issues

Revised March 13, 2016

Overview

The City of Milwaukee Health Department has identified health issues known to have a large-scale impact on health, where there is substantial data to support that Milwaukee suffers a disproportionate burden of morbidity and mortality, inadequate community resources to address the issue, and where there are known effective governmental public health strategies to mitigate the issue. Based on these factors the MHD has identified four key public health issues: healthy birth outcomes, teen pregnancy prevention, sexually transmitted infections, and childhood lead poisoning prevention.

MHD-Identified Issue: Healthy Birth Outcomes

Significance:

Birth outcomes are defined as a category of measures used to describe the health of a baby at the time of his or her birth, and through the first year of life. These measures include birth weight, gestational age, and birth defects, among others. While the goal of every pregnancy is to produce a healthy baby, not every pregnancy or delivery is free of complications. As a result there are two types of birth outcomes: healthy birth outcomes and poor birth outcomes. Babies who are born with healthy birth outcomes are born alive, have a birth weight of 2500 grams or more, have a gestational age of at least 37 weeks, and are free of birth defects and other health complications.

While most families have healthy child births, poor birth outcomes are emotionally and financially devastating for families. Mothers who receive late or no prenatal care, have an unplanned pregnancy, smoke cigarettes or marijuana during pregnancy, have a short pregnancy interval, use alcohol or drugs, have untreated chronic health conditions and infections, have poor nutrition, and low socioeconomic status, among others, have a greater risk of experiencing poor birth outcomes than mothers who do not.

Poor birth outcomes include:

- Infant mortality (babies born alive but who die before their first birthday)
- Premature birth, also known as preterm birth (babies born alive before 37 weeks of pregnancy)
- Low birth weight (babies born alive weighing less than 2500 grams (5 lbs, 8 oz))
- Stillbirths (babies who die before they are born but who weigh at least 350 grams and/or have a gestational age of 20 weeks or more)
- Birth defects
- Maternal mortality (mothers who died due to complications of childbirth)

Infant deaths are a tragedy, not only for the individual families involved, but also for the community as a whole. Worldwide, the infant mortality rate is seen as a barometer of the overall health of the community. In some recent years in Milwaukee, there have been more infant deaths than homicides.

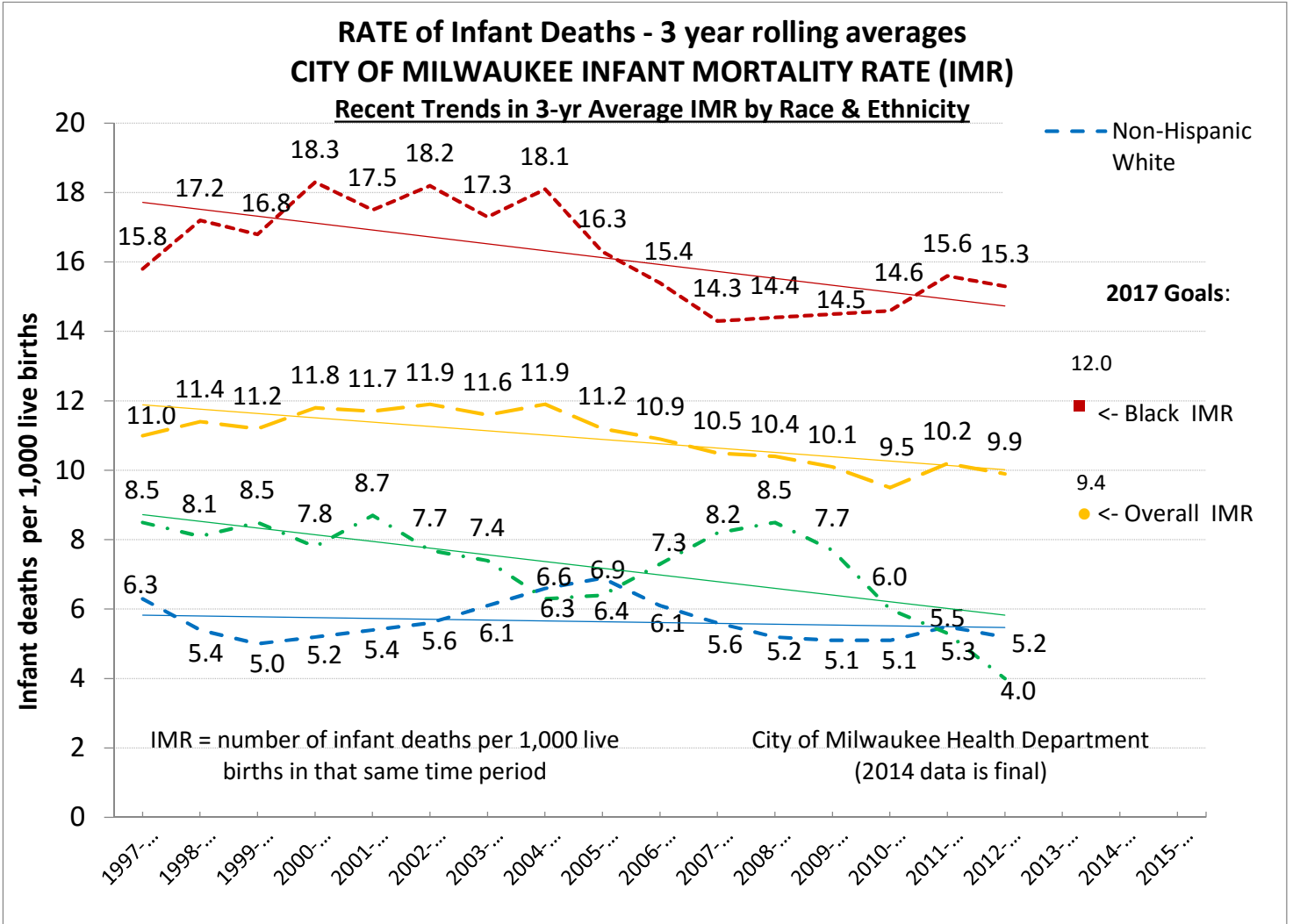
Preterm births and low birthweight are the most significant drivers of infant mortality by far, and they also constitute a serious public health problem in and of themselves. More than 80% of mothers who experienced an infant death or a stillbirth between 2009 and 2011 delivered preterm, and about 60% of Milwaukee's infant deaths can be primarily attributed to being born too soon. Babies who do survive have a greater risk of experiencing serious disabilities such as breathing problems and feeding difficulties, and are more likely to experience chronic health conditions such as cerebral palsy, developmental delays, vision problems, hearing impairment, as well as diabetes, high blood pressure, and heart disease later in their lives.

Status – Stillbirths:

From 2009 to 2011 there were 205 stillbirths in the city. Approximately 40% of these deaths were due to causes that were undetermined. However, 87.8% of stillbirths were delivered premature, and factors such as obesity, infection, and smoking were present in many of the cases.

Status – Infant Deaths:

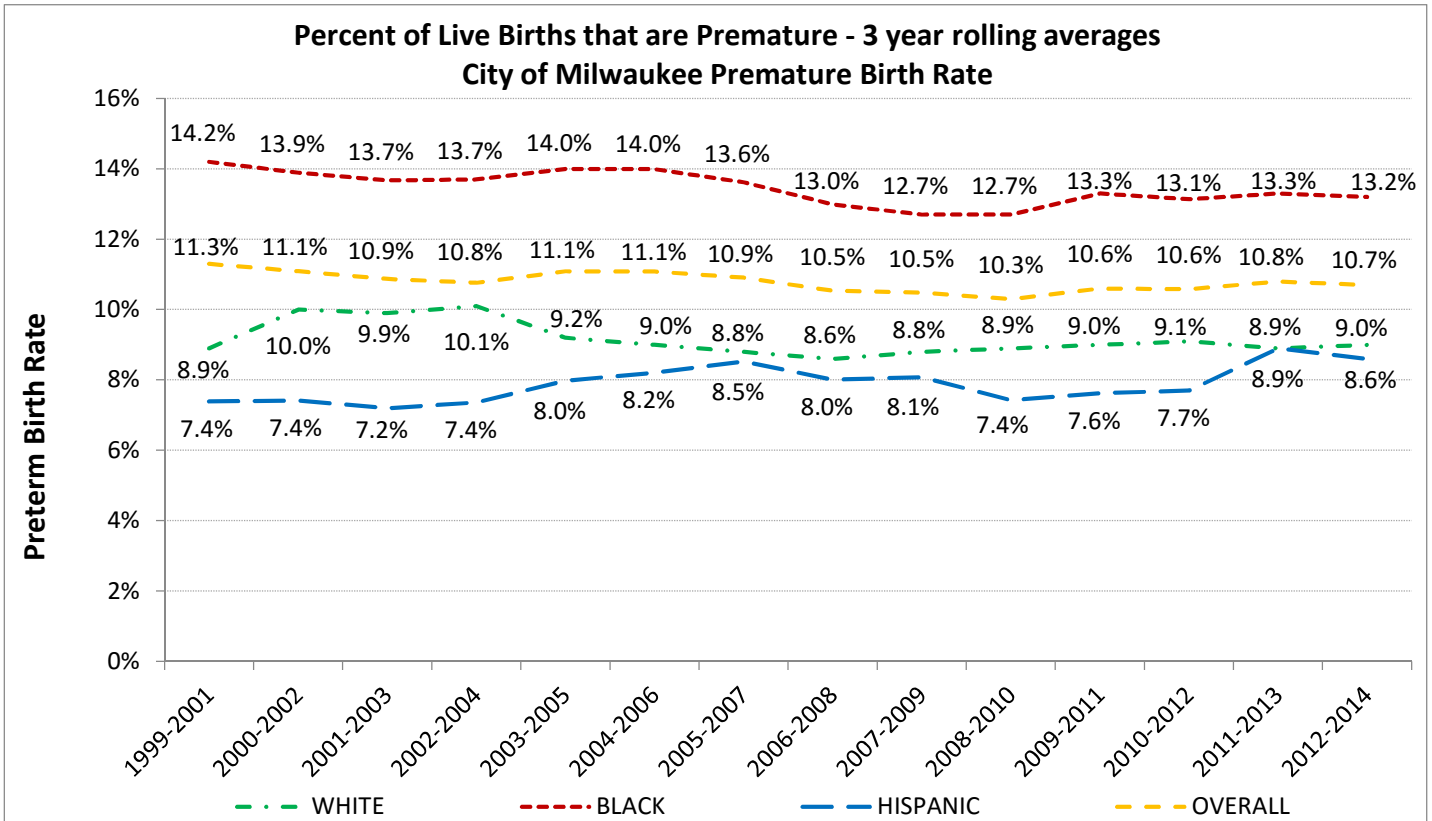
The overall infant mortality rate in Milwaukee has been declining over the past several decades. However, significant racial and ethnic disparities persist. Milwaukee’s African-American infant mortality rate, which is higher than the infant mortality rate in many developing countries, remains nearly 3 times higher than our white infant mortality rate.



Status – Preterm and Low Birthweight Births:

Over the last 15 years, more than 10 percent of the babies born in the city of Milwaukee were premature. Recent data reveal that between 2012 and 2014 the overall preterm birth rate was 10.7 percent. Significant racial and ethnic disparities exist. Non-Hispanic Black infants have a premature birth rate of 13.2% compared to a rate of 9% for non-Hispanic White infants and 8.6% for Hispanic infants.

Similar to preterm birth, low birthweight babies represented 10.4 percent of the livebirths occurring between 2012 and 2014. Babies who are non-Hispanic Black have a low birth weight rate of 14.1 percent, which is double the rate for non-Hispanic Whites (7%) and Hispanics (7.2%).



MHD-Identified Issue: Teen Pregnancy Prevention

Significance:

Teen pregnancy and childbearing continue to be significant public health issue nationwide. One of out 16 new mothers is a teen, and every day 840 teens aged 15 to 19 give birth in the U.S. Despite recent declines, the U.S. continues to report a higher teen birth rate than many countries of similar economic status. In 2010, teen births cost the U.S. \$9.4 billion, mostly attributable to costs for health care, foster care, incarceration, and lost tax revenue.

Teen pregnancy and childbearing can carry high health, emotional, social, and financial costs for both teen mothers and their children. Having more than one child as a teen can further limit the teen mother's ability to finish her education or get a job. Infants born from a repeat teen birth are often born too small or too soon, which can lead to more health problems for the baby. Nationally, nearly 1 in 5 births to teens ages 15 to 19 are repeat births to teen mothers.

Status:

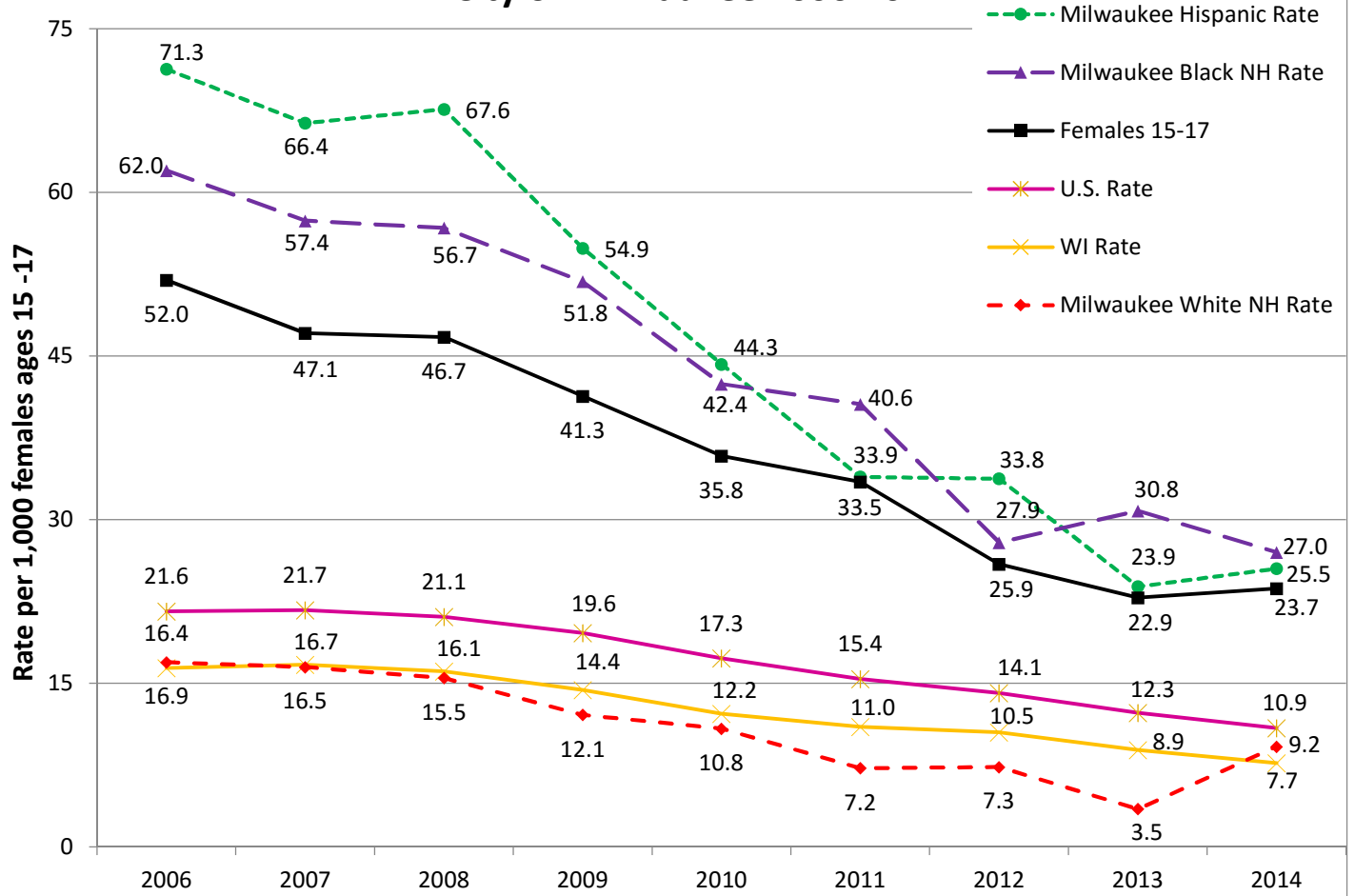
Teen pregnancy prevention, particularly among 15 to 17 year olds, has been one of the most aggressive and important public health campaigns in the city of Milwaukee. In 2006, the city's overall teen birth rate was 52 births per 1,000 females aged 15 to 17. Rates in non-Hispanic Black and Hispanic populations were 62 and 71.3 births per 1,000, respectively. Although the overall rates declined in 2007 and 2008 they remained much higher than the national and state rates at the time. As a result, the City of Milwaukee and its partners (including the Center for Urban Population Health (CUPH)) set an ambitious goal of reducing the rate by 46 percent to a rate of 30 births per 1,000 females aged 15 to 17 by 2015.

A communitywide, multi-partner collaboration led by the United Way of Greater Milwaukee & Waukesha County has driven great success in reducing teen birth rates. As a result of these efforts, the teen birth rate decreased 11.6% for the city overall, 8.6% for non-Hispanic Blacks and 18.8% for Hispanics just one year after setting the goal. Rates declined rapidly over the next four years resulting in the city surpassing its goal three years early in 2012 when the overall rate fell to 25.9.

Due to the success achieved in 2012, a new goal was set in 2013 to further decrease the overall rate by 50% for the city overall and for non-Hispanic Black and Hispanic populations by 2023. Recent data suggests that reducing teen pregnancy needs to continue to be one of the top health priorities for MHD and for the city as a whole.

In 2014, the city experienced a 3.5 percent increase in the overall teen birth rates when the rate increased from 22.9 to 23.7. While non-Hispanic Black teens reached a historic low, increases were recorded across all other racial and ethnic groups. The 2014 rate however remains below the 2015 teen birth rate goal of 30 and reflects a 54 percent reduction in teen birth rates since 2006.

Teen Birth Rates: 15-17 Year Olds City of Milwaukee 2006-2014



MHD-Identified Issue: Sexually Transmitted Infections

Significance:

The CDC estimates that there are approximately 19 million new sexually transmitted infections (STIs) each year—almost half among young people ages 15 to 24. There are more than 1 million people living with HIV in the United States, and more than 50,000 become newly infected each year. Yet as many as one in five Americans living with HIV are unaware of their infection.

The cost of STIs to the U.S. health care system is estimated to be as much as \$15.9 billion annually. Because many cases of STIs go undiagnosed—and some common viral infections, such as human papillomavirus (HPV) and genital herpes are not reported to CDC—reported cases of chlamydia, gonorrhea, and syphilis represent only a fraction of the true burden of STIs in the United States.

Untreated STIs can lead to serious long-term health consequences, especially for adolescent girls and young women. The CDC estimates that undiagnosed and untreated STIs cause at least 24,000 women in the United States each year to become infertile, and chlamydia and gonorrhea are the leading causes of chronic pelvic pain for women, due to the relatively high frequency of undiagnosed or inadequately treated pelvic inflammatory disease caused by these infections.

Among large US cities, Milwaukee has typically ranked among the 10 worst for chlamydia and gonorrhea rates.

Status:

Demographic Information for STD Cases Reported in the City of Milwaukee, 2014

	Chlamydia			Gonorrhea			Primary & Secondary Syphilis		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*
Total	8,358	100.0%	1,405.1	2,327	100.0%	391.2	45	100.0%	7.6
Sex									
Male	2,505	30.0%	873.0	1,132	48.6%	394.5	41	91.1%	14.3
Female	5,843	69.9%	1,897.8	1,190	51.1%	386.5	**	**	**
Unknown	10	0.1%	-	5	0.2%	-	**	**	-
Race									
White	732	8.8%	274.8	142	6.1%	53.3	6	13.3%	2.3
African American	3,985	47.7%	1,676.0	1,395	59.9%	586.7	23	51.1%	9.7
Multiple races	230	2.8%	1,133.7	79	3.4%	389.4	**	**	**
Other	82	1.0%	116.4	15	0.6%	21.3	**	**	**
Unknown	3,329	39.8%	-	696	29.9%	-	10	22.2%	-
Hispanic ethnicity									
Hispanic	283	3.4%	274.7	67	2.9%	65.0	**	**	**
Not Hispanic	2,490	29.8%	506.3	995	42.8%	202.3	35	77.8%	7.1
Unknown	5,585	66.8%	-	1,265	54.4%	-	**	**	-
Age									
0-14 years	133	1.6%	98.6	28	1.2%	20.7	0	0%	0
15-19 years	2,663	31.9%	5,352.0	654	28.1%	1,314.4	**	**	**
20-24 years	3,135	37.5%	5,397.9	819	35.2%	1,410.2	13	28.9%	22.4
25-29 years	1,291	15.4%	2,481.9	395	17.0%	759.4	14	31.1%	26.9
30-34 years	606	7.3%	1,363.2	193	8.3%	434.1	6	13.3%	13.5
35-44 years	384	4.6%	517.8	150	6.4%	202.3	**	**	**
45+ years	138	1.7%	76.1	83	3.6%	45.8	**	**	**
Unknown	8	0.1%	-	5	0.2%	-	1	2.2%	-

*All rates are defined as number of cases per 100,000 population, based on the 2010 U.S. Census.

**Data are suppressed when between one and five (but not zero) cases were reported, except for unknown cases. If only one category in a column was suppressed, the category with the next smallest number of cases was also suppressed to prevent using subtraction to calculate the missing figure.

Data sources: WI PHIN AVR, accessed February 19, 2015; 2010 U.S. Census

Comparison of Reported Cases of HIV Infection in Milwaukee County and Wisconsin, 2014

	Milwaukee County		Wisconsin	
	Cases	Rate*	Cases	Rate*
Total cases	132	13.9	226	4.0
Sex at birth				
Female	19	3.9	34	1.2
Male	113	24.5	192	6.8
Race/ethnicity				
White	21	4.1	74	1.6
African American	81	32.6	99	27.9
Hispanic	28	21.5	42	12.1
American Indian	0	0.0	4	8.1
Asian/Pacific Islander	1	3.0	5	3.7
Multiple races	1	5.2	2	2.5
Unknown	-	-	0	-
Age group				
<5 years	0	0.0	1	0.3
5-14 years	0	0.0	0	0.0
15-19 years	8	11.9	10	2.5
20-24 years	41	53.2	54	13.9
25-29 years	23	28.9	37	10.0
30-34 years	10	14.1	24	6.7
35-39 years	9	15.3	25	7.5
40-44 years	10	16.8	17	4.5
45-49 years	7	11.6	15	3.6
50-54 years	14	21.6	26	5.9
55-59 years	6	10.3	9	2.3
60+ years	4	2.6	8	0.7

Data source: WI DHS Interactive Map and Table of County HIV Case Surveillance Data, accessed May 22, 2015. Data were not suppressed in this table, since the data suppression rule applied by WI DHS (the data source) was not showing demographic and risk exposure breakdowns if the total cases were less than 5.

*All rates are defined as number of cases per 100,000 population.

MHD-Identified Issue: Childhood Lead Poisoning Prevention

Significance:

Protecting children from exposure to lead is important to lifelong good health. No safe blood lead level in children has been identified. Even low levels of lead in blood have been shown to affect IQ, ability to pay attention, and academic achievement. Once they have occurred, the effects of lead exposure cannot be corrected.

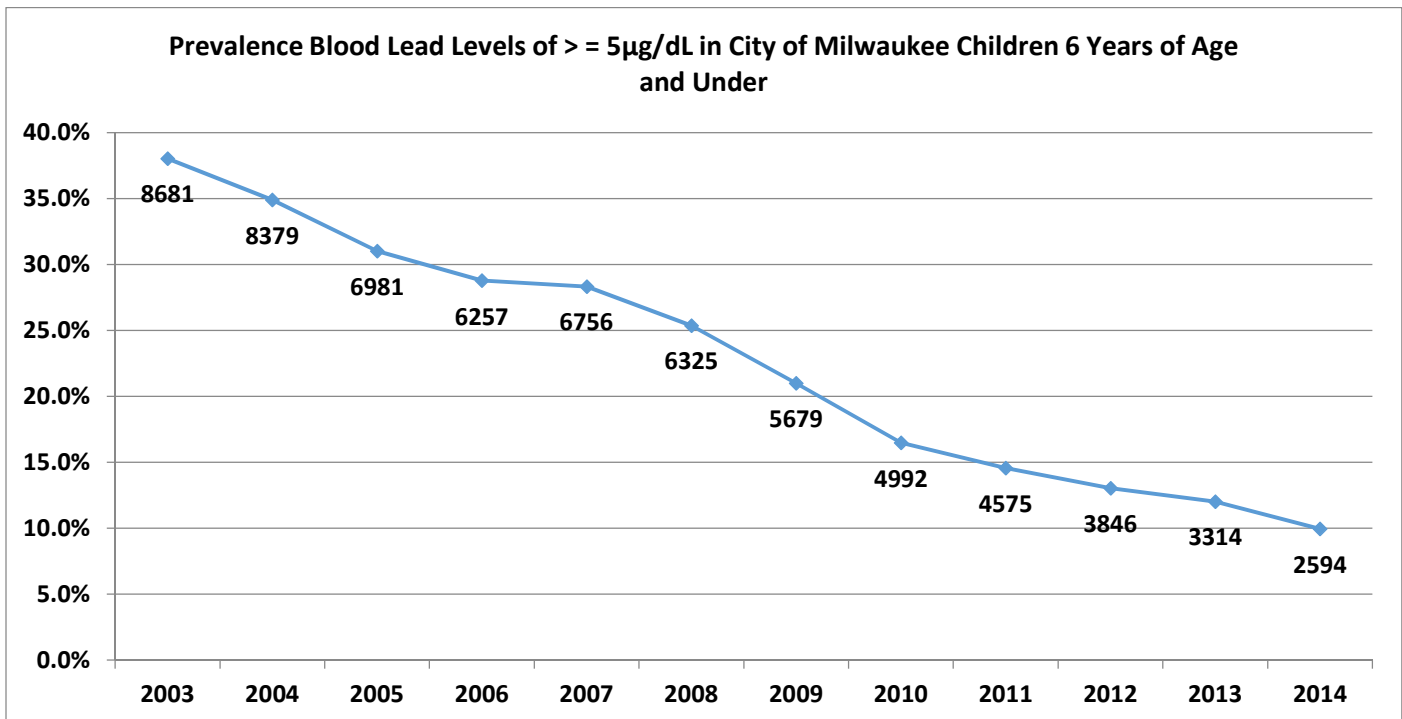
While lead can be found in air, water, and soil, by far the largest contributor to childhood lead poisoning is deteriorating lead-based paint. Approximately 535,000 U.S. children ages 1 to 5 have blood lead levels high enough to damage their health, and 24 million homes contain deteriorated lead-based paint and elevated levels of lead-contaminated house dust - 4 million of these are home to young children. It can cost \$5,600 in medical and special education costs for each seriously lead-poisoned child.

Status:

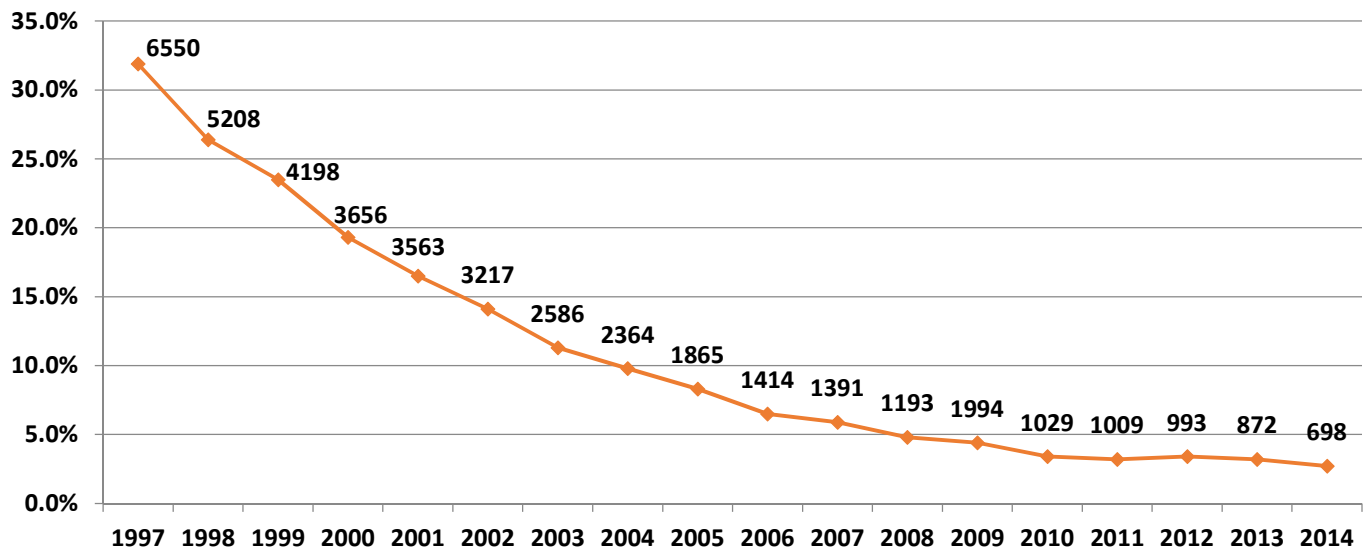
In the City of Milwaukee the prevalence of children 6 and under with blood lead levels above 5 micrograms per deciliter ($\mu\text{g}/\text{dL}$), the reference level at which CDC recommends public health actions be initiated, has declined from 38% in 2003 to 10% in 2014. Looking at the historic action level of $\geq 10 \mu\text{g}/\text{dL}$ the prevalence of children considered to be lead poisoned has decreased from 31.9% in 1997 to 2.7% in 2014. However, the Healthy People 2020 goal is to eliminate childhood lead poisoning. Progress is also being made in assuring children are appropriately screened for lead. The number of children ages 12 to 35 months appropriately screened for lead in 2013 increased to 63.7% from 25% in 1997, although that was a decrease from a high of 72.2% in 2011.

Housing units built before 1978 are at high risk for having lead paint hazards, and housing units built before 1940 are at very high risk. One of the key strategies to reducing lead poisoning is removing lead from homes, between 1997 and 2015 the MHD Childhood Lead Poisoning Prevention Program has made nearly 18,000 housing units lead-free. However, the city is currently able to remediate only about 400 housing units with lead paint hazards per year. It is estimated that there remain at least 17,000 housing units in the city built before 1940 that have lead paint hazards; at the current remediation rate it will take over 42 years to address them all.

In the graphs below, the percent of Milwaukee children ages 6 years and under who have elevated blood lead levels are shown on the vertical axis at left, well the actual numbers of such children are indicated in the labels at each point along the line. The number of cases of actionable blood lead level findings varies greatly by zip code; not surprising, given the correlation between the age of housing stock in the area within the city that that housing stock is located.



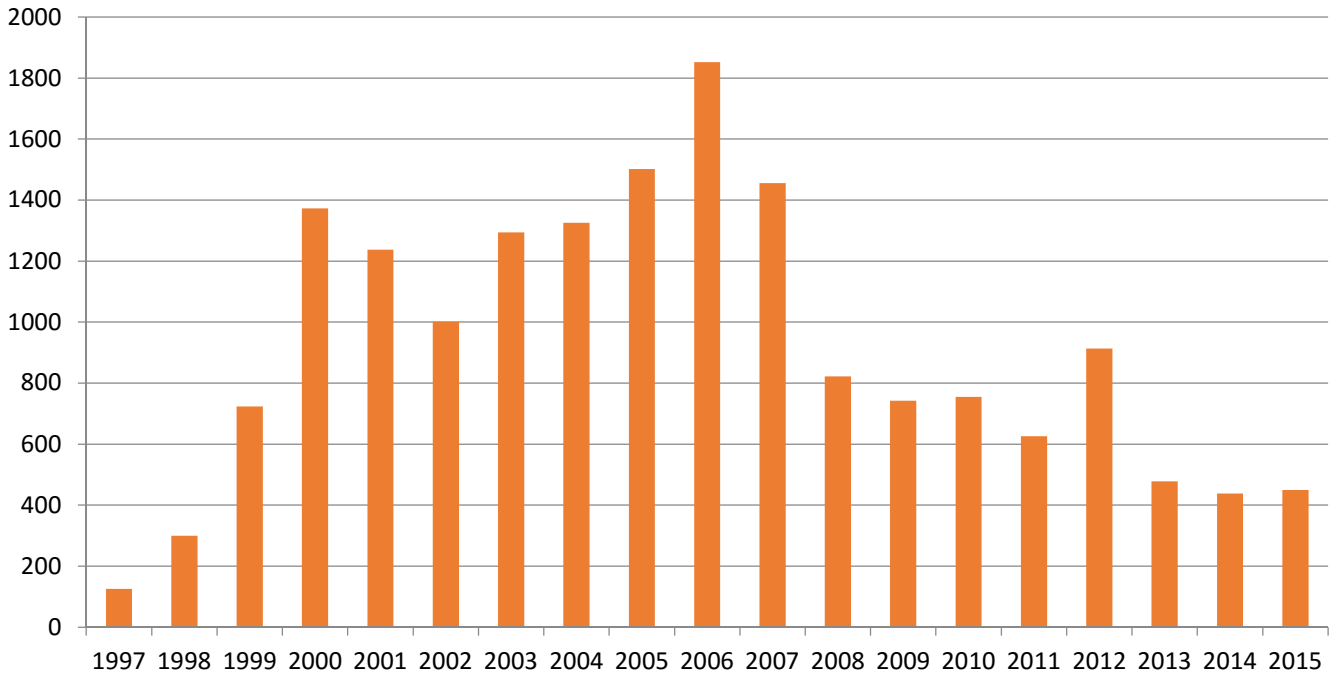
Prevalence of Blood Lead Levels of $\geq 10 \mu\text{g/dL}$ in Milwaukee Children 6 Years of Age and Under



Number of Unique Reported Cases of Lead Poisoning ($\geq 5 \mu\text{g/dL}$) in Children 6 Years of Age or Under by Zip Code, City of Milwaukee

ZIP CODE	2010	2011	2012	2013	2014	ZIP CODE	2010	2011	2012	2013	2014
Overall	4992	4575	3846	3314	2594	53221	96	75	93	70	29
53201	1	1	0	2	0	53222	53	36	19	21	21
53202	15	23	13	6	8	53223	81	75	45	40	22
53203	3	2	0	1	0	53224	86	76	58	40	32
53204	597	540	443	391	383	53225	115	105	66	57	49
53205	162	149	128	75	75	53226	2	2	3	1	2
53206	672	659	547	520	381	53227	32	11	10	7	0
53207	116	91	66	51	59	53228	8	3	2	2	2
53208	432	478	412	364	311	53233	74	64	63	70	40
53209	342	285	273	202	142	53234	0	0	0	0	0
53210	469	506	439	368	292	53237	0	0	0	0	0
53211	21	11	10	14	10	53259	0	0	0	0	0
53212	388	351	324	266	163	53263	0	0	0	0	0
53213	12	12	9	8	4	53267	0	0	0	0	0
53214	22	11	11	8	5	53268	0	0	0	0	0
53215	543	493	430	384	330	53274	0	0	0	0	0
53216	286	226	173	167	101	53278	0	0	0	0	0
53217	0	0	0	0	0	53288	0	0	0	0	0
53218	236	203	142	121	91	53290	0	0	0	0	0
53219	103	72	50	49	31	53293	0	0	0	0	0
53220	25	15	17	9	11	53295	0	0	0	0	0

Housing Units Made Lead Safe, City of Milwaukee



Proportion of Children 12 to 35 Months Tested for Lead, City of Milwaukee

