## Child Health



## 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)
" Numerator: Number of children aged 10-17 years who are 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 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 children 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 age 10-17
years, Oregon and United States, 2011-2012


Data source: National Survey of Children's Health

Overweight/obesity among children age
10-17 years, Oregon, 2003-2011/12


Data source: National Survey of Children's Health

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


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 re-victimization, mental illness (i.e., depression and suicide), 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 an 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)

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.

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


Children aged 0-17 years who have experienced two or more adverse childhood events, by race/ethnicity, Oregon, 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 nonHispanic 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.


Children aged 1-17 years with a preventive dental visit in the past 12 months, Oregon, 2007-2011/12


Children age 1-17 years with a preventive dental visit in the past 12 months, by race/ethnicity, Oregon, 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 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 nonHispanic White children in Oregon, nonHispanic Black, other non-Hispanics and Hispanic groups had lower percentages of children whose health care met the criteria for a medical home.

meets medical home criteria, Oregon and United States, 2011/12

Children aged 0-17 years whose health care meets medical home criteria, Oregon, 2007-2011/12


Children age 0-17 years whose health care meets medical home criteria, by race/ethnicity, Oregon, 2011/12


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

