# Infant Mortality

The infant mortality rate is the number of children who died before their first birthday divided by the number of live births during the year. This rate is used as an indicator of the health and well-being of populations throughout the world and points to underlying issues like the quality of healthcare, access to services, health inequity and individual behaviors. In Washington, the leading causes of infant deaths are birth defects (25% in 2015), Sudden Infant Death Syndrome (SIDS) (13%) and being born too early or too small (13%), which includes preterm and low birth weight infants.

In 2015, 431 of 89,000 Washington State residents died in their first year of life (4.8 per 1,000 live births).

The highest rates of infant mortality occurred among infants born to women who were less than 20 years old, black, American Indian or Alaska Native (AIAN), receiving Temporary Assistance for Needy Families (TANF), or who had a high school education or less.

DOH, along with partner agencies, collaborates to address both the conditions that put infants at high risk for dying in the first year of life as well as activities to prevent specific causes of death, like SIDS.

**4.8 per 1,000**

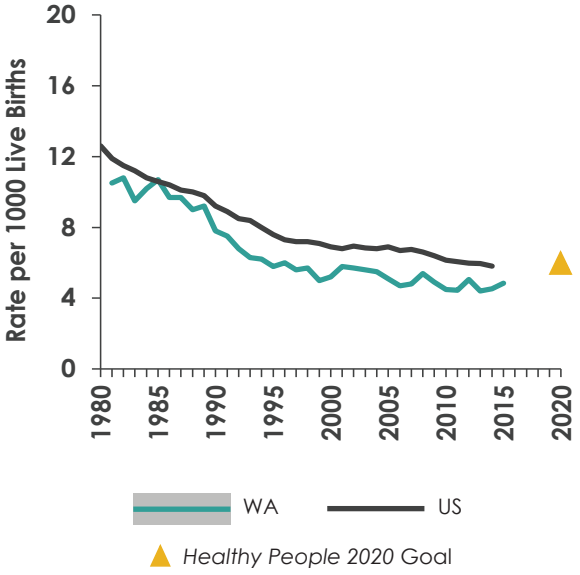
Washington's infant mortality rate is among the lowest in the country

Washington's total infant mortality rate hides racial and socioeconomic disparities

## Time Trends

- In 2015, the infant mortality rate among Washington State residents was 4.8 per 1,000 live births, below the *Healthy People 2020* goal of six infant deaths per 1,000 live births.
- The infant mortality rate in Washington State declined substantially from 10.8 in 1982 to 5.0 in 1999. The rate has decreased more moderately since then.
- Washington has a lower rate of infant mortality compared to the U.S., and has been among the states with the lowest rates in the country for several years.

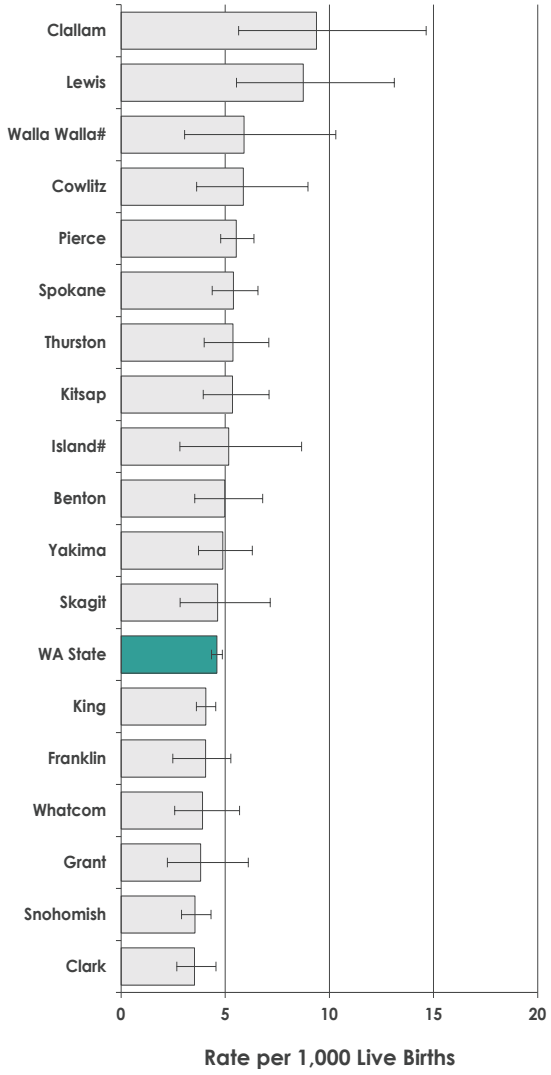
***Infant Mortality***
***Washington State & US***
***Linked Birth Infant Death File, 1980-2015***



# Geographic Variation

- During 2013-2015, for those counties with more stable rates, the infant mortality rate was similar to the state rate of 4.6 deaths per 1,000 live births.
- Rates for counties with fewer than 10 infant deaths each during 2013-2015 are not presented.

***Infant Mortality Rates***
***Washington Counties*****
***Linked Birth Infant Death File, 2013-2015***




**Counties not reported here include counties with fewer than 10 cases, RSE ≥ 30% or zero cases

#Relative standard error (RSE) is between 25% and 29%

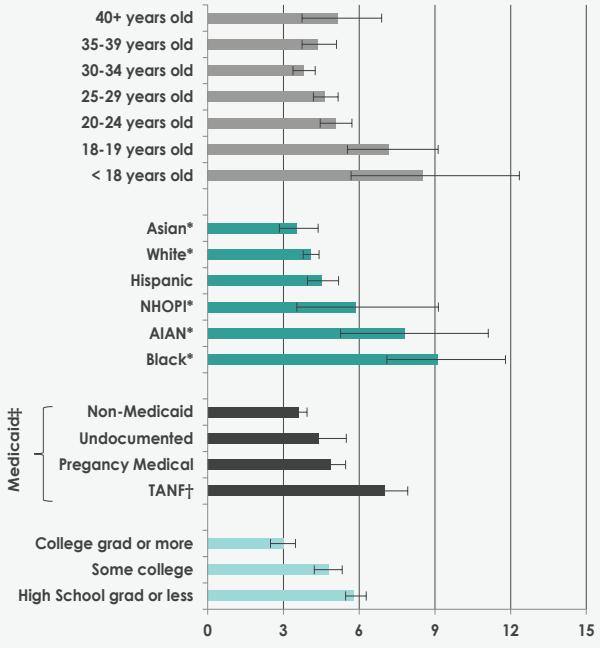
## Impact

- The leading causes of infant death in Washington are birth defects (25% of deaths in 2015), Sudden Infant Death Syndrome (SIDS) (13%) and being born too early or too small (13%), which includes preterm and low birth weight infants.
- The contribution of these causes of death differs by race and ethnicity.

# Disparities

- Infants born to women under 18 years old had the highest infant mortality rates, and rates are elevated for women under 20.
- Blacks and AIAN had the highest infant mortality rates and these inequities have persisted over time.
- Infants born to women receiving TANF experienced the highest infant mortality rate compared to infants of women on other Medicaid programs and infants of women who were not receiving Medicaid.
- Infants born to women with a high school education or less had the highest infant mortality rates.

***Infant Mortality by Maternal Characteristics***
***Washington State***
***Linked Birth Infant Death File, 2013-2015***




*Non-Hispanic* (all races) | *AIAN:* American Indian/Alaska Native | *NHOPI:* Native Hawaiian/Other Pacific Islander

‡*Medicaid Status Source:* First Steps Database, DSHS (2012-14 cohort)

†*TANF:* Temporary Assistance for Needy Families

# How is Washington working to reduce infant mortality?

Infant mortality is death due to any cause during the first year of life. The activities listed below are a sample of statewide activities that focus both on the prevention of specific causes of infant death, as well as preventing the conditions which put infants at high risk for death.

- Family Planning. Babies born preterm are more likely to have low birth weight. Women who have already had a preterm birth are more likely to have another one. Having at least one year between pregnancies can reduce the chance of having another preterm birth. In order to allow enough time before having another baby, women need access to reliable birth control. DOH funds 12 family planning agencies across the state.
- Folic Acid Prior to Pregnancy. Washington State Medicaid now pays for prenatal vitamins with folic acid for women of childbearing age and pregnant women with a provider's prescription.
- First Steps Program. This program includes Maternity Support Services (MSS), Infant Case Management (ICM) and Childbirth Education (CBE) for women up to 198% of the federal poverty level.
- Women, Infants, and Children (WIC) Nutrition Program. WIC is a nutrition program for pregnant women, new and breastfeeding moms, and children under five. WIC provides nutrition education, breastfeeding promotion and support and vouchers for a wide variety of nutritious foods, including fresh fruits and vegetables. Pregnant, postpartum and breastfeeding women, and children from birth to five years old, who live below 185% of the federal poverty level, are eligible for WIC.
- Tobacco Cessation. Smoking is a risk factor for preterm birth. Washington also continues to work to reduce the smoking rate by supporting Tobacco 21 legislation to raise the legal age of purchase of tobacco from 18 to 21 years old. CDC funds the Washington State Tobacco Quitline 1-800-QUIT-NOW for the uninsured and underinsured to help men and women of Washington State to quit smoking.
- Newborn Screening. DOH's Office of Newborn Screening tests babies born in Washington for a number of rare but treatable disorders using a dried blood spot specimen taken at the birth site. Newborn screening is one of the most successful public health initiatives in the U.S.
- Washington Safe Haven Law. This law exists to enable a person to relinquish a newborn who is up to three days old, anonymously, and at a safe drop-off location. Confidential toll-free hotline 1-888-510-BABY (2229).
- Infant Safe Sleep. DOH continues to promote safe sleep practices through Child Profile mailings; the Safe to Sleep campaign and C.J. First Candle. In addition, some hospitals in the state have embraced the Cribs for Kids® National Infant Safe Sleep Hospital Certification program.
- Child Death Review. Child Death Review (CDR) is a process through which some Local Health Jurisdictions (LHJs) bring together teams that review deaths of children, under the age of 18, who have unexpectedly lost their lives. Teams identify preventable circumstances in these deaths and consider strategies to improve health and safety for all children.

See also Prenatal Care

## Technical Notes

*Confidence Intervals:* Definition and examples are described in Appendix C

*Medicaid:* Because we do not have a measure of income among mothers of newborn infants, we use the Medicaid program as a proxy. To do this, we classified women whose pregnancies were covered by Medicaid into three subgroups (from highest to lowest socioeconomic status) based on program eligibility. 'Pregnancy Medical' were women eligible for the pregnancy medical assistance program. These women were U.S. citizens or legal U.S. residents, and were eligible to receive Medicaid because they were pregnant and had incomes at or below 193% of the federal poverty line. 'TANF' were women enrolled in the Temporary Assistance for Needy Families (TANF) program. These women were very low income (generally < 50% the federal poverty level) and received cash assistance (TANF) in addition to Medicaid. 'Undocumented' were women who were not legally admitted for permanent residence, lacked temporary residence status, or were not lawfully present in the U.S. They were eligible to receive Medicaid because they were pregnant and had incomes at or below 193% federal poverty level. Undocumented women were not eligible for TANF although their incomes were often lower than women on TANF. All three Medicaid groups had incomes below most non-Medicaid women.

*Race and Ethnicity:* Classification described in Appendix C

*Relative Standard Error:* Definition and how it was used is described in Appendix C