Supporting Document # 5

MCAH Title V Reports and Policy Documents

- MCH Data Book
- Well woman care listening session report
- State Population Health Indicators
- Breastfeeding white paper
- Workplace Breastfeeding Support Policy
- Workplace Breastfeeding Support guidelines
- Adolescent Well Visit-Sports Physical Comparison
- Opioids Work Group Report

Maternal and Child Health

Data Book





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Welcome

The "Maternal and Child Health 2017 Data Book" contains important information about the health status of Oregon mothers, infants and children. The Oregon Public Health Division's Maternal and Child Health Section is pleased to release this book.

A U.S. Health Resources and Services Administration (HRSA) Title V Block Grant underwrote much of our work on behalf of Oregon families. The grant reflects the federal government's longstanding commitment to support the health and well-being of mothers and children across the nation. It enables states such as ours to provide a broad array of resources and services. These range from nurse home visitors serving young families and pregnant women, to screening all newborn Oregon babies for deafness, to public health surveillance in order to better understand the conditions affecting the health of Oregon families.

The "Maternal and Child Health 2017 Data Book" provides an overview of the health of Oregon women before and during pregnancy. Their health directly affects the health of their infants and children. This book outlines both women's and children's health indicators. It also includes crosscutting factors influencing the health of all family members.

This easy-to-use resource guide is not a repeat of results found in other places. Rather, it compiles indicators from varied data sources, which have been analyzed and reported on in order to create a cohesive view of the status of maternal and child health in Oregon.

This data book provides reliable data on maternal and child health issues to plan and evaluate programs, prevent poor health outcomes, and guide public health policy. The trends and disparities in health indicators throughout this report can help programs and policymakers make data-driven decisions on how to improve the health status of Oregon women and children.

We hope the "Oregon Maternal and Child Health 2017 Data Book" will be a helpful reference and discussion source for all Oregonians concerned with improving Oregon families' health and well-being.

Toward a healthier future for all mothers and children in Oregon,

Cate Wilcox

Maternal and Child Health Manager, Title V Director

Executive summary

The "Maternal and Child Health 2017 Data Book" provides an overview of the health of Oregon women, children and families. This report provides data for program and policy design and evaluation. The trends and disparities highlighted in this report can help programs and policymakers make data-driven decisions about how to improve Oregon women's and children's health.

The report consists of selected indicators for the following maternal and child health populations:

- Preconception and women
- Prenatal and postpartum
- Infants
- Children and
- Adolescents.

There is also a section of indicators that cuts across all these populations. Key indicators from each population are selected from preexisting metric lists such as the life course indicators compiled by the Association of Maternal and Child Health Programs, and the Healthy People 2020 goals.

The table below is a summary of the status of each indicator across three domains:

- Outcome of the indicator in Oregon vs. the United States (U.S.),
- Improvement of the indicator over time and
- Existence of racial/ethnic disparities.

Favorable outcomes are shaded in green. Results needing improvement are shaded in red. Results are marked as "Unavailable" where no data exists for specific domains.

Summary of the status of each indicator across three domains

Indicator	Oregon status better than United States?	Improvement over time?	No racial/ethnic disparities			
Preconception and women's health						
Overweight/obesity among women 18-44 years old	×	✓	×			
Adverse childhood events among women 18-44 years old	Unavailable	×	×			
Well-woman visit	×	X	×			
Pre-pregnancy smoking	×	✓	✓			
Prenatal/postpartum health						
Gestational diabetes	✓	×	×			
Perinatal depression	×	×	X X X			
Intimate partner violence among pregnant women	✓	×	×			
Prenatal oral health	✓	×	✓			
Infant health						
Preterm birth	✓	✓	×			
Breastfeeding	V	/	×			
Safe sleep	✓	/	X X X			
Infant mortality	✓	/	×			
Child health						
Childhood overweight/obesity	✓	×	×			
Adverse childhood events	×	Unavailable	×			
Childhood oral health	×	×	X X X			
Medical home	✓	×	×			
Adolescent health						
Adolescent depression	×	×	×			
Adolescent well visit	×	✓	×			
High school graduation rate	×	✓	×			
Crosscutting						
Households at concentrated disadvantage	Unavailable	Unavailable	×			
Food insecurity	×	Unavailable	Unavailable			
Adequate maternal social support	Unavailable	×	×			

Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal and Child Health | Executive summary | Maternal a

Note that each indicator provides a single key reference point for how women and children are faring in Oregon. Many factors beyond those listed here contribute to the health and well-being of families. Indicators were selected to represent the broad scope of influences on health, such as policies and practices beyond clinical medicine alone. We have seen success in indicators of infant health. However, 11 of 19 Oregon indicators have not improved over time. In addition, racial and ethnic disparities are present in 19 of 21 indicators — including infant health. A supplement to this report will be released with additional indicators presented with Oregon vs. U.S. data. This will further describe the status of maternal and child health in Oregon.

Public health is accountable for the health of the community. Oregon is in the midst of modernizing its public health system to better ensure basic protections critical to Oregonians' current and future health. This report indicates there is much more work to do. To improve the health of mothers and children, we must continue to explore ways to influence the upstream social determinants of health. Our Maternal and Child Health Section has broadened its focus far beyond health issues of pregnancy and the peripartum period for women and infants to better understand and address the factors leading to poor family health outcomes.

The key indicators illustrated here show consistent evidence of disparities among racial and ethnic groups. We are committed to viewing all aspects of MCH through the lens of health equity, consistent with one of the foundational capabilities of public health modernization. This embodies values, policies and practices for all people. These include but are not limited to people who are historically underrepresented based on race/ethnicity, age, disability, sexual orientation, gender, gender identity, socioeconomic status, geography, citizenship status or religion. We consider all these groups in developing and enacting programs and resources, planning our work and engaging with partners.

We will continue to address health promotion issues across the lifespan of individuals and families. We believe preconception, pregnancy and early childhood experiences create and influence a path for lifelong wellness. We invite you to join in this work and let us know how we can best help with your work.

Methods

The "Maternal and Child Health 2017 Data Book" is an overview of the health of Oregon women, children and families. This report is an update to the "2007 Oregon Perinatal Data Book" (available here: https://go.usa.gov/xUjhh).

The 2007 report focused only on perinatal health. This report gives a thorough picture of maternal and child health in Oregon. It provides data on the following six maternal and child health populations or domains:

- Preconception and women's health
- Prenatal and postpartum health
- Infant health
- Child health
- Adolescent health
- Crosscutting.

The first five domains are all populations served by the Oregon Health Authority Maternal and Child Health Section. The last domain, crosscutting, primarily focuses on social determinants of health that affect all population groups.

This report includes indicators compiled from a broad range of sources, including:

- The life course indicators developed by the Association of Maternal and Child Health Programs
- The Healthy People 2020 goals and
- Title V national and state performance measures.

It also has indicators from previous Oregon indicator reports, including the "2007 Oregon Perinatal Data Book." We compiled and grouped these indicators into one of the six maternal and child health populations.

This resulted in a list of 15 to 30 indicators per population. A group of subject matter experts received the indicators. They used a prioritization exercise to select

Executive summary | Maternal and Child Health | Methods /

key indicators for each population. The subject matter experts selected indicators while keeping in mind the following selection criteria:

- **Magnitude:** What proportion of the population is affected?
- Importance/severity: What is the degree of impact on affected populations? What is the morbidity and mortality caused?
- **Interventions:** How effective are available interventions? How feasible are available interventions?
- Equity: Are there racial/ethnic disparities present? Are there rural/urban disparities present? Are there any other disparities present?
- **Partner alignment:** Are there partners working on efforts to address the issue? Will working with partners strengthen the intervention?

The selection of indicators was completed using a vote system, with each subject matter expert having three votes per maternal and child health population. This resulted in the selection of three to four key indicators per population. The significance and importance of each of these key indicators is presented in this report, along with three domains of data, as follows:

- The outcome of the indicator in Oregon vs. the United States
- Changes in the outcome of the indicator over time in Oregon
- Racial/ethnic disparities in the outcome of the indicator in Oregon.

The report presents the most recent available years of data. The years vary, depending on data source. As a result, the years of data presented are not consistent across each indicator. There is often a lag in the release of national data as compared to state level data. Due to this lag, graphs containing both Oregon and U.S. data often use older data than graphs that only examine Oregon data, either over time or over racial/ethnic disparities.

Race and ethnicity are combined into a single variable for each of the indicators where data are available. Note that this can lead to the masking of disparities for groups that have high overlap between race and ethnicity. This is particularly true for individuals of American Indian/Alaska Native race because a proportion is also Hispanic. Therefore, these individuals are categorized into Hispanic and are not reflected in the American Indian/Alaska Native category, making them "hidden."

The race/ethnicity categories also vary depending on data source. Not all race/ethnicities are presented for each indicator, due to differences in data collection and often insufficient sample size. In cases where confidentiality or reliability may be compromised, results from specific race/ethnic groups are either suppressed or compiled into an "other" category.

The data sources used in this report are as follows:

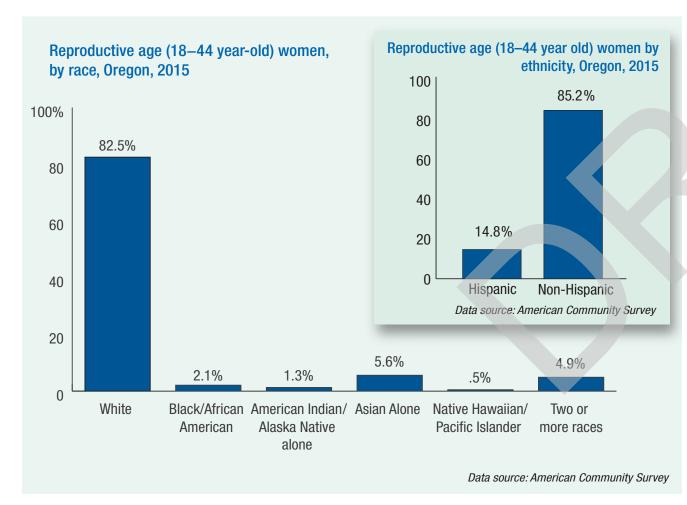
- United States Census Bureau. American community survey (https://www.census.gov/programs-surveys/acs/)
- Oregon Health Authority Public Health Division, Center for Health Statistics.
 Vital statistics (https://go.usa.gov/xUDqa)
- Centers for Disease Control and Prevention National Center for Health Statistics.
 National vital statistics system (https://www.cdc.gov/nchs/nvss/index.htm)
- Oregon Health Authority Public Health Division, Center for Health Statistics.
 Behavioral risk factor surveillance system (https://go.usa.gov/xUDq2)
- Centers for Disease Control and Prevention. Behavior risk factor surveillance system (https://www.cdc.gov/brfss/index.html)
- Oregon Health Authority Public Health Division, Maternal and Child Health Section. Pregnancy risk assessment monitoring system (https://go.usa.gov/xUDqT)
- Centers for Disease Control and Prevention. Pregnancy risk assessment monitoring system (https://www.cdc.gov/prams/index.htm)
- PRAMS-2 (https://go.usa.gov/xUDqb)
- Centers for Disease Control and Prevention. Breastfeeding rates from national immunization survey (https://www.cdc.gov/breastfeeding/data/nis_data/)
- Data Resource Center for Child & Adolescent Health. National survey of children's health (http://childhealthdata.org/learn/NSCH)
- Oregon Health Authority Public Health Division, Center for Health Statistics.
 Oregon healthy teens survey (https://go.usa.gov/xUDqi)
- Centers for Disease Control and Prevention. Youth risk behavior surveillance system (https://go.usa.gov/xUDys)
- National Center for Education Statistics (https://nces.ed.gov/)
- $\bullet \ \ Oregon\ Department\ of\ Education.\ Reports\ \&\ data\ (\underline{https://go.usa.gov/xUDqD})$
- Oregon Department of Human Services Business Services, Office of Forecasting, Research and Analysis (https://go.usa.gov/xUDqB)
- United States Department of Agriculture Economic Research Service. Key statistics 7 graphics (https://go.usa.gov/xUDqk)

A supplement to this report will be released with the remaining indicators not selected as key indicators. These supplemental indicators will be presented with Oregon vs. United States data only.

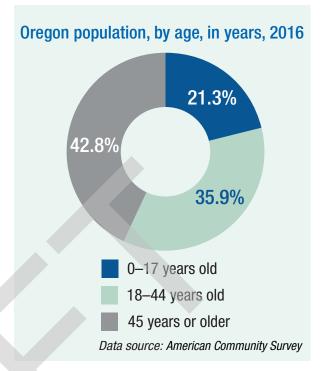
Demographics

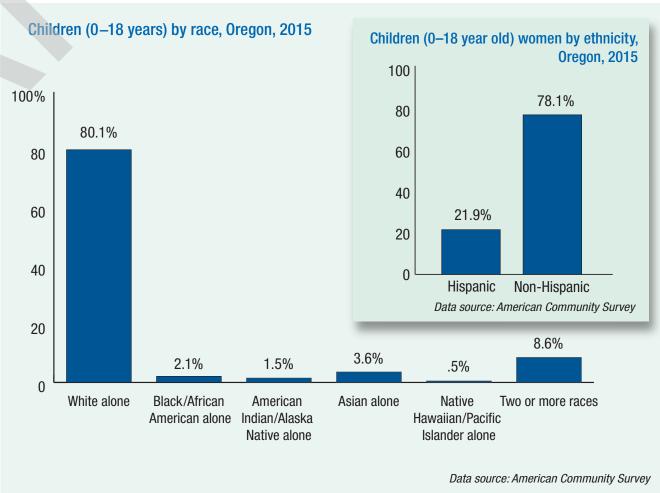
Oregon's population is primarily non-Hispanic White. However, the prevalence of other race and ethnicity groups is higher among children under the age of 18 compared to adults. This is particularly true for Hispanic children and Asian children with two or more races. The number of births in Oregon — approximately 45,000 per year — has stayed relatively consistent for the last 15 years.





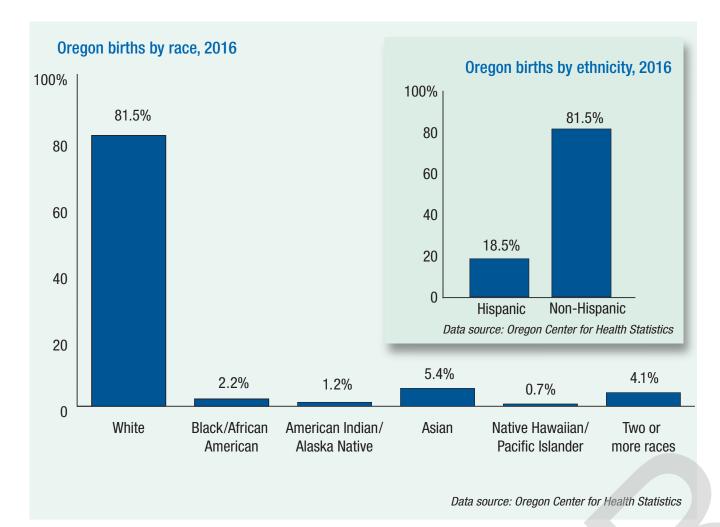
Note: Race category percentages do not add to 100% due to the exclusion of "Other" and "Unknown" race.



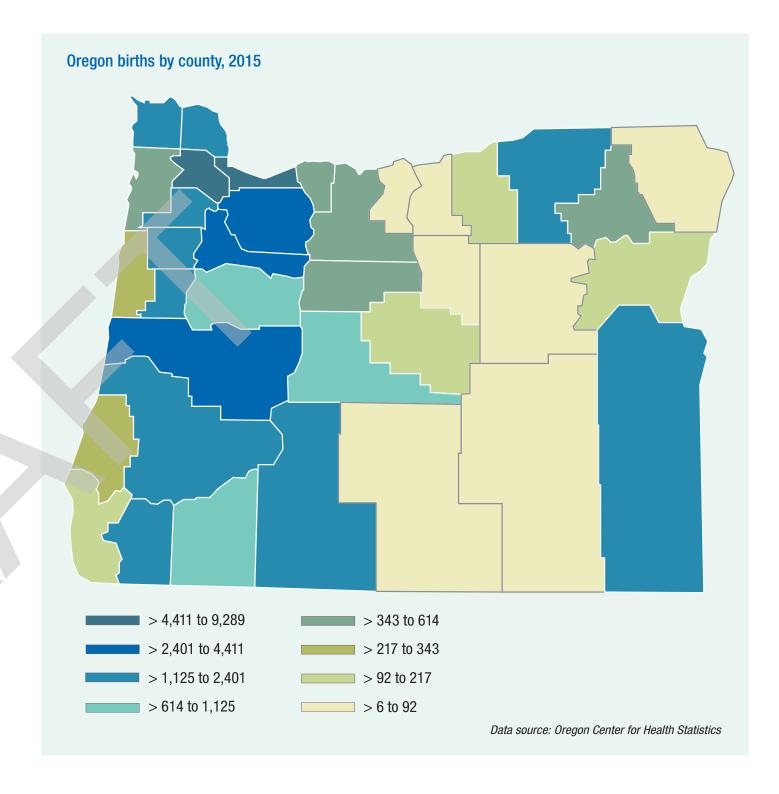


Note: Race category percentages do not add to 100% due to the exclusion of "Other" and "Unknown" race.

Demographics | Maternal and Child Health | | Maternal an



Note: Race category percentages do not add to 100% due to the exclusion of "Other" and "Unknown" race.



Demographics | Maternal and Child Health | | Maternal and

Preconception and women's health

Key indicator: Overweight/obesity among women 18-44 years old

Indicator details:

» Definition: Percent of women 18-44 years old who have a body mass

index of 25 to 29.9 (overweight) or 30 or more (obese)

Numerator: Number of women 18–44 years old who have a body

mass index of 25 to 29.9 (overweight) or 30 or more (obese)

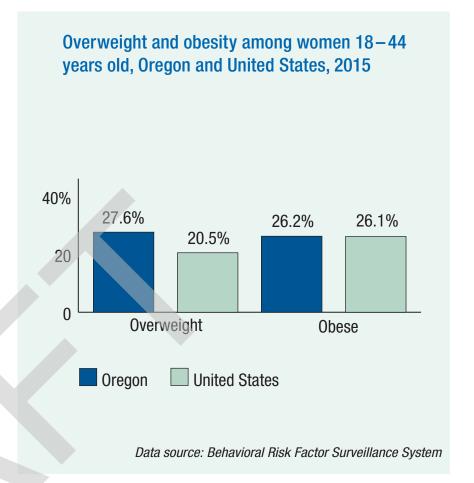
» Denominator: Number of women 18-44 years old

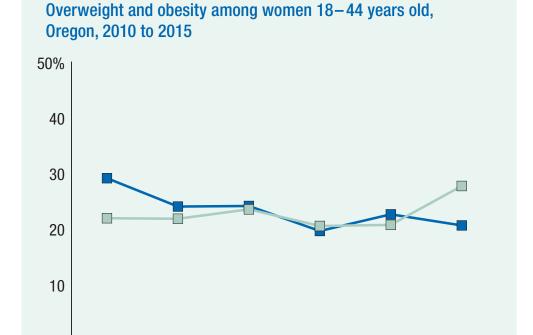
Significance of indicator: Overweight and obesity is becoming more common among women of reproductive age. Almost half of women 18 to 44 years old in the United States have a body mass index in the overweight or obese category.

People who are obese, compared to those with a normal or healthy weight, are at increased risk for many serious diseases and health conditions. These include hypertension (high blood pressure), diabetes, sleep apnea (pauses or reduced breathing during sleep), high LDL cholesterol, coronary heart disease, stroke and mental illness. People who are overweight or obese are also at higher risk for polycystic ovary syndrome. PCOS can cause reduced fertility or failure to achieve pregnancy. During pregnancy, overweight and obese women are at increased risk of gestational diabetes, pregnancy-related high blood pressure, miscarriage, preterm birth and congenital birth defects such as neural tube and heart defects, and gastrointestinal malformations. They are also at a higher risk of complications during labor including heavy blood loss after giving birth. (1,2)

Status in Oregon: The rates of overweight among women aged 18 to 44 in Oregon in 2015 was higher than the national rate. The rate of obesity among women aged 18 to 44 in Oregon in 2015 was slightly higher than the national rate. The rate of obesity among women of reproductive age has followed a slight downward trend in Oregon over the past five years (29.0% in 2010 to 22.5% in 2014) while the rate of overweight women of reproductive age has remained fairly flat.

Disparities in Oregon: In 2015, among Oregon women aged 18 to 44, the highest rates of overweight and obesity were among non-Hispanic Blacks, non-Hispanic American Indian/Alaska Natives and Hispanics. Overweight and obesity were lower for non-Hispanic Whites and non-Hispanic Asians.





2012

Obese

2010

2011

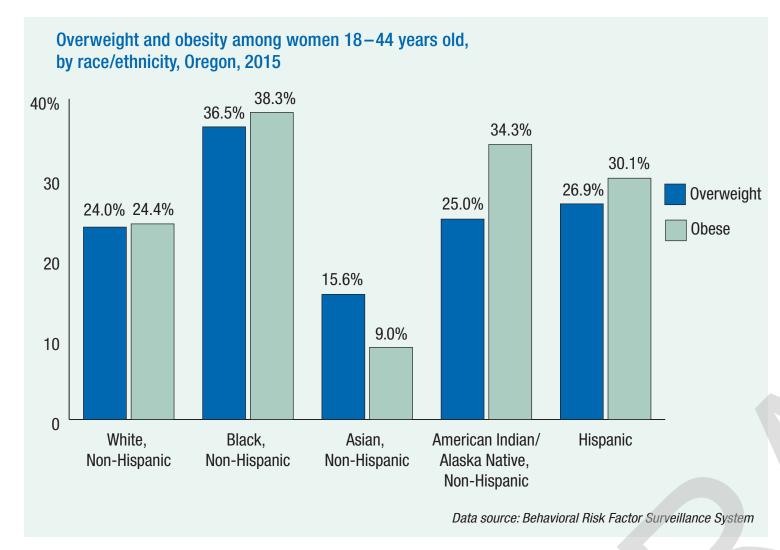
Data source: Behavioral Risk Factor Surveillance System

Overweight

2014

2015

2013



Note: Native Hawaiian/Pacific Islander, Non-Hispanic and two or more races, Non-Hispanic are not shown due to small sample size.

Key indicator: Adverse childhood events among women 18–44 years old

Indicator details:

» Definition: Percent of women 18 – 44 years old who have

experienced four or more adverse childhood experiences

» Numerator: Number of women 18 – 44 years old who have experienced

four or more adverse childhood experiences

» **Denominator:** Number of women 18 – 44 years old

Significance of indicator: The impact of adversity in childhood is profound. Early experiences influence the developing brain. Significant adversity during early sensitive periods of development can create toxic stress and interrupt normal brain development. Traumatic childhood experiences are a root cause of many social, emotional, physical and cognitive impairments that lead to increased incidence of developmental delays and other problems in childhood. (3) Adverse childhood events can also lead to adult health risk behaviors (e.g., smoking, alcoholism), mental illness (e.g., depression and suicide), diseases (e.g., heart disease, cancer, diabetes), disability and premature mortality. (4)

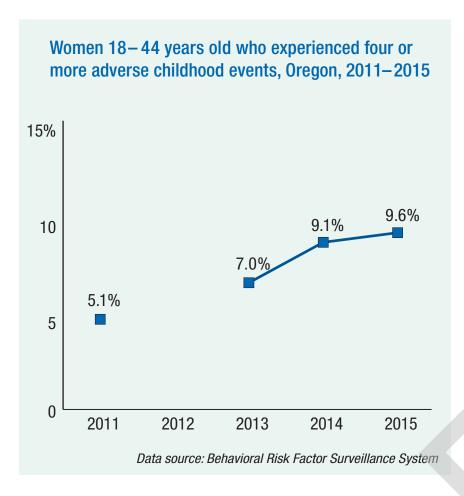
The adverse childhood events (ACEs) contained in this indicator include emotional, physical or sexual abuse; intimate partner violence; household substance abuse; household mental illness; parental separation or divorce; and incarceration of a household member. Women who have experienced three or more ACEs have more than 2.5 times the risk of smoking, alcohol use and illicit substance use during pregnancy. (5) Women with high ACEs also experience more obstetrical complications such as backaches, headaches and leg cramps, all of which increase the risk of hospitalization and preterm births. (6) ACEs can also affect adult caretakers' functioning and core capabilities needed to succeed in life. These include providing the safe and nurturing relationships and environments that are critical to healthy pregnancies and to children's health and development. (7)

Understanding adult women's experience of adversity during their childhood is critical to addressing their physical, mental and behavioral health needs. Understanding these adverse childhood events and their impact on adult outcomes facilitates public health policies and programming that build parenting skills and capabilities, in order to prevent ACEs in future generations. In this indicator, women who have experienced four or more ACEs are considered to have a "high" ACE score.

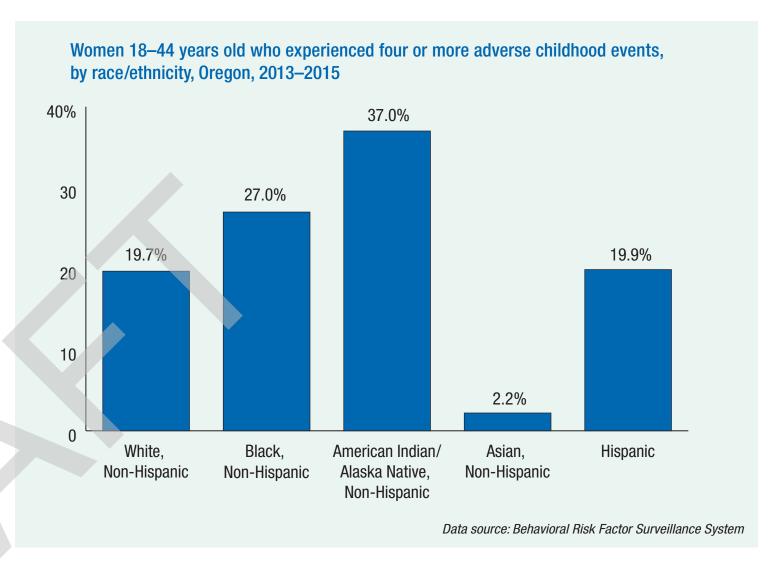
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Status in Oregon: The rate of women 18 to 44 years old with four or more ACES increased steadily between 2011 and 2015 (5.1% to 9.6%).

Disparities in Oregon: In 2015, the percentage of Oregon women aged 18 to 44 who experienced four or more ACEs was higher for non-Hispanic American Indian/Alaska Natives (37.0%) and non-Hispanic Blacks (27.0%) compared to non-Hispanic Whites (19.7%), and lower for non-Hispanic Asians (2.2%). The percentage of Hispanic women (19.9%) was almost the same as the percent of non-Hispanic White women who experienced four or more ACEs.



Note: ACEs data not available in 2012



Note: Native Hawaiian/Pacific Islander, Non-Hispanic and two or more races, Non-Hispanic are not shown due to small sample size.

Key indicator: Well-woman visit

Indicator details:

» Definition: Percent of women 18–44 years old with a visit to a doctor for

a routine checkup in the past 12 months

Number of women 18–44 years old with a visit to a doctor » Numerator:

for a routine checkup in the past 12 months

» Denominator: Number of women 18–44 years old

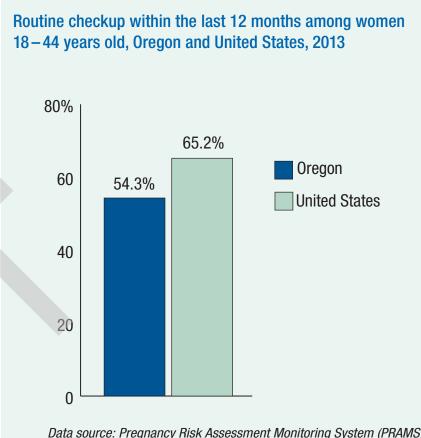
Significance of indicator: Access to high-quality well-woman care is a key driver in optimizing women's health before, between and beyond potential pregnancies. (8) By taking action on health issues throughout the lifespan and prevent future problems for a mother and baby. (9)

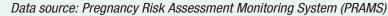
Access to high-quality well-woman care:

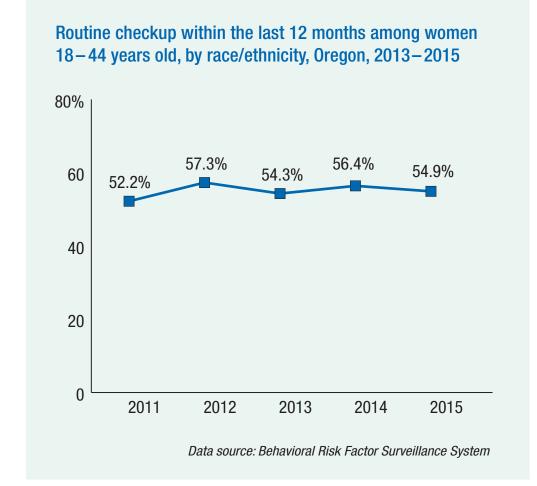
- » Provides a critical opportunity to receive recommended clinical preventive services, screening and management of chronic conditions such as diabetes, counseling to achieve a healthy weight and smoking cessation, and immunizations
- » Increases the likelihood that any future pregnancies are by choice rather than chance
- » Decreases the likelihood of complications for future pregnancies.

Status in Oregon: Compared to the United States as a whole, women aged 18 to 44 had a lower rate for routine checkups in the past year (54.3% compared to 65.2%) in 2013. Between 2011 and 2015, the rate of women in that age group getting routine checkups in Oregon followed a slight upward trend (from 52.2% to 54.9%).

Disparities in Oregon: In Oregon in 2015, the percent of women aged 18 to 44 who had a routine checkup in the last 12 months was relatively even among race/ ethnicity groups.







Key indicator: Pre-pregnancy smoking

Indicator details:

» Definition: Percentage of women with a live birth who smoked in

the three months prior to their pregnancy

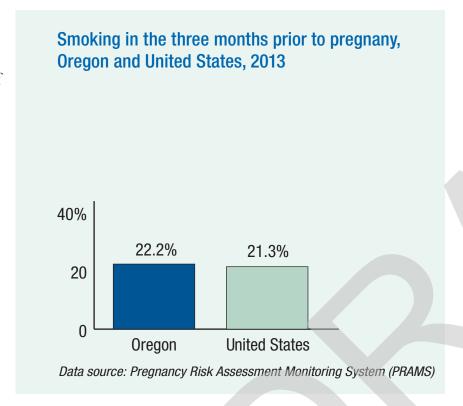
» Numerator: Number of women with a live birth who smoked in the

three months prior to their pregnancy

» Denominator: Number of women with a live birth

Significance of indicator:

Smoking cigarettes during pregnancy is one of the most important avoidable causes of adverse pregnancy outcomes and is associated with high rates of long- and short-term morbidity for both the child and mother. Smoking during pregnancy elevates the risk of complications such as premature birth, low birth weight, sudden infant death syndrome (SIDS), (10) congenital heart defects, gastrointestinal defects and a decrease in pulmonary function later in the child's life. (11)



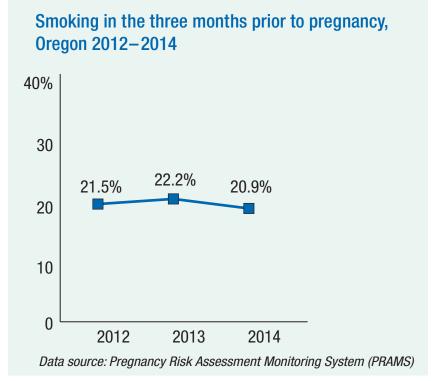
In the United States, approximately one in 10 women who gave birth in 2014 smoked during the three months before pregnancy. Approximately three-quarters of these women continued to smoke after learning they were pregnant.

This indicator focuses on smoking prior to pregnancy. This can be used as a proxy for smoking during the first trimester because women often are not aware of the pregnancy early in the first trimester. Therefore, examining the percentage of women who smoked prior to pregnancy and subsequently had a live birth gives us a good estimate of the percentage of women who smoked in the first trimester.

Low socio-economic status, lower education and belonging to an ethnic minority are significantly associated with increased risk for smoking during pregnancy. Smoking during pregnancy was most prevalent for women aged 20–24.

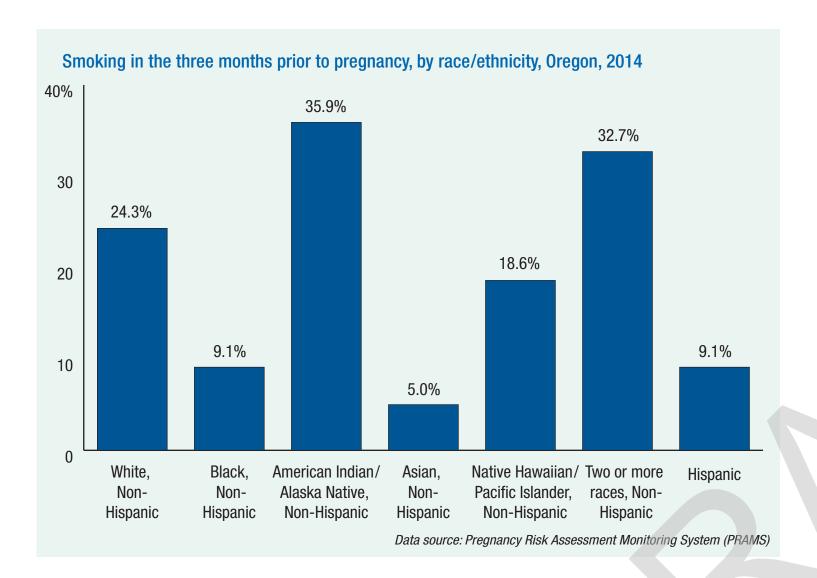
By race, the highest rate was for non-Hispanic American Indian or Alaska Native women. (12)

Status in Oregon: In 2013, the rate of smoking among women in the three months



prior to pregnancy was slightly higher in Oregon than the national rate (22.2% vs. 21.3%, respectively). The percentage of women in Oregon who smoke in the three months prior to pregnancy remained relatively even from 2012 to 2014 (21.5 % to 20.9%).

Disparities in Oregon: Compared to non-Hispanic Whites (24.3%), more non-Hispanic American Indian/Alaska Native (35.9%) and non-Hispanic women of two or more races (32.7%) smoked during the three months before their pregnancies in Oregon in 2014.



Prenatal and pospartum health

Key indicator: Gestational diabetes

Indicator details:

» **Definition:** Percentage of women with a live birth who were told by a

doctor, nurse or other health care worker that they had

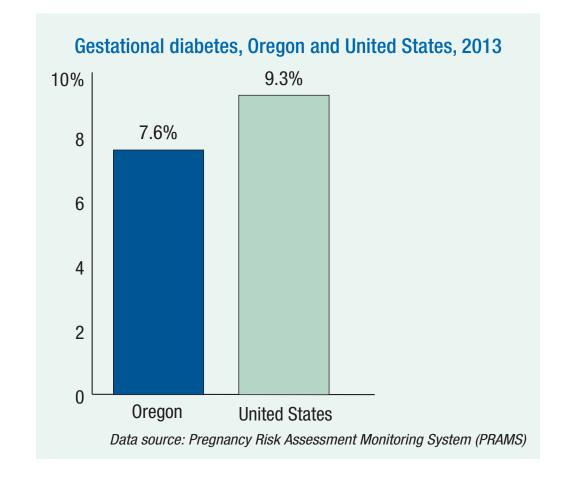
gestational diabetes during their pregnancy

» **Numerator:** Number of women with a live birth who were told by a

doctor, nurse or other health care worker that they had

gestational diabetes during their pregnancy

» **Denominator:** Number of women with a live birth



Significance of indicator: Gestational diabetes is a type of diabetes that appears in pregnant women who did not have diabetes beforehand. It is diagnosed in 4-7% of all pregnancies in the United States. The prevalence is likely to continue increasing given the epidemic of obesity in the United States. (13)

This form of diabetes increases the risk of problems at the time of delivery and can give rise to complications such as macrosomia, C-section delivery, high blood pressure and hypoglycemia. (14,15)

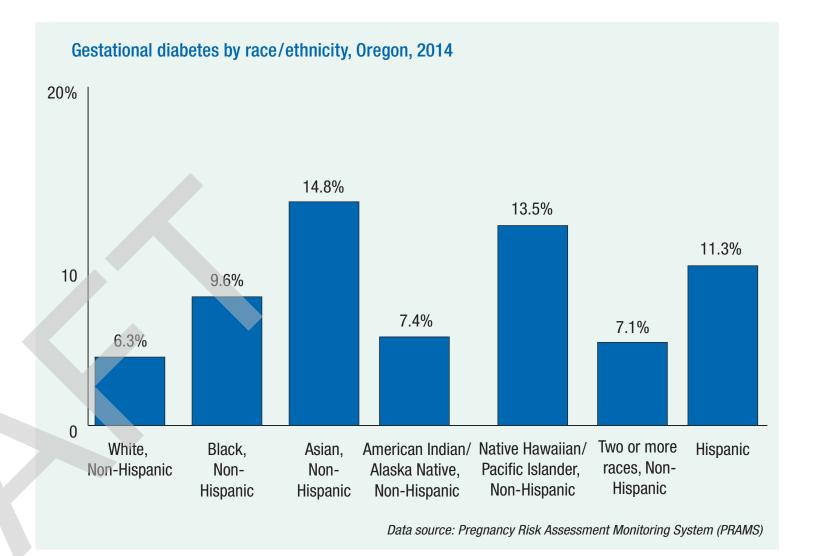
Gestational diabetes is caused by changes in the mother's response to insulin so as to increase blood sugar levels to support the

Gestational diabetes, Oregon and United States, 2013 10% 7.6% 7.3% 8 6.5% 6.3% 6 5.0% 2 2009 2010 2011 2012 2013 2014 2008 Data source: Pregnancy Risk Assessment Monitoring System (PRAMS)

developing baby. In many cases, the mother is not producing enough insulin to keep her own blood glucose in normal range and, therefore, the mother develops gestational diabetes.

Babies born to mothers with gestational diabetes may have breathing problems and hypoglycemia and can develop jaundice. (16)

Studies show that Asian populations are at the greatest risk for developing gestational diabetes, whereas non-Hispanic White and Black women have the lowest prevalence, reinforcing the fact that gestational diabetes is a result of genetics and environmental factors. (17)



Status in Oregon: In 2013, Oregon had a lower rate of gestational diabetes than the United States as a whole (7.6% compared to 9.3%). However, between 2008 and 2014, this rate has increased steadily, from 5.0% in 2008 to 7.8% in 2014.

Disparities in Oregon: Non-Hispanic Blacks, non-Hispanic Asians, non-Hispanic Pacific Islanders/Native Hawaiians and Hispanic women had higher rates of gestational diabetes in Oregon in 2014 than non-Hispanic Whites (6.3%).

Key indicator: Perinatal depression (depression during and after pregnancy)

Indicator details:

» **Definition:** A) Percentage of women with a live birth who experienced

depressive symptoms during pregnancy

B) Percentage of women with a live birth who

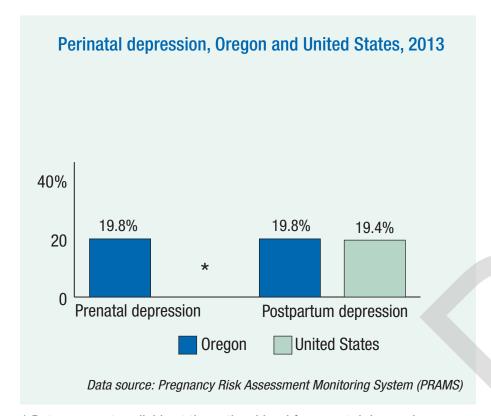
experienced depressive symptoms after pregnancy

» **Numerator:** A) Number of women with a live birth who experienced depressive symptoms during pregnancy

B) Number of women with a live birth who experienced

depressive symptoms after pregnancy

» Denominator: A) & B) Number of women with a live birth

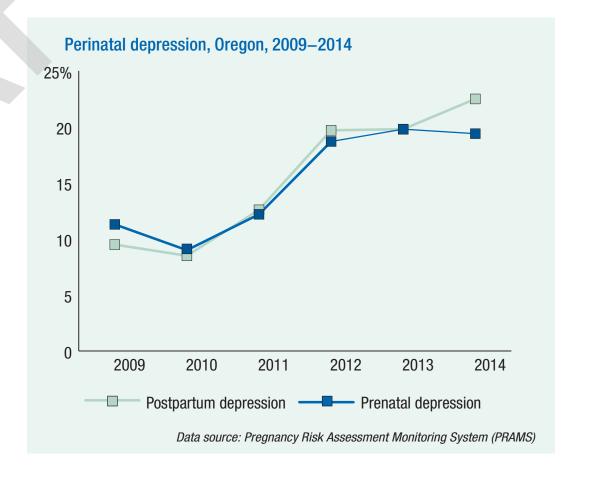


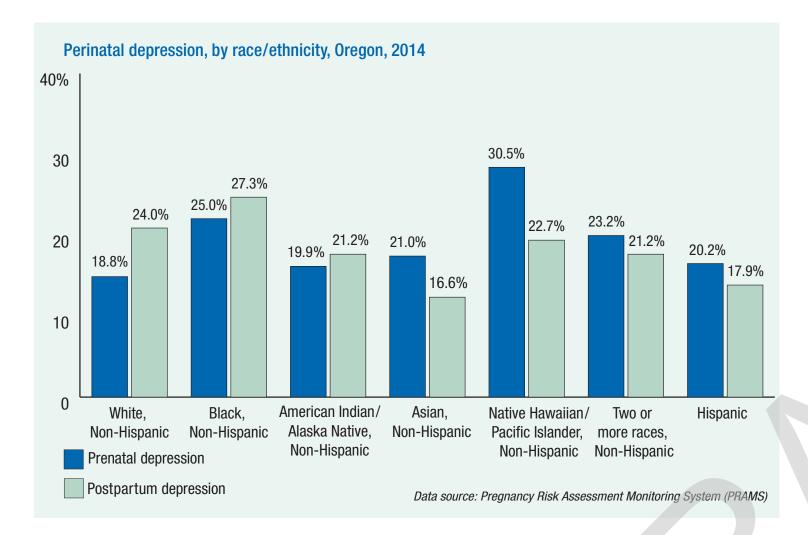
^{*} Data were not available at the national level for prenatal depression.

Significance of indicator: Perinatal depression is depression that occurs during pregnancy or the first year after pregnancy. It is one of the most common complications of childbirth. When untreated, perinatal depression can greatly affect women, infants and families but often goes unrecognized because changes in sleep, appetite and libido may be attributed to normal pregnancy symptoms. (18)

Untreated perinatal depression can affect a mother's ability to care for herself, relate to others, bond with her infant and parent her older children. Children of mothers with untreated depression are at risk for serious health, developmental, emotional, behavioral and learning problems that can last for many years.

Approximately 13% of women in the United States are depressed while pregnant. One study found that up to 51% of women who were socio-economically disadvantaged reported depressive symptoms during pregnancy. Furthermore, mothers who are young, single or have experienced traumatic or stressful situations such as intimate partner violence or homelessness are more likely to experience depression. (19)





Status in Oregon: The rate of postpartum depression (depression after pregnancy) in Oregon 2011 was slightly higher than the national rate (19.8% compared to 19.4%). Both prenatal (during pregnancy) and postpartum (after pregnancy) depression have been on an upward trend in Oregon between 2009 and 2014.

Disparities in Oregon: Compared to non-Hispanic Whites, all other subgroups had higher rates of prenatal depression in Oregon in 2014. Compared to non-Hispanic Whites, non-Hispanic Blacks and non-Hispanic Pacific Islanders/Native Hawaiians had higher rates of postpartum depression in Oregon in 2014. Non-Hispanic American Indian/Alaska Natives. non-Hispanic Asians, non-Hispanic of two or more races and Hispanics all reported lower rates of postpartum depression.

Key indicator: Intimate partner violence among pregnant women

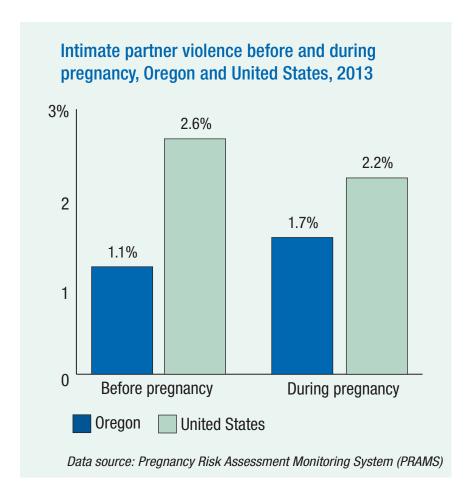
Indicator details:

- » Definition:
- A) Percentage of women with a live birth who were physically abused by their partner during the 12 months prior to pregnancy
- B) Percentage of women with a live birth who were physically abused by their partner during their pregnancy
- **Numerator:** A) Number of women with a live birth who were physically abused by their partner during the 12 months prior to pregnancy
 - B) Percentage of women with a live birth who were physically abused by their partner during their pregnancy
- **Denominator:** A) & B) Number of women with a live birth

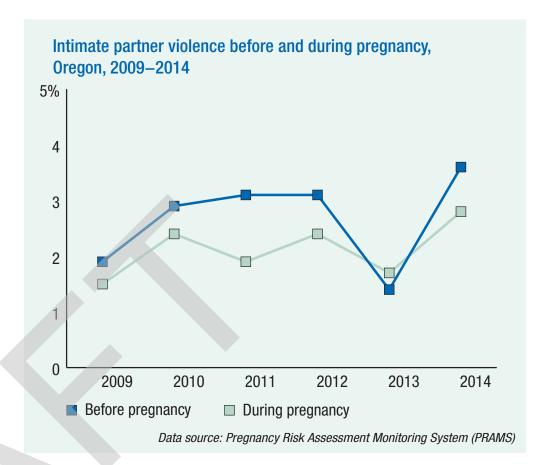
Significance of indicator: Intimate partner violence is a significant medical, public health and societal concern that affects anywhere from 1.5 million to 4 million women in the United States every year. The U.S. Department of Justice estimates that, over a lifetime, 52% women experience intimate partner violence. (20) Women with disabilities are even more at risk; they have a 40% greater risk of experiencing IPV than those who do not have a disability. (21)

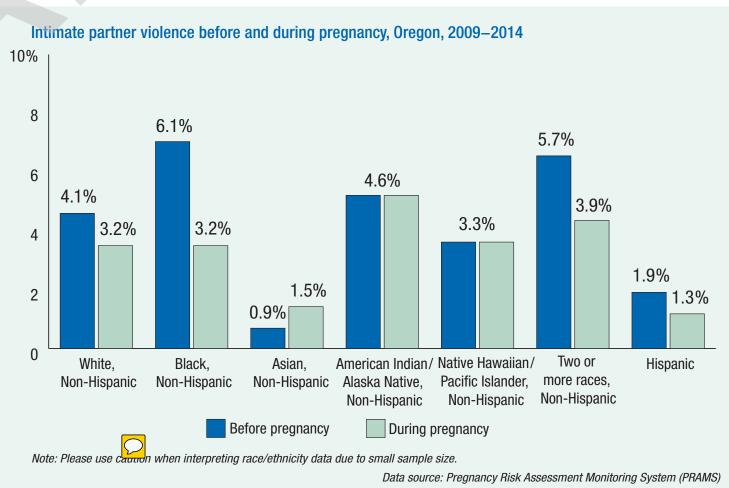
Intimate partner violence harms the pregnant mother's body and her psychological health. It also inflicts stress on the developing fetus. Pregnant women who experience abuse have higher rates of intrauterine growth retardation and preterm labor that can subsequently lead to lower birth weight and other neonatal risks. (22) Furthermore, intimate partner violence is associated with an increase in alcohol and substance abuse during pregnancy. Intimate partner violence among women can lead to lifelong consequences such as emotional trauma, unplanned pregnancy, gynecologic disorders and other chronic health problems. (23)

Status in Oregon: Rates of intimate partner violence both before and during pregnancy were lower in Oregon than in the United States as a whole in 2013. In Oregon, intimate partner violence before pregnancy increased between 2009 and 2014, from 1.9% to 3.6%. Intimate partner violence during pregnancy also increased from 2009 to 2014, from 1.5% to 2.8%. It should be mentioned that intimate partner violence is very undereported nationwide. An increase in rates may be reflective of work that is being done to make reporting more acceptable.



Disparities in Oregon: Non-Hispanic Blacks, non-Hispanic American Indians/ Alaska Natives and Hispanic women reported higher rates of intimate partner violence before pregnancy than non-Hispanic Whites in Oregon (2014). Compared to non-Hispanic Whites, non-Hispanic American Indians/Alaska Natives, non-Hispanic Pacific Islanders/Native Hawaiians and non-Hispanic women of two or more races had higher rates of intimate partner violence during pregnancy.





Key indicator: Prenatal oral health

Indicator details:

» **Definition:** Percentage of women with a live birth who had a dental visit

during their pregnancy

» Numerator: Number of women with a live birth who had a dental visit

during their pregnancy

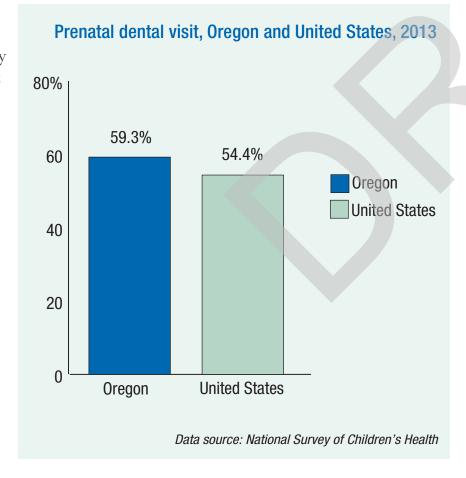
» Denominator: Number of women with a live birth

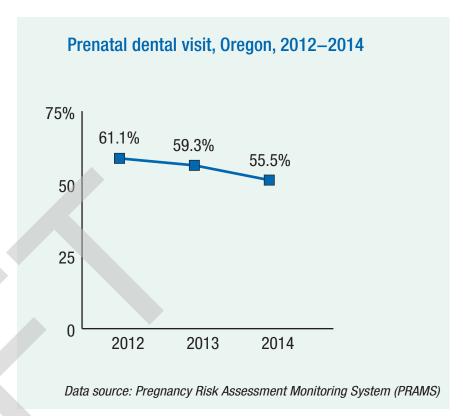
Significance of indicator: Dental care is an important part of a healthy pregnancy. Pregnancy increases the risk for tooth decay (cavities) and periodontitis (gum disease). Oral health diseases may increase risk of poor pregnancy outcomes, such as low birth weight. (24) Dental care is recommended during pregnancy.

Children born to women with tooth decay are much more likely to develop cavities themselves. (25) Mothers can pass cavity-causing germs to their baby, such as by cleaning a pacifier with their own mouth or sharing a spoon.

The greatest burden of oral disease lies in disadvantaged and poor populations, as demonstrated by the proportion of women with access to dental care in those communities.

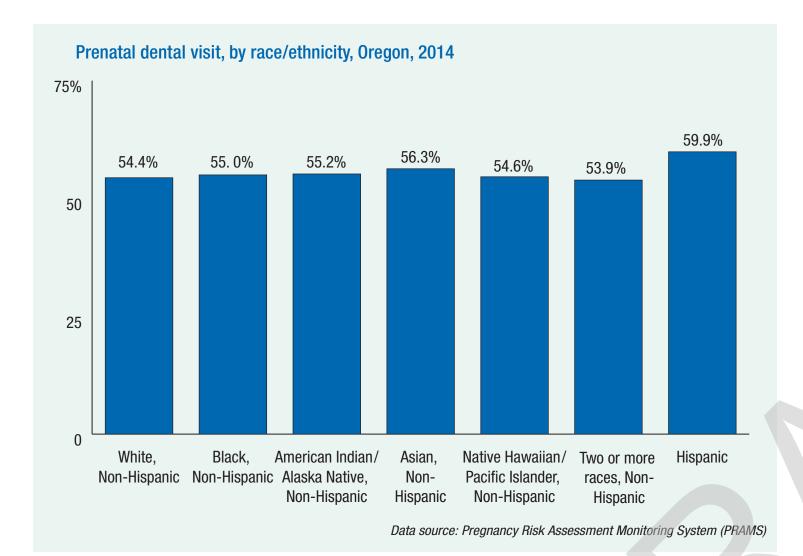
In 2007–2009, 35% of U.S. women reported they did not have a dental visit within the past year and 56% did not visit a dentist during pregnancy. (26) Barriers to dental care include lack of insurance coverage, education, transportation and dental providers that see pregnant women.





Status in Oregon: The percentage of women who had a dental visit during pregnancy was higher in Oregon than the United States in 2013 (59.3% vs. 54.4%). However, the percentage of women in Oregon with a dental visit during pregnancy has been decreasing from 2012 to 2014 (61.1% to 55.5%).

Prenatal and pospartum health | Maternal and Child Health | Prenatal and pospartum health | Maternal and Child Health | Prenatal and pospartum health | Maternal and Child Health | Prenatal and pospartum health | Maternal and Child Health | Prenatal and pospartum health | Maternal and Child Health | Prenatal and pospartum health | Maternal and Child Health | Prenatal and pospartum health | Maternal and Child Health | Prenatal and pospartum health | Maternal and Child Health | Prenatal and pospartum health | Maternal and Child Health | Prenatal and pospartum health | Maternal and Child Health | Prenatal and Description | Maternal and Child Health | Prenatal and Description | Maternal and Child Health | Prenatal and Description | Maternal and Child Health | Prenatal and Description | Maternal and Child Health | Prenatal and Description | Maternal and Child Health | Prenatal and Description | Maternal and Child Health | Prenatal and Description | Maternal and Description | Maternal



Infant health

Disparities in Oregon: In Oregon in 2014, the percent of women who had a dental visit during pregnancy was relatively even among race/ethnicity groups, other than among Hispanic women, who had the highest percentage of women with a dental visit during pregnancy (59.9%).

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 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

Preterm birth, Oregon and United States, 2015 10% 7.6% 5 Oregon United States

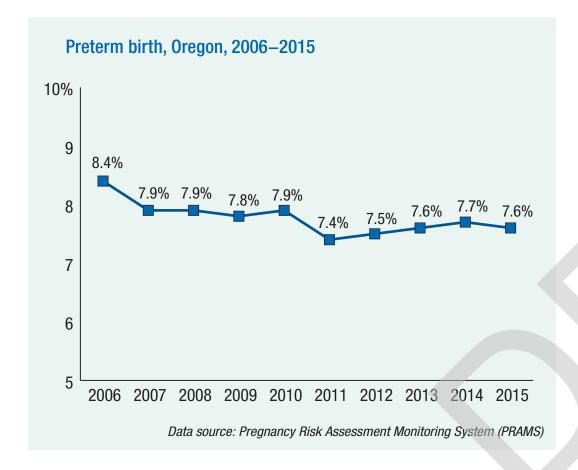
Data source: National Vital Statistics and Oregon Center for Health Statistics

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, by race/ethnicity, Oregon, 2014 15% 10.9% 9.7% 10 7.6% 7.3% 7.2% 6.9% White, Native Hawaiian/ Black, American Indian/ Asian, Hispanic Non-Hispanic Alaska Native, Non-Hispanic Pacific Islander, Non-Hispanic Non-Hispanic Non-Hispanic

Data source: Oregon Center for Health Statistics

o Infant health | Maternal and Child Health | Maternal and Child Health | Infant health | A1

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

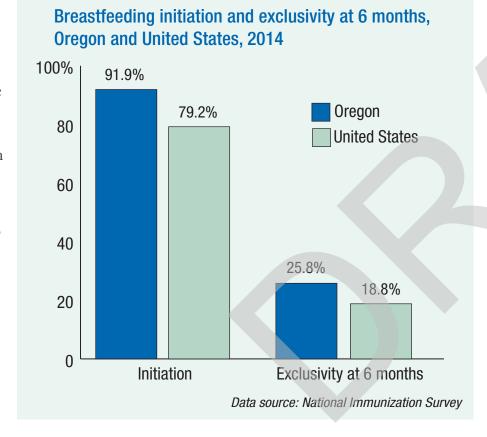
B) Number of infants exclusively breastfed at 6 months

» **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 and 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)

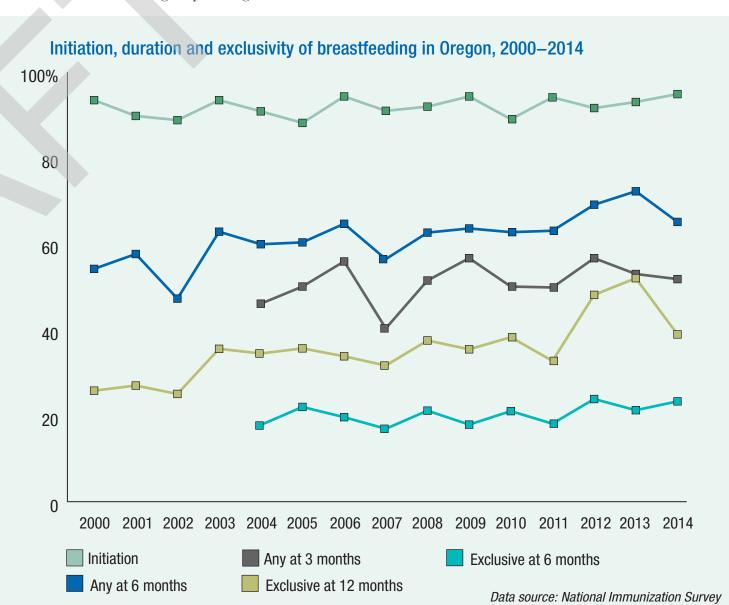
Unfortunately, not all populations breastfeed to the most optimal extent. Mothers with the lowest rates of breastfeeding tend to be young, low-income, African American, unmarried, less educated and overweight or obese before pregnancy. (33)



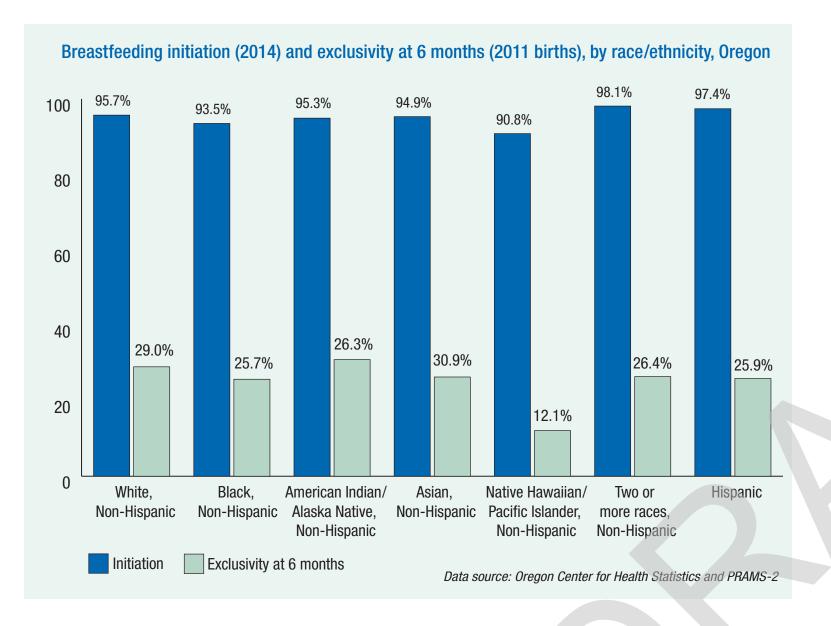
Status in Oregon: Oregon's percentage of infants ever breastfed in 2014 was higher than the national rate (91.9% compared to 79.2%). Oregon's rate of infants who are exclusively breastfed at 6 months also exceeds the national rate (25.8% compared to 18.8%). However breastfeeding duration and exclusivity 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.



Infant health | Maternal and Child Health | Infant health | Maternal and Child Health | Infant health | Agents | Maternal and Child Health | Infant health | Infant health | Maternal and Child Health | Infant health



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

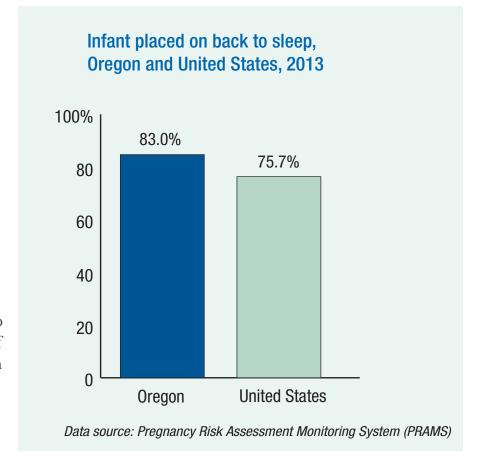
infants on their backs to sleep

» **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 1 month 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)

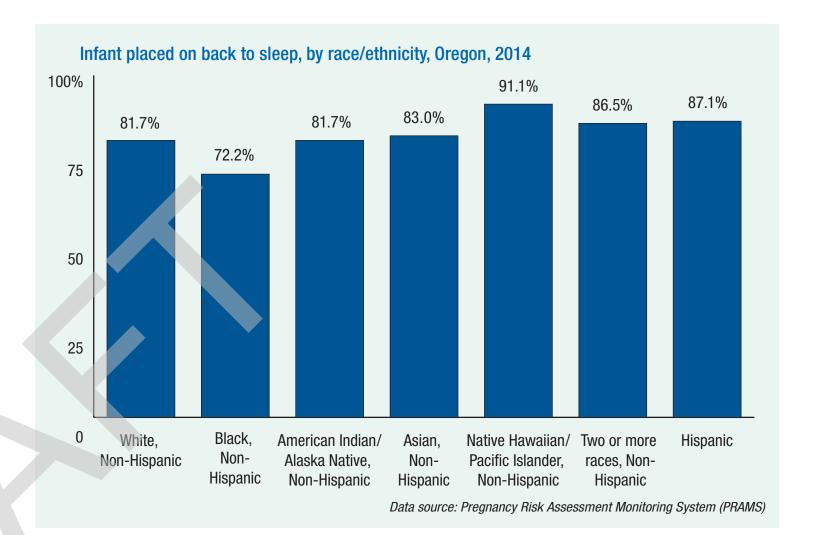


Between 2011 and 2014, SUID rates for American Indian/Alaska Native and non-Hispanic Black infants were more than twice those of non-Hispanic White infants. (38)

Status in Oregon: There 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, between 2009 and 2014, there was an increase in the rate at which infants are put to sleep on their backs in Oregon, from 78.7% to 82.9%.

Disparities in Oregon: Compared to non-Hispanic Whites, non-Hispanic Black infants were put to sleep on their backs at lower rates in Oregon in 2014. All other race/ethnicity groups had a higher rate of infants put to sleep on their backs, as compared to non-Hispanic White infants.





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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

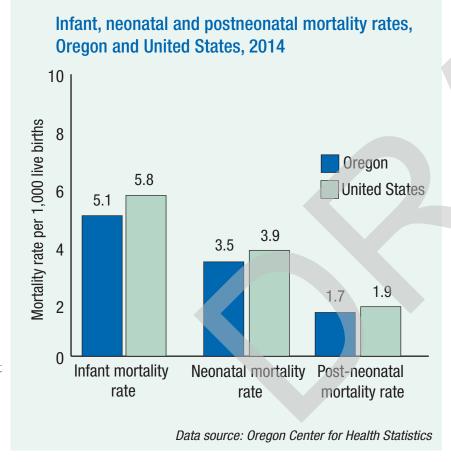
B) Number of deaths of infants aged 28 days – 11 months

C) Number of deaths of infant under the age of 1 year

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

Significance of indicator:

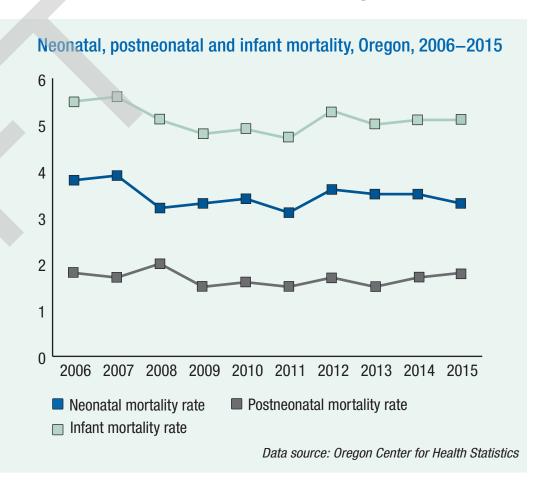
The death of infants — from the time of birth through 1 year of age — is widely used as a measure of community health status and of the availability and quality of health care. However, it is more than that. Every infant death resonates throughout their family and community. The majority of infant deaths 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



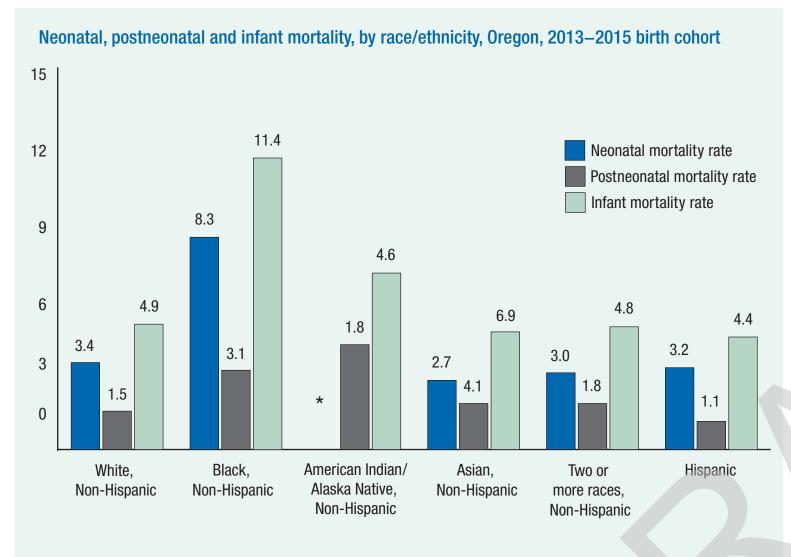
pregnancy, sudden unexpected infant death syndrome (SUIDS), and unintentional injuries. Health of mothers before and during pregnancy, their ability to access good quality and culturally appropriate care during pregnancy and birth, their socioeconomic status, and many other factors play a role in the 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.



Maternal and Child Health Infant health Maternal and Child Health Infant health Ag



Data source: Oregon Center for Health Statistics

Note: Native Hawaiian/Pacific Islander are not shown due to small sample size.

Child health

Key indicator: Childhood overweight/obesity

Indicator details:

Definition: Percentage of children aged 10-17 years who are

overweight or obese (body mass index at or greater

than the 85th percentile)

Number of children aged 10-17 years who are » Numerator:

overweight or obese (body mass index at or greater

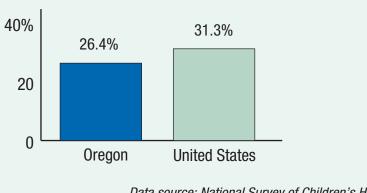
than the 85th percentile)

» Denominator: Number of children aged 10–17 years

Significance of indicator:

Childhood obesity has more than doubled in the past 30 years. The percentage of children aged 6 to 11 years in the United States who were obese increased from 7% in 1980 to nearly 18% in 2012. In 2012, more than one-third of children were overweight or obese. (39) Overweight and obese children are likely to stay obese into adulthood and are more likely to experience psychological and social problems as well as develop chronic diseases such as diabetes, cardiovascular diseases, musculoskeletal

Overweight/obesity among children age 10-17 years, Oregon and United States, 2011–2012



Data source: National Survey of Children's Health

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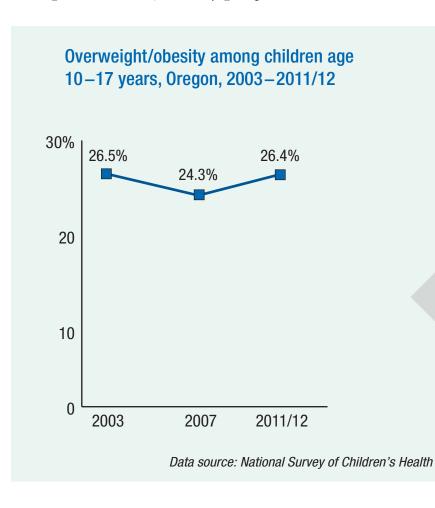
^{*} indicates rate not shown due to five or fewer deaths.

disorders and certain types of cancer (endometrial, breast and colon) at a younger age. Obesity disproportionately affects children from low-income families, particularly in urban settings where "food deserts" (areas that lack ready access to healthy food) are more common. (40) Many low-income families face a double burden of disease caused by inadequate prenatal, infant and child nutrition followed by exposure to high-fat, energy-dense, micronutrient-poor foods and a lack of physical activity as the child grows older. (41)

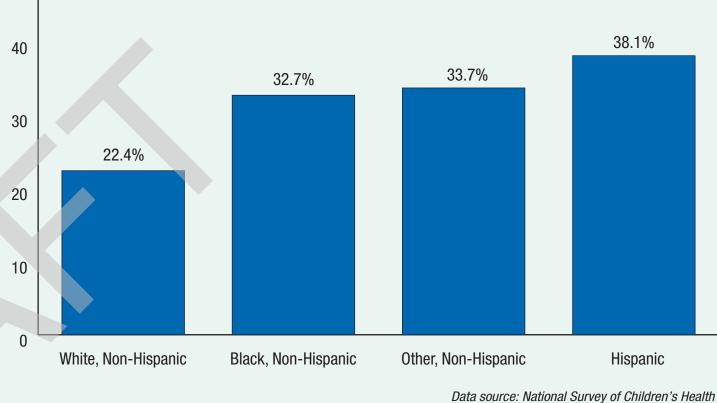
Status in Oregon: The rate of overweight and obesity among children 10 to 17 years old in Oregon was lower than the national rate in 2011/12. Oregon's rate of overweight and obesity among children 10 to 17 years old remained fairly stable from 2003 to 2011/12.

Disparities in Oregon:

The percentage of odren aged 10 to 17 years old in Oregon who were overweight or obese in 2011/12 was lowest among non-Hispanic Whites, with higher rates among all other race/ethnicity groups.



Overweight/obesity among children aged 10 – 17 years, by race/ethnicity, Oregon, 2011/12 50% 40 33.7%



Note: Other, Non-Hispanic includes Asian, Native American, Alaska Native and Native Hawaiian due to the small sample size of these groups.

Key indicator: Adverse childhood events

Indicator details:

» Definition: Percentage of children aged 0–17 years who have experienced

two or more adverse childhood events

» Numerator: Number of children aged 0–17 years who have experienced two

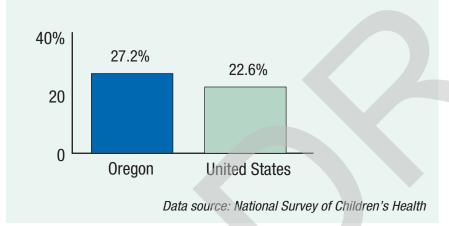
or more adverse childhood events

» Denominator: Number of children aged 0–17 years

Significance of indicator:

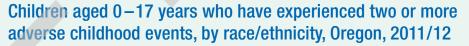
The impact of adversity in childhood is profound. Early experiences influence the developing brain. Significant adversity during early sensitive periods of development can create toxic stress and interrupt normal brain development, leading to lifelong problems. Traumatic childhood experiences are a root cause of many social, emotional, physical and cognitive impairments. These can lead to increased incidence of developmental delays and other problems in childhood. (3) In addition, traumatic childhood experiences can lead to adult health risk behaviors (smoking, alcoholism), violence or revictimization, mental illness (i.e., depression and suicide),

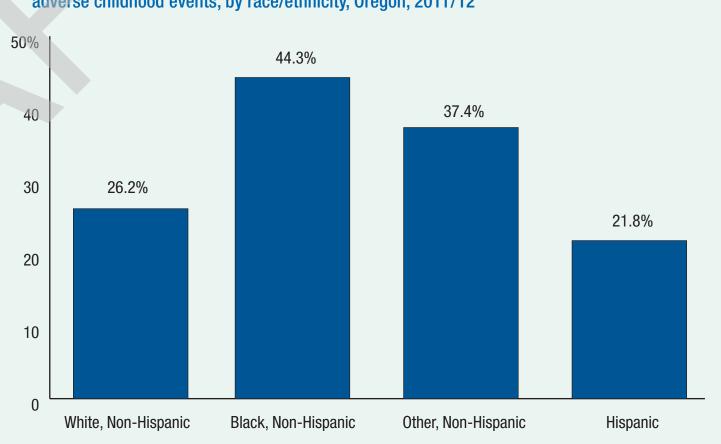
Children age 0-17 years who have experienced two or more adverse childhood events, Oregon and United States, 2011/12



disease (i.e., heart disease, cancer and diabetes), disability and premature mortality. (4)

Adverse childhood experiences as defined in the original ACEs study included abuse, neglect and household dysfunction (household substance abuse or mental illness, parental divorce, incarcerated household member, exposure to domestic violence). More recently, the definition expanded to include a range of traumatic experiences including historical trauma; being a victim of discrimination, community violence or war; being a refugee; school violence and bullying; or experiencing severe social deprivation including poverty, hunger and homelessness. ACEs are common, with 44% of Oregonians having experienced two or more ACEs. The health impacts increase with increasing number of ACEs. (42) Stable, responsive, nurturing relationships can prevent or even reverse the damaging effects of early life stress, with lifelong benefits for learning, behavior and health. (43)





Data source: National Survey of Children's Health

Understanding the prevalence and impact of ACEs can inform efforts to prevent trauma and promote resilience, as well as to modify systems and institutions that serve children and families to interrupt the cycle of trauma. In this indicator, children who have experienced two or more ACEs are considered to have a "high" ACEs score. This is different from the classification used in the preconception/women's health ACES indicator, which categorizes four or more ACEs as "high." This is due to the distribution of the data in each population, with adults reporting higher ACEs scores on average.

Status in Oregon: The percentage of children 0 to 17 years of age who have experienced two or more adverse childhood experiences was higher in Oregon than in the United States as a whole (27.2% in Oregon, 22.6% nationally). The National Survey of Children's Health did not ask about this prior to 2011, so Oregon data over time are not available.

Disparities in Oregon: A higher percentage of non-Hispanic Black children 0 to 17 years of age and other non-Hispanic children (including Asian, Native American, Alaska Native or Native Hawaiian groups) experienced two or more adverse childhood events than non-Hispanic White children in 2011/12.

Key indicator: Childhood oral health

Indicator details:

» Definition: Percentage of children aged 1–17 years who received at least

one preventive dental visit in the past 12 months

» Numerator: Number of children aged 1–17 years who received at least

one preventive dental visit in the past 12 months

» Denominator: Number of children aged 1–17 years

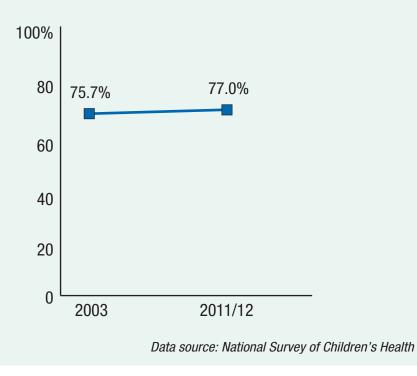
Significance of indicator: Despite being preventable, tooth decay (cavities) is one of the most common chronic childhood conditions in the United States. Tooth decay in children may cause pain and lead to infection. If not treated, it

can negatively affect a child's development and school performance. It can lead to slower speech development, poor nutrition, low self-esteem and increased health care costs.

Nationally in 2011/12, approximately 23% of children aged 2 to 5 had cavities in their primary or baby teeth. Hispanic and Black children were more likely to experience tooth decay and twice as likely to leave them untreated compared to non-Hispanic White children. (44)

Children living in communities with fluoridated tap water have

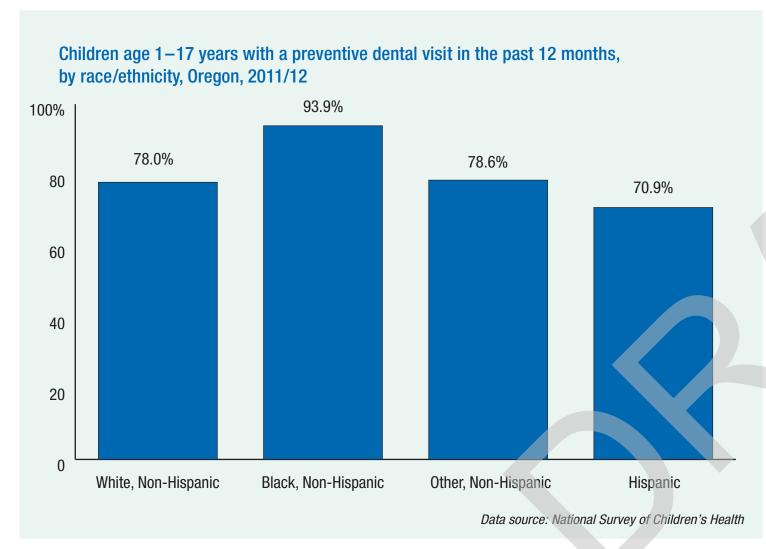




fewer decayed teeth than children who live in areas without fluoride in their tap water. (45) Similarly, children who brush at least once daily with fluoride toothpaste (recommendation is twice daily) or whose teeth have had fluoride varnish coating applied are less prone to tooth decay. (46) A dental visit before age 1 is recommended for every child. (47)

Status in Oregon: In 2011/12, the percentage of children 1 to 17 years of age with a preventive dental visit in the past 12 months in Oregon was close to the national rate. In Oregon, the percentage of children 1 to 17 years of age with a preventive dental visit in the past 12 months increased slightly between 2007 and 2011/12.

Disparities in Oregon: Compared to non-Hispanic Whites, non-Hispanic Blacks had a higher percentage of children 1 to 17 years of age with a preventive dental visit in the past 12 months in 2011/12.



Note: Other, Non-Hispanic includes Asian, Native American, Alaska Native or Native Hawaiian due to small sample size of these groups.

Key indicator: Medical home

Indicator details:

» Definition: Percentage of children aged 0−17 years whose health care

meets medical home criteria

» Numerator: Number of children aged 0–17 years whose health care

meets medical home criteria

Denominator: Number of children aged 0−17 years

Significance of indicator: The medical home concept, developed by the American Academy of Pediatrics (AAP), is a model of delivering family-centered primary care within a continuous, comprehensive community-based system that sustains

optimal health outcomes. (48) Additionally, the primary care provider works with the family and patient to make sure all other non-medical needs are addressed. (49)

Data show that, nationally, the receipt of care in a medical home decreases with age, and Hispanic children are the most likely to not have a medical home. In addition, children living in a household where English is not a primary language are twice as likely not to have a medical home. Statistics show that medical home enrollment also decreases for children who do not live with two biological parents, whose parents attained less than





Data source: National Survey of Children's Health

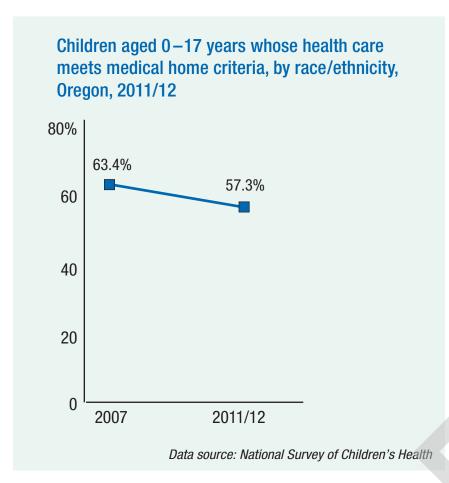
a high school education, or whose household is economically disadvantaged and lacking health insurance. (50)

In this indicator, the criteria for a medical home include a usual place for sick/well care, a personal doctor or nurse, no difficulty in obtaining needed referrals, needed care coordination, and family-centered care received.

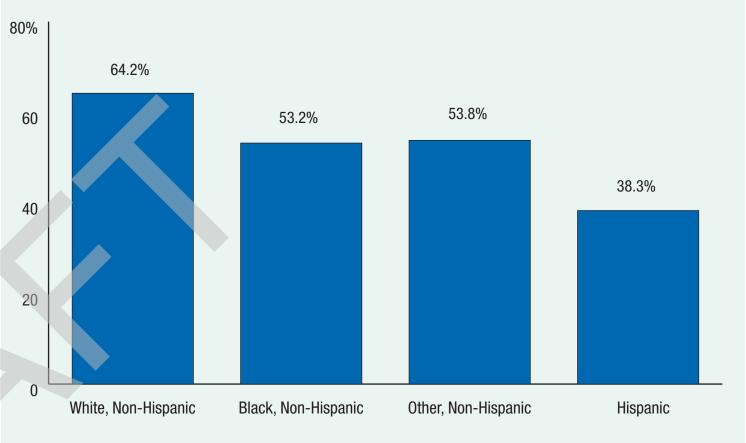
Status in Oregon:

The percentage of children in Oregon whose health care met medical home criteria was slightly higher than the national percentage in 2011–12. However, in Oregon the percentage of children whose health care met medical home criteria declined from 2007 to 2011/12.

Disparities in Oregon: Compared to non-Hispanic White children in Oregon, non-Hispanic Black, other non-Hispanics and Hispanic groups had lower percentages of children whose health care met the criteria for a medical home.



Overweight/obesity among children aged 10-17 years, by race/ethnicity, Oregon, 2011/12



Data source: National Survey of Children's Health

Note: Other, Non-Hispanic includes Asian, Native American, Alaska Native or Native Hawaiian due to small sample size of these groups.

Adolescent health

Key indicator: Adolescent depression

Indicator details:

» Definition: Percent 11th-graders who felt sad or hopeless almost every

day for more than two weeks during the previous 12 months

» Numerator: Number of 11th-graders who felt sad or hopeless almost every

day for more than two weeks during the previous 12 months

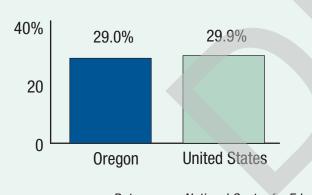
» Denominator: Number of 11th-graders

Significance of indicator: Depression is defined as a period of two weeks or longer during which there is either depressed mood or loss of interest or pleasure. It reflects

a change in function such as problems with sleep, eating, energy, concentration and self-image.

Adolescents' developing brains, coupled with hormonal changes, make them more prone to depression. Between 20% and 30% of adolescents have at least one major depressive episode before they reach adulthood. In 2015, an estimated 3 million adolescents aged 12 to 17 in the United States had at least one major depressive episode. (51) Between one-quarter and one-third of adolescents force.

Depression among Oregon 11th graders and United States 9th–12th graders, 2015



Data source: National Center for Education Statistics

needed mental health care as they either lack access, adequate insurance coverage, stable living conditions, confidentiality or a combination of these factors. (51) As a result, untreated depression may lead to poor school performance, school dropout, strained family relationships, involvement with the child welfare or juvenile justice systems, substance abuse, and engaging in risky sexual behaviors.

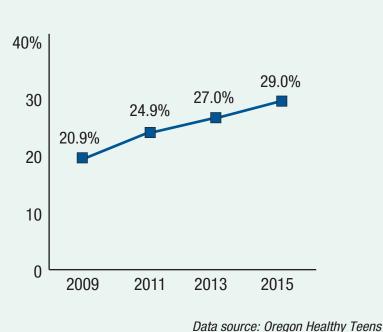
(52) Considering that suicide is the third leading cause of death in adolescents and young adults, adolescent depression is a major public health issue that needs to be systematically addressed.

Status in Oregon: In 2015, the rate of self-reported adolescent depression in the United States was slightly higher than that in Oregon. (Please note that Oregon data only include 11th grade, while U.S. data include ninth to 12th grade; therefore, interpret the difference with caution.) The percentage of 11th-graders in Oregon with self-reported depression increased between 2009 and 2015, from 20.9% to 29.0%.

Disparities in Oregon:

Compared to 11th-grade non-Hispanic Whites, a higher percent of non-Hispanic American Indian/Alaska Native, non-Hispanic Native Hawaiian/Pacific Islander, non-Hispanic of two or more races, and Hispanic 11th-graders report depression. A lower percent of non-Hispanic Black and non-Hispanic Asian 11th-graders report depression, as compared to non-Hispanic Whites.

Depression among Oregon 11th graders, 2009–2015



one-third of adolescents forgo
needed mental health care as they either lack access, adequate insurance coverage,

Adolescent health | Maternal and Child Health | Maternal and Child Health | Adolescent health | Adolescent health | Maternal and Child Health

Key indicator: Adolescent well visit

Indicator details:

» Definition: Percent of 11th-graders with a preventive medical

visit in the past year

» **Numerator:** Number of 11th-graders, with a preventive medical

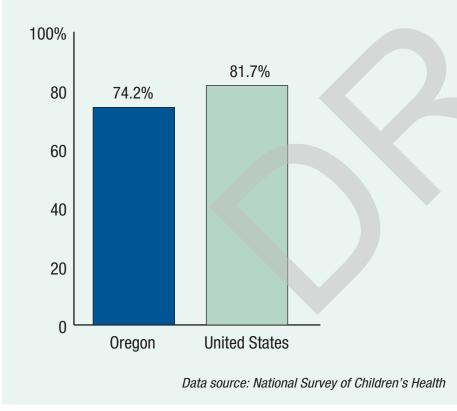
visit in the past year

» **Denominator:** Total number of 11th-graders

Significance of indicator: Adolescence is one of the most dynamic periods of development—a transitioning to increased independence from parents and guardians. While most adolescents enjoy good health, physical, psychological and social changes during this period call for a unique approach to health care. (53) Health behaviors established in adolescence tend to persist into adulthood, and many chronic diseases first emerge in this age group.

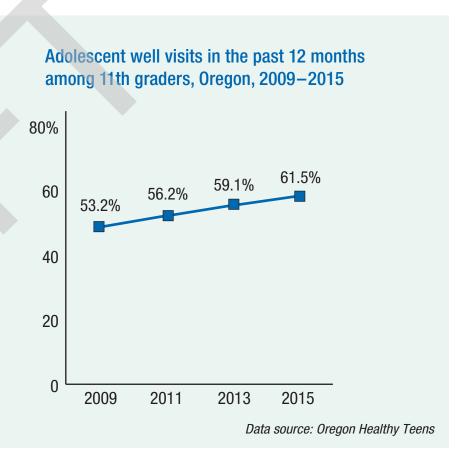
Preventing initiation of high risk and harmful behaviors such as smoking and promotion of healthy behaviors such as physical activity during adolescence can have long-term effects into adulthood. (54) Receiving health care services, including annual adolescent preventive well visits, helps adolescents adopt or maintain healthy habits and behaviors, avoid health damaging behaviors, manage chronic conditions and prevent disease. (55)

Adolescents aged 12–17 years with a preventive medical visit in the last year, Oregon, 2011/12

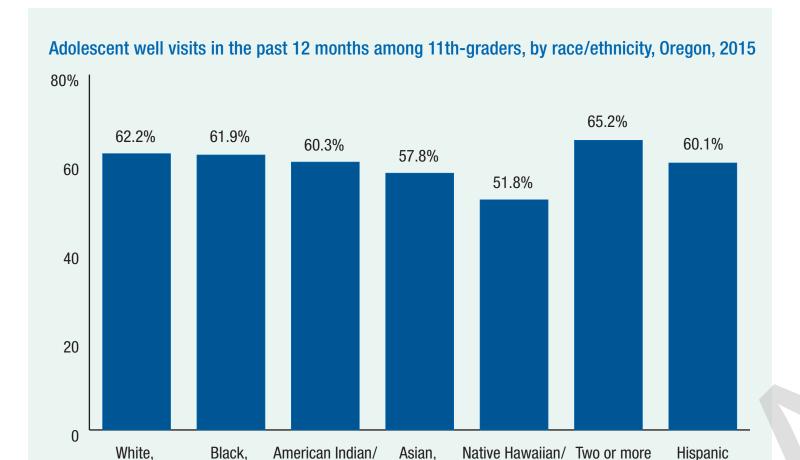


Status in Oregon: The percent of adolescents aged 12 to 17 years receiving a preventive medical visit was lower in Oregon than in the United States as a whole (74.2% v.s. 81.7%). However, the percent of 11th-graders in Oregon with a well visit in the past 12 months steadily increased from 2009 to 2015 (53.2% to 61.5%).

Disparities in Oregon: Compared to non-Hispanic Whites, a higher percent of non-Hispanic 11th-graders with two or more races report a well visit in the last 12 months. All other race/ethnicity groups have a lower percent of 11th-graders reporting a well visit in the last 12 months, as compared to non-Hispanic Whites.



Adolescent health | Maternal and Child Health | Adolescent health | Maternal and Child Health | Adolescent health | 65



Non-

Hispanic

Pacific Islander,

Non-Hispanic

races, Non-

Hispanic

Data source: Oregon Healthy Teens

Non-Hispanic

Non-

Hispanic

Alaska Native.

Non-Hispanic

Key indicator: High school graduation rate

Indicator details:

» Definition: High school graduation rate (four year cohort) as measured by the

Adjusted Cohort Graduation Rate

» Numerator: Number of students who graduate in four years with a regular

high school diploma

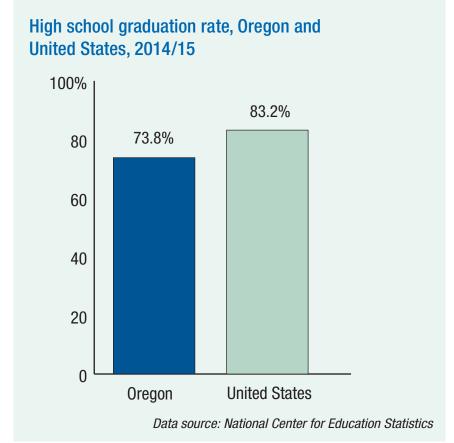
» Denominator: Number of students who form the adjusted cohort for the

graduating class

Significance of indicator: Health and education are inextricably intertwined, and a lack of education is one of the social determinants of poor health. Although education is highly correlated with income and occupation, evidence suggests that education exerts

the strongest influence on health and is associated with lower death rates and levels of risky health behaviors.

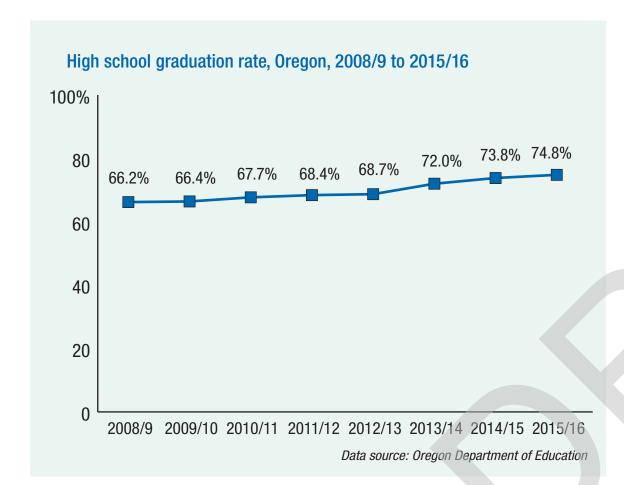
For example, the more schooling people have, the more money they earn, enabling them to purchase better housing in safer neighborhoods, healthier food, better medical care and health insurance. Furthermore, education enables people to access health information, acquire social support, strengthen social support and gain a sense of control over their lives. (56)



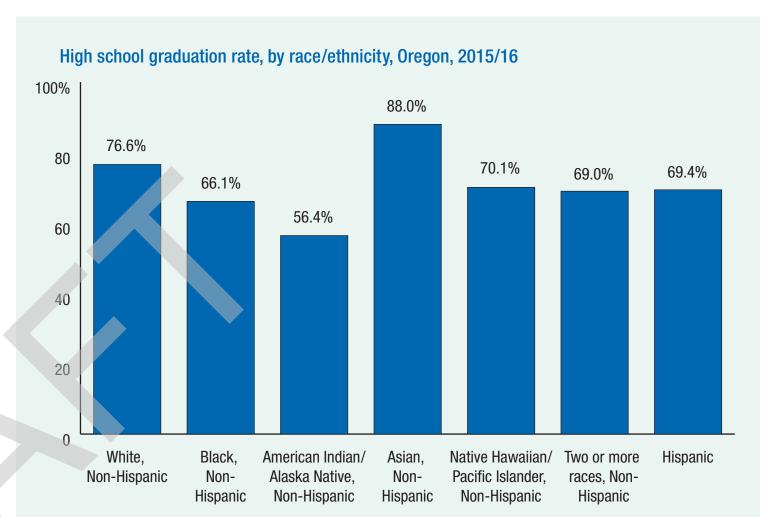
Adolescent health | Maternal and Child Health | Maternal and Child Health | Adolescent health | Maternal and Child Health | Maternal and Child

Unfortunately, 1.2 million students drop out of high school each year in the United States with poor and minority students most at risk for dropping out. (57) This indicator only includes data for adolescents attending public high schools, as data from private schools are unavailable.

Status in Oregon: The adjusted cohort high school graduation rate in Oregon was lower than the national rate in the 2014/15 school year (73.8% vs. 83.2%). In Oregon, the adjusted cohort high school graduation rate steadily increased between the 2008/09 and the 2015/16 school year, from 66.2% to 74.8%.



Disparities in Oregon: In Oregon, the highest high school graduation rates are among Asian non-Hispanic (88.0%) and White non-Hispanic (76.6%) students. The lowest rates among American Indian/Alaska Native non-Hispanic (56.4%) and Black non-Hispanic (66.1%) students.



Data source: Oregon Department of Education

Adolescent health | Maternal and Child Health | Adolescent health | Maternal and Child Health | Adolescent health | Agolescent health | Adolescent health | Maternal and Child Health | Adolescent health | Ad

Crosscutting

Key indicator: Households at concentrated disadvantage

Indicator details:

» Definition: Proportion of households located in census tracts with a high

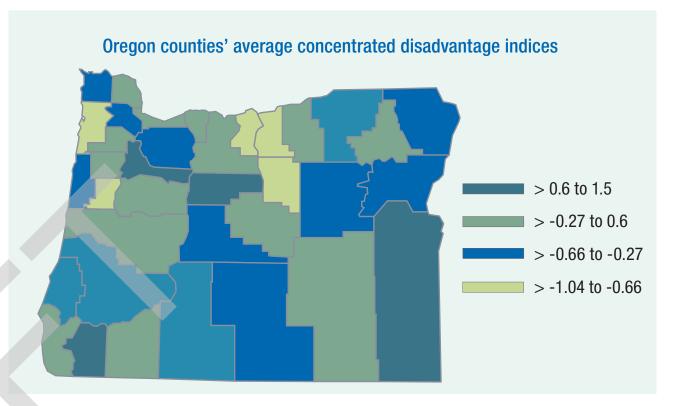
level of concentrated disadvantage, calculated using five census variables: percent of individuals below the poverty line, percent of individuals on public assistance, percent female headed households, percent unemployed, percent younger than age 18

» Numerator: Number of households with children less than 18 years of age

located in census tracts of high concentrated disadvantage

Denominator: Total number of households with children less than 18 years of age

Significance of indicator: Concentrated disadvantage is a measure of community well-being that factors in far more information than looking at income rates alone. High concentrated disadvantage is linked to low social capital. Communities with high concentrated disadvantage have less ability to improve conditions in their neighborhoods, limit neighborhood violence, and intervene in the community for the common good than do neighborhoods without high concentrated disadvantage. (Source: AMCHP Life Course Indicators Tip Sheet) Concentrated disadvantage is a community-level indicator of poverty and socioeconomic conditions, all of which can adversely affect the health outcomes of mothers and their children. It reflects the availability of services and opportunities for community residents including their access to health care, grocery stores and better schools. Disadvantaged neighborhoods have higher rates of single parent households, non-completion of high school, and adolescent deliquency. Furthermore, women living in concentrated disadvantaged areas are less likely to have prenatal care in their first trimester and are at an increased risk for mental illnesses.



Status in Oregon: The map below shows average levels of concentrated disadvantage* for Oregon counties. Not all communities within each county had the same level of concentrated disadvantage.

*The concentrated disadvantage index for each census tract is calculated from five census variables, with the percentage of each then z-score transformed (subtracting the mean of the distribution from the variable value and dividing the difference by the standard deviation of the distribution: Z = (score - mean)/standard deviation). The concentrated disadvantage index is defined by census tract only. However, for this map only, we have averaged the indicator to a county level.

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The table below shows Oregon census tracts with the 10 highest concentrated disadvantage indices.

10 highest concentrated disadvantage indices per Oregon census tracts

Rank	County	Census tract [*]	Concentrated disadvantage index
1.	Jefferson	Southern portion of Warm Springs reservation	3.36
2.	Marion	Inner northeast Salem: Northgate neighborhood	3.27
3.	Linn	Albany: Queen and Geary neighborhoods	2.56
4.	Jackson	Medford West	2.37
5.	Marion	Inner northeast Salem: Grant-Highland neighborhood	2.36
6.	Malheur	East Ontario	2.35
7.	Washington	Southeast Hillsboro	2.31
8.	Marion	Outer Salem: Hayesville	2.27
9.	Klamath	Klamath Falls East	2.21
10.	Multnomah	St. Johns/Portsmouth neighborhood	2.17

^{*}Linked data from Office of Forecasting, Research and Analysis

Key indicator: Food insecurity

Indicator details:

» **Definition:** Proportion of households experiencing food insecurity

(household reports being unable to afford balanced meals, having to cut the size of meals because of too little money for food or being hungry because of too little money for food)

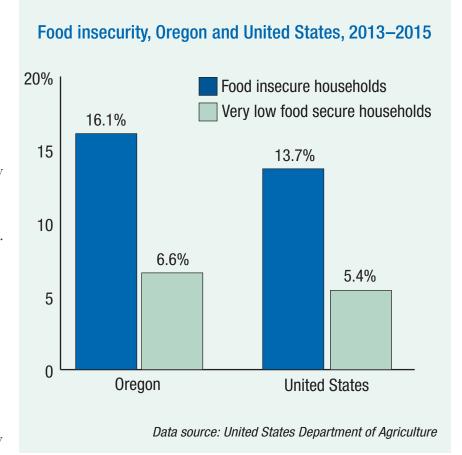
» Numerator: Number of households experiencing food insecurity

» **Denominator:** Number of households

Significance of indicator: Food security exists when "all people at all times have access to sufficient, safe and nutritious food to maintain a healthy and active life." (61) Unfortunately, in 2011, nearly 50 million people in the United States experienced food insecurity.

Certain populations such as single parent households, Black and Hispanic households and households living below 185% of the federal poverty line are disproportionately affected by food insecurity Furthermore, food insecurity is more prevalent in large cities and rural areas compared to suburban areas.

Food insecurity affects the entire family; infants born to mothers with inadequate nutrition may experience developmental delays, congenital anomalies, low birth weight and other health issues. Likewise, children with food insecurity have an increased risk for behavioral and social issues, chronic health conditions and impaired academic development. (62)



Crosscutting | Maternal and Child Health | | Mate

Food insecure: Households that report three or more conditions that indicate food insecurity are classified as "food insecure." That is, they were at times unable to acquire adequate food for one or more household members because they had insufficient money and other resources for food. The three least severe conditions that would result in a household being classified as food insecure are:

- They worried whether their food would run out before they got money to buy more.
- The food they bought didn't last, and they didn't have money to get more.
- They couldn't afford to eat balanced meals.

At times during the year, eating patterns of one or more household members were disrupted and food intake reduced because the household lacked money and other resources for food.

Status in Oregon: Compared to the United States as a whole, Oregon had a higher percentage of food insecure households (16.1% vs. 13.7%) and very low food secure households (6.6% vs. 5.4%) during the 2013/15 period.

Social bonds and supportive relationships are widely recognized as being indispensable to healthy psychological functioning and well-being.



Key indicator: Adequate maternal social support

Indicator details:

» Definition: Percentage of mothers of 2-year-olds who have adequate

social support

» **Numerator:** Number of mother of 2-year-olds who reported having at

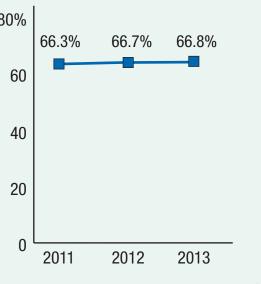
least three of five types of social support

» Denominator: Number of mothers of 2-year-olds

Significance of indicator:

Healthy, nurturing relationships are key to maternal and child well-being. Social bonds and supportive relationships are widely recognized as being indispensable to healthy psychological functioning and well-being, as well as contributing positively to parenting practices. (63) Social connections are a key protective factor for strengthening families and promoting both individual and community resilience. Friends, family members, neighbors and community



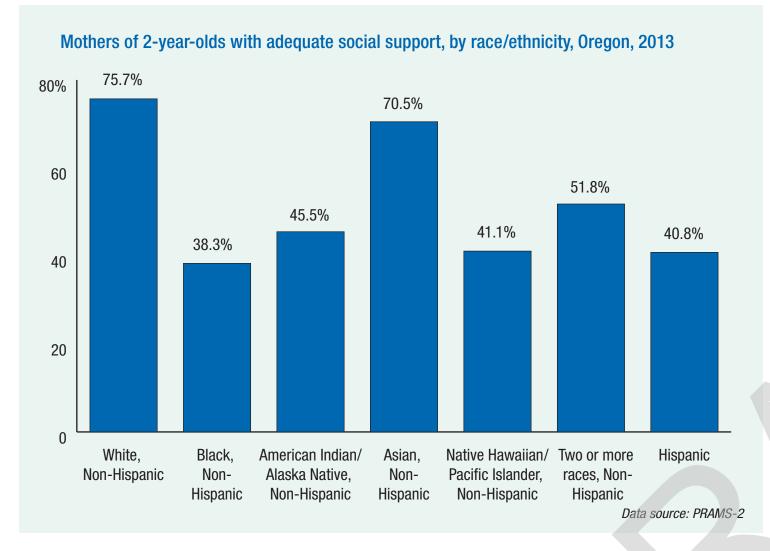


Data source: PRAMS-2

members provide emotional support, help solve problems, offer parenting advice and give concrete assistance to parents. (64) Research has shown that positive social support of high quality can enhance resilience to stress, help protect against developing trauma-related psychopathology, decrease the functional consequences of trauma-induced disorders, and reduce medical morbidity and mortality. (64)

Young pregnant women and new moms who imagined themselves as parents, and therefore developed a supportive circle of friends for themselves that included playmates for their babies and toddlers, had better child and mom well-being.

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In contrast, pregnant women with low support reported increased depressive symptoms and reduced quality of life. (65) A lack of emotional, informational and material resources including social support increases the physical and psychological strains associated with pregnancy.

This indicator includes the following types of support for mothers of 2-year-olds: someone who would loan money for food or bills when needed, someone to help if the mother was sick and needed to be in bed, someone to take the mother to the clinic or doctor's office if she needed a ride, someone the mother could count on to listen to her when she needed to talk, and someone other than the 2-year-old child who shows the mother love and affection.

Status in Oregon: (U.S. data are not available for comparison.) In Oregon, the percent of mothers of 2-year-olds with adequate social support remained relatively consistent between 2011 and 2013 (66.3% to 66.8%).

Disparities in Oregon: Compared to non-Hispanic Whites, all other race/ethnicity groups had a lower percent of mothers of 2-year-olds with adequate social support.

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>> Well-woman care

Listening to women and providers



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Executive summary

In Oregon, among women ages 18–44, 17.5 percent are smokers, 27.1 percent are obese and 20.1 percent report excessive drinking. In addition, more than 40 percent of women, regardless of insurance coverage, did not receive a preventive care visit in the past year, one of the lowest rates in the country.¹

To improve the health of women before, between and beyond potential pregnancies, the Maternal and Child Health (MCH) Section of the Oregon Health Authority (OHA) is working to increase the percentage of Oregon women receiving high-quality well-woman care. This is key to improving women's health, reducing unintended pregnancies and improving outcomes for any future pregnancies.

To develop well-woman care strategies and activities, the MCH Section partnered with local public health authorities (LPHAs) and tribes to hold listening sessions and key informant interviews to better understand:

- Women's experiences and barriers to accessing preventive health services (well-woman care, preconception care)
- Challenges faced in accessing culturally responsive care and
- Women's perspective on care improvement.

This report documents themes drawn from the listening sessions and key informants. Key themes included:

- Health care providers generally recommend annual well-woman/preventive care visits.
- Most women did not identify preventive services as a main reason to go to the doctor or health care provider.
- Changing recommendations on preventive screenings have created confusion.
- Women seek care with providers they know and trust.
- Listening session participants described many barriers to well-woman care including:
 - o Provider and staff attitudes
 - o Distrust of providers/fear of practices
 - o Preventive care not being a priority
 - o Lack of culturally appropriate care
 - o Discomfort with pelvic examinations
 - o Transportation issues and
 - o Lack of childcare.

¹ America's Health Rankings: https://www.americashealthrankings.org/explore/2018-health-of-women-and-children-report/measure/well_women_visit_women/state/OR

The themes drawn from the listening sessions and key informant interviews led to the following recommendations:

- Public Health should partner with health systems and community organizations
 to develop public awareness campaigns that focus on the importance of
 women's health and preventive care.
- Public Health should partner with health systems to offer training to increase the clinical workforce's cultural competency and provide traumainformed care.
- Health systems should develop strategies to make appointments more available, allow more time for patient-provider interaction and integrate mental health services into preventive care visits.
- Public Health should partner with health systems and community organizations to decrease transportation and childcare barriers.

The Oregon Health Authority's (OHA) MCH Section greatly appreciates the time the listening session and interview participants spent sharing their knowledge and ideas on well-woman care.

Background, recruitment and methods

Background

Receiving high-quality well-woman care is key to improving women's health before, between and beyond potential pregnancies. High-quality well-woman care is a national priority area for the Title V Maternal and Child Health (MCH) Block Grant. This federal grant provides funding to states to carry out MCH programs and related activities through state Public Health, local public health authorities (LPHA) and Oregon tribes.

Recruitment

The MCH Section partnered with Multnomah, Jefferson and Marion counties and the Warm Springs Tribe to conduct five listening sessions. The MCH Section partnered with rural and urban Oregon LPHAs and tribes. We had a particular interest in listening to low-income women, Black women and Native American women; these groups are more likely to experience poor maternal and child health outcomes. LPHAs or the tribe recruited women of reproductive age (18–44) to participate from home visiting programs, Women Infant and Children (WIC) and existing groups of women that meet in their community. In Multnomah County, we conducted an

How did MCH recruit participants?

We had a particular interest in listening to low-income women, Black women and Native American women; these groups are more likely to experience poor maternal and child health outcomes.

additional listening session with staff (nurses and community health workers) working in the Healthy Birth Initiative Program. This program works to improve access to health care and provide ongoing support to African American women and their families before and after birth. Each listening session was scheduled for 90 minutes. LPHAs and the MCH Section provided funding for healthy food and incentives (\$25 Fred Meyer or Safeway gift cards) for participants. Appendix A explains the demographics of the listening session participants.

MCH staff interviewed health care providers and a clinical researcher that they knew. We asked interviewees for additional interviewee recommendations. MCH staff sought a mix of primary care providers and specialists for interviews. The phone or in-person interviews, scheduled for 30 minutes each, included three OB/GYNs, two family practice physicians, two family planning providers and one researcher. For a list of those interviewed, see Appendix B.

Methods

MCH staff prepared a script and questions and conducted each of the listening sessions and key informant interviews. We reviewed an informed consent form (Appendix D) with each participant and collected demographic information from each participant in the listening sessions. We did not collect identifying information. MCH staff took notes and all sessions and interviews were recorded with the participants' permission. Discussion items included:

- Reasons women go to a doctor/health care provider
- Reasons women don't go to see a doctor/health care provider
- Understanding of what a well-woman visit is and if it's important
- Understanding of what preconception care is and if it's important
- Experience of care
- Ways experience of care could improve.



Analysis

We used Nvivo 10 qualitative analysis software to analyze audio recordings of the interviews and listening sessions. An analyst listened to each recording and coded segments of the audio tracks related to questions about well-woman visits. These references were sorted into categories that fit the major themes described in this report.

Themes

This report's themes (see Appendix C) come from all listening sessions and key informant interviews. Each session's and interview's unique issues follow this summary.

Health care providers generally recommend annual well-woman/preventive care visits.

Providers generally recommended their patients have annual preventive visits (not always called well-woman visits) for their patients. A few of the providers interviewed acknowledged that all women may not need annual visits (e.g., younger women without chronic conditions or birth control needs), but they still generally recommend annual visits for all women because it allows them to develop a relationship with their provider. Providers described focusing on the age-based recommended screenings and reproductive health care during a well-woman visit and then providing individualized care based on the patient's needs and identified priorities. While the providers interviewed recommended annual visits, they observed that the systems level does not focus on annual preventive visits for women. Providers described a greater focus on specific screenings (e.g., Pap smears) and metrics (e.g., OHA's effective contraceptive use metric for coordinated care organizations). However, in general, providers felt that concentrated efforts were not made at the systems level to get women in for an annual visit.

Most women did not identify preventive services as a main reason to go to the doctor or health care provider.

The most common reasons given for going to the doctor or health care provider were if they were sick, "something was wrong" or because they were pregnant. None of the participants used the term "well-woman visit"; however, women did mention check-ups, yearly physicals required by employer, and preventive services such as birth control and Pap smears.

Changing recommendations on preventive screenings have created confusion.

Both women and health care providers stated there was confusion over the changing recommendations for preventive screenings, e.g., for the Pap smear. In the past, an annual Pap smear was recommended for all sexually active women, and

providers routinely included a Pap smear as part of annual preventive visits. Women often associated the annual visit with the Pap smear. With changing screening recommendations, some women thought annual examinations were no longer recommended and not covered by health insurance. Some women found the distinction between a Pap smear and a pelvic examination confusing.

"My experience is, when I was trained in medicine, in my first 10, 15 years of practice, it was a very solid recommendation, that everybody comes every year for a Pap smear. So ... that's what they call their visit: "I'm here for my Pap smear." No one would say, 'I'm here for my well-woman exam," or "I'm here for my annual checkup." They'll say, "I'm here for my Pap smear." So, of course you'll do a whole well-woman exam, but the way they've linked the visit is that "It's time for my Pap smear." When the recommendations changed around the Pap smear, for me that was a major turning point ... When that changed, there was an enormous messaging change to women. Then women didn't see a reason to come in anymore." — Health care provider

Barriers

Listening session participants described many barriers to well-woman care.

These barriers generally fell into one of three categories: barriers related to the care provider or other staff, barriers related to the patient and barriers related to the health care system.

Barriers related to the care provider or other staff

Provider and staff attitudes

When discussing challenges about visiting a doctor or health care provider, women described doctors who did not care about them and who dismissed their concerns. They said that some health care providers did not take the time to get to know them to understand their concerns, and did not explain why they were doing certain tests or treatments. They described care providers who either talk down to them or use words they don't understand. Women described providers who were judgmental toward plus-sized women and office staff who were not knowledgeable or helpful.

"They'll use big words like "mastoid." No, just say tell me this part right here on my neck. Or they really, sometimes they will talk sooo slow. Like dumb it down."— Listening session participant

"When I went in to my last appointment she said, "I'm kinda concerned you lost so much weight," as I'm holding a newborn. They either forgot I was pregnant or ... (laughs)."— Listening session participant

"I had a bacterial infection that landed me into the hospital ... All that could have been

prevented... I was trying to get in to see the doctor, like two or three weeks before that whole situation happened because I was having pain and stuff. The receptionist just didn't seem to care that I was having pains and stuff, and said that I needed to wait until I had my monthly appointment with my doctor."— Listening session participant

Distrust of providers/fear of provider practices

Many women described a distrust of health care providers. For some women, this lack of trust related to concerns about confidentiality. For others, it related to a fear due to their undocumented status or concerns about being reported to Child Protective Services. Others reported a belief that some care providers give unnecessary drugs, make recommendations based on non-medical information, are unable to resolve problems and misdiagnose patients' conditions. One mother expressed a fear of separation from her child during treatment. One listening session participant said that a previous bad experience with a care provider made her distrust others.

Lack of culturally appropriate care

Closely related to distrust of care providers is a lack of culturally appropriate care. Native American and African American women expressed a concern about poor medical care due to racism or the lack of culturally responsive services.

They related instances in which care providers misdiagnosed them and made erroneous assumptions about their history. For example, one Native American mother described repeated drug testing. An African American mother described being questioned repeatedly about domestic violence.

If they're in an unsafe situation, they're not going to tell a white doctor. They're just not. I wouldn't.

-Healthy Birth Initiative Staff

'My client said they would ask her domestic violence questions over and over just because the father of the baby showed up to the appointment. The big myth is that Black men don't show up to, don't take care of their kids, so if he comes here, he must be following you to make sure you're not saying anything about it, and that really pissed her off."

— Healthy Birth Initiative staff

"If they're in an unsafe situation, they're not going to tell a white doctor. They're just not. I wouldn't."—Healthy Birth Initiative staff

One listening session participant noted that African American women are not represented in trials to test drugs. As a result, they experience a disproportionate number of adverse effects from those drugs. Another noted a perception in the African American community that birth control is perceived as a form of population control. Participants in a listening session that included Native Americans expressed a related perception that health care providers were biased against women who want large families.

"If you want to get pregnant, that's kind of frowned upon. Me and my significant other, we want a big family." — Listening session participant

"Us mothers who are working mothers ... I get shamed for having multiple babies."—Listening session participant

Barriers related to the patient

Barriers to well-woman care included attitudes toward prevention, discomfort with pelvic examinations and dissatisfaction with providers' services.

Preventive care is not a priority

A barrier to well-woman care voiced in the listening sessions and the key informant interviews was that many women do not see preventive visits as important. Some women described a family history of not going to a doctor unless something is wrong. This theme emerged in many ways, including statements such as:

"Just personally, for me, when I became pregnant was when I really established a primary care provider. I had seen doctors before, as a kid, going in for checkups and stuff, but the whole time I was in college I never went to the doctor 'cause I wasn't sick, so I didn't feel that I needed to go."— Listening session participant

A few of the listening session participants mentioned that mothers tend to care for themselves only after everyone else in the family is cared for, a sentiment echoed by health care providers.

"Women in general attend to their own health care last. They tend to make sure that their children and family, including their spouses, are attended to before they take care of themselves."— Health care provider

"Women culturally don't take the time to take care of themselves. They're too busy taking care of everybody else."— Health care provider

Discomfort with pelvic examinations

Some listening session participants expressed a general discomfort with pelvic examinations as a reason they avoided annual visits. Some specifically mentioned being uncomfortable having a male doctor perform a Pap smear, while another

participant said that she was uncomfortable having multiple people present during pelvic exams.

Transportation

Mothers in both rural and urban settings mentioned transportation as a barrier to well-woman care, and one noted that gentrification played a role in exacerbating that problem.

Lack of childcare

Mothers frequently cited not having easy access to childcare or having to bring children with them to appointments as a challenge to receiving care.

Barriers related to the system of care



Some barriers to well-woman care described in the interviews and listening sessions related to the overall system of care. They included barriers related to time, access to care and continuity of care.

Time

Time was a frequently mentioned barrier to quality well-woman care. Listening session participants described being rushed during appointments and being required to make another appointment when they asked too many questions.

"They told my client one time, 'You're asking too many questions, so we need to reschedule you.' "— HBI Staff

Time factored into other aspects of receiving care, including time taken away from work, the time it takes to get an appointment and the time spent waiting during appointments.

"When you're a working mother and you take time off of work to come down here and you sit for three hours for your twenty-minute appointment, not even that, it's really frustrating, because even if they call you in and take your vitals, you're still waiting for the doctor to come in and do what he needs to do."— Listening session participant

Access to care

Access to well-woman visits, and to health care in general, depends largely on having insurance. Several people cited issues related to insurance when discussing why some women do not get annual checkups. People noted the perception that some insurance plans do not cover annual visits. Since some people equate the Pap smear with the annual exam, some women believe that this means that their insurance will not cover an annual examination.

Some insurance plans don't promote the need for annual visits, and insurance companies sometimes make assignments that are inconvenient:

"They put my son with one doctor and my two daughters with a completely different doctor. So all my kids were seeing different doctors."— Listening session participant

Women described the experience of providers not accepting Medicaid (Oregon Health Plan) patients. Or if accepted by a provider, women insured by Medicaid faced longer waits for appointments.

"I had OHP for a long time. Now I have private insurance. And it was, 'Oh, we can't get you in,' and I update my insurance, and it was, 'We can see you tomorrow.' I've been told, 'We can only take so many OHP patients and you have to have a new patient examination. Those are four months out.'"

— Listening session participant

Lack of continuity of care

Another impediment to quality care in some health systems is that patients see a different doctor at every visit. Rather than building a relationship with the same doctor over time, they must explain their history at every visit.

"I've had five different doctors in the last two years. With each doctor, every time I go in, I get a different doctor. I have to explain my whole medical history."

— Listening session participant

Two listening session participants described being referred to the emergency room for care. One stated that once there, the emergency room staff said that it wasn't an emergency. The other said that she simply did not receive treatment.

Listening session participants also expressed frustration over limited clinic or provider hours, the lack of translation services and, in rural areas, the lack of enough doctors.

Providers described barriers to women receiving well-woman care.

The fragmentation of the healthcare system makes it challenging for women to follow up with different health care providers. Women may not know which providers can offer specific services. Changes in standards of care and the easy availability of birth control have made the reasons for a woman to attend a preventive health visit less clear.

Providers also noted that the time it took to review patients' histories and address all concerns was challenging given the number of patients they must see each day. Providers described systems put in place to encourage efficiency that may add to the patient's feeling of not being listened to and being rushed. Family planning clinics also discussed policies that limit their scope and ability to provide comprehensive well-woman care.

Women seek care with providers they have a relationship with.

Some health care providers (both primary care and specialists) thought primary care providers best deliver well-woman care because of their ability to manage chronic conditions. However, some providers noted that some primary care providers are not comfortable providing reproductive health services and that many women never establish care with a primary care provider, so specialists are often the only provider women see.

When asked who should provide well-woman care, one interviewee, an obstetrician/gynecologist, said:

"I think we're all in a position to do that, honestly. I think the family practice physicians and nurse practitioners and women's health nurse practitioners, OB/GYN, I think we're all trained and capable of doing that. So I really think it's those providers that have trust from the patient."

In the listening sessions, many women described a preference for reproductive health specialists and female providers for contraception and preconception health needs.

- "I don't think that many men have an understanding about it."
- Listening session participant
- "They're more meticulous...when you go to a specialist, that's all they do."
- Listening session participant

Providers suggested ways to improve preventive care for women.

- Using a structured template for electronic health records to inform providers what a patient needs
- Developing better messaging about the need to have well-woman and preconception care visits
- Providing patient-centered contraception counselling with follow-up
- Including the well-woman visits as a Healthcare Effectiveness Data and Information Set (HEDIS) measure.

Women suggested ways to improve preventive care for women.

- Setting up whole family appointments
- Providing incentives for Pap smear visits
- Offering gym memberships to support health
- Providing mental health services as part of the well-woman visit
- More outreach around well-woman visits, sending reminder cards in the mail.
- Providing wider insurance coverage for visits.

Recommendations

Based on the themes drawn from the listening sessions and key informant interviews, the following recommendations were developed:

- Public Health should partner with health systems and community organizations
 to develop public awareness campaigns that focus on the importance of women's
 health and preventive care.
- Public Health should partner with health systems to offer training to increase the cultural competency of the clinical workforce and the provision of traumainformed care.
- Health systems should develop strategies to increase the availability of appointments, allow more time for patient-provider interaction, and integrate mental health services into preventive care visits.
- Public Health should partner with health systems and community organizations to decrease barriers related to transportation and childcare.

America's Health Rankings: https://www.americashealthrankings.org/explore/2018-health-of-women-and-children-report/measure/well_women_visit_women/state/OR

Appendix A

Listening Session Demographics

Place	# of participants	Age range	Race/ethnicity	Insurance
Multnomah County	12	20—52	6 African American 2 African 1 Black 1 Black/Asian 1 European/Black 1 Pacific Islander	9 OHP 1 Kaiser 1 None 1 Unknown
Multnomah County (staff)	7	25—53	5 African American 1 Black/African American 1 African American/White	Not collected
Warm Springs	6	28—36	6 American Indian	4 OHP 1 None 1 Unknown
Jefferson County	12	21—42	7 White 3 Hispanic/Latino 2 Native American	11 OHP 1 None
Marion County	10	22—38	8 White 1 Hispanic 1 Asian/White	7 OHP 2 Providence 1 Kaiser

^{*} Include diagnosed mental disorder, problem with alcohol and/or other substance, and/or depressed mood.

 $[\]dagger$ Include treatment for problems with alcohol and/or other substance.

[‡] Data were not collected before 2009.

Appendix B

Key informant interviewees

Researcher

(Jillian Henderson, PhD, MPH, Kaiser Permanente Center for Health Research)

Primary care providers

Family practice physicians (Helen Bellanca, MD, and Amy Henninger, MD)

Specialty care providers

Obstetrics/gynecology physicians (Marni Carlyle, MD, Michelle Berlin, MD, and Kimberly Vesco, MD)

Family planning providers (Stephanie Wiley, NMNP, and Lil Reitzel, NP)

Appendix C

Major themes by listening session

Jefferson County

Participants in the Jefferson County listening session discussed the way perceived biases presented a barrier to women's trust in their health care providers. These included a perceived bias against plus-sized women, women who want large families and a general perception that health care providers make erroneous assumption about their histories. They also mentioned that the lack of translation services was a barrier to care.

They also discussed the effect of misdiagnosis and errors in treatment on their trust in health care providers. In some cases, participants did not see health care providers as caring about their patients, who sometimes felt judged, rushed and neglected. They were frustrated that they saw a different doctor at every visit and had to explain their health history each time.

This listening session also discussed insurance problems' effects on their care. These included insurance coverage annual visits, providers who do not accept Oregon Health Plan patients and the long wait to see a doctor for OHP patients.

Warm Springs Tribe

The Warm Springs Tribe listening session also discussed the way perceived cultural bias may present a barrier to women's trust in their health care providers. They described health providers conducting repeated drug tests. They also perceived a bias against women who want large families.

Like the participants in the Jefferson County listening session, they were concerned about misdiagnosis and errors in treatment and saw some health care providers as not caring about their patients. They were frustrated that they had to see a different doctor for specialty care and expressed discomfort with having multiple people present at pelvic examinations.

Multnomah County: Healthy Birth Initiative women

Women in the Healthy Birth Initiative listening session also touched upon the cultural issues that lead to distrust in health care providers. They expressed a concern that minority women sometimes receive poor care due to racism. They also discussed how established patterns may reduce well-woman visits: only going to doctor if something is wrong and a family history of not going to the doctor. Other issues they touched upon include transportation problems, the time it takes for medical appointments and the need to include mental health services when providing well-woman care.

Multnomah County: Healthy Birth Initiative staff

The Healthy Birth Initiative staff reiterated the concerns of Healthy Birth Initiative clients about poor care due to health care providers' attitudes toward their patients based on race and culture and the patients' distrust of doctors. They provided the example of doctors who repeatedly ask Black mothers questions about domestic violence.

Some of the distrust of health care providers on the part of patients stems for the lack of inclusion of Black women in trials to test new drugs, which they believe results in a disproportionate number of adverse effects; the perception that birth control is actually an attempt to control population growth; and the perception that doctors either talk down to them or use language that they do not understand. They also discussed the lack of Black doctors as a barrier to care.

Marion County Health Department

Women in the Marion County listening session discussed the reasons they might not schedule annual visits. Their reasons included health care providers who do not listen to them and explain why they are doing what they are doing, unhelpful office staff and the lack of childcare. They expressed a belief that having health care providers who only saw them episodically meant the care providers did not really know or care about their patients.

They discussed the limitation that insurance placed on their access to care, noting that some insurance policies do not cover annual visits or may not allow for a visit of sufficient length. Many providers do not accept the Oregon Health Plan; having this type of insurance makes it harder to get appointments.

Appendix D

Consent Forms

Well Woman Care Key Informant Interviews: Consent for Participantion

Purpose:

We are conducting key informant interviews to better understand the experience of health care providers in providing well woman care in order to inform the public health well-woman care strategies and activities. We have a set of questions we would like to ask you and we expect this to last no longer than 30 minutes. These interviews paired with listening sessions that we are conducting with women of reproductive age, will assist us in developing appropriate strategies, policies, and programs to improve access to well-woman care.

Risks/benefits:

- You may feel uncomfortable talking about certain topics with us today
 - » You do not have to answer anything that you do not want to.
- We will keep everything you tell us confidential unless you tell us something that we're required to tell somebody to protect a child or vulnerable adult.
 - We are mandated to report to the appropriate authorities if you tell us that someone is hurting a child or vulnerable adult or hurt one in the past. We also have to tell someone if a child or vulnerable adult might hurt themselves or someone else. We will not be asking questions regarding such information, however if you so choose to share this information, you must know we are required to report it.
- We will be taking notes and recording our discussion today.
 - » All hand-written notes and the recording will be kept in a locked cabinet at our workplace.
 - » They will be destroyed after finalizing a report that will be shared with our partners to inform the development of strategies and activities to improve access to and the quality of well woman care.
- After our interviews, we will identify themes and create a report. We will
 not attribute any specific information or a quote to you, there will be no
 way to connect what you say to your name.

- » In a report, however, we may thank our key informants and identify each provider by name.
- You may not receive any direct benefit from your participation today, however the knowledge we gain from you may help improve women's health across Oregon in the future.

What If I Change My Mind About Participating?

Your participation in this is voluntary and you may decide to not begin or to stop participating at any time. If you choose not to participate or stop participating after we begin, there will be no impact on your relationship with the Oregon Health Authority.

Questions? Concerns?

You may contact Anna Stiefvater at anna.k.stiefvater@state.or.us or 971-673-1490

Well Woman Care Listening Sessions: Consent for Participation

Purpose: The purpose of this learning session is to learn about women's experience with preventive health care. We will be asking questions to prompt a discussion that we will record and take notes on so we can remember all information shared. Because this is a joint effort between the State and your local public health authority, some staff from your local agency are here today and they too may take notes for the purposes of improving services. We expect the session will last for 60-90 minutes.

Risks/Benefits:

- You may feel uncomfortable talking about certain topics with us today.
 - » You do not have to answer anything that you do not want to.
- We ask all of you in this group today to keep everything that anyone says confidential, please don't share personal stories with your friends or neighbors outside of this session. Because we cannot guarantee that everyone will follow this guideline, you do not have to answer anything that you do not want to
- We will keep everything you tell us confidential unless you tell us something that we're required to tell somebody to protect a child or vulnerable adult.
 - » We are mandated to report to the Oregon Department of Human Services if you tell us that someone is hurting a child or vulnerable adult or hurt one in the past. We also have to tell someone if a child or vulnerable adult might hurt themselves or someone else. We will not be asking questions regarding such information, however if you so choose to share this information, you must know we are required to report it.
- We will be taking notes and recording our discussion today.
 - » All hand written notes and the recording will be kept in a locked cabinet at our workplace.

- » They will be destroyed after finalizing a report that will be shared with our partners to inform the development of strategies and activities to improve access to and the quality of well-woman care.
- After our interviews, we will identify themes and create a report. We will not attribute any specific information or a quote to you, there will be no way to connect what you say to your name.
- Although you may not receive any direct benefit from your participation today, the knowledge we gain from you may improve women's health in Oregon in the future.

What If I Change My Mind About Participating?

Your participation in this is voluntary and you may decide to not begin or to stop participating at any time. If you choose not to participate or stop participating after we begin, there will be no impact on any programs or benefits you may receive from the Oregon Health Authority or your local public health department.

Questions? Concerns?

You may contact Anna Stiefvater at anna.k.stiefvater@state.or.us or 971-673-1490

Appendix E

Key informant interviews questions

- 1. Tell us a little about your patient population. Are they coming to you for general preventive care or special health issues? Do you see mostly women or a mix? What ages? Private insurance or Medicaid?
- 2. Do you provide or recommend annual well woman visits for your patients? Why or why not?
 - Following: Do you think that all women need an annual well woman visit, or would less frequent be ok for some women?
- 3. When you are providing a well woman visit or annual checkup for woman, what are your priorities?

Following: What do you think are the major health risks for women?

Primary health care provider

- 4. During an annual check-up or well woman visit, do you ask about or assess women's reproductive health? Why or why not?
- 5. Do you provide contraceptive services or preconception health services or do you refer them to a specialist?

Following: If a woman asked about contraception or preconception, do you provide the care at that visit? Schedule her for another appointment? Refer her to a specialist?

Reproductive health specialist (Ob/Gyn)

- 6. During an annual check-up or well woman visit, do you assess and manage woman's overall health or refer to primary care? why or why not?
- 7. What are some challenges you/or your colleagues face when delivering well woman care? For instance, health systems or health insurance issues
- 8. In your experience, what are the barriers that keep women from coming to a well woman or preventive care visit?
- 9. Who do you think should provide well woman care (primary care provider/or Obstetrics/ Gynecologists)?
- 10. What else should we know?

Listening session questions

- 1. Why do you (or people you know) go to the doctor or a health care provider? (Create a list of reasons on poster board)
- 2. What is challenging about going to the doctor/health care provider? (What are the barriers?) (Create list)
- 3. Are you familiar with the idea of a well woman visit? Have you been to one?
 If yes, what happened at the visit?
 If no, what do you think would happen at a well woman visit?

Think about a general checkup or well woman visit that you've had (questions 4-6)

- 4. Is there something that your doctor or other health care provider should have talked to you about during your well woman visit or general checkup and they did not?
- 5. Are there questions that you wanted to ask but for some reason did not? Why?
- 6. What was the attitude of the doctor or health care provider toward your questions/curiosities? Do you feel they were sensitive to your cultural needs?
- 7. When you seek care for a reproductive health need (maybe you want birth control or you want to become pregnant), what kind of doctor or health care provider do you prefer going to? An Ob/Gyn, your primary care provider, a family planning provider
- 8. Why do you think women are turning to health care services only after they get pregnant or if they are having trouble getting pregnant, and not before?
- 9. Describe what a good visit with a doctor or health care provider would look like.
- 10. What else would you like us to know?



You can get this document in other languages, large print, braille or a format you prefer. Contact 971-673-1490 (TTY 711). We accept all relay calls or you can dial 711.

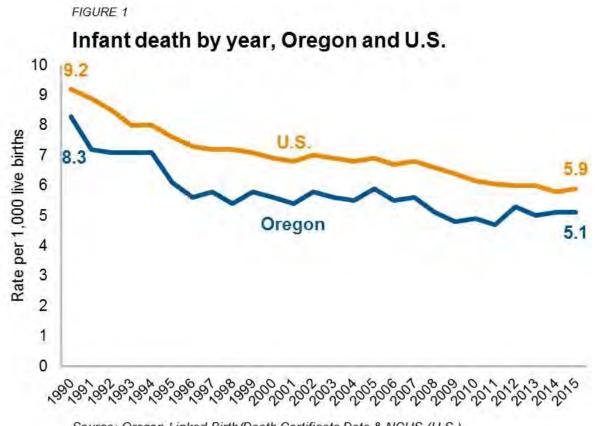


Maternal and Child Health

Infant mortality

Infant mortality (the death of an infant during its first year) has dramatically declined over the past 60 years in the U.S. This decline is largely due to medical advances and hospital care of premature infants. Nationally, the leading causes of infant death are birth defects, prematurity/low birth weight, maternal complications of pregnancy, sudden unexplained infant death syndrome (SUIDS), and injuries.

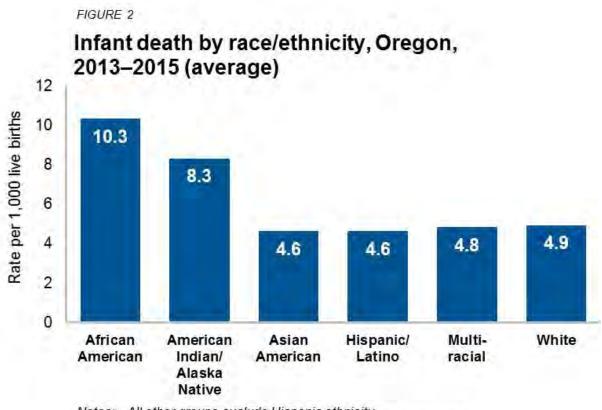
In Oregon in 2015, 5.1 infants died per 1,000 live births among Oregon residents, down from 1990 when 8.3 infants died per 1,000 live births (Figure 1).



Source: Oregon Linked Birth/Death Certificate Data & NCHS (U.S.)

Oregon's infant death rate has been lower than the U.S. rate for more than 25 years, but racial and ethnic disparities persist. On average from 2013 to 2015, the infant

death rate was highest among African Americans (10.3 per 1,000 live births) and American Indian/Alaskan Natives (8.3 per 1,000 live births; Figure 2). Studies have found that, although interventions to reduce some causes of infant death, such as SUIDS, have been successful in these populations, other complex factors are involved, such as access to care.



Notes: All other groups exclude Hispanic ethnicity

Source: Oregon Linked Birth/Death Certificate Data & NCHS (U.S.)

Oregon's Public Health Division is working with the National Institute for Children's Health's Collaborative Improvement and Innovation Network to Reduce Infant Mortality (IM CoIIN) to focus on strategies to reduce infant deaths. These include the strategic areas of safe sleep practices, smoking cessation in mothers, preconception and interconception care for women, prevention of preterm births, increasing the use of higher-level health facilities for deliveries in high-risk pregnancies, and improvement in social determinants of health and equity to impact pregnancy outcomes.

Additional Resources: Oregon Perinatal Data Book, pp.14-15

About the Data: Oregon data is from the Oregon Linked Birth & Death Certificate Data (from the Center for Health Statistics of the Oregon Health Authority) and U.S. data is from

the National Center for Health Statistics. Data include infants born alive who die within the first year of life.

For More Information Contact: Alfredo Sandoval, alfredo.p.sandoval@state.or.us

Date Updated: August 14, 2017

Oregon State Health Profile

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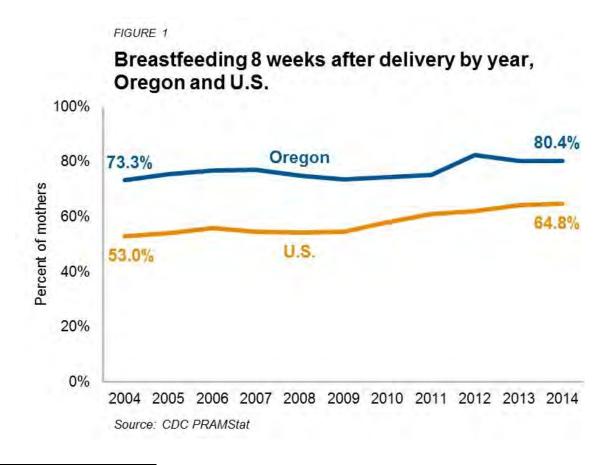


Maternal and Child Health

Infant breastfeeding

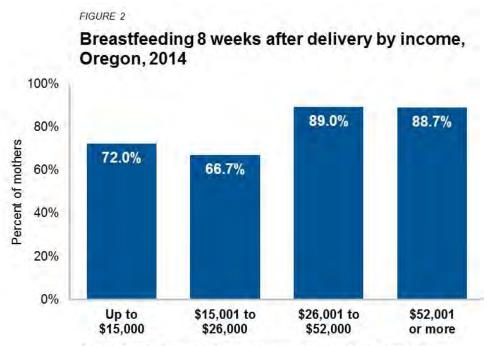
Breast milk is the most complete form of nutrition for infants, with well-documented benefits for infants' health, growth, immunity, and development. The American Academy of Pediatrics recommends breastfeeding for reduced risk of infection in infants and for the prevention of childhood obesity. Breastfeeding also enhances bonding between infant and mother.

Breastfeeding rates in Oregon are higher than in the U.S. as a whole (Figure 1). In 2014, 80.4% of Oregon mothers breastfed their infants at 8 weeks after delivery compared to 64.8% nationally. Oregon also has the second highest rate of breastfeeding at 6 months postpartum of any state: 68.2% in Oregon compared to 51.8% in the U.S. in 2013¹.



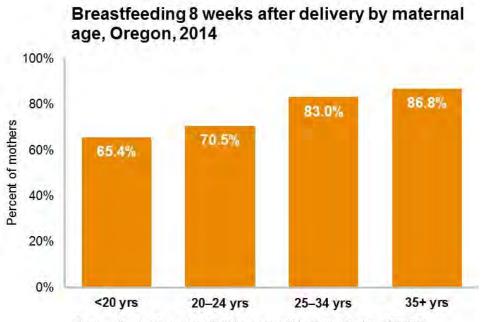
¹ Breastfeeding Among U.S. Children Born 2002-2013, CDC National Immunization Survey

Infant breastfeeding overall in Oregon is high, but mothers who are <25 years old or low-income have lower rates (Figures 2 and 3). In the weeks following birth, mothers often reduce or stop breastfeeding for a variety of reasons. With active support, these barriers can be resolved so mothers can achieve their personal breastfeeding goals and meet breastfeeding recommendations.



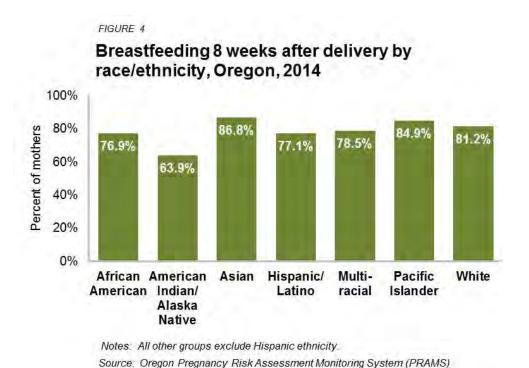
Source: Oregon Pregnancy Risk Assessment Monitoring System (PRAMS)

FIGURE 3



Source: Oregon Pregnancy Risk Assessment Monitoring System (PRAMS)

In Oregon, women who identify as Asian had the highest percentage of breastfeeding their babies at 8 weeks of age (86.8%), and American Indian/Alaskan Native women the lowest (63.9%; Figure 4).



Oregon conducts an ongoing statewide survey of mothers of newborns and of toddlers to better understand mothers' knowledge and experiences of breastfeeding and to determine where breastfeeding promotion efforts can best be targeted. Oregon WIC offers additional support through Breastfeeding Peer Counseling Programs and provides breast pumps when they are needed for breastfeeding support or for mothers returning to work or school.

Additional Resources: Breastfeeding

About the Data: Data is from the CDC PRAMStat System and the Oregon Pregnancy Risk Assessment Monitoring System (PRAMS) by year of birth. Unknowns are excluded from the analysis. Percentage of infants breastfed includes any breastfeeding of the infant at 8 weeks postpartum.

For More Information Contact: Alfredo Sandoval, alfredo.p.sandoval@state.or.us

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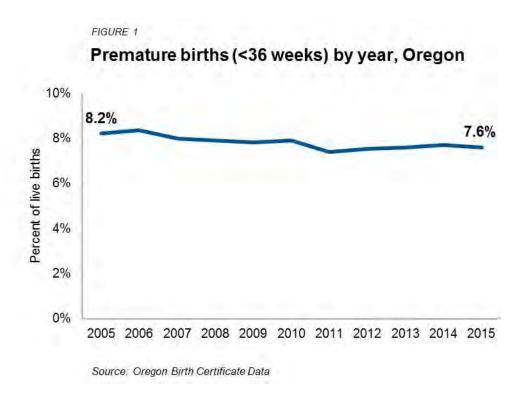
Maternal and Child Health

Premature births

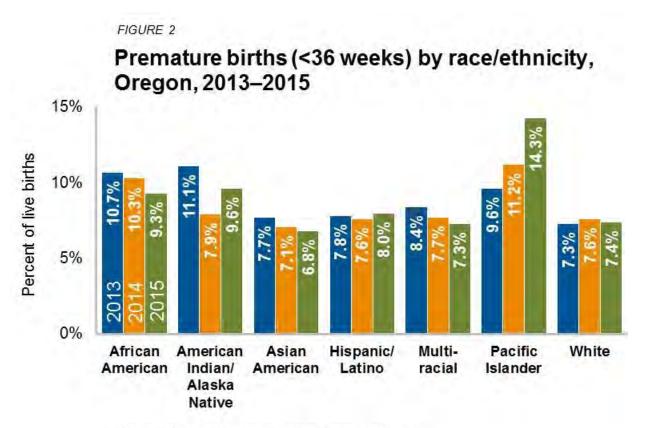
About 1 in every 10 babies in the United States is born prematurely. A pregnancy typically lasts about 40 weeks, and babies are premature if they are born any time before 37 weeks of pregnancy. A developing baby goes through important growth during the final weeks and months of pregnancy. Many organ systems need the final weeks of pregnancy to fully develop.

Premature babies may have more health problems and often need to stay in the hospital neonatal intensive care unit before being able to go home. They also may have long-term health problems that can affect their whole lives. There is a higher risk of serious disability the earlier the baby is born, and premature birth is a leading cause of long-term developmental disabilities in children. Premature birth is also an important cause of infant deaths.

In 2015, nearly 8% of babies born to Oregon mothers were born prematurely (Figure 1). The overall prematurity rate has decreased slightly over the past 10 years, with minimal changes taking place in the moderately premature births (32-36 weeks of pregnancy) and very premature births (less than 32 weeks of pregnancy).



The prevalence of premature births varies by race and ethnicity (Figure 2). In Oregon, as in much of the United States, non-Hispanic black women have higher rates of premature births than do Hispanic, Asian, white, or multiracial women. Estimates of child premature birth rates for women who are either Pacific Islander or American Indian/Alaska Native should be interpreted with caution due to small sample sizes for these births.



Notes: All other groups exclude Hispanic ethnicity

Source: Oregon Birth Certificate Data

Some of the factors that can increase risk of premature birth include having had a previous premature birth, smoking, high blood pressure, diabetes, poor nutrition, a space of less than 6 months between pregnancies, and some infections. Many women who have a premature birth have no known risk factors.

In Oregon, the Public Health Division's programs to support preconception and interconception health include home visiting programs, education about nutrition and WIC services, smoking cessation activities, and others. Each of these programs can assist in moderation of risk factors linked to prematurity. The Public Health Division has partnered with Oregon Medicaid to determine whether pregnant women on Medicaid with a previous preterm birth are receiving an injectable

medication called 17P during prenatal care that can help to prevent preterm birth in the current pregnancy. The Public Health Division is also partnering with the Oregon Perinatal Collaborative and multiple hospital systems represented on the Collaborative to find new strategies for ensuring access to and use of 17P for these patients.

Additional Resources: Premature birth information from the CDC, and from the <u>American College of Obstetricians and Gynecologists</u>

About the Data: Oregon Birth Certificate Data from the Center for Health Statistics, Oregon Health Authority. Prematurity is a gestational age <37 weeks. Moderate prematurity is 32-36 weeks, and Very premature is <32 weeks. Rates of prematurity are calculated per 100 live births. Estimates of prematurity rates for specific subpopulations are unstable due to small numbers.

For More Information Contact: Alfredo Sandoval, alfredo.p.sandoval@state.or.us

Date Updated: August 14, 2017

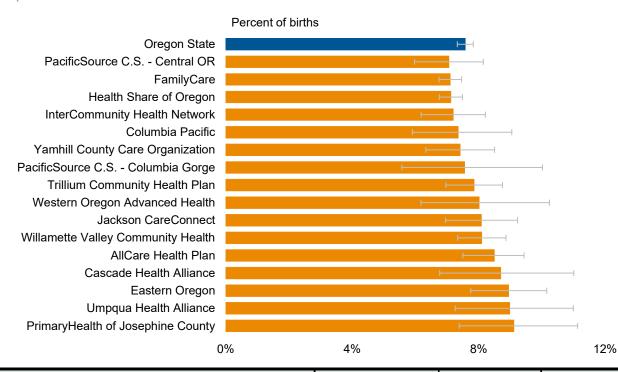
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Premature births (<36 weeks) in regions covered by Coordinated Care Organizations, 2015

Gray lines represent confidence intervals



Coordinated Care Organization (Data represent entire population of CCO regions - not just enrolled population)	Percent of births	Premature births	Total births
AllCare Health Plan	8.5%	294	33,471
Cascade Health Alliance	8.7%	69	793
Columbia Pacific	7.4%	89	1,210
Eastern Oregon	9.0%	213	2,379
FamilyCare	7.1%	1,513	21,298
Health Share of Oregon	7.1%	1,459	20,481
InterCommunity Health Network	7.2%	193	2,681
Jackson CareConnect	8.1%	194	2,397
PacificSource C.S Central OR	7.1%	162	2,294
PacificSource C.S Columbia Gorge	7.6%	48	635
PrimaryHealth of Josephine County	9.1%	96	1,053
Trillium Community Health Plan	7.9%	295	3,754
Umpqua Health Alliance	9.0%	94	1,046
Western Oregon Advanced Health	8.0%	64	798
Willamette Valley Community Health	8.1%	433	5,344
Yamhill County Care Organization	7.4%	179	2,413
Oregon State	7.6%	3,458	45,622

About the Data

Data Source: Oregon Birth Certificates

Data Notes:

Includes only births for which gestational age is known

Date: July 25, 2017

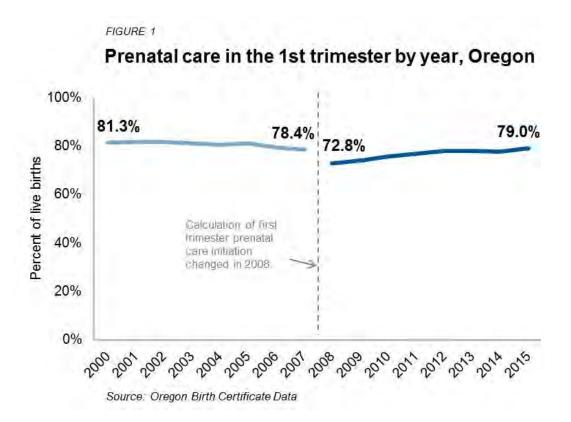


Maternal and Child Health

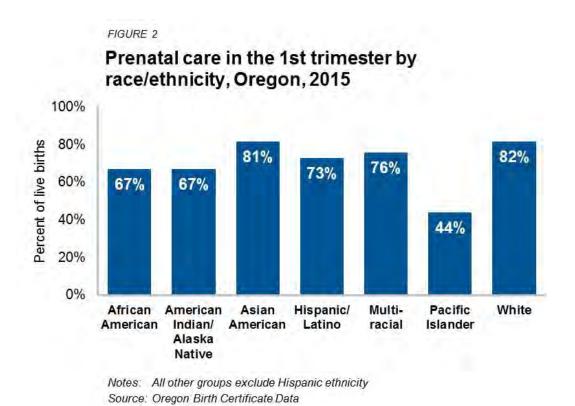
First trimester prenatal care

The percentage of women initiating prenatal care during the first trimester is a marker for access to maternal health care services. Early prenatal care is important to identify and treat babies or mothers at risk for health conditions that can affect the pregnancy. It is also important because health care providers can educate and assist mothers with health issues related to pregnancy including nutrition, alcohol use, smoking, exercise, and preparing for childbirth and infant care. Babies born to women who receive prenatal care early and throughout the pregnancy are less likely to have low birth weight or to be born prematurely.

The percentage of women who started prenatal care during the first trimester of pregnancy declined slightly from 2000 (81.3%) through 2007 (78.4%). However, it is important to note that changes to the Oregon birth certificate led to lower numbers starting with 2008 births. The percentage of women starting prenatal care during the first trimester has improved since 2008, reaching 79% in 2015 (Figure 1).



Asian American and White women in Oregon have higher rates of first trimester prenatal care than all other groups (Figure 2). This lets us know that more work is needed on removing barriers to the early start of prenatal care in populations such as Pacific Islander women, as seen in the figure below.



Psychosocial, financial, logistical, health care provider, and many other issues can create barriers for women in obtaining early prenatal care. In Oregon, efforts have been made to improve initiation of early prenatal care for our Medicaid population. In 2000, the MCH program began Oregon Mothers Care, which worked closely with the Oregon Health Plan to ensure that pregnant women on Medicaid obtained early prenatal care. Since then, 78% to 91% of women who received prenatal care during pregnancy had timely access to prenatal care services. Starting in 2014, Coordinated Care Organizations (CCOs) have had a financial incentive metric around provision of early prenatal care for women in Medicaid. In 2014, 68.1% of women whose deliveries were paid by Medicare had prenatal care in the first trimester. That increased to 70.4% in 2015 and then decreased to 67.9% in 2016.

Additional Resources: <u>Oregon Birth Data</u>; <u>Oregon Perinatal Data Book</u>, pp.26-29, <u>Oregon Health Plan Timeliness of Prenatal Care Guidance Document</u>

About the Data: Data source is Oregon Birth Certificate Data. Data include the percentage of live births where mothers reported initiating prenatal care during the first trimester of pregnancy. Birth certificate data documents whether a delivery was paid by Medicaid, but cannot be used to determine whether prenatal care for that pregnancy was paid by Medicaid. Birth Certificate data for 2015 is preliminary and does not include births to Oregon residents that occur in other states.

For More Information Contact: Alfredo Sandoval, alfredo.p.sandoval@state.or.us

Date Updated: August 14, 2017

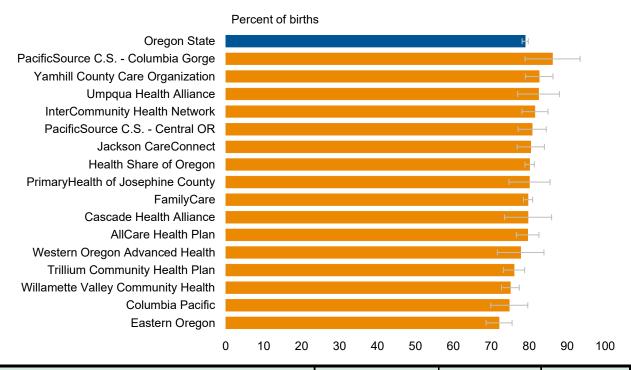
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First trimester prenatal care initiation in regions covered by Coordinated Care Organizations, 2015

Gray lines represent confidence intervals



Coordinated Care Organization (Data represent entire population of CCO regions -	Percent of births	Births with 1st trimester	Total births
not just enrolled population)		prenatal care	
AllCare Health Plan	79.6	2,747	3,451
Cascade Health Alliance	79.7	632	793
Columbia Pacific	74.8	900	1,204
Eastern Oregon	72.1	1,706	2,367
FamilyCare	79.7	16,876	21,173
Health Share of Oregon	80.1	16,314	20,361
InterCommunity Health Network	81.5	2,180	2,674
Jackson CareConnect	80.4	1,917	2,384
PacificSource C.S Central OR	80.8	1,824	2,258
PacificSource C.S Columbia Gorge	86.2	542	629
PrimaryHealth of Josephine County	80.1	841	1,050
Trillium Community Health Plan	76.0	2,848	3,747
Umpqua Health Alliance	82.5	861	1,044
Western Oregon Advanced Health	77.8	615	791
Willamette Valley Community Health	75.0	3,973	5,294
Yamhill County Care Organization	82.6	1,986	2,403
Oregon State	79.0	35,808	45,354

About the Data

Data Source: Oregon Birth Certificates

Data Notes:

Includes only births for which trimester prenatal care was initiated is known

Date: August 14, 2017

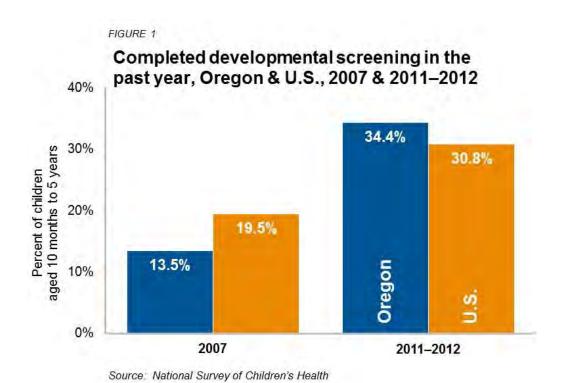


Maternal and Child Health

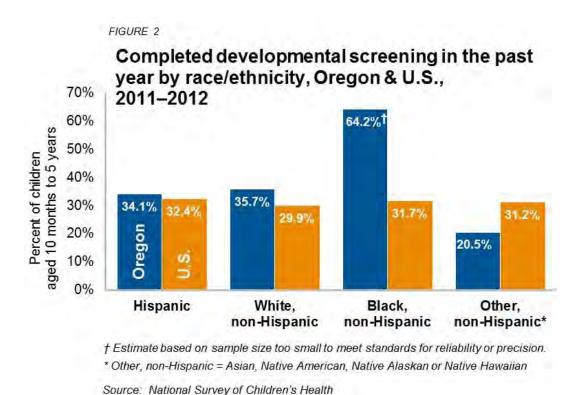
Childhood developmental screening

Early childhood development is a marker for future social, behavioral, physical, and cognitive development. Early identification of developmental disorders is critical to the well-being of children and their families. The percentage of children with a developmental disorder has been increasing, yet overall developmental screening rates have remained low.

In 2011/12, 34.4% of Oregon children aged 10 months to 5 years had received developmental screening in the past 12 months, compared to 30.8% in the U.S. (Figure 1). The screening rate has increased substantially since 2007 in both Oregon and the U.S. (from 13.5% and 19.5%, respectively). This increase may be due to intentional training of clinical providers through the Screening Tools and Referral Training (START) program of the Oregon Pediatric Society as well as broader recognition and use of the Ages and Stages Questionnaire (ASQ) in many early childhood settings including home visits. In addition, the American Academy of Pediatrics has encouraged its members to increase screening of children for developmental delays, beginning at the 9-month well child visit.



In 2011–2012, the rate of developmental screening was lower among Hispanic and among non-Hispanic Asian, Native American/Alaska Native, and Native Hawaiian children, than among non-Hispanic White and non-Hispanic Black children. However estimates of developmental screening by race/ethnicity should be interpreted with caution, due to small sample size of state specific results (Figure 2).



There is concentrated national promotion of developmental screening. Initiatives span federal government, professional organizations, child advocacy groups and the Centers for Disease Control and Prevention (CDC).

Oregon is transforming health care and early education specific to developmental screening. Work occurring includes state legislative directives, government policy makers, medical providers, home visiting programs and child care quality improvement programs.

Additional Resources: Data Resource Center for Child & Adolescent Health

About the Data: Data source is the National Survey of Children's Health which is only updated every 4 years. Data includes children aged 10 months to 5 years who were screened for developmental, behavioral and social delays using a parent-reported standardized screening tool during a health care visit within the past 12 months.

For More Information Contact: Maria Ness, maria.n.ness@state.or.us

Date Updated: August 2, 2017

Oregon State Health Profile

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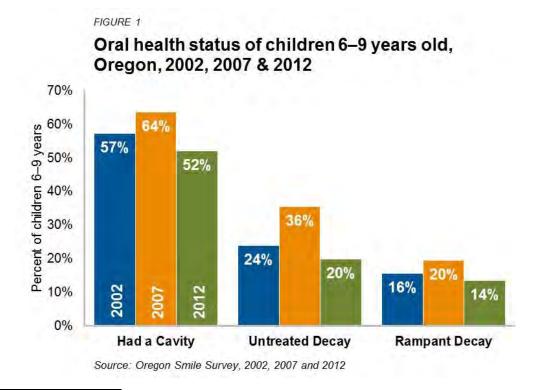


Maternal and Child Health

Tooth decay

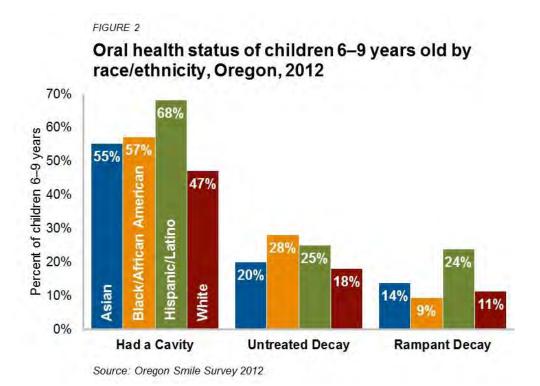
Despite being preventable, tooth decay (cavities) is one of the most common oral health conditions of childhood in the United States. Tooth decay in children may cause pain and lead to infection. Left untreated, tooth decay often has serious consequences that can negatively affect a child's development and school performance. It can lead to diminished growth, social development, nutrition, speech development, and overall general health. Children with poor oral health have worse academic performance and are nearly three times more likely to miss school as a result of dental pain.¹ Over time, dental decay can become severe enough to require costly emergency treatment.

The oral health of Oregon's school-age children worsened between 2002 and 2007 when the prevalence of cavities, untreated tooth decay and rampant decay all increased in children 6 to 9 years old (Figure 1). In 2012 there were improvements in all three measures, showing rates similar to those seen in 2002.



¹ Jackson SL, VannWilliam F Jr, Kotch JB, Pahel BT, Lee JY. Impact of poor oral health on children's school attendance and performance. American Journal of Public Health. 2011;101(10):1900-1906.

While improvements were generally made between 2007 and 2012, there are substantial disparities that exist in oral health for Oregon's children based on geographic residence, household income, and race and ethnicity. Hispanic/Latino children have substantially higher rates of cavities, untreated decay, and rampant decay compared to white children, while Black/African American children have higher rates of untreated decay (Figure 2).



Concerted efforts, including limiting consumption of sugary drinks and snacks, improving oral hygiene, screening for and treatment of decay, increasing preventive interventions such as dental sealants and fluoride varnish, and water fluoridation are needed to address this important public health issue.

Additional Resources: Oregon Smile Survey, 2012 Report

About the Data: Data source is the Oregon Smile Survey which is done every five years (2002, 2007 and 2012). Trained dental hygienists screen children in 1st, 2nd and 3rd grades from a statewide representative sample of elementary schools in Oregon. Oral screening includes: 1) any cavities in primary or permanent teeth that are treated or untreated (health status); 2) untreated tooth decay in primary or permanent teeth (access); 3) decay in >7 teeth that is treated or untreated (severity).

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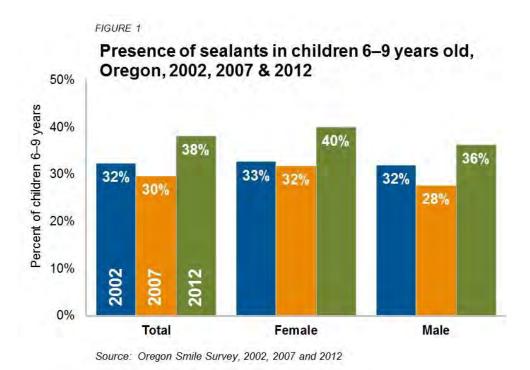


Maternal and Child Health

Dental sealants

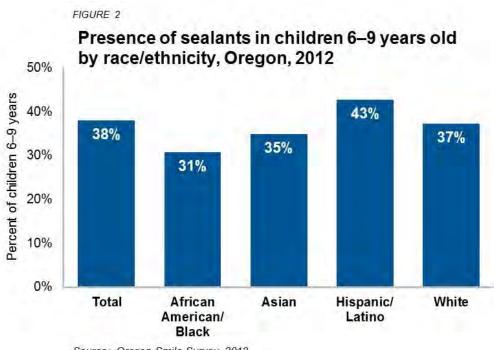
Dental sealants are thin liquid coatings applied to the chewing surfaces of the back molar teeth to prevent tooth decay (cavities). The coating flows into the deep pits and grooves of the tooth "sealing out" bacteria and food debris that cause cavities. This highly effective, safe and low-cost intervention prevents about 50%–80% of decay in the treated teeth for at least 2 years, and protection lasts for about nine years¹. When permanent molars begin to develop in first and second grades, children should get dental sealants at a dental visit or from a school dental sealant program. Children should get sealants again when the next permanent molars begin to develop in sixth and seventh grades.

The number of Oregon's school-age children receiving dental sealants increased from 2002 to 2012, with a slight decrease in 2007 (Figure 1). In 2012, 38% of 6- to 9-year-old children had dental sealants, representing about 48,000 children in 1st to 3rd grades. Oregon has already surpassed the Healthy People 2020 target for dental sealants for 6- to 9-year-olds.



¹ http://www.thecommunityguide.org/oral/supportingmaterials/RRschoolsealant.html

Substantial oral health disparities exist for Oregon's children based on geographic residence, household income, and race and ethnicity. Children from low-income families and certain racial and ethnic populations are at higher risk for tooth decay, but do not receive dental sealants that protect against cavities at the same level as higher-income children or white children (Figure 2).



Source: Oregon Smile Survey, 2012

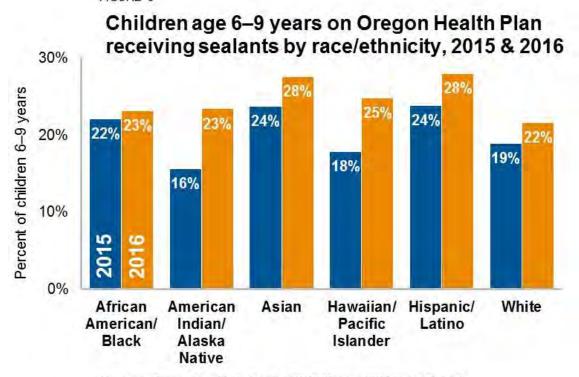
To help eliminate disparities, interventions such as school dental sealant programs are recommended since they can reach children from low-income families who are less likely to receive private dental care. During the 2016-17 school year, an estimated 89% of eligible (40% participation in Free and Reduced Lunch Programs) elementary schools and 68% of eligible middle schools were being served by a school dental sealant program².

In Oregon, concerted efforts are being made to increase dental sealants for our Medicaid population. The percent of children ages 6-14 who received a dental sealant on a permanent molar in the past year increased 17% since 2014³. While increases have been observed across all racial and ethnic populations from 2015 to 2016, disparities continue to exist (Figure 3).

² Oregon Health Authority, Oral Health Unit.

³ Oregon Health Authority. Oregon's health system transformation: CCO metrics 2015 final Report. June 2016.

FIGURE 3



Source: Oregon Health Authority, CCO Metrics 2016 Final Report

Additional Resources: 2012 Smile Survey CCO Dental Sealants Metric Report

About the Data: Data source is the Oregon SMILE Survey which is done every five years (2002, 2007 and 2012). Trained dental hygienists screen children in 1st, 2nd and 3rd grades from a statewide representative sample of elementary schools in Oregon. Oral screening includes: 1) any cavities in primary or permanent teeth that are treated or untreated (health status); 2) untreated tooth decay in primary or permanent teeth (access); 3) decay in >7 teeth that is treated or untreated (severity). Dental sealants is a new incentive measure for OHP CCOs beginning in 2015. Data source for CCO metrics are administrative (billing) claims. These numbers reflect children receiving new sealants and does not include those that are not candidates for sealants (e.g., those already sealed, not yet erupted, or with active decay).

For More Information Contact: Kelly Hansen oral.health@state.or.us

Date Updated: August 8, 2017

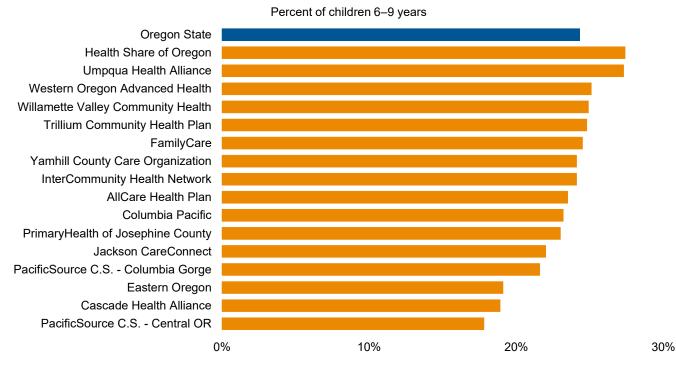
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Children age 6–9 years on Oregon Health Plan receiving dental sealants by Coordinated Care Organization, 2016

Gray lines represent confidence intervals



Coordinated Care Organization	Percent of children 6–9 years
AllCare Health Plan	23.5%
Cascade Health Alliance	18.9%
Columbia Pacific	23.2%
Eastern Oregon	19.1%
FamilyCare	24.5%
Health Share of Oregon	27.4%
InterCommunity Health Network	24.1%
Jackson CareConnect	22.0%
PacificSource C.S Central OR	17.8%
PacificSource C.S Columbia Gorge	21.6%
PrimaryHealth of Josephine County	23.0%
Trillium Community Health Plan	24.8%
Umpqua Health Alliance	27.3%
Western Oregon Advanced Health	25.1%
Willamette Valley Community Health	24.9%
Yamhill County Care Organization	24.1%
Oregon State	24.3%

About the Data

Data Source: Oregon Health Authority, CCO Metrics 2016 Final Report

Date: August 1, 2017

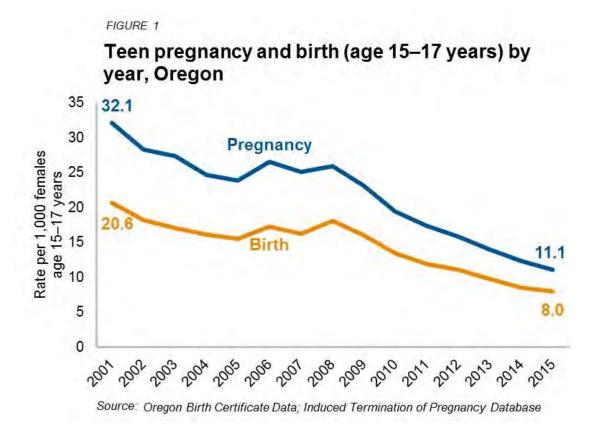


Maternal and Child Health

Teen pregnancy and birth

Teen pregnancies and births have been linked to poverty, income disparities, increased risk for dropping out of high school, and reduced access to prenatal care.

In Oregon, the teen pregnancy rate among females 15 to 17 years continues to decline, from 32.1 per 1,000 in 2001 to 11.1 per 1,000 in 2015 (Figure 1). Similarly, the teen birth rate among females 15 to 17 years declined from 20.6 per 1,000 in 2001 to 8.0 per 1,000 in 2015.



Racial and ethnic disparities in teen pregnancy and birth remain despite rates continuing to decline across all groups (Figure 2). Hispanic/Latino females continue to experience the highest pregnancy rate (22.4 per 1,000) followed by African American females (21.8 per 1,000), and American Indian/Alaska Native females (18.6 per 1,000). Hispanic/Latino females also experienced the highest birth rate

(19.2 per 1,000). Asian/Pacific Islander females had the lowest pregnancy and birth rates (4.0 and 2.6, respectively).

FIGURE 2 Teen pregnancy and birth (age 15-17 years) by race/ethnicity, Oregon, 2013-2015 average 25 Rate per 1,000 females 20 21.8 19.2 18.6 15 Pregnancy Rate 12.3 11.9 10 5 0 African American Hispanic/ Multi-White Asian/ American Indian/ Pacific Latino racial Islander Alaska

Notes: All other groups exclude Hispanic ethnicity.

Native

Source: Oregon Birth Certificate Data; Induced Termination of Pregnancy Database

American

Additional Resources: Oregon Vital Statistics; Office of Equity and Inclusion

About the Data: Data sources for births and induced terminations are Oregon Birth Certificate Data and Induced Termination of Pregnancy Database, respectively. Population estimates used in calculating rates are from the National Center for Health Statistics (NCHS). Pregnancy rates are calculated by combining the numbers of live births and induced terminations in females aged 15-17 years. Teen birth rates count live births only.

For More Information Contact: LaShanda Friedrich, lashanda.n.friedrich@dhsoha.state.or.us

Date Updated: September 25, 2017

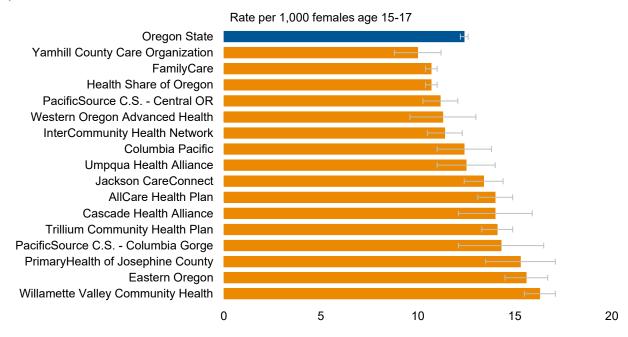
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Teen pregnancy (age 15-17) in regions covered by Coordinated Care Organizations, 2013–2015

Gray lines represent confidence intervals

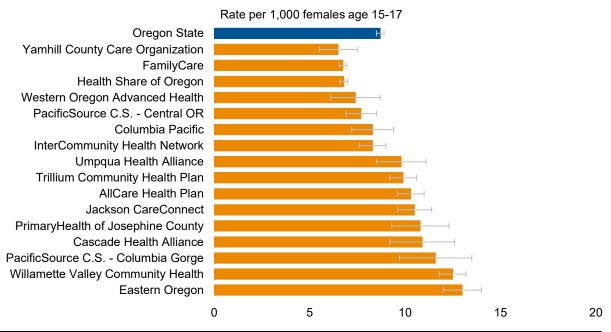


Coordinated Care Organization (Data represent entire population of CCO regions - not just enrolled population)	Rate per 1,000 females age 15- 17	Teen pregnancies (average annual)	Females age 15–17 (average annual)
AllCare Health Plan	14.0	79	5,614
Cascade Health Alliance	14.0	17	1,190
Columbia Pacific	12.4	25	2,038
Eastern Oregon	15.6	59	3,760
FamilyCare	10.7	330	30,708
Health Share of Oregon	10.7	330	30,708
InterCommunity Health Network	11.4	50	4,414
Jackson CareConnect	13.4	52	3,839
PacificSource C.S Central OR	11.2	45	3,968
PacificSource C.S Columbia Gorge	14.3	14	972
PrimaryHealth of Josephine County	15.3	23	1,478
Trillium Community Health Plan	14.1	85	6,028
Umpqua Health Alliance	12.5	23	1,852
Western Oregon Advanced Health	11.3	15	1,293
Willamette Valley Community Health	16.3	137	8,363
Yamhill County Care Organization	10.0	21	2,123
Oregon State	12.4	898	72,027



Teen births (age 15-17) in regions covered by Coordinated Care Organizations, 2013–2015

Gray lines represent confidence intervals



Coordinated Care Organization (Data represent entire population of CCO regions - not just enrolled population)	Rate per 1,000 females age 15- 17	Teen births (average annual)	Females age 15–17 (average annual)
AllCare Health Plan	10.3	58	5,614
Cascade Health Alliance	10.9	13	1,190
Columbia Pacific	8.3	17	2,038
Eastern Oregon	13.0	49	3,760
FamilyCare	6.8	207	30,708
Health Share of Oregon	6.8	207	30,708
InterCommunity Health Network	8.3	37	4,414
Jackson CareConnect	10.5	40	3,839
PacificSource C.S Central OR	7.7	31	3,968
PacificSource C.S Columbia Gorge	11.6	11	972
PrimaryHealth of Josephine County	10.8	16	1,478
Trillium Community Health Plan	9.9	85	6,028
Umpqua Health Alliance	9.8	18	1,852
Western Oregon Advanced Health	7.4	10	1,293
Willamette Valley Community Health	12.5	105	8,363
Yamhill County Care Organization	6.5	14	2,123
Oregon State	8.7	629	72,027

About the Data

Pregnancy Count Data Source: Oregon Birth Certificates and Induced Abortion Reports

Pregnancy Population Data Source: U.S. Census Bureau Population Estimates

Pregnancy Data Notes:

All estimates are unadjusted as they are restricted to a single age group

Birth Count Data Source: Oregon Birth Certificates

Birth Population Data Source: U.S. Census Bureau Population Estimates

Birth Data Notes:

All estimates are unadjusted as they are restricted to a single age group

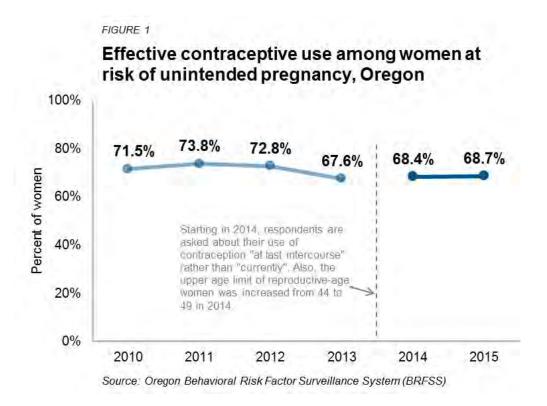
Date: July 31, 2017



Reproductive Health

Effective contraceptive use among women at risk of unintended pregnancy

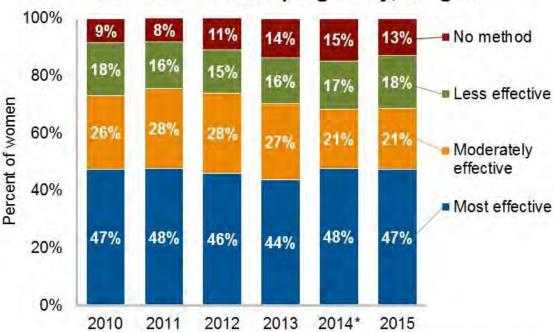
Unintended pregnancy is associated with an increased risk of health problems for both women and babies. When used correctly, contraceptives are very effective at preventing unintended pregnancy. The most effective contraceptive methods, with failure rates of less than 1%, are those that do not require user intervention. These methods include: male and female sterilization, intrauterine devices (IUD) and contraceptive implants. Moderately effective methods require consistent and correct use, and have typical-use failure rates between 6-12%. These methods include hormonal pills, patches, rings, and shots, as well as non-hormonal diaphragms.



In 2015, 68.7% of women at risk of unintended pregnancy reported using effective methods of contraception at last intercourse, consistent with previous years (Figure 1). No significant differences in contraceptive use are observed among women of different ethnic and racial groups.

FIGURE 2

Contraceptive method use among women at risk of unintended pregnancy, Oregon



* Starting in 2014, respondents are asked about their use of contraception "at last intercourse" rather than "currently". Also, the upper age limit of reproductive-age women was increased from 44 to 49 in 2014.

Source: Oregon Behavioral Risk Factor Surveillance System

In 2015, 13% of women at risk of unintended pregnancy reported using no method of contraception at last intercourse, and 18% reported using the least effective methods (condoms, sponges/diaphragms, spermicide and withdrawal) (Figure 2).

Oregon has multiple programs and policies in place to increase access to effective methods of contraception and quality family planning services, yet unintended pregnancy remains a major public health concern. Unintended pregnancy is disproportionately concentrated among poor and low-income women, young women (ages 18-24 years), and minority women.

Additional Resources: Reproductive Health Program, Oregon BRFSS

About the Data: Data source is the Oregon Behavioral Risk Factor Surveillance System (BRFSS). BRFSS is a telephone survey conducted annually among non-institutionalized adults age 18+. Women at risk of unintended pregnancy are defined as women age 18-49 (18-44 from 2010-2013) who are not pregnant, have not had a hysterectomy, are not post-

menopausal, are sexually active with an opposite-sex partner, and who answered the contraceptive use questions in the survey. Effective contraceptive methods are defined as the most effective methods (intrauterine device, implant, vasectomy and tubal ligation) and moderately effective methods (hormonal patch, ring, shot and pill) (from 2010-2013, moderately effective methods were included only if the respondent indicated they were used "every time" the respondent had sex). Less effective methods include condoms, spermicide, sponge/cap/diaphragm (which are grouped together in BRFSS, otherwise diaphragms are considered moderately effective methods), emergency contraception, and withdrawal.

For More Information Contact: Rachel Linz, Rachel.S.Linz@state.or.us

Date Updated: June 30, 2017

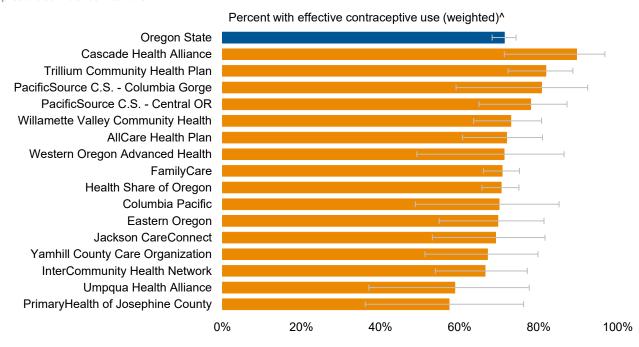
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Effective contraceptive use among women at risk of unintended pregnancy in regions covered by Coordinated Care Organizations, 2010–2013

Gray lines represent confidence intervals



Coordinated Care Organization	Percent with effective	Number at risk
(Data represent entire population of CCO regions -	contraceptive use	of unintended
not just enrolled population)	(weighted)^	pregnancy*
AllCare Health Plan	71.9%	155
Cascade Health Alliance	89.6%	26
Columbia Pacific	70.1%	50
Eastern Oregon	69.7%	89
FamilyCare	70.8%	722
Health Share of Oregon	70.6%	695
InterCommunity Health Network	66.5%	112
Jackson CareConnect	69.2%	93
PacificSource C.S Central OR	78.0%	82
PacificSource C.S Columbia Gorge	80.8%	23
PrimaryHealth of Josephine County	57.4%	34
Trillium Community Health Plan	81.9%	144
Umpqua Health Alliance	58.8%	37
Western Oregon Advanced Health	71.3%	41
Willamette Valley Community Health	73.0%	154
Yamhill County Care Organization	67.1%	86
Oregon State	71.4%	1,626

About the Data

Data Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)

Data Notes:

*Reproductive-age women at risk of unintended pregnancy:

Age: 18-44

Not currently pregnant

Have not had a hysterectomy

Not currently abstinent

Have an opposite-sex partner

Not trying to get pregnant or "don't care if get pregnant"

Exclude any without known contraceptive use status (such as those who ended the survey early)

^Effective contraceptive use includes women who reported using most or moderately effective methods

Most effective methods: IUD, Implant, Female Sterilization or Vasectomy

Moderately effective methods: Pill, Patch, Ring, or Shot, IF used "every time you have sex"

Date: August 29, 2016

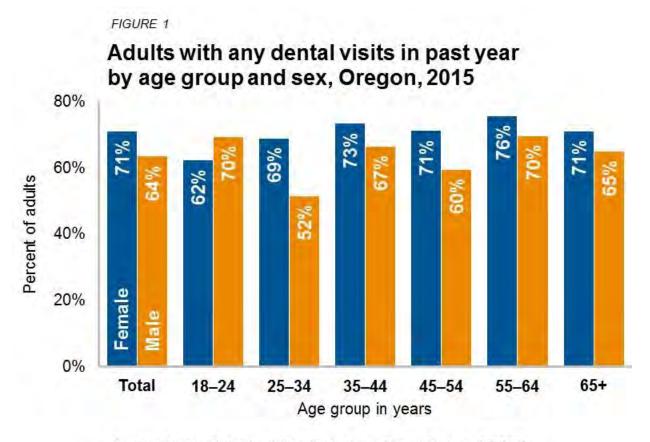


Health Care Access

Dental visits

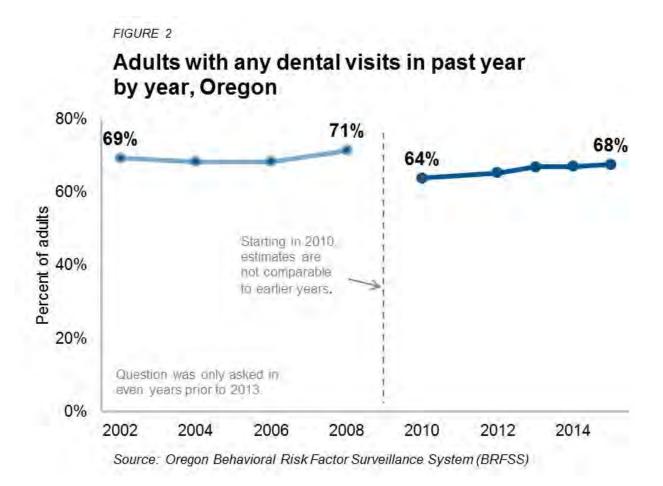
A healthy mouth is an important part of overall health, and regular visits to a dentist can help keep your teeth and gums healthy. Regular examinations and good oral hygiene can prevent most dental disease. Dental professionals can help detect oral health problems early on when treatment is likely to be easier and more affordable. They can also provide preventive services that can avoid many problems from developing in the first place.

The percentage of adults with any dental visits in the past year is a marker for access to dental care services. Overall in 2015, 64% of adult males and 71% of adult females had at least one dental visit in the past year in Oregon (Figure 1). This visit could be for preventive services, restorative care, or emergency treatment for a dental problem.



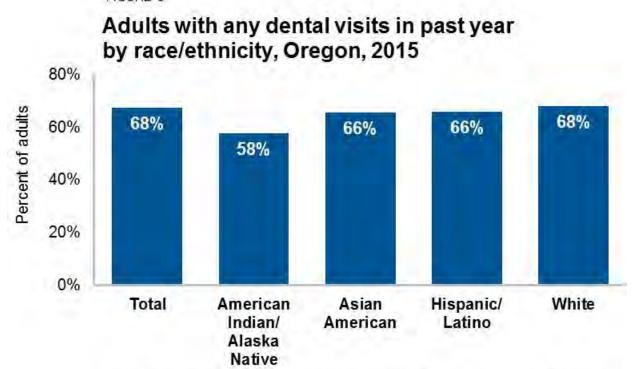
Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)

Dental visit rates in Oregon have remained stable since 2002 (Figure 2).



In Oregon, disparities exist in accessing timely dental care based on geographic residence, household income, and race and ethnicity. Hispanic/Latino, Native American and multiracial adults receive dental care at rates well below white adults (Figure 3). These disparities persist because there are a multitude of barriers, including lack of dental insurance, under-representation of a culturally diverse workforce, and cultural and linguistic obstacles, which need to be addressed in our communities.

FIGURE 3



Notes: All other groups exclude Hispanic ethnicity. Some groups not displayed due

to low numbers.

Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)

As of January 1, 2014, all non-pregnant adults who qualify for the Oregon Health Plan (Medicaid) in Oregon receive the same package of benefits, which includes comprehensive dental coverage. Before 2014, the majority of adults who qualified for Medicaid received only an emergency dental benefit. Full benefits were reserved for those who could meet certain eligibility requirements, such as adults who were aged, blind, or disabled and receiving at or below supplemental security income standard. Pregnant women continue to receive a slightly enhanced level of benefits.

Additional Resources: Oregon BRFSS

About the Data: Data source is the Oregon Behavioral Risk Factor Surveillance System (BRFSS). BRFSS is a telephone survey conducted annually among non-institutionalized adults age 18+. Since 2010, the BRFSS data have included cell phone respondents as well as those reached by landline, and data weighting methods have changed. Therefore, caution should be used in interpreting changes over time. Data include respondents who reported having visited a dentist, dental hygienist, or dental clinic in the past 12 months. From the question: "How long has it been since you last visited a dentist or a dental clinic for any reason? Include visits to dental specialists, such as orthodontists".

For More Information Contact: Kelly Hansen oral.health@state.or.us

Date Updated: August 8, 2017

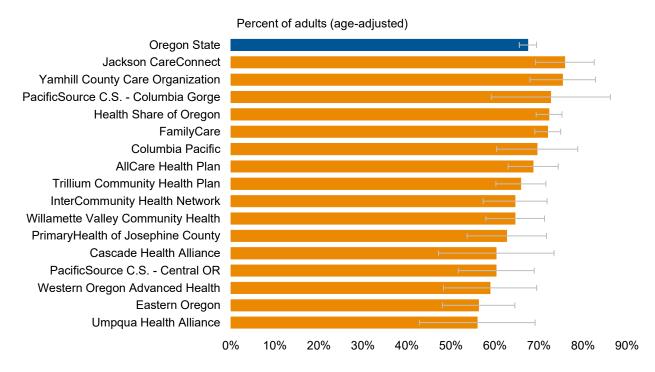
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Adults who had a dental care visit in the past year in regions covered by Coordinated Care Organizations, 2015

Gray lines represent confidence intervals



Coordinated Care Organization (Data represent entire population of CCO regions - not just enrolled population)	Percent of adults (age-adjusted)	Number of respondents (N)
AllCare Health Plan	68.7%	376
Cascade Health Alliance	60.3%	85
Columbia Pacific	69.6%	146
Eastern Oregon	56.3%	245
FamilyCare	72.0%	1,640
Health Share of Oregon	72.3%	1,600
InterCommunity Health Network	64.6%	332
Jackson CareConnect	75.9%	215
PacificSource C.S Central OR	60.3%	227
PacificSource C.S Columbia Gorge	72.7%	57
PrimaryHealth of Josephine County	62.7%	163
Trillium Community Health Plan	65.9%	413
Umpqua Health Alliance	56.0%	144
Western Oregon Advanced Health	58.9%	243
Willamette Valley Community Health	64.6%	371
Yamhill County Care Organization	75.4%	186
Oregon State	67.5%	4,245

About the Data

Data Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)

Data Notes:

Adults = age 18+

Number of respondents (N) is unweighted; percentages are weighted

Age-Adjusted to standard U.S. 2000 population - 3 groups (18-34, 35-54, 55+)

Question: How long has it been since you last visited a dentist or dental clinic for any reason?

Include visits to dental specialists, such as orthodontists.

Date: August 11, 2017

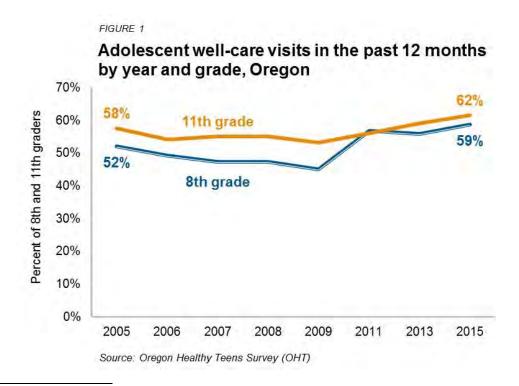


Health Care Access

Adolescent well-care visits

While most adolescents enjoy good health, dramatic physical, cognitive, social and emotional change during this period calls for a unique approach to health care compared to adults or young children. Additionally, health behaviors established in adolescence tend to persist into adulthood and many chronic diseases first emerge in this age. Comprehensive well-care visits that are aligned to American Academy of Pediatrics guidelines¹ are a vehicle to deliver evidence-based screening, services (such as immunizations) and health promoting messages.

The Affordable Care Act and health system transformation efforts in Oregon have elevated the focus on adolescent well care visits. While data varies by source, it is clear that not enough young people are receiving annual well care visits. Oregon Healthy Teens (OHT) data from 2015 show approximately half of 8th and 11th graders reported seeing a doctor or nurse when they were not sick or injured in the past 12 months (Figure 1). There has been a steady increase in the proportion of students who report a well care visit since 2009.



¹ Recommendations for Preventive Pediatric Health Care, Bright Futures, American Academy of Pediatrics

Additional Resources: Adolescent and School Health Program

About the Data: Data source is the Oregon Healthy Teens Survey (OHT). OHT is a pencil and paper or online survey conducted every two years among Oregon 8th and 11th graders within schools. Data includes responses that indicate having a "visit with a doctor or nurse when not sick or injured" in the last 12 months.

For More Information Contact: adolescent.program@state.or.us

Date Updated: July 11, 2017

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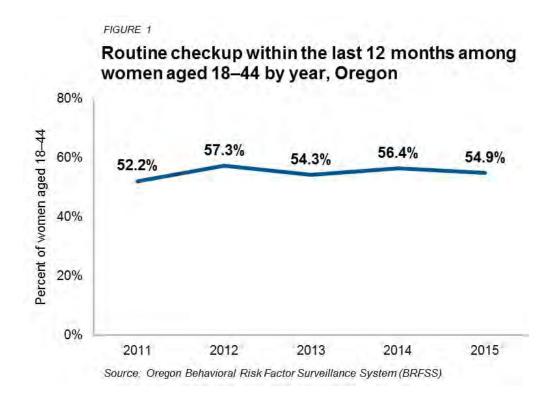
Health Care Access

Well woman visits

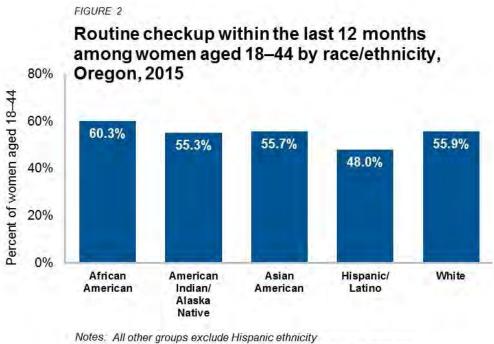
Access to high-quality well woman care is a key driver for optimizing the health of women before, between and beyond potential pregnancies. By taking action on health issues throughout the lifespan, future problems for the mother and baby can be prevented. Access to high-quality well woman care:

- Provides a critical opportunity to receive recommended clinical preventive services, screening and management of chronic conditions such as diabetes, counseling to achieve a healthy weight and smoking cessation, and immunizations.
- Increases the likelihood that any future pregnancies are by choice rather than chance.
- Decreases the likelihood of complications for future pregnancies.

In 2011, 52.2% of Oregon women aged 18 to 44 years had a well woman visit (a routine checkup) within the last year. This percentage increased slightly to 54.9% in 2015 (Figure 1).



Racial/ethnic disparities exist in the receipt of well woman visits among Oregon women aged 18 to 44 years. However due to small sample size, this disparity data should be interpreted with caution (Figure 2).



Notes: All other groups exclude Hispanic ethnicity
Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)

A well woman care visit is supported in Oregon and nationally as a chance to screen for diseases and risk factors, and promote health before and between pregnancies. The annual well woman visit has been endorsed by the American College of Obstetrics and Gynecologists (ACOG) and was also identified among the women's preventive services required by the Affordable Care Act (ACA) to be covered by private insurance plans without cost-sharing.

Additional Resources: Oregon Behavioral Risk Factor Surveillance System

About the Data: Data source is the Oregon Behavioral Risk Factor Surveillance System (BRFSS), which is conducted annually. Data includes women of reproductive age (18 to 44 years old). The question asked in BRFSS is "About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition."

For More Information Contact: Maria Ness, maria.n.ness@state.or.us

Date Updated: August 2, 2017

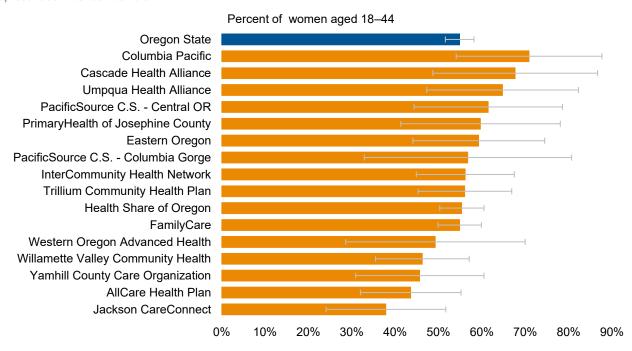
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Routine checkup within the last 12 months among women aged 18–44 in regions covered by Coordinated Care Organizations, 2015

Gray lines represent confidence intervals



Coordinated Care Organization	Percent of	Number of
(Data represent entire population of CCO regions -	women aged	respondents
not just enrolled population)	18–44	(N)
AllCare Health Plan	43.6%	87
Cascade Health Alliance	67.7%	25
Columbia Pacific	70.9%	35
Eastern Oregon	59.3%	66
FamilyCare	54.9%	529
Health Share of Oregon	55.4%	521
InterCommunity Health Network	56.2%	100
Jackson CareConnect	37.9%	56
PacificSource C.S Central OR	61.5%	37
PacificSource C.S Columbia Gorge	56.8%	20
PrimaryHealth of Josephine County	59.7%	32
Trillium Community Health Plan	56.1%	103
Umpqua Health Alliance	64.8%	37
Western Oregon Advanced Health	49.3%	23
Willamette Valley Community Health	46.3%	104
Yamhill County Care Organization	45.7%	50
Oregon State	54.9%	1,202

About the Data

Data Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)

Data Notes:

Number of respondents (N) is unweighted; percentages are weighted

Question: About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.

Date: August 3, 2017



Photo Credit: Look at This Imaging

TOPICS INCLUDE:

- Current Successes
- Key Public Health Strategy
- Costs of Not Supporting Breastfeeding
- Existing Barriers
- Disparities Persist
- CDC Breastfeeding Report Card
- Actions: State and Local
- References

AIM

Breastfeeding supports lifelong health of children and their mothers and is one of the highest impact interventions providing benefits for children, women and society. Increasing rates of exclusive breastfeeding is one of the most powerful interventions policy makers have to improve population health. From birth through the first year, breastfeeding's unparalleled brain-building capabilities gives babies the healthiest start to life²—it is a child's first inoculation against illness and risk for developing chronic disease leading to premature death. Breastfeeding reduces infant morbidity and mortality, is consistently associated with higher performance on intelligence tests among children and adolescents across all income levels^{2,3} and improves school achievement and boosts adult earning. Breastfeeding contributes to equity by giving all children a nutritional head start for success in life.1

BACKGROUND

Breast milk is the biological norm for feeding babies. In addition to providing the essential building blocks for brain-development, its nutritional and immunological properties unique to breast milk help protect babies from infection and illness. This protection is key to reducing infant mortality, SIDS deaths, respiratory infections and necrotizing enterocolitis (NEC), a condition with very high medical costs that mainly affects premature babies when fed breast milk substitutes.^{2,3,4} Longer duration of breastfeeding is associated with lower risk for overweight, obesity and type-2 diabetes later in life. Mothers benefit from reduced risk for ovarian cancer, breast cancer, heart disease and postpartum depression.^{2,3,4}

Breast milk itself, as well as the experience of breastfeeding, contribute to healthy development—the nutritional quality and the quality of experiences and interactions strengthen baby's sensory and emotional circuitry. Breastfeeding facilitates a naturally responsive style of meeting babies' needs.²

BEHIND THE CURRENT SUCCESS



Today's WIC mothers are breastfeeding at much higher rates than 20 years ago, receiving extensive support for breastfeeding initiation and continuation. Oregon WIC has taken multiple policy steps to align daily clinic operations and implement evidence-based strategies to protect and support breastfeeding: 10

PROFESSIONAL LACTATION SUPPORT

Currently 19 local WIC staff have obtained the International Board Certified Lactation credential (IBCLC) with financial and technical assistance from state WIC.

PRENATAL EDUCATION

Each month, WIC clinics statewide provide over 50 free prenatal breastfeeding preparation classes, giving families support for breastfeeding statewide.

PEER SUPPORT

Breastfeeding peer counselors provide additional support in 9 local WIC agencies; peer support is an evidence-based strategy that empowers women in their belief in their ability to breastfeed.¹²

HEALTH CARE PROVIDER EDUCATION

The state WIC staff teach an in-person Breastfeeding Basics twice a year that is open to staff from WIC, Head Start, public health nursing programs and hospitals.

HEALTHY FOODS FOR BREASTFEEDING WOMEN

Women who exclusively breastfeed their infants receive additional foods in a food prescription or benefit designed to meet their nutritional needs.

BREAST PUMPS

Local WIC agencies can provide manual, personal, double and hospital-grade breast pumps to WIC participants who do not qualify for a pump through their insurer.

A KEY PUBLIC HEALTH STRATEGY

Breastfeeding is a key strategy to improve public health and supports the Triple Aim of improving quality of care, improving the health of the community and reducing the cost of healthcare. The *Surgeon General's Call to Action to Support Breastfeeding* states that, "Rarely are we given the chance to make such a profound and lasting difference in the lives of so many." Breastfeeding targets are identified in the *U.S. Healthy People 2020*⁵ and *Global Nutrition Targets 2025*. The Centers for Disease Control and Prevention has identified increasing the 6 month exclusive breastfeeding rate as a "winnable battle," a public health priority with large-scale impact on health.

Despite being a leader in breastfeeding rates as compared to other states, overall duration and exclusivity rates fall short of health organization recommendations for optimal breastfeeding [in Oregon].

Oregon's health care transformation is shifting the focus to prevention. Modernization efforts address Oregon's capacity to provide foundational public health services in order to achieve improved health for all community members.8 In the Action Plan for Health Framework, breastfeeding fits in the context of addressing health outcomes, the social determinants of health and health equity. Breastfeeding is identified as a strategy in the State Health Improvement Plan (SHIP) under the priority 'Slow the increase of Obesity,' and breastfeeding strategies are in all 3 focus areas: population, health equity and health systems.8 Oregon's Title V program and community partners identified breastfeeding as a priority with dedicated targeted funding.9 Oregon WIC has long been a national leader in supporting breastfeeding, and Oregon has some of the highest breastfeeding rates in the nation.¹⁰ Lower income women in Oregon start and continue breastfeeding at a rate comparable to the general population for some measures and exceed Healthy People 2020 goals.¹⁰ Despite being a leader in breastfeeding rates as compared to other states, overall duration and exclusivity rates fall short of health organization recommendations for optimal breastfeeding.

THE COSTS TO THE U.S. BY NOT SUPPORTING BREASTFEEDING

Protection, promotion and support of breastfeeding provides short- and long-term health and economic advantages to children, women and society¹. Suboptimal breastfeeding, particularly low rates of exclusive breastfeeding increase health costs for both children and their mothers.





Gap between medical breastfeeding recommendations and current suboptimal breastfeeding rates result in significant excess costs and preventable deaths.



FOR WOMEN

If 90% of mothers are supported in following optimal breastfeeding recommendations, the U.S. would save

\$18.3 billion

in health care costs and can prevent

4000

Premature deaths per year 13

PREVENTABLE DISEASES

- Breast cancer
- Hypertension
- Myocardial infarction (heart attack)
- Type 2 diabetes mellitus
- Premenopausal ovarian cancer

FOR CHILDREN

If 90% of mothers are supported in following optimal breastfeeding recommendations, the U.S.would save

\$13 billion

in health care costs and can prevent

911

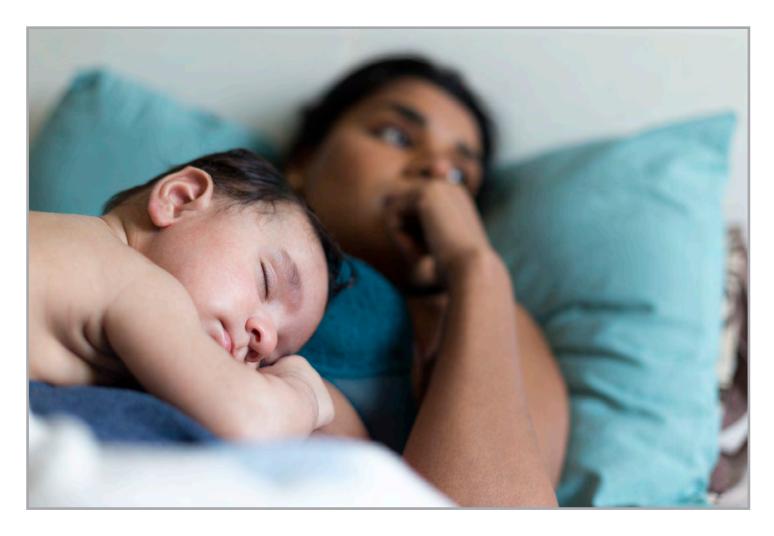
Infant deaths per year 13



PREVENTABLE DISEASES

- · Otitis media
- Gastroenteritis
- Lower resp. tract infections
- Atopic dermatitis
- SIDS
- · Necrotizing enterocolitis
- Childhood asthma
- · Childhood leukemia
- Type 1 diabetes mellitus
- Childhood obesity

These cost savings are even greater when taking into consideration that diseases prevented by breastfeeding are more prevalent among populations experiencing disparities.¹⁵



EXISTING BARRIERS

Women who want to breastfeed need stronger support from their families, communities, health care providers and employers. ^{1,2,4,15} There are multiple barriers to improving breastfeeding rates, a major one being lack of access to a hospital or birthing center that is "Baby-Friendly," ^{2,4,15} a certification that ensures that mothers in health facilities are optimally supported to breastfeed and bond with their baby. ¹⁶ In Oregon only 32.4% of births occur in Baby-Friendly facilities. ¹⁵ Since 2007 Oregon hospitals have improved in the majority of "Baby-Friendly" steps, from 74% in 2007 to 86% in 2015. ¹⁷ In 2015, 14% of hospitals reported routinely feeding infant formula or other liquids to healthy, breastfed newborns when there was no medical reason or parental consent to do so. ¹⁵ Aggressive and inappropriate marketing of breast milk substitutes (infant formula) influences not only families but also health care workers. ^{1,4} Nonetheless, hospital practices are improving. Continued areas for improvement in Oregon are having a hospital breastfeeding policy, not giving supplemental feedings to breastfed infants, staff training, and hospitals providing appropriate discharge planning. ¹⁷

Women may not have access to breastfeeding counselors, lactation consultants and other healthcare professionals trained in breastfeeding support.² The U.S. Preventive Services Task Force (USPSTF) recommends providing interventions during pregnancy and after birth to support breastfeeding as there is convincing evidence that breastfeeding provides substantial health benefits for children and adequate evidence that breastfeeding provides moderate health benefits for women.¹⁸ Oregon has 8.27 International Board Certified Lactation Consultants (IBCLCs)/1000 births.¹⁵ Legislation passed during the 2017 Oregon legislative session provides state licensure for IBCLCs beginning January 1, 2018. This will result in increased access to lactation consultants for all Oregon women who need medical management of breastfeeding problems. The Affordable Care Act has mandated coverage of lactation support services which increased breastfeeding initiation by as much as 2.5 percentage points; the effect was larger for populations that are less-educated, unmarried or non-Hispanic black.¹⁹ The differential impacts suggest that coverage of lactation services can have a positive increase in breastfeeding rates among groups that have historically had lower breastfeeding rates.¹⁹ Strategies for Providing Lactation Services outlines evidence-based strategies that Coordinated Care

Organizations (CCOs) and healthcare providers can implement to meet mandated coverage requirements to support breastfeeding women.¹²

Women who return to work while still breastfeeding must balance breastfeeding and the demands of employment.2 They may face inflexibility in their work hours and locations, or a lack of privacy for breastfeeding or expressing milk.4 Oregon and federal lactation accommodation laws aim to provide the necessary support for women who have the need to express milk at work. Also, child care providers are essential in helping employed women continue to breastfeed after returning to work by having a breastfeeding-friendly environment.4 Another major barrier is lack of paid maternity leave.^{1,2,4} Maternity leave increases both breastfeeding initiation and duration.4, 19 Lack of access to paid leave means that women return to work just a few weeks after giving birth, putting their ability to breastfeed at risk.²

DISPARITIES PERSIST IN BREASTFEEDING OPPORTUNITIES AND HEALTH OUTCOMES

Disparities in breastfeeding rates persist among both low income women and women of color, contributing to an increase in poor health outcomes and premature deaths and resulting in persistent inequality later in life.^{1,2}

One study found that breastfeeding disparities in the U.S. are most pronounced among non-Hispanic blacks, with an increased risk for SIDS, type 2 diabetes, cardiovascular disease and breast cancer.²⁰ Additionally black infants have more than twice the deaths of whites attributable to lack of optimal breastfeeding and also had more than three times the rate of NEC.²⁰

Breastfeeding provides a unique opportunity to reduce disparities in infant mortality and to disrupt intergenerational cycles of poor health, to ensure all children have an equal opportunity. Disparity in breastfeeding duration and exclusivity may directly affect economic security and lack of paid leave and hospital maternity care that is not evidence-based disproportionately impact families of color and are a significant barrier to breastfeeding. ²¹

BABY-FRIENDLY HOSPITALS

10 STEPS TO SUCCESSFUL BREASTFEEDING 16

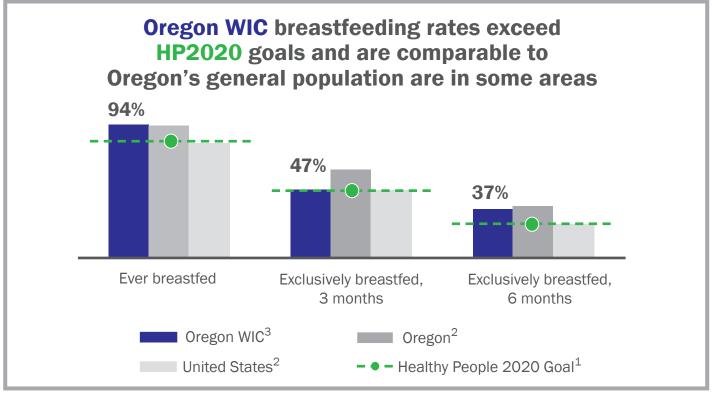
- Have a written breastfeeding policy that is routinely communicated to all health care staff
- Train all health care staff in the skills necessary to implement this policy
- Inform all pregnant women about the benefits and management of breastfeeding
- Help mothers initiate breastfeeding within one hour of birth
- Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants
- Give infants no food or drink other than breastmilk, unless medically indicated
- Practice rooming in allow mothers and infants to remain together 24 hours a day
- Encourage breastfeeding on demand
- Give no pacifiers or artificial nipples to breastfeeding infants
- breastfeeding support groups and refer mothers to them on discharge from the hospital or birth center

STILL ROOM FOR IMPROVEMENT IN OREGON

Most Oregon women start out breastfeeding (93.2%). The majority of Oregon babies, however, are not breastfed in accordance with the American Academy of Pediatrics (AAP) and World Health Organization (WHO) recommendations that babies be fed only breastmilk for their first 6 months and continue breastfeeding with complementary foods for at least 1 year (at least 2 years and beyond according to WHO).^{22,23} Many women are not able to meet their breastfeeding goals due to an overall lack of support; only 6 in 10 are able to do so for as long as they initially planned.²⁴

THE CDC BREASTFEEDING REPORT CARD 15				
	Oregon	Nation	HP 2020 Goals	
Ever Breastfed	93.5%	82.5%	81.9%	
Exclusive Breastfeeding at 3 months	62.7%	46.6%	46.2%	
Breastfeeding at 6 months	70.0%	55.3%	60.6%	
Exclusive Breastfeeding at 6 months		24.9%	25.5%	
Breastfeeding (any breastmilk) at 1 year		33.7%	34.1%	
Live Births at Baby Friendly Hospitals		18.3%	8.1%	
Formula Supplementation of Breastfed Infants within 2 days of birth		15.5%	14.2%	
mPINC overall score (75% of Oregon birth facilities)		79	NA	
mPINC sub-scores needing improvement:				
 Current staff receive appropriate breastfeeding education 	31%			
Staff provide appropriate discharge planning	37%	NA	NA	
Breastfeeding policy includes all 10 model policy elements	39%			

CDC's national <u>survey of Maternity Practices in Infant Nutrition and Care (mPINC)</u> is administered every two years to monitor and examine changes in practices over time at all hospitals and birth centers with registered maternity beds in the United States and Territories. Additional information here: <u>www.cdc.gov/breastfeeding/data/nis_data/index.htm.</u>



1. Healthy People 2020 Goals 2. National Immunization Survey, 2014 cohort 3. Oregon WIC Administrative data, 2016

RECOMMENDED STATE AND LOCAL ACTIONS

Women and their families need improved support so that they are able to breastfeed according to recommendations and their own breastfeeding goals by creating breastfeeding-friendly communities, workplaces, hospitals and healthcare systems.^{2, 4, 16}

STATE PROGRAMS

Create a supportive environment through policy and legislation, supportive regulations and programs such as:

- Support implementation of lactation services and supplies coverage before, during and after pregnancy and throughout the neonatal period
- Support and promote evidencebased maternity care practices such as Baby-Friendly hospitals
- Facilitate linkages between hospitals, local health agencies and community-based resources
- Provide health care provider training to support exclusive breastfeeding
- Support and promote community-based strategies to support exclusive breastfeeding such as peer support programs
- Ensure implementation of lactation accommodation laws to support breastfeeding upon return to work
- Update Oregon child care regulations to address support for breastfeeding families
- Support paid parental leave

LOCAL HEALTH AGENCIES AND COMMUNITY PARTNERS

Create a supportive environment through:

- Increase enrollment of WIC-eligible women and babies
- Help CCOs increase access to qualified breastfeeding support and lactation care providers, and increase access to provision of breast pumps
- Promote evidence-based maternity care practices such as Baby-Friendly hospitals
- · Support health care provider training
- Ensure strong linkages between hospitals and local public health agencies
- Provide community-based peer support programs that help empower women to succeed in breastfeeding
- Support implementation of lactation accommodation laws for women returning to work
- Promote breastfeeding-friendly child care provider practices
- Address aggressive and inappropriate marketing of breast milk substitutes (infant formula)





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Operational Policy

Policy title:	Workplace Breastfeeding Support Policy		
Policy number:	DHS OHA-010-020		
Original date:	11/07/2016	Last update:	12/18/2017
Approved:	Kris Kautz, OHA COO Dr. Reginald Richardson, Deputy Director, DHS		

Purpose

The Department of Human Services (DHS) and the Oregon Health Authority (OHA) are committed to workplace policy that benefits employee, family and community wellness. Breastfeeding is a proven, cost-effective prevention strategy for protecting infants and mothers from many chronic and acute diseases and conditions and reduces health care costs for families, employers and communities. A strong workplace lactation policy sets an example for other employers as well as for employees, volunteers and visitors that the agencies promote breastfeeding and expressing milk in the workplace.

Description

This policy describes the expectations for supporting breastfeeding within DHS|OHA by outlining the performance requirements for DHS|OHA and agency staff.

Applicability

This policy applies to all DHS and OHA staff including employees, volunteers, trainees, and interns.

As keepers of the public trust, all agency employees have a responsibility to comply with state and agency policies, administrative rule, and state and federal law. The agencies take this responsibility seriously and failure to fulfill this responsibility is not treated lightly. Employees who fail to comply with state or agency policy, administrative rule, or state and federal law may face progressive discipline, up to and including dismissal from state service.

Policy

- 1. A breastfeeding individual, whether staff, volunteer, or visitor, may breastfeed in any area of DHS|OHA where the breastfeeding individual and child are authorized to be, whether or not the individual's breast or nipple is exposed as part of breastfeeding.
- 2. DHS|OHA treats conduct that reasonably interferes with an employee's work performance, that creates an intimidating, hostile or offensive work environment, or that inhibits a staff member's ability to breastfeed or express milk in accordance with this policy, as harassment under the DAS Discrimination and Harassment Free Workplace policy. According to the Department of Administrative Services (DAS) 50.010.01 policy, DHS|OHA shall prohibit:
 - a. Adverse employment actions related to lactation or time used for lactation, including but not limited to discrimination or retaliation.

- b. Disapproving comments or criticism of staff who use time for lactation.
- c. Jokes, comments or ridicule that may result in embarrassment for staff whether lactating or not.
- d. Tampering with or theft of lactation equipment or stored pumped milk.
- e. Altering or scheduling over break times or planned break times intended for lactation purposes.
- 3. DHS|OHA shall ensure that all individuals have an adequate location for breastfeeding or pumping breast milk. The location shall **not** be a restroom and shall:
 - a. Be a private room with a lock.
 - b. Be near an area for hand washing.
 - c. Include a comfortable chair, a table, a wastebasket, and access to an electrical outlet.
 - d. Include reasonable modifications to policies, practices or facilities as needed to address accessibility and avoid discrimination.
- 4. DHS|OHA shall allow for flexibility in scheduling for staff who are breastfeeding an infant brought into the agency for that purpose or for expressing milk.
 - a. A reasonable amount of time shall be allowed for nursing or expressing milk.
 - b. The space provided to staff for nursing or expressing breast milk shall be in close proximity to their workspace.
 - c. If the time required for nursing or expressing breast milk exceeds the normal amount of time allowed by lunch and break periods, staff:
 - A. Shall be allowed the opportunity to make up the work time.
 - B. May use annual, compensatory, or unpaid leave to cover the additional work time.
 - d. Time spent in travel to or from a provided location that is not in close proximity to the workspace is considered work time and does not require the staff member to either make up the time or use leave.
 - e. Pumping time must be included in time worked for the purpose of determining eligibility for health insurance.
- 5. DHS|OHA shall allow for the storage of breast milk in a refrigerator or a storage area for a personal cooler, ice chest or thermos.
 - a. Individuals storing breast milk shall provide their own containers.
 - b. Individuals storing breast milk shall ensure their containers are clearly marked with name and date.
- 6. Individuals who breastfeed in a DHS|OHA facility shall not dispose of diapers or other odorous materials in the location provided for breastfeeding or expressing milk. Individuals shall ensure that these materials are:
 - a. Stored properly, in an area not used by other staff; and
 - b. Taken home or disposed of each day.
- 7. Information about breastfeeding shall be provided by DHS|OHA:
 - a. In break spaces and where other mandated notices are displayed.
 - b. In staff communications and on agency websites.
 - c. To new staff or volunteers during new employee training and orientation.
 - d. In public areas of facilities to direct visitors about where to get facility-specific breastfeeding information.
- 8. The provision of workplace support for breastfeeding shall be included in workplace wellness plans and policies.
- 9. For those who must breastfeed or express breast milk at an alternate location, DHS|OHA shall provide lactation support, preferably by arranging for the agency employee to use a space at the alternate location for lactation purposes.
- Staff shall refer to DHS|OHA-010-019 for agency requirements related to supporting breastfeeding.

11. DHS|OHA follow all applicable federal and state statutes, rules and policies.

References

OAR 839-020-0051

ORS 109.001

ORS 653.077

Patient Protection and Affordable Care Act, Amended Section 7 of the Fair Labor Standards Act,

Break time for Nursing Mothers

Public Health Breastfeeding Laws references

DHS|OHA-010-020-01 Workplace Breastfeeding Support Policy Guidelines

Forms referenced

Related policies

DAS 50.010.01 Discrimination and Harassment Free Workplace Policy

DHS|OHA-010-019 Healthy Meetings, Conferences, and Events

DHS|OHA-010-019-01 Healthy Meetings, Conferences and Events Guidelines

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Policy history

Version 1 Joint DHS|OHA policy established 11/07/2016 Version 2 12/18/2017

Keywords

Breastfeeding, breast milk, expressing, nursing, lactation, pumping, harassment, discrimination

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Guidelines

Title:	Workplace Breastfeeding Support Policy Guidelines
Related to:	DHS OHA -010-020-01
Effective date:	11/07/2016

Purpose

This document provides guidelines for creating a supportive workplace breastfeeding environment that complies with state and federal laws and demonstrates that DHS|OHA promote a culture of breastfeeding support and the role it plays in overall health and worksite wellness.

Breastfeeding is a proven, cost-effective prevention strategy for protecting infants and mothers from many chronic and acute diseases and conditions. It reduces health care costs for families, employers and communities. A work environment that supports breastfeeding and lactation benefits employers through increased retention and employee satisfaction. DHS|OHA will support an individual's choice to breastfeed either publically or privately and provide a clean, private location if that is the preferred option.

Guidelines

- 1. A breastfeeding individual may breastfeed in private areas set aside for this purpose but is not required to do so.
- 2. DHS|OHA provides accessible private rooms, near employee workspaces, with locking doors for milk expression or breastfeeding.
 - a. The lactation areas are designed to make users feel comfortable and safe.
 - A. Lactation areas are sanitary, with the standards for cleanliness similar to expectations for food preparation areas.
 - B. Lactation areas are designated for milk expression and breastfeeding with signage designating the purpose of the space, and may not be a sick room or break room.
 - C. The room may be accessed using a key, key card, or code to enter the room.
 - b. If a designated room is not available, DHS|OHA provides an alternative private location, near the employee's workspace, where the employee can breastfeed or express milk concealed from view and without intrusion by other employees or the public. If a locked breastfeeding room is not available:
 - A. Signage outside the alternative space shall advise that the space is in use and not accessible to others.
 - B. Good communication with staff ensures that staff understand their responsibilities related to not entering the lactation space.
 - c. If the agency opens the space to visitors, clients or the public, employee needs are the priority.
 - A. Non-employees accessing lactation spaces should be treated with the same respect and expectations as employees.
 - B. If there is public access to a lactation area, the items in the space may need to be secured.

- 3. The following amenities are recommended for lactation spaces:
 - a. Furnishings made of durable washable surfaces (no fabric) that can be wiped down or cleaned easily.
 - b. Enhanced options such as a sink for washing hands and pump parts, a small refrigerator for storing milk, soft lighting to help with relaxation, a footstool, mirror, supportive books, magazines or educational material, framed photos or posters, and a place for staff to post photos of their children or other shared information.
- 4. For questions about creating an accessible lactation room contact DHS|OHA Human Resources or the Northwest Americans with Disabilities Center.
- 5. Employees are not required to use the private lactation space if they do not prefer it.
 - a. Employees may choose to express breast milk in an alternate location, free from view, such as their own office or work space.
 - b. If an employee is using an electric breast pump in an alternate location, the employee should ensure the noise is not disruptive to near-by co-workers.
 - c. Good communication with other staff ensures that co-workers do not intrude on the employee, or make comments about lactation activities.
- 6. Each lactation room should have a reasonable method of scheduling time to use the room.
 - a. Time allotted for scheduling is usually in 30-minute increments.
 - b. Scheduling options include a paper sign-in sheet kept in the room, a dry-erase board, or an online calendar schedule.
 - c. Each worksite may keep a log to determine when additional space may be needed.
- 7. The provision of private, accessible space should be adequate for the number of breastfeeding staff needing this accommodation.
 - a. In some agencies, additional space may be needed to meet employee needs.
 - b. Agencies should consider how many females are employed, the number and size of buildings, and the work schedule and job settings of employees. A general rule is to provide at least one permanent milk expression space for every 50–100 females employed by the agency, and adjust as employee needs increase.
 - c. The National Institutes of Health (NIH) compiled a formula for identifying the number of spaces needed, and estimate that at least six milk expression stations for every 1000 female employees should be the general rule. This number is based on a pregnancy rate of 5–7 percent among the female population, a breastfeeding initiation rate of 75 percent, and an assumption that most nursing employees cluster milk expression periods around a similar period from 10 a.m. to 3 p.m. during a standard work day. The chart below is based on their general guide:

Milk Expression Spaces

Number of Female Employees	Number of Stations Needed
Under 100	1
Approximately 250	2
Approximately 500	3
Approximately 750	4
Approximately 1000	6

- 8. Individuals who use the room are responsible for keeping the room clean.
 - a. Staff should use sanitizing wipes for wiping down surfaces and spills.
 - b. Individual agency locations may determine room maintenance responsibilities.
- 9. Centralized locations make it possible for the greatest number of employees to access the space; each agency location should provide a room in close proximity to employee work areas.
 - a. "Close proximity" means a space close enough to the employee work area that reaching it does not appreciably shorten the break time or meal period, an approximate walking distance of 5 minutes or less.

- b. Spaces shall be in easily accessed locations evenly distributed within large buildings and across a large campus.
- c. Within a building, lactation spaces may be located near a central bank of elevators, the entrance to a facility, or the employee lounge or eating areas.
- 10. Work schedule and work pattern flexibility are provided to express milk during work hours as often as needed. Scheduling is arranged on a case-by-case basis depending on the specific needs of the employee.
 - a. Employees and supervisors shall consider flexible work hours, phase-back scheduling options (a temporary part-time schedule to gradually transition back to work full-time), part-time and telecommuting opportunities, as well as flexible breaks and assignments when feasible.
 - b. The time and frequency needed for feeding or expressing milk varies between employees, depending on the age of the child, milk supply and other factors.
 - A. It is not unreasonable for an employee to need to pump three times during an 8-hour workday.
 - B. Employees and their supervisors shall work out arrangements suitable to both parties in order to address the employee's biological need and the organization's business need. Such arrangements may be modified over time.
 - C. It is not unreasonable for each expression of milk session to take about 30 minutes. This includes walking to the room, setting up the pump, expressing milk, storing the breast milk, rinsing the pump parts and returning to the work station.
 - c. It is expected that the employee and employer will discuss the accounting of the break time and will determine arrangements that are suitable to both parties. Possible arrangements include:
 - A. Employee makes up the time by coming in a little earlier or leaving a little later, so there is no change in pay status.
 - B. Employee obtains prior authorization from supervisor to use already accrued annual leave or compensatory time.
 - C. Employee takes unpaid leave for the additional time, resulting in a decrease in pay. If this arrangement is selected, employers must count pumping time to determine an employees' eligibility for health insurance.
 - D. Other scenarios as arranged and approved by the employee and employer.
 - d. If a private location is not within close proximity to the employee's work area, the time taken to travel to and from the location shall be considered work time and is not be counted as break time
 - e. If feasible, the employee shall take the pumping breaks at the same time as the regular meal and break times already provided by the employer, adding additional unpaid time, vacation time or accrued compensatory time to these breaks in order to successfully feed or pump.
 - f. A breastfeeding employee can feed an infant brought in during lunch or breaks when the workplace is safe for infants.
- 11. Breastfeeding employees can store their milk in a workplace refrigerator; breast milk is not a hazardous bodily fluid, and it is not a contamination danger.
 - a. Handling and supervision of the expressed milk is the sole responsibility of the employee.
 - b. The employer may choose to provide a refrigerator dedicated exclusively for storage of breast milk at the workplace; this dedicated refrigerator is not to be used for other purposes like storage of employee lunches.
 - c. Individual agency locations are responsible for determining refrigerator maintenance responsibilities.
- 12. To promote access to breastfeeding facilities, information should be available in multiple areas and formats that will help staff and visitors find information and support including:

- a. In agency lobbies.
- b. In staff break areas and where other mandated notices are displayed.
- c. On agency web pages such as the DHS|OHA Shared Services site, Intranet Health & Safety, and Human Resources webpages.
- d. In staff communications such as newsletters, email messages and other announcements.
- e. In new employee training and orientation.
- f. From managers and supervisors when staff or volunteers voluntarily disclose pregnancy or during return-to-work planning with parents if lactation support requested.
- g. From managers and supervisors through periodic communication to all staff.
- h. To managers and supervisors through training that ensures understanding and implementation of the policy.
- 13. Employee should provide notice that breaks to feed or pump breast milk during the work day will be needed with the return to work.
 - a. It is preferable that notice be provided prior to returning to work.
 - b. After receiving notice from the employee, DHS|OHA ensures that workplace support is available by the time the employee needs it.
- 14. Some position requirements, such as high physical activity, uniform requirements, or significant travel away from a consistent workstation, may create barriers for nursing parents. Employees and supervisors should work together establish appropriate work arrangements, including temporary work-duty reassignment.
- 15. Prenatal and postpartum nursing, breastfeeding and lactation information is available for interested employees from Human Resources, Employee Assistance Plan service provider, health benefit providers and on the Public Health Division website.
- 16. Managers, supervisors, and employees are expected to create and maintain an environment that encourages and supports employees and eliminates barriers to milk expression. A supportive, respectful environment includes a workforce that does not tolerate comments or actions that may dissuade lactating employees from utilizing the resources available for lactation support.

References

Northwest Americans with Disabilities Act Center

1-800-949-4232

nwadactr@uw.edu

Forms referenced

Related policies

DAS 50.010.01 Discrimination and Harassment Free Workplace Policy
DHS|OHA-010-019 Healthy Meetings, Conferences, and Events

DHS|OHA-010-019-01 Healthy Meetings, Conferences, and Events Guidelines

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Keywords

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UPDATE: JULY 2017

Comparison of the Adolescent Well Care Visit and Pre-participation Physical Evaluation





TRANSFORMATION CENTER Health Policy & Analytics Division













Executive summary

Comparison of the Adolescent Well Care Visit and Pre-participation Physical Evaluation was created through a partnership between the Oregon Health Authority and the Oregon School Activities Association to help organizations understand the differences between the Adolescent Well Care Visit (AWV) and the Pre-participation Physical Evaluation (PPE), also known as a "sports physical." These organizations include Oregon's school districts, schools, athletic departments, school-based health centers, adolescent primary care providers, private insurers and coordinated care organizations. Student athletes benefit from both the AWV and the PPE:

- The AWV has a stronger sense of development and overall health and well-being.
- The PPE has focused screening for medical conditions or injuries (primarily cardiovascular and musculoskeletal, respectively) which may be worsened by athletic activity (a sample PPE form has been included on pages 9-11).

This publication emphasizes that schools and providers should encourage student athletes to complete both evaluations as recommended. There is enough overlap between the two methods that a health care provider could complete both assessments at the same time. The table* provides points of comparison to maximize coordination in parental involvement, the health information sought during a pre-visit questionnaire, and the physical exam. It shares recommendations for providers on modifying an AWV or PPE to include elements of both. This coordination will help limit a student's absence from school and sports, and will ensure exams cover all aspects of a student's health during an Adolescent Well Care visit or sports physical.

	Adolescent Well Care Visit (AWV)	Pre-participation Physical Evaluation (PPE) "Sports Physical"
Timing	n/a	Recommend at least six weeks before the start of the sports season. Can take place as early as May to enable use for summer camps.
Periodicity	Annually	Once every two years (state law)
Provider	MD, DO, PA, NP, ND	MD, DO, PA, NP, ND, DC

* The content for this table was sourced from best practices presented in:
Adolescent Well Care Visit (American Academy of Pediatrics' *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*): https://brightfutures.aap.org/materials-and-pocket-guide/Pages/default.aspx and Bright Futures Adolescence Tools: https://brightfutures.aap.org/materials-and-tools/tool-and-resource-kit/Pages/adolescence-tools.aspx

Pre-participation Physical Evaluation (American Academy of Pediatrics' *PPE: Physical Evaluation, Fourth Addition*): https://www.aap.org/en-us/about-the-aap/Committees-Councils-Sections/Council-on-sports-medicine-and-fitness/Pages/PPE.aspx

	Adolescent Well Care Visit (AWV)	Pre-participation Physical Evaluation (PPE) "Sports Physical"
Parental Involvement	Parents are encouraged to be involved in the AWV. The patient can be alone, however, for some adolescent visits. Pre-visit questionaries' are confidential based on applicable Oregon law.	Parental involvement needed to ensure accuracy of medical history. Physical and risk screening completed confidentially.
Goals/Priority	First Priority: Address concerns of adolescent and parent Bright Futures Discussion Priorities: 1. Physical growth and development 2. Social and academic competence 3. Emotional well-being (coping, MH, sexuality) 4. Risk Reduction (tobacco, alcohol, pregnancy, STI) 5. Violence and injury prevention	 Primary goals: Screen for conditions that may be lifethreatening or disabling Screen for conditions that may predispose to injury or illness Secondary goals: Determine general health Serve as an entry point to the health care system Provide an opportunity to initiate discussion on health-related topics
Structure/ Components	 Pre-visit questionnaire and history (supplemental assessment) Developmental Observation: Observation of parent-child interaction Development surveillance School Performance Physical exam, screenings, and immunizations Anticipatory guidance 	 Medical history questionnaire Physical exam and screenings (includes confidential risk screening questions and some anticipatory guidance) Specialty exam (if needed) Optional: Immunization, education Clearance for activity
Pre-visit Questionnaire/ History Forms	Pre-visit includes discussion prompts based on Bright Futures priorities; screening questions on vision, hearing, TB, alcohol, drugs, cigarettes, sex/STI/pregnancy, and anemia; and growth and development questions. Supplemental questions follow Bright Futures priorities in detail (includes detailed questions on nutrition, emotional wellbeing, etc).	 General medical history Heart health (family and patient) Musculoskeletal Head injury or concussion Asthma Diabetes Medications Supplements Allergies Heat illness Missing organ Vision and eye injuries Nutrition and eating disorder Sickle cell Menstruation (anemia) PPE requires specific details in physical health history (including family history). Physical exam gets at risk behaviors influencing health in part.
Immunizations	Screening required: Consult with https://www.cdc.gov/vaccines/schedules/	Screening optional

	Adolescent Well Care Visit (AWV)	Pre-participation Physical Evaluation (PPE) "Sports Physical"
Highlighted Elements of	1. Vitals: blood pressure, height, weight, BMI	Vitals: blood pressure, height, weight, BMI, pulse
Full Physical Exam and	2. Vision/Eyes: acuity (periodicity varies)	2. Vision/Eyes: acuity and pupil size
Screenings	3. Skin: acne, acanthosis nigricans, atypical nevi, tattoos and piercings, signs of abuse, injury	3. Skin: MRSA, herpes simplex, signs associated with eating disorders
	4. Musculoskeletal: examine back/spine	4. Musculoskeletal: full general screen*/ upper extremity
	 Genitalia Females: Sexual maturity rating, visual observation for STIs, pelvic exam if warranted but by age 21 Males: Testicles for hernia, varicocele, masses; sexual maturity rating; and observe for STIs 	 5. Genitalia Females: NA unless part of health maintenance exam Males: (optional) Scrotum for hernia, varicocele, masses. (Not contraindicatied for athletics).
	6. Breasts: Females assessed for sexual maturity rating, clinical breast exam after age 20. Males: gynecomastia	6. Breasts: NA for PPE
	7. ENT: Universal hearing screening (once in early, mid, and late adolescence)	 ENT: Hearing if signs of damage, oral ulcers, herpes, leukoplakia (tobacco), nasal polyps, deviated septum
	8. Cardiovascular: dyslipidemia (screen* at least once between age 17-21)	8. Cardiovascular: vitals, dynamic auscultation of heart, palpation of heart, physical exam for Marfan Syndrome*.
	9. Anemia: if positive on risk screen	 Anemia: check for eating disorders through visual observation of height, weight, ear, nose, mouth, throat, abdomen, and skin; and history of injury, neurological conditions, nutrition, and menstrual cycle.
	 10. Tuberculosis: if positive on risk screen 11. STIs: if sexually active 12. HIV: universal at least once between age 15 and 18 13. Pregnancy: if sexually active without contraception, late menses, or amenorrhea 14. Cervical Dysplasia: universal screen at age 21 15. Alcohol or drug use: universal risk assess 16. Depression: universal screen 17. Psychosocial/Behavior: universal assess 18. Oral health: screen for fluoride supplementation up to age 16 	 Central Nervous System: Upper extremity, neck range of motion, reflexes. Pulmonary Exam (bronchospasm test, tobacco) Abdominal exam Risk Behavior: Stress, Depression, Feeling Safe, Tobacco, Alcohol, Drugs, Steroids, Supplements, Body Image
Anticipatory Guidance	Tied to Bright Futures priorities, and based on patient needs, developmental observation, and stage of adolescence	Related to reduction in risk of injury or sustained absence. Examples: warnings about PED use, teaching self-admin testicular exam, prevention strategies on MRSA

 $[\]color{red}{*} \hspace{0.2cm} \underline{\text{http://www.osaa.org/sportsmedicine}}$

The state requires that a PPE take place every two years. This offers a unique opportunity for athletes disconnected from the health system to have a wellness exam. Athletes who see a primary care provider for annual check-ups have an opportunity to fulfill the PPE requirement. The following recommendations will help providers maximize care in the assessments.

Recommendations for Providers:

How to modify an Adolescent Well Visit to include all elements of a Pre-participation Evaluation.

- Use the AWV pre-visit screening questions recommended by Bright Futures on physical activity and hobbies. This will help you to broach the subject of school sports.
- Complete PPEs at least six weeks before the start of the sports season. This will allow time for any referrals and follow-up exams. Ideally, you will conduct PPEs in the late spring or early summer for students who participate in fall sports.
- If you know the adolescent to be an athlete, send the parents the comprehensive PPE medical history form prior to the visit. You can also have them obtain it online*.
 - If you do not have the form prior to the visit, then attempt to get a detailed past medical and family history at the visit. The student can fill out as much of the history form as possible. With consent of the adolescent, you or your medical assistant can call a parent to complete the history portion. Then you may review and sign-off on the PPE form. Studies show cardiovascular screening questions are more accurate if the parents help in providing the history.
- Make clear to the student that confidential information provided on the AWV pre-screening questionnaire will not be in the medical history form shared with the parent and school.
- Conduct focused (see above) examinations of the lung, abdomen, heart, and central nervous and musculoskeletal systems.
 - Provider should keep in mind specific recommendations for the cardiovascular/murmur exam, the two-minute musculoskeletal exam, the Marfan screen, and the concussion protocol. These are included on the second page of the OSAA Sports Physical Form found at http://www.osaa.org/sportsmedicine.

^{*} http://www.osaa.org/sportsmedicine

• Assure that you ask appropriate risk behavior questions. Risk behavior questions in the PPE are likely in an AWV.

How to modify a Pre-participation Physical Evaluation to include all elements of an Adolescent Well Care Visit.

- Assure a separate, confidential space is available. This way an athlete can feel comfortable discussing Bright Future's AWV topic areas.
 - This is especially important in an "assembly-line," "locker room," or "station-based" PPE (see Different Formats below).
- Provide previsit questions from Bright Futures/AWV to the student athlete. These can be topical conversation prompts at the time of the visit, for direct anticipatory guidance and to prompt additional physical screens.
- Provide additional screens as necessary (hearing, STIs, pregnancy, cervical dysplasia, and drug or alcohol use, etc.).
- Provide recommended vaccinations for athlete if available or advise to obtain from their primary care provider.
- Complete more thorough examinations of the genitals and breasts, as recommended for the AWV, if private setting is available.
- Based on screening, be prepared to provide pelvic exams which are recommended as needed by age 21.
- Ensure proper claims reporting for the Adolescent Well Visit.



Different Formats for Performing PPE or Sports Physicals

Not all "sports physicals" are equal. Timing, available personnel, and a community's resources, traditions and standards all determine how middle and high school athletes get clearance to participate in sports. Whenever possible, we recommend that athletes receive a sport physical (especially those combined with an Adolescent Well Visit) in an office-based setting, including a School Based Health Center or a patient's primary care home.

• The "office-based" examination: This type of exam allows privacy for history taking, examination and discussion of specific concerns. It allows for anticipatory guidance and health maintenance (including immunizations), as well as more (but not always sufficient) time. Ideally, the exam takes place in the athlete's medical home. This is where he or she is an established patient with a well-known medical history. An exam at a medical home can be combined with or qualify for an AWV exam.

Other sports physical formats will be less than ideal. In addition, these formats may not be conducive to providing a comprehensive well visit. Therefore, avoid the following formats when trying to complete both exams:

- The "station-based" examination: This is the most appropriate format when performing a mass sports physical at a school or clinic. Athletes proceed through a series of stations. Stations are for height and weight measurements, blood pressure reading, visual acuity, general exam, cardiovascular exam, orthopedic screening, and review of history and final clearance. Ideally, an additional station will focus on risks and behaviors. This can include mental health, sexual health and substance use issues. These topics can be sensitive in the non-medical environment and require provision of confidential space. Station-based exams require multiple volunteer licensed healthcare providers. You may need athletic trainers and coaches to coordinate logistics, if performed at a school.
- The "assembly-line" or "locker room" physical: A single provider screens a large number of athletes. This occasionally occurs in a medical office, but more often in the school locker room, cafeteria or gymnasium. Although sometimes necessary, you should avoid the assembly-line physical when possible. There is little time to review thoroughly the athlete's medical history. Additionally, it offers little to no privacy for the physical exam or a private discussion of the athlete's history or questions.

School Sports Pre-Participation Examination – Part 1: Student or Parent Completes

Revised May 2017

ne:			Data of himbs		
Age: Grade:			Date of birth:		
<u> </u>	School:		Sport(s):		
edicines and Allergies: Please list all of the prescription and over-the-count Do you have any allergies? Yes No If yes, please identify					
☐ Medicines ☐ Pollens			Foods ☐ Stinging Insects		
olain "Yes" answers below. Circle questions you do not know t	he ansv	vers to.			
ENERAL QUESTIONS			BONE AND JOINT QUESTIONS	YES	N
. When was the student's last complete physical or "checkup?" Date: Month/ Year/ (Ideally, every 12 months)			14. Have you ever had an injury to a bone, muscle, ligament or tendon that caused you to miss a practice, game or an event?		
	YES	NO	15. Do you have a bone, muscle or joint problem that bothers you?		
. Has a doctor or other health professional ever denied or restricted your participation in sports for any reason?			MEDICAL QUESTIONS	YES	N
Do you have any ongoing medical conditions? If so, please identify below.			16. Do you cough, wheeze or have difficulty breathing during or after exercise?		
. Have you ever had surgery?			17. Have you ever used an inhaler or taken asthma medicine?		
IEART HEALTH QUESTIONS ABOUT YOU . Have you ever passed out or nearly passed out DURING or AFTER	YES	NO	18. Are you missing a kidney, an eye, a testicle (males), your spleen or any other organ?		
exercise? Have you ever had discomfort, pain, tightness or pressure in your chest			19. Do you have any rashes, pressure sores, or other skin problems such as herpes or MRSA skin infection?		
during exercise?			20. Have you ever had a head injury or concussion?		
 Does your heart ever race or skip beats (irregular beats) during exercise? Has a doctor ever told you that you have any heart problems? If so, check 			21. Have you ever had numbness, tingling, or weakness, or been unable to move your arms or legs after being hit or falling?		
all that apply: High blood pressure A heart murmur			22. Have you ever become ill while exercising in the heat?		
High blood pressure A heart murmur High cholesterol A heart infection Kawasaki disease Other:			23. Do you or someone in your family have sickle cell trait or disease?		
. Has a doctor ever ordered a test for your heart? (For example,			24. Have you, or do you have any problems with your eyes or vision?		
ECG/EKG, echocardiogram)			25. Do you worry about your weight?		
On the proof of			26. Are you trying to or has anyone recommended that you gain or lose weight?		
1. Have you ever had a seizure?			27. Are you on a special diet or do you avoid certain types of food?		
EART HEALTH QUESTIONS ABOUT YOUR FAMILY	YES	NO	28. Have you ever had an eating disorder?		
Has any family member or relative died of heart problems or had an unexpected sudden death before age 50 (including drowning,			29. Do you have any concerns that you would like to discuss today?		
unexplained car accident or sudden infant death syndrome)?			FEMALES ONLY	YES	NO
Does anyone in your family have a pacemaker, an implanted defibrillator, or heart problems like hypertrophic cardiomyopathy,			30. Have you ever had a menstrual period? 31. How old were you when you had your first menstrual period?		
Marfan syndrome, arrhythmogenic right ventricular cardiomyopathy,			32. How many periods have you had in the last 12 months?		

Form adapted from ©2010 American Academy of Family Physicians, American Academy of Pediatrics, American College of Sports Medicine, American Medical Society for Sports Medicine, American Orthopaedic Society for

certified nurse practitioner; or a (e) licensed chiropractic physician who has clinical training and experience in detecting cardiopulmonary diseases and defects."

School Sports Pre-Participation Examination – Part 2: Medical Provider Completes

Revised May 2017

PHYSICAL EXAMINATION FORM

Date of Exam:					
Name:					Date of birth:
Sex: Age	:	Grade:	School:		Sport(s):
EXAMINATION					
Height:	Weight	:	BMI:		
BP: / (/)	Pulse:	Vision R 20/	L 20/	Corrected ☐ YES ☐ NO
MEDICAL				NORMAL	ABNORMAL FINDINGS
Appearance					
Eyes/ears/nose/throat					
Lymph nodes					
Heart •Murmurs (auscultation	standing, supine	, with and without Va	Isalva)		
Pulses					
Lungs					
Abdomen					
Skin					
Neurologic					
MUSCULOSKELETAL					
Neck					
Back					
Shoulder/arm					
Elbow/forearm					
Wrist/hand/fingers					
Hip/thigh					
Knee					
Leg/ankle					
Foot/toes					
☐ Cleared for all sports☐ Cleared for all sports☐ Not cleared			nendations for further ev	aluation or trea	atment for:
☐ Pending fu	rther evaluation	on			
☐ For any spo					
☐ For certain					
Recommendations:					
-					
as outlined above. A copy of participation, the provider ma	the physical exan y rescind the clea	n is on record in my off arance until the problen	ice and can be made available n is resolved and the potentia	e to the school at th I consequences are	It present apparent clinical contraindications to practice and participate in the sp the request of the parents. If conditions arise after the athlete has been cleare e completely explained to the athlete (and parents/guardians). This form is an al examination findings. I have also reviewed the "Suggested Exam Protocol".
Name of provider (print/type)	:				Date:
Address:					
Signature of provider:					

ORS 336.479, Section 1 (3) "A school district shall require students who continue to participate in extracurricular sports in grades 7 through 12 to have a physical examination once every two years." Section 1(5) "Any physical examination required by this section shall be conducted by a (a) physician possessing an unrestricted license to practice medicine; (b) licensed naturopathic physician; (c) licensed physician assistant; (d) certified nurse practitioner; or a (e) licensed chiropractic physician who has clinical training and experience in detecting cardiopulmonary diseases and defects."

Form adapted from ©2010 American Academy of Family Physicians, American Academy of Pediatrics, American College of Sports Medicine, American Medical Society for Sports Medicine, American Orthopaedic Society for Sports Medicine, and American Osteopathic Academy of Sports Medicine.

School Sports Pre-Participation Examination – Suggested Exam Protocol for Medical Provider Revised May 2017

MUSCULOSKELETAL

Have patient:

1. Stand facing examiner

2. Look at ceiling, floor, over shoulders, touch ears to shoulders

3. Shrug shoulders (against resistance)

4. Abduct shoulders 90 degrees, hold against resistance

5. Externally rotate arms fully

6. Flex and extend elbows

7. Arms at sides, elbows 90 degrees flexed, pronate/supinate wrists

8. Spread fingers, make fist

Contract quadriceps, relax quadriceps
 "Duck walk" 4 steps away from examiner

11. Stand with back to examiner
12. Knees straight, touch toes

13. Rise up on heels, then toes

To check for:

AC joints, general habitus Cervical spine motion Trapezius strength Deltoid strength Shoulder motion Elbow motion

Elbow and wrist motion

Hand and finger motion, deformities Symmetry and knee/ankle effusion Hip, knee and ankle motion Shoulder symmetry, scoliosis Scoliosis, hip motion, hamstrings Calf symmetry, leg strength

MURMUR EVALUATION – Auscultation should be performed sitting, supine and squatting in a quiet room using the diaphragm and bell of a stethoscope.

Auscultation finding of:

1. S1 heard easily; not holosystolic, soft, low-pitched

2. Normal S2

3. No ejection or mid-systolic click4. Continuous diastolic murmur absent

5. No early diastolic murmur6. Normal femoral pulses

(Equivalent to brachial pulses in strength and arrival)

Rules out:

VSD and mitral regurgitation

Tetralogy, ASD and pulmonary hypertension Aortic stenosis and pulmonary stenosis

Patent ductus arteriosus Aortic insufficiency Coarctation

MARFAN'S SCREEN – Screen all men over 6'0" and all women over 5'10" in height with echocardiogram and slit lamp exam when any two of the following are found:

1. Family history of Marfan's syndrome (this finding alone should prompt further investigation)

2. Cardiac murmur or mid-systolic click

3. Kyphoscoliosis

4. Anterior thoracic deformity

5. Arm span greater than height

6. Upper to lower body ratio more than 1 standard deviation below mean

7. Myopia

8. Ectopic lens

CONCUSSION -- When can an athlete return to play after a concussion?

After suffering a concussion, no athlete should return to play or practice on the same day. Previously, athletes were allowed to return to play if their symptoms resolved within 15 minutes of the injury. Studies have shown that the young brain does not recover that quickly, thus the Oregon Legislature has established a rule that no player shall return to play following a concussion on that same day and the athlete must be cleared by an appropriate health care professional before they are allowed to return to play or practice.

Once an athlete is cleared to return to play, they should proceed with activity in a stepwise fashion to allow their brain to readjust to exertion. The athlete may complete a new step each day. The return to play schedule should proceed as below following medical clearance:

Step 1: Light exercise, including walking or riding an exercise bike. No weightlifting.

Step 2: Running in the gym or on the field. No helmet or other equipment.

Step 3: Non-contact training drills in full equipment. Weight training can begin. Step 4: Full contact practice or training.

Step 5: Game play.

If symptoms occur at any step, the athlete should cease activity and be re-evaluated by a health care provider.

581-021-0041 Form and Protocol for Sports Physical Examinations

- 1. The State Board of Education adopts by reference the form entitled "School Sports Pre-Participation Examination " dated May, 2017 that must be used to document the physical examination and sets out the protocol for conducting the physical examination. The form may be used in either a hard copy or electronic format. Medical providers may use their electronic health records systems to produce the electronic form. Medical providers conducting physicals of students who participate in extracurricular activities in grades 7 through 12 must use the form.
- ${\bf 2.} \quad \text{The form must contain the following statement above the medical provider's signature line:} \\$

This form is an exact duplicate of the current form required by the State Board of Education containing the same history questions and physical examination findings. I have also reviewed the "Suggested Exam Protocol".

- 3. Medical providers conducting physicals on or after April 30, 2011 and prior to May 1, 2017 must use the form dated May 2010.
- 4. Medical providers conducting physicals on or after May 1, 2017 and prior to May 1, 2018 may use either the form dated May 2010 or the form dated May, 2017.

6. Medical providers conducting physicals on or after May 1, 2018 must use the form dated May, 2017.

NOTE: The form can be found on the Oregon School Activities Association (OSAA) website: http://www.osaa.org

Stat. Auth.: ORS 326.051 Stats. Implemented: ORS 336.479

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TRANSFORMATION CENTER Health Policy & Analytics Division



*To learn more about additional metric resources please visit:*www.oregon.gov/oha/Transformation-Center/Pages/Resources-Metric.aspx

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Oregon Pregnancyand OpioidsWorkgroupRecommendations



Acknowledgments

The Oregon Health Authority (OHA) greatly appreciates the time workgroup members spent sharing their knowledge with the goal of improving outcomes for Oregon mothers and infants.

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Executive summary

Opioid use among pregnant and parenting women and neonatal abstinence syndrome (NAS) are complex public health issues. They cut across health and behavioral health providers, families, child welfare, the criminal justice system and other community organizations.

A variety of life experiences can lead to opioid-exposed pregnancies. These experiences include chronic pain or other conditions managed by medication, misuse of prescribed medication, recovery from opioid addiction and receiving MAT, and active abuse of heroin. Each of these experiences calls for differing prevention and intervention opportunities.

The Oregon Health Authority convened the Oregon Pregnancy and Opioids Workgroup to develop recommendations that can optimize the outcome for both mother and infant. The workgroup included experts from a variety of disciplines, including maternity and pediatric health care providers, public health, child welfare, and substance abuse treatment. The group met from December 2017 to March 2018.

This report includes clinical recommendations for all women of reproductive age as well as those specific to women with an opioid use disorder and their infants. The recommendations focus on care preconception through postpartum and infancy. For these recommendations to be effective, health care providers must recognize the role that trauma and adverse childhood experiences (ACEs) play in substance use disorders. It is also important to incorporate trauma-informed prevention and treatment in a significant way.

This report recognizes the barriers to optimal care faced by women with an opioid use disorder and their infants. The system and policy recommendations encourage Oregon health care leaders and policy makers to better support families affected by opioid use disorder.



Recommendations in brief:

Clinical recommendations

Primary prevention (for all women)

- 1. Ask all women of reproductive age about their pregnancy intentions prior to initiation and continuation of any opioid, including medication-assisted treatment (MAT) for an opioid use disorder (OUD).
- 2. Ask all pregnant women and women seeking pregnancy or preconception care about opioid use.
- 3. For all pregnant women without an OUD, avoid prescribing opioids when possible but, if necessary, do so with safeguards in place.
- 4. Prevent opioid overdose.
- 5. Upon discharge after a delivery, encourage all women without an OUD who need ongoing pain treatment to use non-opioid therapies (i.e., NSAIDs). If opioids are indicated, they should receive a limited number of opioid pills to last until a scheduled follow-up visit and no more than seven days of treatment.

Secondary prevention (for women with an opioid use disorder and their infants)

- 6. Coordinate care for pregnant and parenting women with an OUD.
- 7. Manage OUDs during pregnancy by following evidence-based approaches.
- 8. Include additional screenings and services when caring for pregnant women with an OUD.
- 9. Provide appropriate pain control for women with an OUD during labor.
- 10. Provide necessary postpartum services and support for women with an OUD.
- 11. Encourage breastfeeding for women with an OUD on MAT.
- 12. Closely monitor an infant born to a mother who used opioids during pregnancy. Manage care with a standardized protocol for the assessment and treatment of infants at risk for neonatal abstinence syndrome (NAS).

System and policy recommendations

- 13. The Oregon Health Authority, in partnership with the Oregon Maternal Data Center, should implement a surveillance strategy for in utero opioid exposure and NAS. The strategy should be mindful of any unintended negative consequences and seek a balance between patient confidentiality and the state's ability to truly understand the scope of the problem.
- 14. Oregon health care leaders and policy makers should work to advance systems change that supports families affected by OUD.

Introduction

The Oregon Pregnancy and Opioids Workgroup formed in recognition of the need for a comprehensive approach to optimizing health outcomes for mothers with OUD and their infants. Optimizing outcomes requires collaborative efforts among state agencies, health care providers and community organizations that address the entire spectrum of prevention across the lifespan. The workgroup developed statewide recommendations on opioid prescribing during pregnancy, identification and treatment of OUD during pregnancy, and care and treatment of prenatally exposed infants. The recommendations are intended to help health care providers incorporate best practices when caring for women and their substance-exposed infants and to encourage local efforts to provide coordinated care for families.

The workgroup adopted the principles of the World Health Organization: prioritizing prevention; ensuring access to prevention and treatment services; respecting patient autonomy; providing comprehensive care; and safeguarding against discrimination and stigmatization. The workgroup recognizes evidence showing a strong correlation between opioid addiction and traumatic experiences, particularly early childhood adversity and the need to use trauma-informed approaches to prevent and treat opioids addiction.

The "Oregon Pregnancy and Opioids Workgroup Recommendations" provide Oregon health care providers with a consolidated set of recommendations for the management of opioid use during pregnancy, women with OUD during pregnancy, and care of the opioid-exposed newborn. The content is intended to complement standard medical care, the Oregon Opioid Prescribing Guidelines, and other resources available through the American College of Obstetrics and Gynecology, American Academy of Pediatrics and Substance Abuse and Mental Health Services Administration.



Clinical recommendations

Primary prevention: Consider recommendations 1-5 for all women.

Recommendation 1:

Ask all women of reproductive age about their pregnancy intentions prior to initiation and continuation of any opioid (including MAT for OUD).

- a. Offer patient-centered contraceptive counseling and services to women who do not desire pregnancy.
- b. Inform women who do desire pregnancy of potential obstetric and newborn risks associated with opioid use in pregnancy and encourage them to seek early and regular prenatal care.

Recommendation 2:

Ask all pregnant women and women seeking pregnancy or preconception care about opioid use.

- a. Routinely ask all pregnant women and women seeking pregnancy or preconception care about use of opioids, including appropriate use of prescription opioids, illicit use of prescription opioids and other illicit opioids such as heroin. Because polysubstance use is common, rely on short validated tools that screen for other substance use. Examples of tools include CAGE-AID, SBIRT Oregon's Brief Screen for all adults, 4P's Plus/Integrated Screening Tool for women who are pregnant, or CRAFFT for adolescents.
- b. Any positive initial screen should prompt more in-depth discussion, screening with interview tools such as Drug Abuse Screen Test (DAST) or other strategies to determine if an OUD exists.
- c. Ask all pregnant women and women seeking pregnancy or preconception care about their history of a substance use disorder.
- d. Ask all pregnant women and women seeking pregnancy or preconception care about current and past participation in substance use disorder treatment programs. If a woman is currently in treatment, seek out appropriate consents to facilitate communication between care providers.

- e. Toxicology screens to monitor reported or suspected drug use should only be done with the woman's informed consent. Toxicology screens can provide evidence of abstinence from substance use and can be used to support a woman's recovery efforts.
- f. Follow positive toxicology screens for substances of concern with a confirmatory drug assay such as gas chromatography/ mass spectrometry.
- g. Clinicians should check the Oregon Prescription Drug Monitoring Program (PDMP) for women who use opioids, have a history of OUD or are suspected of using opioids shortly before or during pregnancy. The woman should be informed that the clinician is checking the PDMP, and this should be documented in the medical record.

Toxicology Screening

Toxicology screens have high rates of false results and do not substitute for verbal, interactive questioning and screening for substance use disorders. Universal drug toxicology screening is not recommended.

Recommendation 3:

Avoid prescribing opioids when possible to all pregnant women without OUD. If necessary, prescribe opioids with safeguards in place.

a. If a pregnant woman without an OUD needs pharmacologic management for acute pain (dental, surgical, injury), manage pain with a multi-modal approach, minimizing the use of opioids.

Resource

Consider the Oregon Opioid Prescribing Guidelines when determining whether to initiate or continue prescribing opioids for chronic pain.

- b. Before prescribing opioids to a pregnant woman without an OUD, clinicians should check the Oregon Prescription Drug Monitoring Program (PDMP) (excluding postsurgical pain control). The woman should be informed that the clinician is checking the PDMP, and this should be documented in the medical record.
- c. If a woman becomes pregnant while using prescription opioids for chronic pain, evaluate her for physical dependence and reevaluate the treatment plan. Inform her of potential obstetric and newborn risks associated with ongoing use. If there is no OUD, it's medically appropriate to taper and the woman is willing, taper her to

- the lowest effective dose (or off) opioids and manage her pain with other modalities (e.g., exercise, physical therapy, behavioral approaches) and nonopioid pharmacologic treatments.
- d. If a woman becomes pregnant while using prescription opioids for chronic pain and the prescriber is not the maternity care clinician, the prescriber and the maternity care clinician should have a conversation to determine:
 - Whether an assessment for physical dependence or OUD is needed
 - Who will prescribe during the maternity episode
 - A schedule for ongoing consultation and a plan for care after the maternity episode. The ongoing consultation should facilitate co-management and prevent the prescriber from discharging the woman due to pregnancy.

Pain management specialists, in collaboration with the maternity care clinician, should initiate and continue care for pregnant women in need of services.

Recommendation 4:

Prevent opioid overdose.

- a. Make pregnant women taking opioids aware of the risk for overdose and how to prevent one. Anyone taking chronic opioids should have access to naloxone in case of an overdose.
- b. Prescribe naloxone to pregnant women at risk of overdose; e.g., history of overdose, higher opioid dosages (≥50 MME/day), concurrent benzodiazepine use or history of a substance use disorder. Pregnant women can safely use naloxone to manage opioid overdose.
- c. Avoid prescribing other sedating medications (e.g., benzodiazepines) to pregnant women using opioids due to the risk of enhanced respiratory depression.

Recommendation 5:

Upon discharge after a delivery, encourage all women without an OUD who need ongoing pain treatment to use non-opioid therapies (i.e. NSAIDs). If opioids are indicated, they should receive a limited number of opioid pills to last until a scheduled follow-up visit and for no more than seven days of treatment.

See recommendation 10 for postpartum recommendations specific to women with opioid use disorder.

Secondary prevention: Consider recommendations 6–11 for women with an OUD as well as for their infants.

Coordinated care

An essential component of effective, coordinated care is reducing discrimination and punitive approaches associated with opioid use disorders during pregnancy and supporting women in feeling safe when accessing treatment services. All professionals involved in care need to understand the different contexts of opioid use by a pregnant woman to accurately assess her distinct needs and those of her family members to implement the most appropriate and comprehensive plan of care.

Recommendation 6:

Coordinate care for pregnant and parenting women with an opioid use disorder.

- a. Develop a comprehensive plan of care that lists each health and social problem, how to address it and who is responsible for addressing it.
- b. Communication and coordination between substance disorder treatment providers, maternity care clinicians, behavioral health providers, DHS Child Welfare (when involved) and local social services organizations, as well as the woman, are necessary to ensure an optimal continuum of care.
- c. Put consent forms in place to secure information releases necessary to coordinate care. Sharing information about substance use disorder treatment requires special permission.

Medication-assisted treatment (MAT)

Engaging pregnant women with opioid use disorders in comprehensive services is essential for optimal recovery and parenting outcomes. The standard of care for pregnant women with an opioid use disorder is MAT and evidence-based behavioral interventions. MAT's efficacy has been widely acknowledged and endorsed as a highly effective tool in recovery, including for pregnant women.

Recommendation 7:

Manage opioid use disorders during pregnancy by following evidencebased approaches.

- a. Refer all pregnant women with an OUD to substance use disorder treatment and behavioral health treatment. If local resources are not available, consider that some women are willing to travel. Telemedicine may also be available. Health Care providers should document any lack of available services to advocate for more services in their community.
- b. An individual familiar with American Society for Addiction Medicine (ASAM) criteria should assess all pregnant women with an OUD to determine the recommended treatment setting. Treatment setting recommendations should include the woman, consider barriers to treatment and include active coordination to ensure follow-through.
- c. Offer a pregnant woman with an OUD MAT. Both buprenorphine and methadone are appropriate medications; the woman's preference, clinical indications and access should guide the choice between the two medications.
- d. A woman who becomes pregnant while on buprenorphine should continue buprenorphine. A woman who becomes pregnant while on buprenorphine/naloxone should discuss with her maternity care clinician the pros and cons of remaining on it while pregnant versus transitioning to buprenorphine only.
- e. A woman who becomes pregnant while on methadone should continue methadone and not transition to buprenorphine.
- f. Assess a woman for a dose increase during pregnancy if she was previously stable on buprenorphine or methadone. Women in this situation typically need a dose increase in the third trimester. Coordinate care with the substance use disorder treatment provider. An increased dose does not increase the risk
 Surveillance
- g. A pregnant woman who was previously stable on buprenorphine or methadone, but relapses to opioid use should have her treatment plan reevaluated and care coordinated among providers. Return to substance use is common; do not view it as a reason to discontinue treatment.

for neonatal abstinence syndrome.

Pregnant women with opioid use disorders often have co-occurring health conditions requiring surveillance in addition to routine pregnancy surveillance.

h. Only consider medically supervised withdrawal of a pregnant woman from opioids on a case-by-case basis if intensive behavioral health supports are in place. The clinician should assess the woman's motivation and discuss risk of relapse with her. Unsuccessful medically supervised withdrawal presents substantial adverse maternal risks such as relapse and overdose.

Recommendation 8:

Include additional screenings and services when caring for pregnant women with OUD.

- a. Obtain ultrasound measurement as early as possible in pregnancy. Women with OUD often present later to care and/or have irregular menses. To establish accurate dating of pregnancy, see the recommendations from the American Congress of Obstetricians and Gynecologists, the American Institute of Ultrasound in Medicine, and the Society for Maternal Fetal Medicine.
- b. Use fundal height measurements and ultrasound surveillance to assess fetal growth more often if signs of growth restriction are present. Pregnant women with OUD have a higher risk of fetal growth restriction.
- c. Screen pregnant women with an OUD for other substance use at presentation for care. If a woman with an OUD is also using alcohol and/or tobacco, offer her evidence-based services to support the discontinuation of these substances while she is starting MAT.
- d. Assess pregnant women with an OUD for iron deficiency, vitamin D deficiency and macronutrient imbalance. Prenatal vitamin use throughout pregnancy and nutrition counseling are especially important as many pregnant women with OUD experience poor nutrition, malnutrition and eating disorders.
- e. Screen for hepatitis C, hepatitis B and HIV at start of prenatal care and repeat during the third trimester. Screen for syphilis at the start of care, during the third trimester and then again at delivery. Screen for other STIs more often.
- f. Refer early for dental cleaning and care.
- g. Ask about skin infections; monitor and treat as needed.
- h. Have a baseline EKG on file for women who are using methadone for MAT.
- i. Add a comprehensive metabolic panel (CMP) to the routine prenatal panel to assess liver and renal function.
- j. Screen for behavioral health conditions, intimate partner violence (IPV) and social risk during the first prenatal care visits and repeat the screenings during the pregnancy. Behavioral health conditions may require pharmacotherapy. Prescribers need to keep in mind possible drug interactions with MAT. Women with OUD often struggle with a history of trauma, abuse or neglect. They may have mental illness such as depression, anxiety or post-traumatic stress disorder (PTSD). They are disproportionately more likely to be in an abusive relationship and struggling with social isolation, homelessness

- and food insecurity.
- k. Check and monitor the Oregon Prescription Drug Monitoring Program as part of routine management for pregnant women with an OUD.
- l. Identify and provide referrals to appropriate services including behavioral health treatment, counseling and peer support.
- m. Schedule more frequent visits to identify medical and psychosocial problems early.
- n. Discuss possible effects of opioids on the newborn and risk of NAS. Advise on possibility of extended stay for newborn and process for reporting drug-exposed newborn.
- o. Consider an antenatal pediatric consultation for pregnant women with an OUD.
- p. Provide education on the benefits of breastfeeding.
- q. Offer patient-centered contraceptive counseling and make a plan.

Recommendation 9:

Provide appropriate pain control for women with an OUD during labor.

- a. Consider an antenatal anesthesia consult and make a plan for managing pain during labor.
- b. Do not hesitate to offer pain management including an epidural and/or a short-acting opioid analysesic to a pregnant woman with an OUD (including women on MAT) to manage pain during labor.
- c. A pregnant woman with an OUD should not receive butorphanol, nalbuphine or pentazocine.
- d. Continue a pregnant woman with an OUD on her same daily dose during the hospital stay if she is currently maintained on either methadone or buprenorphine. Reassure patients of this plan to reduce their anxiety. When possible, contact the substance use treatment provider to confirm dose of methadone or buprenorphine and notify of admission. Dividing the usual daily maintenance dose of buprenorphine or methadone into three or four doses every 6–8 hours may provide partial pain relief; however, the woman will likely require additional analgesia. While the woman is in the hospital, any attending clinician who can prescribe opioids may legally order buprenorphine and methadone to maintain a patient's outpatient dose during his/her hospitalization. Documentation of this federal regulation is available here.
- e. A pregnant woman with an OUD currently maintained on either methadone or buprenorphine may require higher doses of opioid analgesics to experience pain relief. This is true whether she is having a vaginal delivery or a C-section. Health

care providers may be anxious about the high dosages required. If the woman is alert and has a normal respiratory rate, the woman has not overdosed. Aggressive pain management will not worsen addiction and may improve the postpartum medical course.

- f. Do not administer buprenorphine to a woman who takes methadone.
- g. Consider alternative pain management strategies such as doulas, mindfulness and relaxation training, laboring in water and pudendal blocks. Consider nitrous oxide with caution; bear in mind that it may accentuate the levels of narcotics, and that cannabinoids will slow nitrous oxide's metabolism.

Recommendation 10:

Provide necessary postpartum services and support for women with an OUD.

- a. After a vaginal delivery, women can generally achieve adequate pain relief with nonsteroidal anti-inflammatory drugs (NSAIDs) and acetaminophen.
- b. After a C-section, a woman who is stable on buprenorphine or methadone for OUD should continue her outpatient dose.
- c. Judicious use of injectable nonsteroidal anti-inflammatory agents can be highly effective in postpartum and post-cesarean pain control. Also consider alternate pain management strategies including gabapentin, lidocaine patches and transversus abdominus plane blocks.
- d. If a woman with an OUD needs opioids for pain control postpartum, she may require higher than usual doses of opioid analgesics to accomplish pain relief due to tolerance of opioids.
- e. After delivery, women usually do not require immediate dosage adjustments of methadone or buprenorphine. However, monitor for sedation. Assess women experiencing drowsiness for medical illness, relapse to substance use and dose adjustment.
- f. Avoid discontinuation of MAT and encourage continuation in a substance use disorder treatment program. Give the woman a list of medications administered during hospitalization as well as those prescribed at discharge. Notify the substance use treatment provider upon discharge to confirm the woman has a follow-up appointment. Be sure to indicate the timing of the last dose. Confirm who will reevaluate the woman's dose postpartum and provide outpatient prescriptions. Check hours for the methadone clinic prior to discharge so she does not miss a dose.
- g. Screen any new mother with OUD for behavioral health disorders before discharge.
- h. Provide patient-centered contraception counseling to all women before discharge.

i. Consider sooner and more frequent postpartum follow-up with the maternity care clinician. The discharge plan should include strategies for the mother to get support.

Recommendation 11:

Encourage breastfeeding for women with an OUD on MAT.

- a. Provide education on the benefits of breastfeeding. Any amount of breastfeeding can decrease the infant's need for pharmacological treatment.
- b. Treatment with methadone or buprenorphine is not a contraindication to breastfeeding. Encourage women to breastfeed unless the mother is HIV-positive or Hepatitis C positive with cracked or bleeding nipples. The current buprenorphine package insert advises against breastfeeding; however, an American College of Obstetricians and Gynecologists (ACOG) and AAP consensus panel stated that the effects on the breastfeed infant are likely to be minimal and that breastfeeding is not contraindicated.
- c. Provide lactation support.
- d. If a new mother returns to substance use, carefully review the mother's situation before recommending a discontinuation of breastfeeding.

Recommendation 12:

Closely monitor an infant born to a mother who used opioids during pregnancy. Manage care with a standardized protocol for the assessment and treatment of infants at risk for neonatal abstinence syndrome (NAS).

- a. Infant toxicology testing should not be the primary way to screen for substance use during pregnancy. If there is suspicion of substance use, first interview the mother about her medical and substance use history.
- b. Only perform infant toxicology testing (using urine, meconium or cord blood) if there are clear clinical indications (unable to obtain a history from the mother, infant with unexplained symptoms, severe obstetrical complications such as abruption, etc.). Seek parental consent for infant toxicology testing in all cases. Infant toxicology testing without parental consent may sometimes be necessary. The decision to perform infant toxicology testing without parental consent should be based on perceived risk of substantial harm to infant and clearly documented in the medical record.
- c. Closely monitor all infants born to women who used opioids during pregnancy; assess the infant for symptoms of NAS. Most infants who will develop NAS needing pharmacologic treatment will do so in the first 96 hours after birth; however, NAS symptoms can develop later as well. Monitor either in the hospital or in an outpatient setting based on clinical judgement and the availability of flexible and prompt follow-up. When possible, partner with parents in this monitoring.

- d. When using a standardized scoring system to assess NAS, neonatal health care providers should undergo training and periodic updates to assure interrater reliability.
- e. First line therapy for infants with NAS symptoms is non-pharmacological care such as non-nutritive sucking, swaddling, uninterrupted sleep, a low-stimulation environment, skin-to-skin contact, frequent feeding and rooming-in with mom. Proactively employ these strategies in an infant at risk of developing NAS.
- f. Infants with NAS can typically be managed outside of neonatal intensive care. Health care providers should determine whether the infant can remain in low-acuity settings or be transferred depending upon the need for pharmacologic therapy, the severity of symptoms, local protocols and the comfort level of the care team.
- g. If pharmacological treatment for NAS is indicated, the American Academy of Pediatrics (AAP) recommends commencing pharmacologic treatment with oral morphine or oral methadone, preferably preservative-free formulations. When a second-line agent is indicated, clonidine is preferable to phenobarbital.
- h. However, any infant with significant NAS symptoms and any infant requiring pharmacologic treatment should receive routine assessments and close attention to development following AAP guidelines for developmental screening for all young children. Little is currently known about the neurodevelopmental effects of intra-uterine opioid exposure and postnatal pharmacologic treatment for NAS.
- i. Educate infant caregivers about the signs of opioid withdrawal in infants, techniques to sooth the infant, and safe sleep recommendations.
- j. Refer infant caregivers to a pediatric clinician who is knowledgeable about NAS and accessible from the time of infant hospital discharge.
- k. Consider referral to home visiting programs (e.g., Healthy Families, Babies First), infant mental health services and early intervention depending on community availability.
- 1. Assess for smoking in the home. Encourage all smokers to quit or smoke outside
- m. Health care providers should understand their legal responsibility for reporting substance exposure of an infant and be sensitive to the social and legal consequences for the mother and infant.

Health systems and policy recommendations

Recommendation 13:

The Oregon Health Authority, in partnership with the Oregon Maternal Data Center, should implement a surveillance strategy for in utero opioid exposure and NAS. The strategy should be mindful of any unintended negative consequences and seek a balance between patient confidentiality and the state's ability to truly understand the scope of the problem.

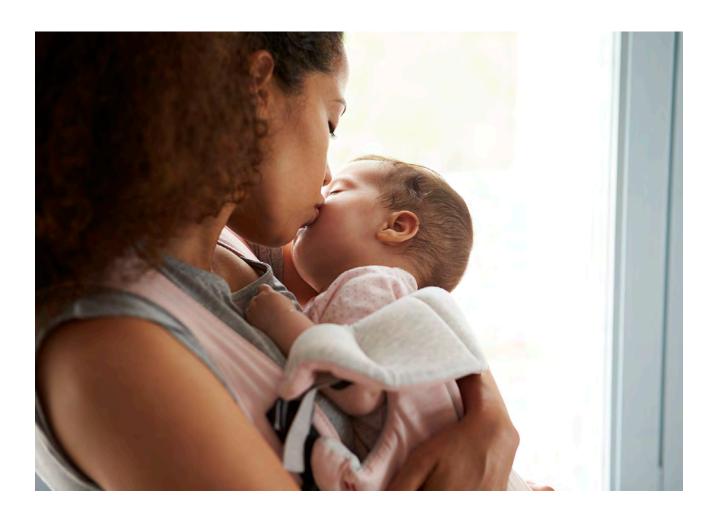
- a. Health care systems and health care providers should collect data on screening for substance use in pregnancy.
- b. Health care systems and providers should participate in and support efforts to collect data on use of opioids in pregnancy, rates of OUDs in pregnant women, infants exposed to opioids in utero and all adverse perinatal outcomes related to opioid use.
- c. Health care systems should consider outcomes that include the mother, infant and family well-being and go beyond the immediate prenatal and postpartum period.

Recommendation 14:

Oregon health care leaders and policy makers should work to advance systems change that supports families affected by OUD.

- a. Provider organizations should educate health care providers on the use of validated substance use screening tools as the standard of care.
- Provider organizations should educate and train clinicians on prescribing MAT during pregnancy.
- c. Health care providers should educate patients in non-narcotic treatment of pain.
- d. Support the expansion of telemedicine services.
- e. Substance use disorder treatment agencies and systems throughout Oregon should increase access to residential and other treatment programs for pregnant women and mothers with an OUD. This is a particular challenge in rural and frontier Oregon.
- f. Substance use disorder treatment agencies and systems should support innovation to bring more family-centered, wraparound services to communities, including peer support.

- g. Substance use disorder treatment agencies should promote attachment and bonding by supporting strategies that discourage separation of mothers and infants (e.g., residential treatment allowing mothers and infants to remain together).
- h. Department of Human Services Child Welfare should have systems in place to facilitate access to the supports families need for long-term stability (e.g., ongoing medication-assisted treatment and other substance use treatment services, early intervention services for infants, home visiting services).
- i. Correctional facilities and jails should facilitate access to medication-assisted treatment without interruption for pregnant and parenting women with OUDs.



Definitions*

Behavioral health

The condition of well-being aligned with prevention and intervention, treatment and recovery supports for people with mental and substance use problems or disorders

Clinician

Physician or midwife

Health care provider

All providers of health care including physicians, midwives, nurses and doulas

Maternity care

Health care services provided during pregnancy, labor and delivery and postpartum

Medication-assisted treatment (MAT)

Type of comprehensive substance use disorder (SUD) treatment that provides maintenance pharmacotherapy

Neonatal abstinence syndrome (NAS)

This is a group of physiological and neurobehavioral signs of withdrawal that may occur in a newborn exposed to substance in utero. This document does not us the term "neonatal opioid withdrawal syndrome" (NOWS) referring to manifestations of withdrawal specifically attributable to opioids. However, "neonatal opioid withdrawal syndrome" is becoming more common in practice and literature.

Opioid use disorder (OUD)

OUD is defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). The diagnosis of OUD can be applied to someone who uses opioid drugs and has at least two of the 11 symptoms occurring within a 12-month period.

^{*}Definitions listed are terms that are found in this report.

Resources and additional information

Recommendation 1

Family planning

- Centers for Disease Control and Prevention. Providing quality family planning services: Recommendations of CDC and the U.S. Office of Population Affairs. April 25, 2014 / 63(RR04);1-29 [cited 2018 May 10]. Available from: https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6304a1.htm
- Centers for Disease Control and Prevention. US medical eligibility criteria (US MEC) for contraceptive use, 2016 [cited 2018 May 10]. Available from: https://www.cdc.gov/reproductivehealth/contraception/mmwr/mec/summary.html

Pregnancy intention screening tools

- One Key Question®, developed by the Oregon Foundation for Reproductive Health. [cited 2018 May 10]. Available from: https://powertodecide.org/one-key-question
- Preconception Resource Guide for Clinicians https://beforeandbeyond.org/toolkit/

Recommendation 2

Oregon Prescription Drug Monitoring Program

The Oregon Prescription Drug Monitoring Program (PDMP) is a tool to help health care providers and pharmacists provide patients better care in managing their prescriptions. It contains information provided by Oregon-licensed retail pharmacies. http://www.orpdmp.com/

Screening tools

- Substance Abuse and Mental Health Services Administration. Screening tools. https://www.integration.samhsa.gov/clinical-practice/screening-tools
- Oregon SBIRT (Screening, Brief Intervention, Referral to Treatment). Screening forms. http://www.sbirtoregon.org/screening-forms/

Recommendation 3

Oregon Opioid Prescribing Guidelines

The task force adopted the CDC guideline as the foundation for opioid prescribing for Oregon and developed a brief addendum to address Oregon-specific concerns. http://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/SUBSTANCEUSE/OPIOIDS/Documents/taskforce/oregon-opioid-prescribing-guidelines.pdf

Oregon Prescription Drug Monitoring Program

The Oregon Prescription Drug Monitoring Program (PDMP) is a tool to help health care providers and pharmacists provide patients better care in managing their prescriptions. It contains information provided by Oregon-licensed retail pharmacies. http://www.orpdmp.com/

Recommendation 4

Oregon Public Health Division naloxone rescue for opioid overdose http://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/SUBSTANCEUSE/OPIOIDS/Pages/naloxone.aspx

Recommendation 5

Postdischarge opioid use after cesarean delivery

Osmundson, Sarah S. MD, MS; Schornack, Leslie A. MD; Grasch, Jennifer L. BS; Zuckerwise, Lisa C. MD; Young, Jessica L. MD; Richardson, Michael G. MD Obstetrics & Gynecology: July 2017 - Volume 130 - Issue 1 - p 36–41

Recommendation 6

Consent2Share: Web-based application to share personal health information across the health system http://www.feisystems.com/what-we-do/health-it-application-development/consent2share/

Substance Abuse and Mental Health Services Administration: A collaborative approach to the treatment of pregnant women with opioid use disorders https://ncsacw.samhsa.gov/files/Collaborative_Approach_508.pdf

Recommendation 7

American Society for Addiction Medicine (ASAM) National practice guideline for the use of medications in the treatment of addiction involving opioid use https://www.asam.org/resources/guidelines-and-consensus-documents/npg

American Society for Addiction Medicine (ASAM) Criteria https://www.asam.org/resources/the-asam-criteria/about

Oregon 211: Find local community resources http://211info.org/

Oregon medication-assisted treatment and recovery, including Oregon-approved opioid treatment programs

http://www.oregon.gov/oha/hsd/amh/Pages/umatr.aspx

Oregon Substance Use Disorders Services Directory

http://www.oregon.gov/oha/HSD/AMH/Publications/provider-directory.pdf

Substance Abuse and Mental Health Service Administration: Methadone treatment for pregnant women (brochure)

https://store.samhsa.gov/shin/content/SMA14-4124/SMA14-4124.pdf

Substance Abuse and Mental Health Service Administration: Medication-assisted treatment

https://www.samhsa.gov/medication-assisted-treatment

Substance Abuse and Mental Health Services Administration: Clinical guidance for treating pregnant and parenting women with opioid use disorder and their infants. Page 29, Decision Considerations When Selecting an Opioid Agonist Medication for a Pregnant Woman.

https://store.samhsa.gov/product/SMA18-5054

Recommendation 8

The American College of Obstetricians and Gynecologists, the American Institute of Ultrasound in Medicine, and the Society for Maternal-Fetal Medicine: Methods for estimating the due date https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric Practice Methods-for-Estimating-the-Due-Date

Centers for Disease Control and Prevention. Treating for two https://www.cdc.gov/pregnancy/meds/treatingfortwo/index.html

Family planning

- Providing quality family planning services: Recommendations of CDC and the U.S. Office of Population Affairs recommendations and reports. April 25, 2014 / 63(RR04);1-29
 - https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6304a1.htm
- US medical eligibility criteria (US MEC) for contraceptive use, 2016 https://www.cdc.gov/reproductivehealth/contraception/mmwr/mec/summary.html

Oregon Prescription Drug Monitoring Program

Check and monitor the Oregon prescription drug monitoring program as part of routine management for pregnant women with an opioid use disorder.

Oregon Tobacco Quit Line

https://www.quitnow.net/oregon/

Oregon marijuana: Health and safety http://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/MARIJUANA/Pages/health.aspx

Substance Abuse and Mental Health Services Administration: Clinical guidance for treating pregnant and parenting women with opioid use disorder and their infants. Page 48, Management options for SUDs other than OUD during pregnancy. https://store.samhsa.gov/product/SMA18-5054

Syphilis during pregnancy

- Centers for Disease Control and Prevention. Syphilis during pregnancy https://www.cdc.gov/std/tg2015/syphilis-pregnancy.htm
- Oregon Health Authority letter to providers
 http://www.oregon.gov/oha/PH/DISEASESCONDITIONS
 HIVSTDVIRALHEPATITIS/SEXUALLYTRANSMITTEDDISEASE/
 Documents/spr/ProviderMessageSyphilisLaneFinalNov16.pdf

Recommendation 9

U.S. Department of Justice Drug Enforcement Administration Diversion Control Division. Title 21 Code of Federal Regulations PART 1306 — prescriptions general information. §1306.07 Administering or dispensing of narcotic drugs. https://www.deadiversion.usdoj.gov/21cfr/cfr/1306/1306_07.htm

Recommendation 10

The American College of Obstetricians and Gynecologists: Postpartum birth control https://www.acog.org/Patients/FAQs/Postpartum-Birth-Control

The American College of Obstetricians and Gynecologists: Committee opinion: Opioid use and opioid use disorder in pregnancy

https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Opioid-Use-and-Opioid-Use-Disorder-in-Pregnancy

Academy of Breastfeeding Medicine Clinical Protocol #21: Guidelines for breastfeeding and substance use or substance use disorder, revised 2015 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4378642/pdf/bfm.2015.9992.pdf

Centers for Disease Control and Prevention: Contraindications to breastfeeding or feeding expressed breast milk to infants

https://www.cdc.gov/breastfeeding/breastfeeding-special-circumstances/contraindications-to-breastfeeding.html

Recommendation 12

An initiative to improve the quality of care of infants with neonatal abstinence syndrome

Matthew R. Grossman, Adam K. Berkwitt, Rachel R. Osborn, Yaqing Xu, Denise A. Esserman, Eugene D. Shapiro, Matthew J. Bizzarro

Pediatrics May 2017, e20163360; DOI: 10.1542/peds.2016-3360

http://pediatrics.aappublications.org/content/early/2017/05/16/peds.2016-3360

American Academy of Pediatrics: Identifying Infants and Young Children with Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening

http://pediatrics.aappublications.org/content/118/1/405.full

Home visiting

- Babies First!: Public health nurse home visiting program http://www.oregon.gov/oha/PH/HEALTHYPEOPLEFAMILIES/BABIES/ HEALTHSCREENING/BABIESFIRST/Pages/index.aspx
- Healthy Families Oregon https://oregonearlylearning.com/healthy-families-oregon

Mandatory reporting of child abuse and neglect

A positive toxicology screening may or may not require a mandatory report of child abuse or neglect to Department of Human Services (DHS) Child Welfare. Oregon law states that mandatory reporters must report "unlawful exposure to a controlled substance, as defined in ORS 475.005, that subjects a child to a substantial risk of harm to the child's health or safety." Make a report if substantial risk is present in conjunction with a positive toxicology screen.

Mandatory reporting of substance-affected infants

Federal law requires that health care providers involved in the delivery or care of infants notify the Oregon Department of Human Services (DHS) Child Welfare when they identify an infant as affected by substances or withdrawal symptoms from prenatal substance exposure, or a fetal alcohol spectrum disorder, including both legal and illegal drugs.

A plan of care must be developed and the plan must ensure the safety and well-being of the infant by addressing the health and substance use disorder needs of the infant and the affected family/caregiver.

 Neonatal Abstinence Syndrome: A Guide for Families. Developed by the Ohio Perinatal Quality Collaborative https://opqc.net/sites/bmidrupalpopqc.chmcres.cchmc.org/files/Resources/ Neonatal%20Abstinence%20Syndrome/opqc_nas_parent_guide_092914.pdf National Center on Substance Abuse and Child Welfare (NCSACW) https://ncsacw.samhsa.gov/default.aspx

Safe sleep

- American Academy of Pediatrics: SIDS and other sleep-related infant deaths: Updated 2016 recommendations for a safe infant sleeping environment http://pediatrics.aappublications.org/content/early/2016/10/20/ peds.2016-2938
- Oregon safe sleep for babies http://www.oregon.gov/oha/ph/healthypeoplefamilies/babies/pages/ sids.aspx

Collaborative approaches

Collaborative approaches for caring for pregnant women with an opioid use disorder and their infants

Project Nurture (Oregon) A Center of Excellence model integrating maternity care and addiction treatment for pregnant women with substance use disorders http://www.projectnurtureoregon.org/projectnurture

Children and Recovering Mothers (CHARM) Collaborative (Vermont) http://county.milwaukee.gov/ImageLibrary/Groups/cntyHHS/BHD/CARS/Well-Baby/CHARM_CaseStudy.pdf

Fir Square (Vancouver, BC): Combined Care Unit that cares for women who use substances and their newborns exposed to substances in a single unit http://www.bcwomens.ca/our-services/pregnancy-prenatal-care/pregnancy-drugs-alcohol



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