

Annual Wisconsin Birth and Infant Mortality Report

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Wisconsin Department of Health Services
Division of Public Health
Office of Health Informatics

The Department of Health Services (DHS) provides annual reports on vital statistics as a service to the people of Wisconsin and others interested in Wisconsin. The *Annual Birth and Infant Mortality Report, 2015*, is one of those reports, containing key findings and descriptive information collected by the State Vital Records Office. This report is published annually and replaces two earlier report series: *Wisconsin Births and Infant Deaths* and *Births to Teens in Wisconsin*. Technical notes are available at <https://www.dhs.wisconsin.gov/stats/births/index.htm>.

Additional health-related statistical information for Wisconsin is available through the Internet on the DHS site, at <https://www.dhs.wisconsin.gov/stats/index.htm>. Wisconsin Interactive Statistics on Health (WISH) is an online data query system, located at <https://www.dhs.wisconsin.gov/wish/index.htm>, which includes birth data for multiple years and geographic areas in Wisconsin.

This publication was prepared by the Office of Health Informatics, Division of Public Health, Wisconsin DHS. The findings in this report were compiled by Yiwu Zhang, Karl Pearson, Wendy Hart, and Ousmane Diallo in the Office of Health Informatics. Stephanie Hartwig in the Office of Health Informatics assisted with the graphic design. Draft review was provided by staff in the Bureau of Community Health Promotion, Division of Public Health. The report was prepared under the supervision of Oskar Anderson, Director of the Office of Health Informatics; Lisa Walker, State Registrar of Vital Records; and Milda Aksamitauskas, Section Chief, Health Analytics Section.

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This report presents information about Wisconsin residents' births that occurred in 2015. Information from previous years is also presented to show changes over time. This report includes information on the number and rate of live births; demographic characteristics of the mother, such as age, race/ethnicity, marital status, education, and number of previous births; characteristics of the pregnancy and delivery, including the trimester that prenatal care began, number of visits, and whether the mother smoked during pregnancy; characteristics of the newborn; and infant mortality rates. This report also includes information about infants who died before their first birthday and about fetuses of more than 20 weeks of gestation who were stillborn.

Beginning January 1, 2011, Wisconsin began collecting birth data from hospitals using a new web-based data-entry system. The new system adopted the 2003 U.S. Standard Certificate of Live Birth. Previously, Wisconsin had been collecting data based on the 1989 U.S. Standard Certificate of Live Birth. Many changes have been made to the data collection process. Some information is no longer collected, new information has been added, and some information is still collected but using a different definition. Comparisons between 2015 data and data from years prior to 2011 should be made with great caution. Please refer to the Technical Notes for a more complete description of changes.

Data used in the report include resident birth data, matched infant birth-death data, fetal death data, and induced abortion data. All data refer to Wisconsin residents unless otherwise noted.

All the information is presented according to place of residence. This means that events have been assigned to the area where the person lives (usually legal residence) regardless of where the events occurred. For births, the reference is to the residence of the mother. For infant deaths, the reference is to the residence of the infant at the time of death.

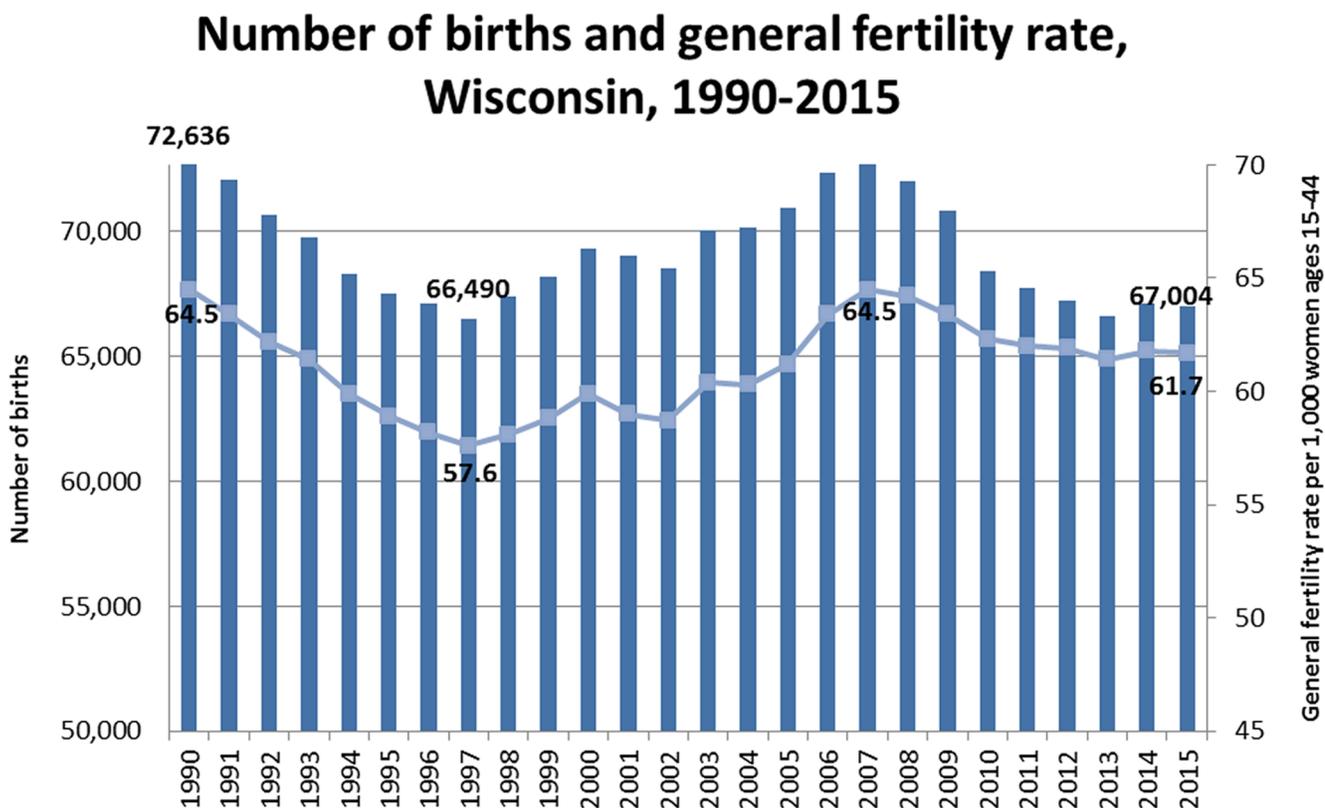
61.7

The number of births per 1,000 women aged 15-44 (the general fertility rate) remained steady in 2015.

In 2015, there were 67,004 live births to Wisconsin residents, 115 less than in 2014 (67,119).

The 2015 general fertility rate was 61.7 births per 1,000 Wisconsin females aged 15-44, compared with 61.8 in 2014. The 2014 U.S. general fertility rate was 62.9. (See Technical Notes for source of U.S. data. Technical Notes are published in a separate document.)

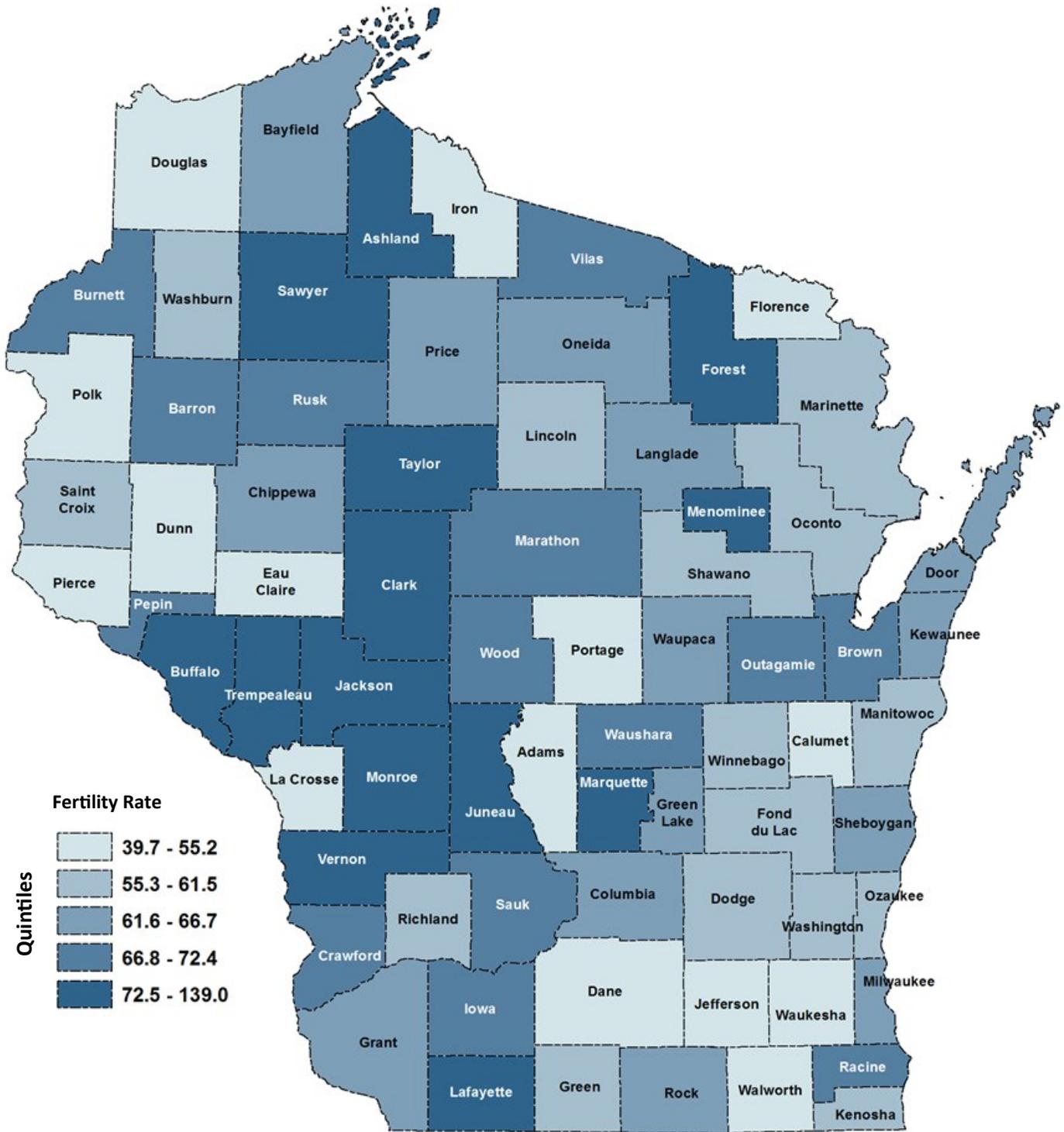
Figure 1. Total number of births and general fertility rate, 1990-2015, Wisconsin



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

Map 1. Births per 1,000 females aged 15-44 (general fertility rate) by county, 2015, Wisconsin

Wisconsin Fertility Rates (Births per 1,000 Females Aged 15-44)



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

16.4

The birth rate for teenagers continued the decline seen in recent years. It has declined by more than half since 2000.

In 2015, there were 3,074 live births to Wisconsin teens (mothers less than 20 years of age), a decrease from 3,413 teen births in 2014. Teen births represented 5 percent of Wisconsin births overall, unchanged from 2014.

The 2015 Wisconsin teen birth rate was 16.4 births per 1,000 females aged 15-19, compared to 18.1 in 2014. (This rate excludes births to females under 15 years of age.) In 2000 the teen birth rate 35.7 births per 1,000 females aged 15-19, which was 2.2 times higher than the rate of 16.4 for 2015.

The estimated pregnancy rate among Wisconsin teens in 2015 was 20.2 pregnancies per 1,000 females aged 15-19, compared to 21.9 in 2014. (This rate is calculated by adding births, reported fetal deaths, and reported induced abortions among females under 20 years of age, then dividing by the number of females aged 15-19.)

The teen birth rate declined among the Black/African American, Asian, Hispanic, and White populations. Among Black/African Americans, the teen birth rate went from 45.9 in 2014 to 41.9 in 2015. The Asian teen birth rate declined from 18.2 in 2014 to 17.4 in 2015. The White teen birth rate declined from 10.6 in 2014 to 9.3 in 2015. The teen birth rate for Hispanic/Latinos was 29.7 in 2015, below the rate of 31.6 in 2014. The teen birth rate for American Indian/Alaska Natives was 32.2 in 2015, up from the rate of 31.2 in 2014. (See Technical Notes for an explanation of race/ethnicity categories.)

9.3

9.3 percent of babies were born preterm and 7.3 percent of babies were born at low birthweight in 2015.

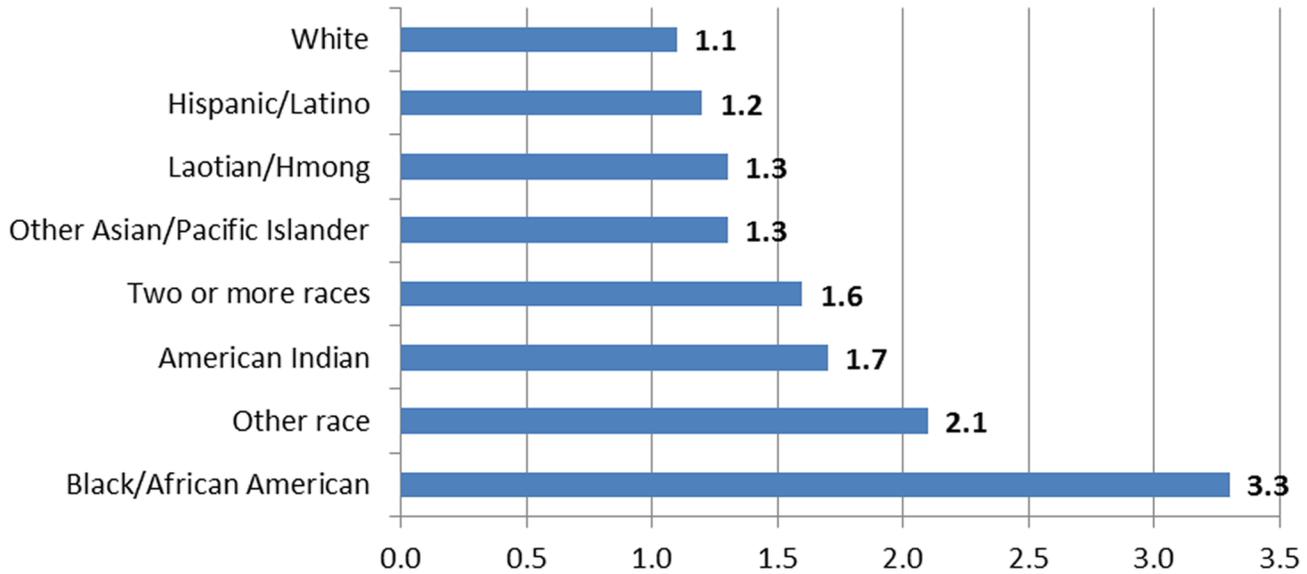
In 2015, 4,889 Wisconsin infants were low birthweight; that is, they weighed less than 2,500 grams (about 5.5 pounds) at birth. This total represented 7.3 percent of all births (7.3 percent in 2014). In comparison, 8.0 percent of all infants born in the United States in 2014 weighed less than 2,500 grams.

Among low birthweight infants, 889 (1.3 percent of all 2015 births) were born at very low birthweight (less than 1,500 grams or about 3.3 pounds) and were thus at the highest risk for health problems. This is the same percentage as in 2014.

In 2015, 6,251 Wisconsin infants were born prematurely (with a gestation of less than 37 weeks). This total represented 9.3 percent of all births, unchanged from 2014. (See Technical Notes for full definition of prematurity.)

Figure 2. Percentage of very low birthweight infants by race/ethnicity, Wisconsin, 2015

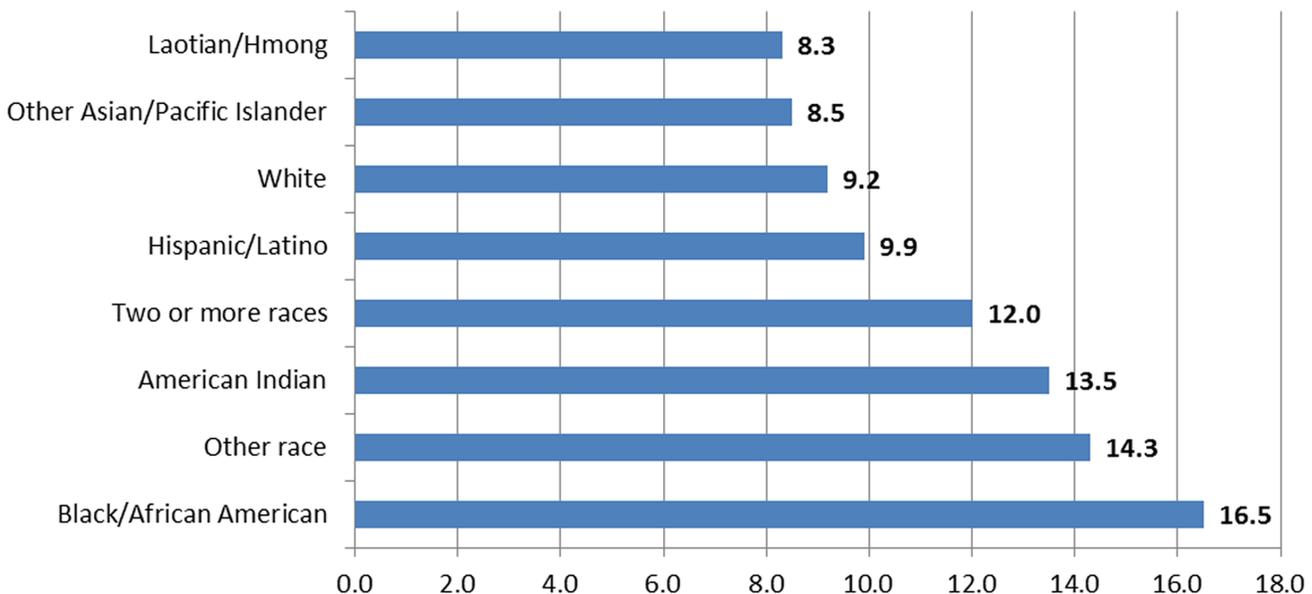
Percentage of very low birthweight infants by race/ethnicity, Wisconsin, 2015



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

Figure 3. Percentage of premature births by race/ethnicity, Wisconsin, 2015

Percentage of premature births by race/ethnicity, Wisconsin, 2015



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

5.7

In 2015, 384 infants died before their first birthday. The infant mortality rate was 5.7 infant deaths per 1,000 live births.

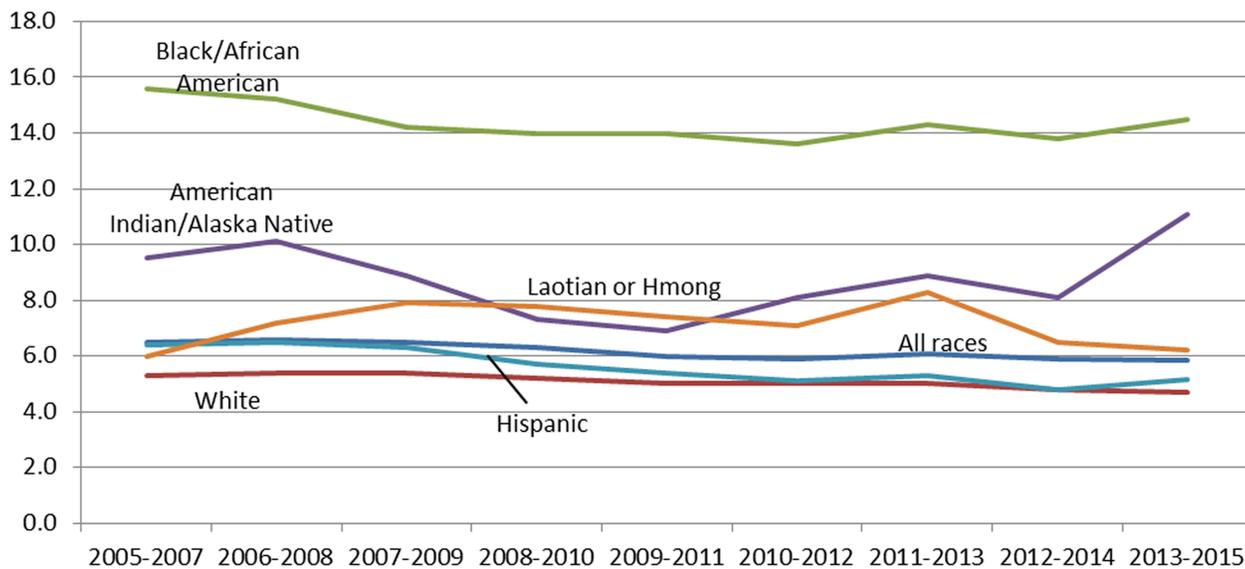
In Wisconsin, 384 infants under the age of one year died in 2015. The 2015 infant mortality rate was 5.7 infant deaths per 1,000 live births, unchanged from 2014. The 2014 U.S. infant mortality rate was 6.0 infant deaths per 1,000 live births (2015 U.S. rate was not available at the time of this publication).

Three-year rolling average infant mortality rates were calculated for the major race/ethnicity groups. During 2013-2015 the white infant mortality rate was 4.7 infant deaths per 1,000 births, compared to 14.5 for Black/African American, 11.1 for American Indian/Alaska Native, 5.2 for Hispanic/Latino, and 6.2 for Laotian/Hmong infants.

Three-year rolling average infant mortality rates for all races during 2013-2015 were statistically unchanged from 2012-2014.

Figure 4 and Table 1. Three-year infant mortality rates by race/ethnicity, Wisconsin, 2005-2007 through 2013-2015

Three-year infant mortality rates, Wisconsin, 2005-2015



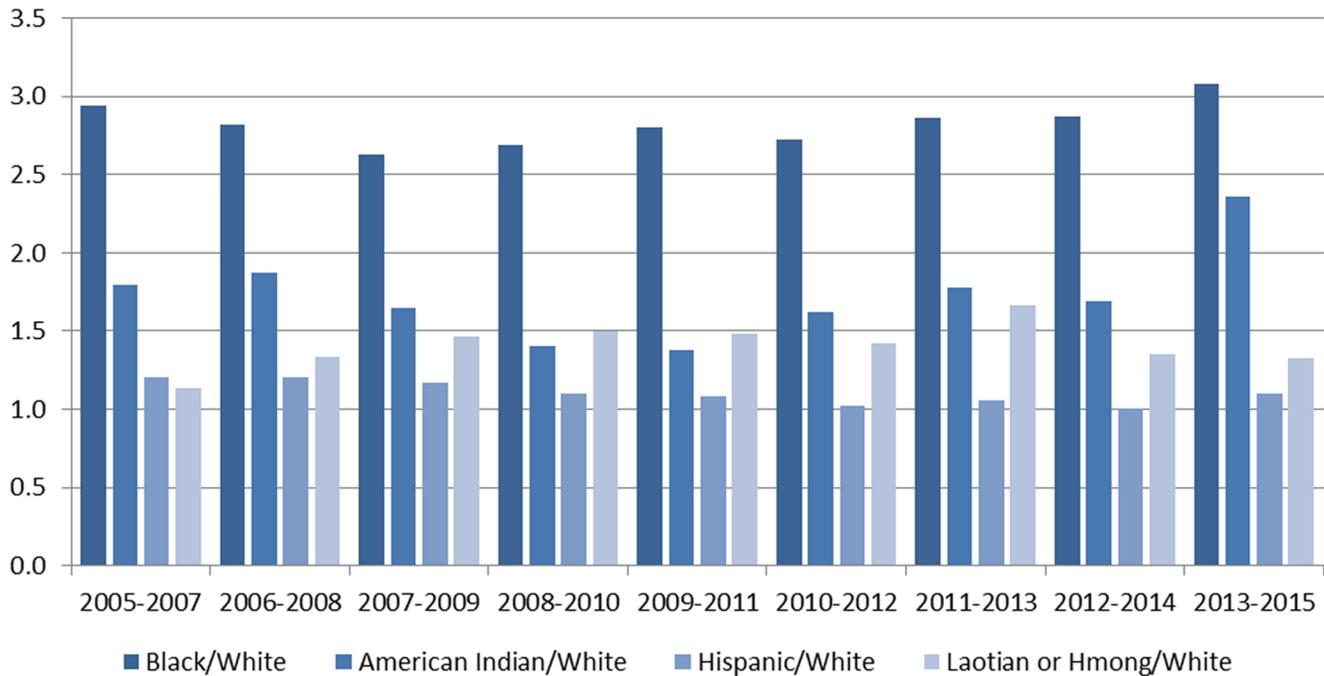
	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
All races	6.5	6.6	6.5	6.3	6.0	5.9	6.1	5.9	5.9
White	5.3	5.4	5.4	5.2	5.0	5.0	5.0	4.8	4.7
Black/African American	15.6	15.2	14.2	14.0	14.0	13.6	14.3	13.8	14.5
American Indian/Alaska Native	9.5	10.1	8.9	7.3	6.9	8.1	8.9	8.1	11.1
Hispanic	6.4	6.5	6.3	5.7	5.4	5.1	5.3	4.8	5.2
Laotian/Hmong	6.0	7.2	7.9	7.8	7.4	7.1	8.3	6.5	6.2

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

Infant mortality disparity ratios were calculated for the same three-year periods. During 2013-2015 the Black/White disparity ratio was 3.1, the American Indian/White ratio was 2.4, the Laotian or Hmong/White ratio was 1.3 and the Hispanic/White ratio was 1.1. A ratio of 1.0 would indicate there was no difference in the infant mortality rate between the two groups being compared.

Figure 5 and Table 2. Three-year infant mortality disparity ratio by race/ethnicity, Wisconsin, 2005-2007 through 2013-2015

Disparity ratio of infant mortality, Wisconsin, 2005-2015



	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Black/White	2.9	2.8	2.6	2.7	2.8	2.7	2.9	2.9	3.1
American Indian/White	1.8	1.9	1.6	1.4	1.4	1.6	1.8	1.7	2.6
Hispanic/White	1.2	1.2	1.2	1.1	1.1	1.0	1.1	1.0	1.1
Laotian or Hmong/White	1.1	1.3	1.5	1.5	1.5	1.5	1.7	1.4	1.3

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

In general, babies born to teens are more likely to die in infancy. In 2015, the infant mortality rate was 11.1 per 1,000 births to teens aged less than 20, compared with 5.5 per 1,000 births to mothers aged 20 and older. (In 2014, the rates were 10.3 per 1,000 births to teens and 5.4 per 1,000 births to mothers older than 20.)

There were 331 fetal deaths recorded in 2015. Fetal deaths or stillbirths are reported if the fetus reached 20 weeks of gestation or 350 grams. Please see Technical Notes for a full definition.

76.4

Select maternal characteristics of Wisconsin births in 2015; 76.4 percent of infants were breastfed at hospital discharge.

In 2015, White women accounted for 72.2 percent of Wisconsin resident births, compared to 72.6 percent in 2014. Black/African American women accounted for 9.8 percent of 2015 births, unchanged from 2014. Births to Hispanic women accounted for 9.9 percent of the total in 2015, compared to 9.5 percent of total births in 2014. (See Technical Notes for explanation of race/ethnicity categories.)

In 2015, 11.1 percent of Wisconsin women who gave birth had not finished high school, 24.0 percent finished high school or completed a GED, 44.8 percent had earned an associate degree or higher, and 19.7 percent had attended some college but had not yet earned a degree. In 2014, these percentages were 11.3 percent, 24.6 percent, 44.3 percent, and 19.4 percent, respectively.

The proportion of births in which the mother reported smoking during pregnancy was 12.0 percent in 2015, compared to 13.1 percent in 2014.

Cesarean sections represented 26.1 percent of all births in 2015, which was unchanged from 2014.

The proportion of births in which the mother was obese at the time she became pregnant was 28.8 percent in 2015, compared to 28.1 in 2014.

In 2015, 76.4 percent of infants were breastfed at discharge from the birth facility, compared to 75.6 percent in 2014.

The overall proportion of women who received first-trimester prenatal care was 75.5 percent in 2015, compared to 75.4 percent in 2014. At the county level, the range of first-trimester prenatal care extended from 54.5 percent in Vernon County to 88.1 percent in Kewaunee County (see Map 2.)

Table 3 shows counties with a statistically-significant change from 2013 to 2015 in the percentage of women who received first-trimester prenatal care. Brown and Dane counties showed significant increases in the this percentage, while there were five counties where statistically-significant declines in this measure were observed: Ashland, Barron, Milwaukee, Outagamie, and Racine.

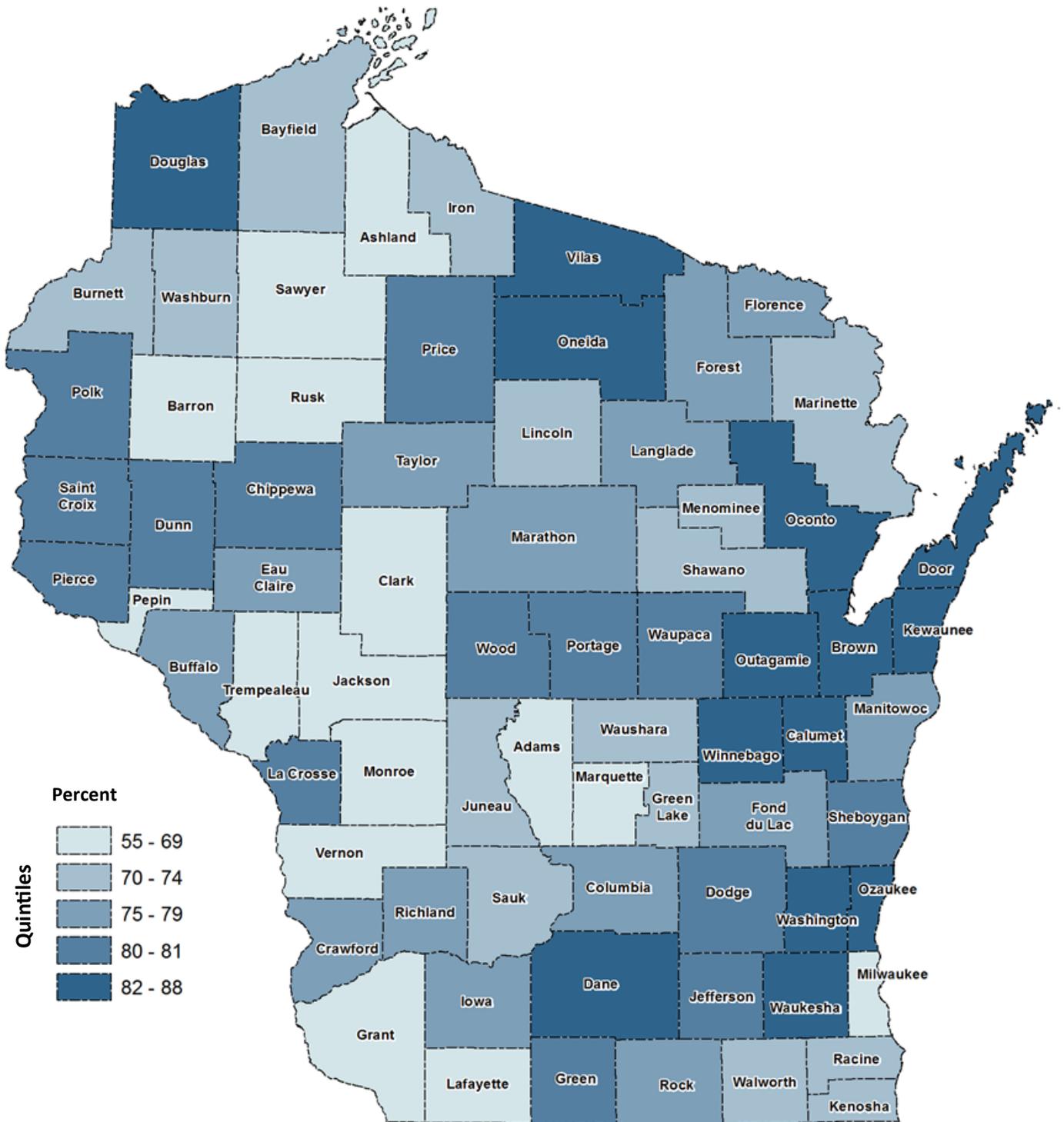
Table 3. Counties with a statistically-significant change in percent of births where mother received first-trimester prenatal care, 2015 compared to 2013, Wisconsin

County	Total Number of Births, 2015	Percent of Mothers Who Received First-Trimester Prenatal Care		Percentage Point Change from 2013
		2013	2015	
Ashland	199	79.8	65.3	-14.5
Barron	490	79.8	68	-11.8
Brown	3,417	78.6	82.9	4.3
Dane	6,178	76.1	81.1	5.0
Milwaukee	13,906	68.4	66	-2.4
Outagamie	2,368	85	82	-3.0
Racine	2,399	74	69.8	-4.2

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

Map 2. Percentage of mothers who received first-trimester prenatal care, 2015, Wisconsin

Percentage of mothers who received first-trimester prenatal care, 2015



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

Table 4. Most popular first names for newborns, Wisconsin, 2015

Girls		Boys	
1.	Emma	1.	Noah
2.	Olivia	2.	Oliver
3.	Ava	3.	Owen
4.	Evelyn	4.	Henry
5.	Charlotte	5.	Liam
6.	Harper	6.	Mason
7.	Sophia	7.	Jackson
8.	Amelia	8.	Logan
9.	Nora	9.	William
10.	Elizabeth	10.	James
11.	Ella	11.	Lucas
12.	Avery	12.	Benjamin
13.	Abigail	13.	Ethan
14.	Grace	14.	Carter
15.	Isabella	15.	Wyatt
16.	Mia	16.	Jack
17.	Aubrey	17.	Elijah
18.	Chloe	18.	Samuel
19.	Hazel	19.	Levi
20.	Emily	20.	Alexander
21.	Lillian	21.	Jacob
22.	Natalie	22.	Lincoln
23.	Addison	23.	Grayson
24.	Aria	24.	Aiden
25.	Brooklyn	25.	Isaac

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

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