

# Deaths During and After Pregnancy in Nevada, 2003 to 2014

Deaths during and after pregnancy can be categorized into pregnancy-associated deaths, pregnancy-related deaths, or maternal mortality<sup>1-3</sup>.

- Pregnancy-associated deaths include the death of a woman while pregnant or within one year of the termination of pregnancy, from any cause.
- Pregnancy-related deaths include the death of a woman while pregnant or within one year of the end of pregnancy, from any cause related to or aggravated by pregnancy or its management, but not from accidental or incidental causes.
- Maternal mortality (also known as maternal death) includes the death of a woman while pregnant or within 42 days of the end of pregnancy, from any cause related to or aggravated by pregnancy or its management, but not from accidental or incidental causes.

Healthy People 2020 has an objective for maternal deaths to be reduced to a rate of 11.4 maternal deaths per 100,000 live births.

From 2003 to 2014, Nevada experienced 156 pregnancy-associated deaths. In 2013-2014, there were 27 pregnancy-associated deaths, a ratio of 38.5 per 100,000 live births (Figure 2). Nevada's pregnancy-associated deaths has increased but with trends similar to national data. It is unclear if the increase is due to changes in reporting after the implementation of the revised 2003 vital records certificate. The revised death certificate captures additional information related to pregnancy status, not previously captured, likely helping further identify pregnancy-associated deaths, pregnancy-related deaths, and maternal mortality.

National trends in pregnancy-related mortality show an increase from 7.2 per 100,000 live births in 1987 to 15.9 per 100,000 live births in 2012<sup>1</sup>. Nevada's pregnancy-related mortality rate was below the national trend at 5.7 per 100,000 for 2011-2012.

Although Clark County accounted for 75% of the pregnancy-associated deaths, Washoe County had a higher pregnancy-associated ratio per 100,000 live births than Clark and the rest of the state (Figure 3). Washoe County's pregnancy-associated death ratio was 40.5 per 100,000 live births compared to Clark County's ratio of 35.7 per 100,000 live births and 26.6 for the rest of the state.

Figure 1. Pregnancy Death Classification

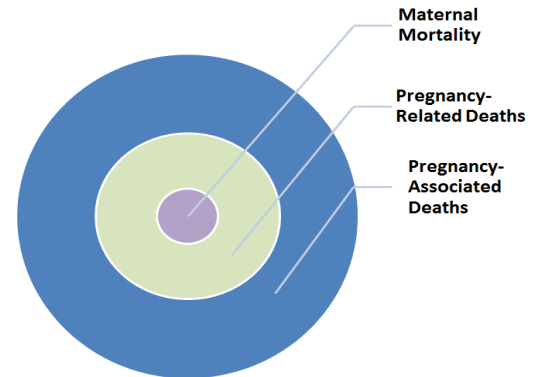


Figure 2. Trends in Pregnancy Deaths, Ratio per 100,000 Live Births, Nevada 2007-2014<sup>4</sup>

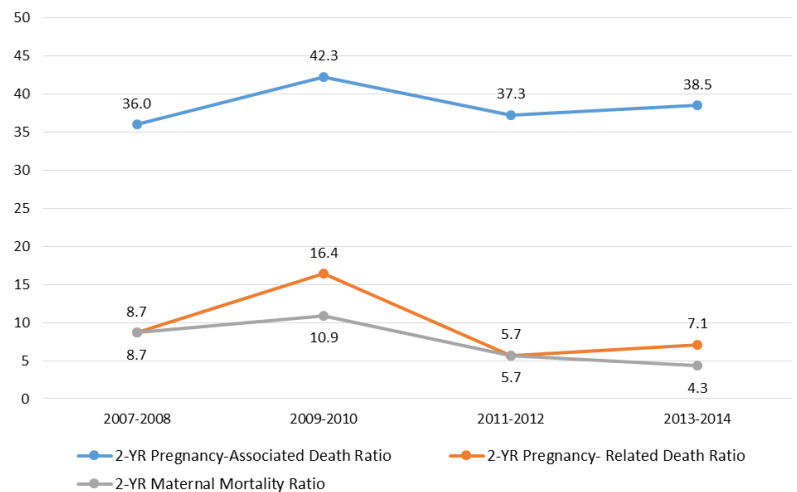
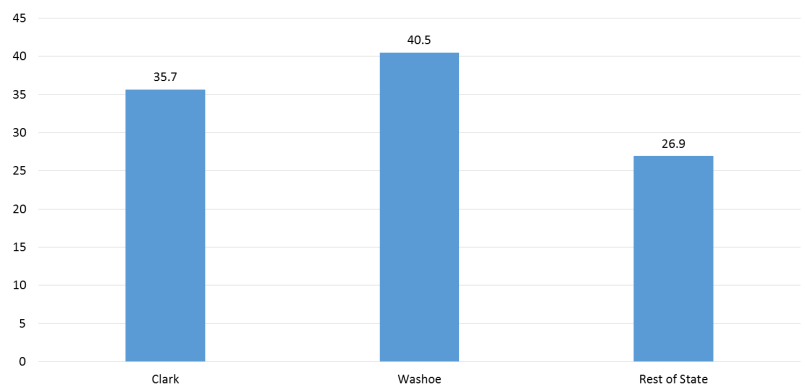
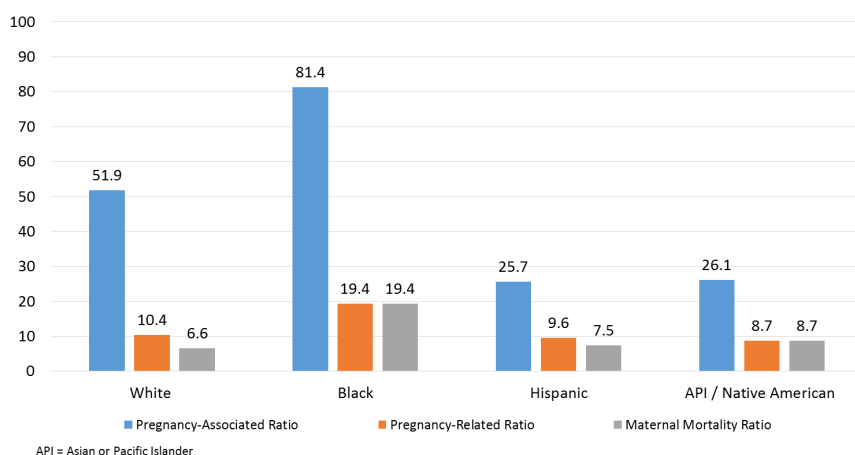


Figure 3. Pregnancy-Associated Deaths Ratio per 100,00 Live Births by County of Residence, Nevada 2003-2014<sup>4</sup>



From 2008 to 2014, Black women had the highest ratio of pregnancy deaths by race/ethnicity, followed by White women (Figure 4). The ratios show a potential indication of racial disparities. The ratio of Black women's pregnancy-associated deaths was more than 3 times the ratio of Hispanic women's pregnancy-associated deaths. All of the race/ethnic groups in Nevada except for Black women met the Healthy People 2020 target of less than 11.4 maternal deaths per 100,000 live births.

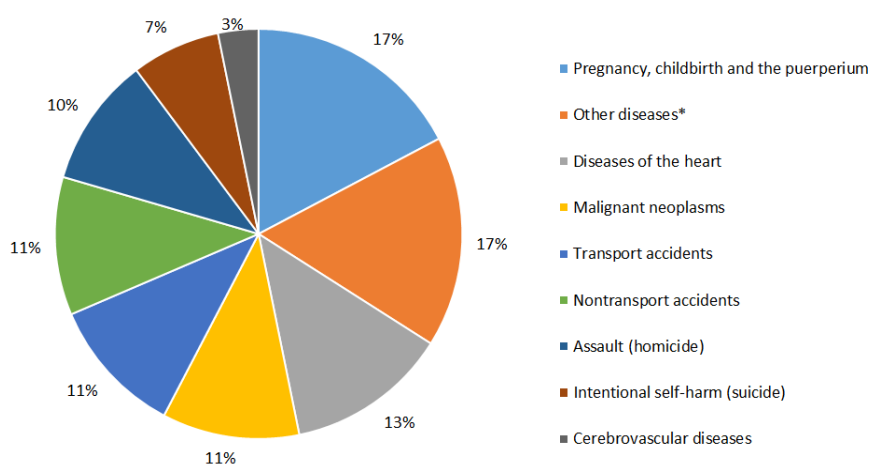
Figure 4. Death Ratio per 100,000 Live Births by Race/Ethnicity, Nevada 2008-2014<sup>4</sup>



Nationally, from 2011-2012 Black women had the highest pregnancy-related mortality ratio at 41.1 per 100,000 live births, more than twice the ratio of White women of 11.8 per 100,000 live births and almost four times the ratio of women of other races of 15.7 per 100,000 live births<sup>1</sup>.

Top causes of pregnancy-associated deaths in Nevada were related to pregnancy, childbirth, and the puerperium time period (Figure 5). Other diseases category including an aggregate total of cases such as septicemia, complications during surgery, meningitis, or chronic liver disease and cirrhosis, accounted for 17% of the pregnancy-associated deaths. Diseases of the heart accounted for 13% of the pregnancy-associated deaths; cancer, transport accident, and non-transport accidents accounted for 11% each; assaults 10%; and 7% from intentional self-harm.

Figure 5. Percent of Pregnancy-Associated Deaths Grouped by Top Causes of Deaths, Nevada 2003-2014<sup>4</sup>



For additional information regarding this publication, please contact:

Laura Valentine, M.S.  
 Title V MCH Health Program Manager  
 Child, Family and Community Wellness  
 Nevada Division of Public and Behavioral Health  
 Lvalentine@health.nv.gov

#### References

- Centers for Disease Control and Prevention (CDC). Pregnancy– Mortality Surveillance System. <http://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.html>. Updated January 21, 2016.
- Centers for Disease Control and Prevention (CDC). Pregnancy– Related Deaths. <http://www.cdc.gov/reproductivehealth/MaternalInfantHealth/Pregnancy-relatedMortality.htm>. Updated January 12, 2016.
- World Health Organization (WHO). Maternal mortality ratio (per 100,000 live births). <http://www.who.int/healthinfo/statistics/indmaternalmortality/en/>.
- Office of Public Health Informatics and Epidemiology. Office of Vital Records- Nevada Electronic Birth and Death Certificates. Accessed August 2016.