Infant health
Key indicator: Preterm birth

Indicator details:

» Definition: Percent of live births with a gestational age of less than 37 weeks

» Numerator: Number of live births with a gestational age of less than 37 weeks

» Denominator: Number of live births

Significance of indicator: Preterm birth occurs when a baby is born before 37 weeks of pregnancy and it affects approximately one in 10 infants born in the United States. Preterm birth is the leading cause of newborn death and a major determinant of illness and disability among infants, including developmental delays, chronic respiratory problems and vision and hearing impairment. (27)

In 2015, for the first time since 2007, there was a slight increase in the national preterm birth rate and significant disparities between racial and ethnic groups persist. In 2015, the rate of preterm birth among African-American women (13%) was approximately 50 percent higher than the rate of preterm birth among White women (9%). (28) Preterm births are more likely among teen mothers and mothers 40 and older.

Many times the cause of preterm birth is unknown. Risk factors include multiple pregnancies, infections and chronic conditions such as diabetes and high blood pressure, and a prior preterm birth. (29)

Status in Oregon: The rate of preterm birth in Oregon is lower than the national rate (7.6% compared to 9.6% in 2015). Between 2006 and 2015, the rate of preterm birth has dropped from 8.4% to 7.6%.

Disparities in Oregon: When compared to non-Hispanic White women (7.3%), the rate of preterm birth in Oregon in 2014 was higher for non-Hispanic Black (9.7%), non-Hispanic Hawaiian/Pacific Islanders (10.9%), and non-Hispanic American Indian/Alaska Natives (7.6%).
Preterm birth, Oregon and United States, 2015

Data source: National Vital Statistics and Oregon Center for Health Statistics

Preterm birth, Oregon, 2006–2015

Data source: Pregnancy Risk Assessment Monitoring System (PRAMS)
Preterm birth, by race/ethnicity, Oregon, 2014

Data source: Oregon Center for Health Statistics
Key indicator: Breastfeeding

Indicator details:

» Definition:  
A) Percentage of infants ever breastfed  
B) Percentage of infants exclusively breastfed at 6 months

» Numerator:  
A) Number of infants ever breastfed  
B) Number of infants exclusively breastfed at 6 months

» Denominator:  
A) & B) Number of infants

Significance of indicator: The health benefits of breastfeeding are well recognized as breast milk is uniquely suited to the infant’s nutritional needs. (30) Breast milk is a live substance that contains immunological properties against a host of illnesses and diseases. Infants who do breastfeed have a lower risk of SIDS (sudden infant death syndrome). (31) Similarly, mothers who breastfeed have a decreased risk of breast and ovarian cancer, have better maternal health outcomes, and have lower risks of postpartum depression. (32)

Unfortunately, not all populations breastfeed to the most optimal extent. Mothers with the lowest rates of breastfeeding tend to be young, low-income, African American, unmarried, less educated and overweight or obese before pregnancy. (33)

Status in Oregon: Oregon’s percentage of infants ever breastfed in 2014 was higher than the national rate (91.9% compared to 79.2%). Oregon’s rate of infants who are exclusively breastfed at 6 months also exceeds the national rate (25.8% compared to 18.8%). However breastfeeding duration and exclusivity did not meet the American Academy of Pediatrics recommended guidelines of 6-month exclusive breastfeeding and continued breastfeeding at least until 12 months of age. (34)

Disparities in Oregon: In Oregon, the rate of infants ever breastfed for non-Hispanic Blacks, non-Hispanic American Indians/Alaska Natives, non-Hispanic Native Hawaiians/Pacific Islanders and non-Hispanic Asians was lower than the rate for non-Hispanic Whites among infants born in 2012. The rate of infants ever breastfed was higher for non-Hispanic mothers of two or more races and Hispanic mothers in 2014. Among infants born in 2012 in Oregon, the only race/ethnicity group with a higher rate of exclusive breastfeeding at 6 months than non-Hispanic Whites was non-Hispanic American Indian/Alaska Natives, with all other groups being lower.
Breastfeeding initiation and exclusivity at 6 months, Oregon and United States, 2014

Data source: National Immunization Survey

Initiation, duration and exclusivity of breastfeeding in Oregon, 2000–2014

Data source: National Immunization Survey
Breastfeeding initiation (2014) and exclusivity at 6 months (2011 births), by race/ethnicity, Oregon

Data source: Oregon Center for Health Statistics and PRAMS-2
Key indicator: Safe sleep

Indicator details:

» Definition: Percentage of women with a live birth who most often place their infants on their backs to sleep

» Numerator: Number of women with a live birth who most often place their infants on their backs to sleep

» Denominator: Number of women with a live birth

Significance of indicator: Sudden unexpected infant death (SUID) is the leading cause of death among babies between birth and 1 year of age. (35) SUID includes all unexpected deaths in infants less than 1 year old including those without a clear cause, such as SIDS, and those from a known cause, such as accidental suffocation. The three commonly reported types of SUID are sudden infant death syndrome (SIDS); accidental suffocation and strangulation in bed (ASSB); and unknown cause.

In the United States, in 2015, there were approximately 1,600 deaths due to SIDS, 1,200 deaths due to unknown causes and approximately 900 deaths due to accidental suffocation and strangulation in bed. (36)

The SUID rate declined considerably following the release of the American Academy of Pediatrics recommendation to place babies on their back to sleep in 1992 and the initiation of the Back to Sleep campaign in 1994. However, rates have remained unchanged in recent years, and racial and ethnic disparities persist. (37)

Between 2011 and 2014, SUID rates for American Indian/Alaska Native and non-Hispanic Black infants were more than twice those of non-Hispanic White infants. (38)

Status in Oregon: There are approximately 40 sudden unexpected infant deaths (SUID) every year in Oregon. In 2013, a higher percentage of infants in Oregon were most frequently placed on their backs to sleep, as opposed to those in the United States as a whole (83.0% vs. 75.7%). In addition to this, the rate ranged from 78.7% in 2009 to nearly 83% in 2014.

Disparities in Oregon: Black infants were placed on their backs approximately 72% of the time. All other race/ethnicity groups had a higher rate of infants put to sleep on their backs, as compared to non-Hispanic White infants. While babies from other race/ethnic groups were placed on their back to sleep from approximately 82%-92% of the time.
Infant placed on back to sleep, Oregon and United States, 2013

- Oregon: 83.0%
- United States: 75.7%

Data source: Pregnancy Risk Assessment Monitoring System (PRAMS)

Infant placed on back to sleep, Oregon, 2009–2014

- 2009: 78.7%
- 2010: 77.9%
- 2011: 78.9%
- 2012: 82.5%
- 2013: 83.0%
- 2014: 82.9%

Data source: Pregnancy Risk Assessment Monitoring System (PRAMS)
Infant placed on back to sleep, by race/ethnicity, Oregon, 2014

Data source: Pregnancy Risk Assessment Monitoring System (PRAMS)
Key indicator: Infant mortality

Indicator details:

» Definition:  
A) Neonatal mortality: Rate of deaths of infants aged 0–27 days per 1,000 live births  
B) Postneonatal mortality: Rate of deaths of infants aged 28 days–11 months per 1,000 live births  
C) Infant mortality: Rate of deaths of infants under the age of 1 year per 1,000 live births

» Numerator:  
A) Number of deaths of infants aged 0–27 days  
B) Number of deaths of infants aged 28 days–11 months  
C) Number of deaths of infant under the age of 1 year

» Denominator: A), B) and C) Number of live births

Significance of indicator: The death of infants — from the time of birth through 1 year of age — is widely used as a measure of community health status and of the availability and quality of health care. However, it is more than that. Every infant death resonates throughout their family and community. The majority of infant deaths take place in the first four weeks of life (neonatal deaths), with most of those during the first week (early neonatal deaths). (29) The most common causes of infant mortality are birth defects and chromosomal anomalies, being born very prematurely, maternal complications of pregnancy, sudden unexpected infant death syndrome (SUIDS), and unintentional injuries. Health of mothers before and during pregnancy, their ability to access good quality and culturally appropriate care during pregnancy and birth, their socioeconomic status, and many other factors play a role in the health of infants.

Status in Oregon: In 2014, Oregon’s rates of infant, neonatal and postneonatal mortality were lower than the national rates. These rates have remained fairly level between 2006 and 2015.

Disparities: For individual race and ethnicity categories, we found that infant, neonatal and postneonatal mortality rates among non-Hispanic Black, Asian, two or more races and Hispanic women were all higher than or equal to the rate among non-Hispanic White women. We could not determine accurate rates for American Indian/Alaska Native women because of a small sample size.
Infant, neonatal and postneonatal mortality rates, Oregon and United States, 2014

- Infant mortality rate: Oregon 5.1, United States 5.8
- Neonatal mortality rate: Oregon 3.5, United States 3.9
- Post-neonatal mortality rate: Oregon 1.7, United States 1.9

Data source: Oregon Center for Health Statistics

Neonatal, postneonatal and infant mortality, Oregon, 2006–2015

- Neonatal mortality rate
- Postneonatal mortality rate
- Infant mortality rate

Data source: Oregon Center for Health Statistics

* indicates rate not shown due to five or fewer deaths.
Note: Native Hawaiian/Pacific Islander are not shown due to small sample size.

Data source: Oregon Center for Health Statistics