
Oregon Child Health 2010 Data and Resource Guide



A partnership of
Association of Oregon Public Health Nurses
Coalition of Local Health Officials, Maternal and Child Health Committee
Oregon Center for Children and Youth with Special Health Needs
Oregon Department of Human Services, Office of Family Health
Washington County Department of Health and Human Services

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ACKNOWLEDGEMENTS

The Maternal and Child Health section in the DHS Office of Family Health would like to thank these people for their involvement in the preparation of the Oregon Child Health 2010 Data and Resource Guide.

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Special thanks to the Child Health Collaborative 2009-2010 planning committee. They provided valuable input on the scope and design of the Data and Resource Guide and offered comments during the review process.

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Finally, special thanks to external partners who shared data and maps for inclusion in the Data and Resource Guide: Natasha Detweiler, Oregon Housing and Community Services; Emerson Ong, Office of Rural Health, OHSU; Tonya Drayden, Oregon Poison Center, OHSU; Kathleen Miller, RUPRI; and Don Albrecht and Betsy Newman, Western Rural Development Center.

Color printing for the Data and Resource Guide was generously donated by the Oregon Center for Children and Youth with Special Health Needs.

Suggested citation: Oregon Department of Human Services, Office of Family Health. Oregon Child Health 2010 Data and Resource Guide. Available online at: www.oregon.gov/DHS/ph/ch/data_resources.shtml.

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INTRODUCTION

With our state and local public health partners, the Office of Family Health in the Public Health Division is pleased to share with you this collection of child health indicators and resources. This guide was developed to serve as a tool for understanding the status of children's health in Oregon for the 2010 Child Health Collaborative. We hope it will serve to inform the prioritization of child health issues for planning, collaboration and action by maternal and child health stakeholders and advocates.

It is difficult to depict the health and well-being of a child using a collection of discrete indicators. In many cases, data are simply not available to reflect on key aspects or influences of child health. Data are not real-time; that is, they do not reflect on recent changes to child health indicators, such as economic downturns and the effects of unemployment. While we recognize we have limited information to address child health issues, we cannot fail to thoroughly consider and examine the data that we do have available to us. In this data collection, we present a varied representation of indicators that reflect on the breadth of childhood. Our focus is children from birth through 8 years old. Some indicators focus on specific ages within the birth to 8 range, but wherever possible, we have analyzed the data across those years.

Topics were selected by a committee of local and state public health leaders to represent the myriad of influences on child health, and to be inclusive of a variety of issues and indicators that child health experts deem important. Within this breadth of data, we hope you will find issues that resonate for future engagement and action on behalf of children's health, whether through public health interventions, enhanced data collection or policy initiatives. Perhaps these indicators will suggest other issues of importance or spotlight gaps in our data or systems for development.

Oregon can be proud of our efforts on behalf of children's health! Compared to national data, Oregon children are less likely to live in a home where someone smokes, and less likely to have elevated blood lead levels. Oregon's rate of children who have received a preventive medical visit in the past year is twice that of the United States. Our breastfeeding initiation and continuation statistics are among the best!

While we can enjoy these successes, there are other areas wanting attention and improvements. Identifying those issues and collectively working toward their improvement is the task of all our partners engaged in improving the health of all children in Oregon.

A handwritten signature in black ink, reading "Katherine J. Bradley". The signature is fluid and cursive.

Katherine J. Bradley, PhD, RN
Administrator
Office of Family Health
Public Health Division
Oregon Department of Human Services

Oregon Child Health 2010 Data and Resource Guide



PREFACE

Overview

The Maternal and Child Health Services Block Grant (Title V of the Social Security Act) provides federal funding to states to improve the health of women, children and families. Every five years, state maternal and child health programs conduct a comprehensive needs assessment to identify gaps in health status and health systems capacity. As a result of this comprehensive needs assessment, state maternal and child health programs identify priority areas for focused effort at the state and local level during the subsequent five years.

In Oregon, the 2010 Title V Maternal and Child Health Needs Assessment engaged an advisory group of community partners, stakeholders and experts to consider each of the maternal and child health subpopulations, weigh presentations of data, and develop priority recommendations. This process was intended to ensure that identified priorities reflect the knowledge and experience of Oregon communities, as well as the evidence. The findings of the advisory group resulted in recommendations for priority issues across the life course of the MCH population, from women before pregnancy to 24 year old adolescents, including children and youth with special health needs.

For the subpopulation of children ages birth to 8, a special retreat of Oregon's maternal and child health leaders gathered to reflect on the evidence. At the Child Health Collaborative, 70 leaders from 22 counties and state government reviewed trends and issues in child health from a national, state and local perspective; shared ideas about tackling issues; and worked through a facilitated process to prioritize child health issues for action.

The collection of child health indicators presented in this Oregon Child Health 2010 Data and Resource Guide provided maternal and child health leaders with an objective foundation for scoring child health topics and issues using a set of defined criteria. Individual scores were combined to narrow a field of nine child health topics to three: child safety, healthy food and physical activity and oral health. Participants then scored issues within these three child health topics, resulting in the prioritization of three new shared priority areas in child health:

1. Unintentional injuries,
2. Obesity/physical activity, and
3. Preventive oral health.

Workgroups, composed of state and local maternal and child health leaders, were formed to begin action planning for next steps on each of these three priority areas.

Beyond its intended use for the Child Health Collaborative, we hope that partners and child health advocates will use this collection of indicators to inform their work on the many issues and opportunities to improve the health of children in Oregon.

Data conventions and sources

This Data and Resource Guide provides a snapshot of Oregon’s children, birth through 8 years old, and offers national comparisons when possible. The age range does vary within the guide, depending on the indicator and whether targeted data for ages 0-8 were available. Indicators such as breastfeeding and immunization refer to younger populations, while data on children with special health care needs includes children through age 17. For clarity, the age range is specified for each indicator.

The majority of the data are from the National Survey of Children’s Health, which provides state and national information on children’s physical, social and emotional well-being. Other national surveillance sources used in the guide include: National Immunization Survey, Behavioral Risk Factor Surveillance System, and National Health and Nutrition Examination Survey. State level surveys used in the guide include: Oregon Pregnancy Risk Assessment Monitoring System, Oregon Kindergarten Readiness and the Oregon Smile Survey. The majority of sources rely on parent report, but some use hospital records, provider report, or even a combination of parent and provider report. A brief description of all data sources and collection methods can be found in Appendix A.

Indicators from state surveys may not have comparable national information. For this reason, some indicators do not offer a national data perspective. Those that provide a national level context include data from all 50 states. In order to keep the guide accessible and manageable for the intended purpose, we chose not to trend data over time, present county level data or break out subpopulations.

The data presented in this book are the most recent data available as of the fall of 2009, when data were analyzed for this report. In most cases, the data come from surveys collected in 2006-2008. When analyzing data, we determined the categories of analysis based on recommended levels of healthy living.

Organization

The data are organized broadly into child health topics with subsequent issue areas that contain specific data indicators. We purposefully included topics that reflect multiple levels of the socio-ecological framework: individual, neighborhoods and communities, and populations. The indicators were selected by a planning committee composed of state and local partners who considered the availability of data and the goal of presenting a basic, but thorough, picture of child health for data-driven decision making.

Health equity

In general, the data presented in this guide represent the state population of children in aggregate, and do not closely examine subpopulations. In most cases, this is due to the lack of sufficient data to represent subpopulations in Oregon. While this is an overarching challenge and limitation, we feel it is essential to present the available data that highlight health disparities across subpopulations in our state. These data are presented in the “Background Data” section of the guide and are grouped under the term “Health Equity.” In this section, we present data that offer context on several key subpopulations in Oregon: children by race/ethnicity, rural residents, and children with special health care needs. These data offer a closer look at children’s health through these three lenses, and suggest that while some disparities may be related to biology and genetics, others are avoidable and can be addressed through more equitable systems, resource allocation and policies.

Background Data

Demographics

Health Equity

Race/ethnicity

Rural/urban

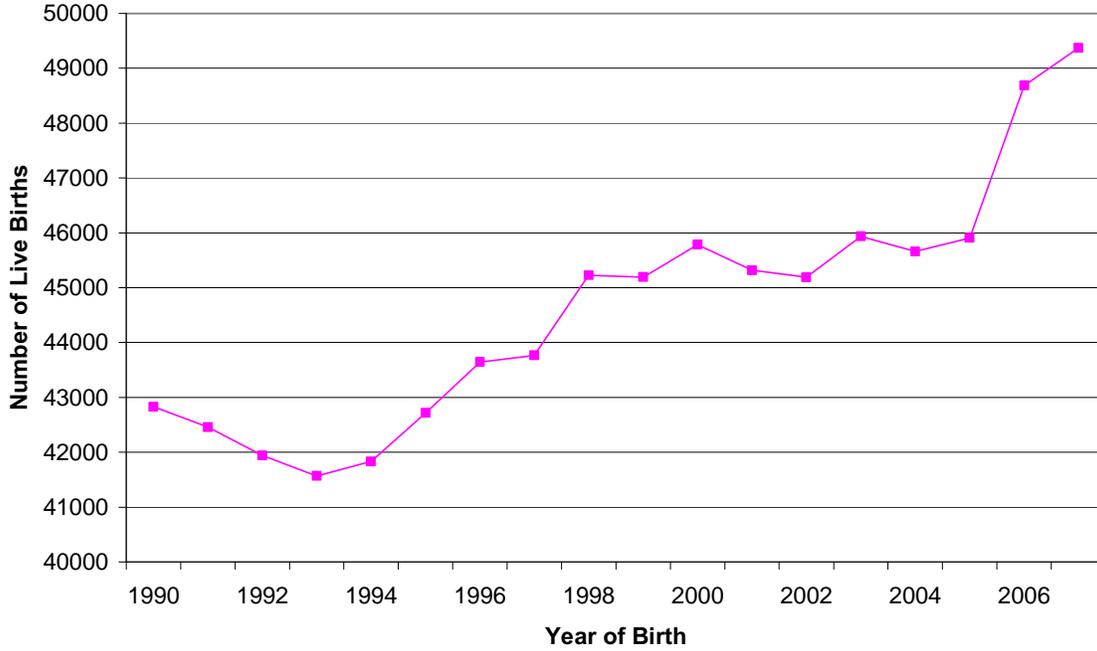
Children with special health care needs (CSHCN)

DEMOGRAPHICS

BACKGROUND DATA

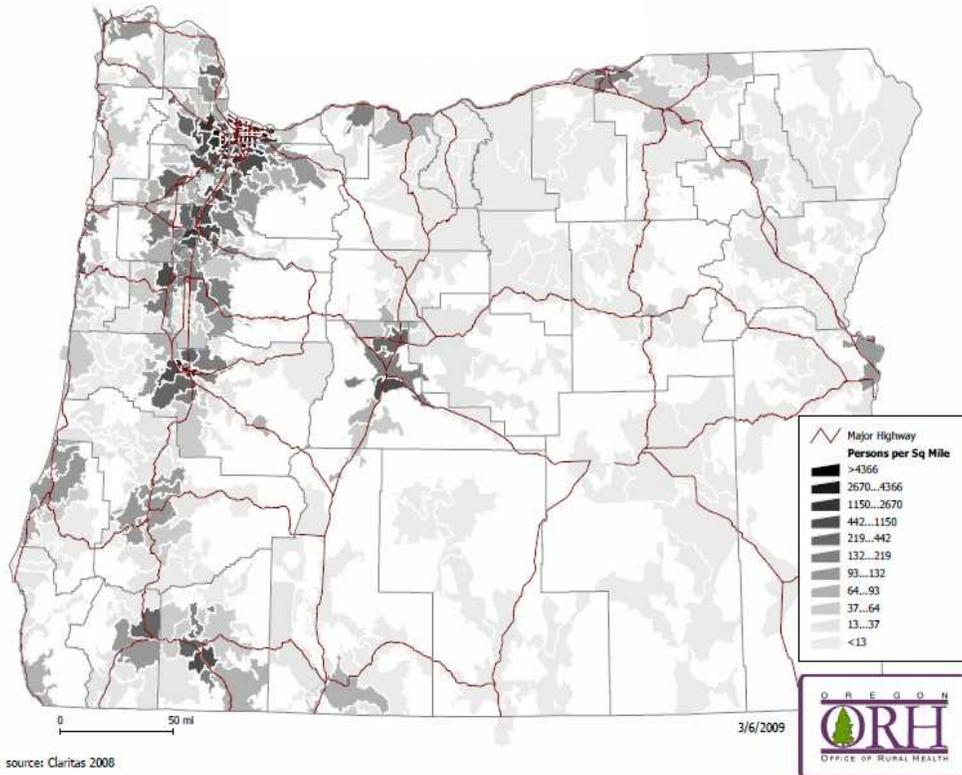
BIRTHS

- ▶ Number of **live births** by year, Oregon 1990-2007.¹



LOCATION

- ▶ Total **population density** of Oregon residents (persons per square mile), 2008.²



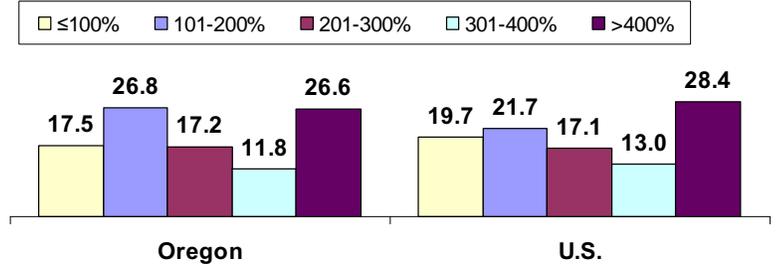
source: Claritas 2008

DEMOGRAPHICS

INCOME

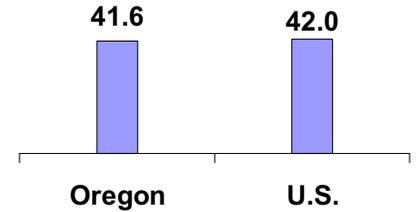
- ▶ Families with children ages 0-8 according to **poverty level**.

*Note: In 2007, the Federal Poverty Level (FPL) for a family of four was \$20,650.*³



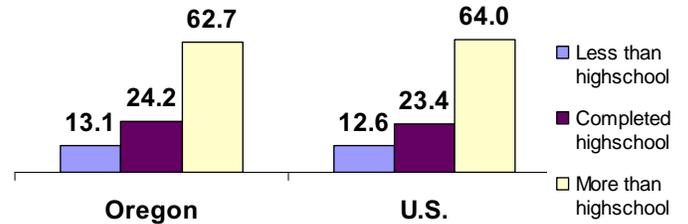
- ▶ Percent of public school students (elementary, middle and high school) eligible for the **free and reduced lunch program**.

*Note: Children and youth with family incomes below 185% of the poverty threshold qualify for this program.*⁴



EDUCATION

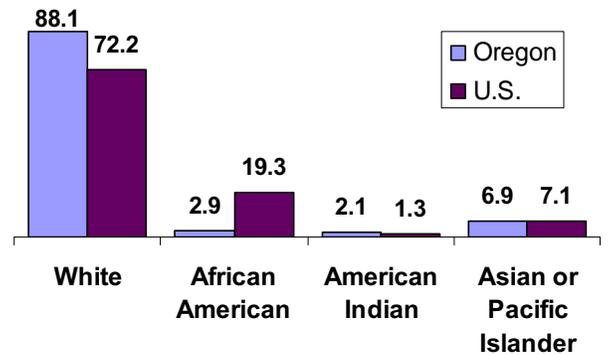
- ▶ Highest level of **education completed by mothers** of children ages 0-8, Oregon and U.S.³



RACIAL/ETHNIC BACKGROUND

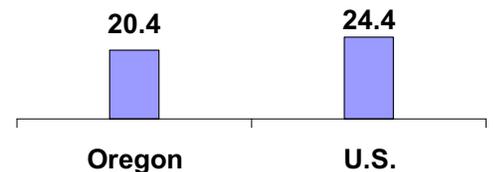
- ▶ **Live births** in the United States and Oregon, 2006, by race of mother.⁵

*Total live births in 2006*⁵
 United States: 4,265,555
 Oregon: 48,689



- ▶ **Percent of live births** to mothers of Hispanic or Latino ethnicity, 2006.⁵

*Total live births in 2006*⁵
 United States: 4,265,555
 Oregon: 48,689

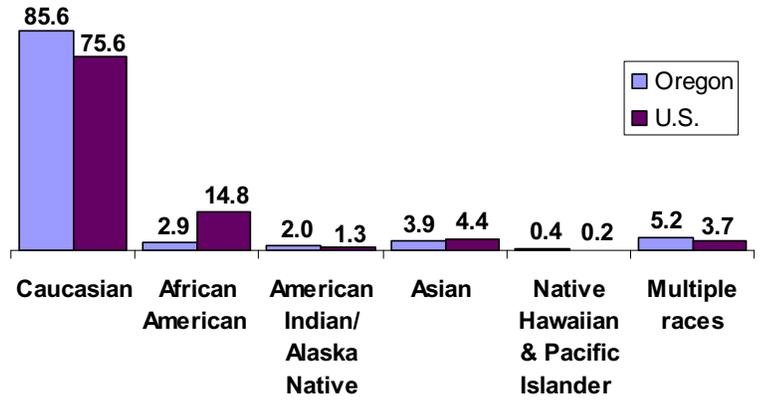


DEMOGRAPHICS

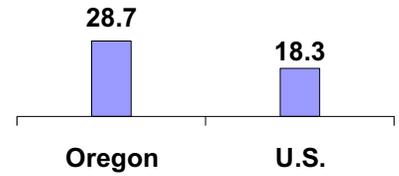
BACKGROUND DATA

► **Children ages 0-8, by race.⁶**

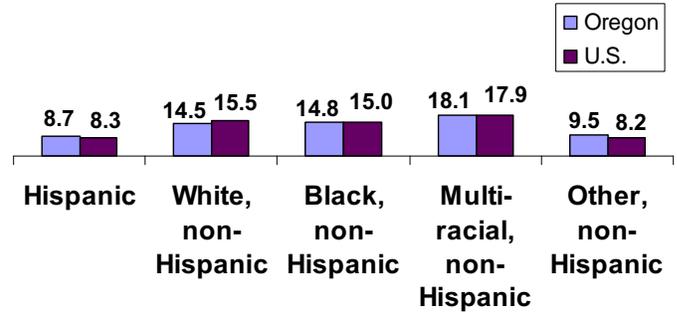
Total population 0-8 in 2008⁶
 United States: 74,342,838
 Oregon: 431,776



► **Percent of infants born with at least one foreign-born parent in 2007.⁷**



► **Percent of children with special health care needs ages 0-8, by race/ethnicity.⁸**



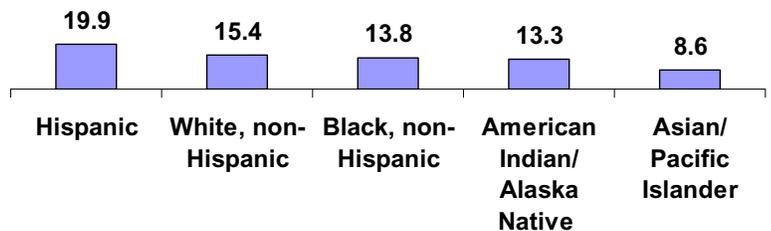
The Governor’s Task Force on Racial and Ethnic Health was established by Executive Order in 1999 to make recommendations for addressing health issues that “substantially and persistently undermine the wellbeing of one or more racial or ethnic communities.” The six initial health priorities identified in the Executive Order were: adequate access to care, HIV/AIDS, diabetes, asthma, lead poisoning, and alcohol/drug abuse.⁹ Data on these high priority issues are presented below.

In Oregon, racial and ethnic groups are a small portion of the overall population. This presents a challenge to gathering data that can reliably represent racial and ethnic populations. While it is essential to collect data to describe the health of all populations, it is also important to recognize that data based on small numbers can be misleading. For areas where the numbers were too small to be analyzed, a national population is offered.

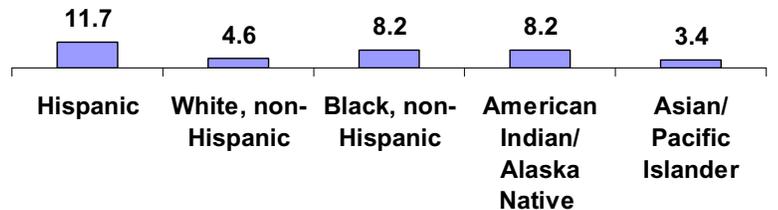
Note: Racial/ethnic categories exclude Hispanic ethnicity unless otherwise mentioned. American Indian, Alaska Native, Asian and Pacific Islander categories exclude individuals of Hispanic ethnicity.

ACCESS TO CARE

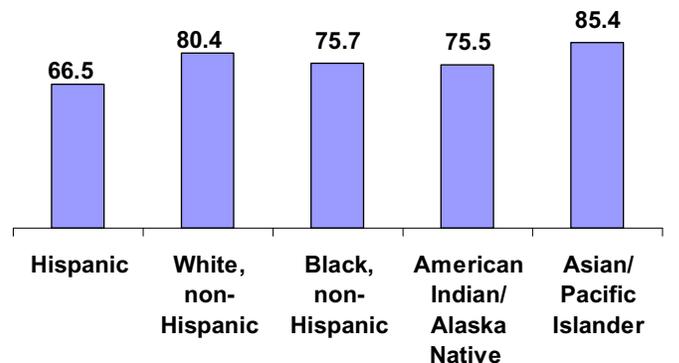
- ▶ Percent of 2 year olds in Oregon who have **ever** been **without health insurance**, by race/ethnicity of the mother.¹⁰



- ▶ Percent of 2 year olds in Oregon who do **not** have a **regular health care provider**, by race/ethnicity of the mother.¹⁰



- ▶ Percent of 2 year olds in Oregon who have **never been to a dentist**, by race/ethnicity of the mother.¹⁰

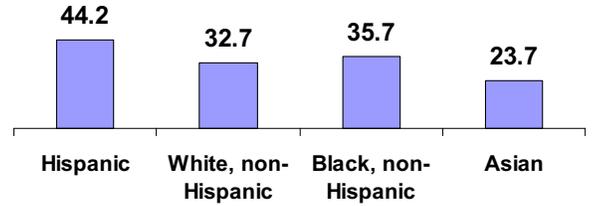


HEALTH EQUITY: RACE/ETHNICITY

BACKGROUND DATA

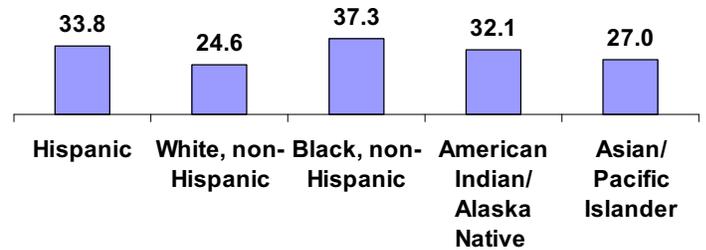
- ▶ Percent of Oregon children in first through third grade identified as **needing dental treatment** for tooth decay.

Note: Assessment is based on a visual screening by a trained oral hygienist. ¹¹



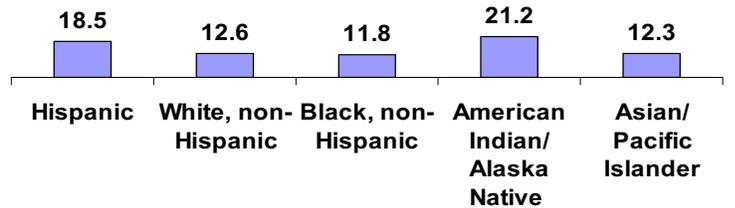
DIABETES (AND OTHER METABOLIC-RELATED FACTORS)

- ▶ Percent of Oregon mothers of 2 year olds with a **family history of diabetes**, by race/ethnicity.¹⁰

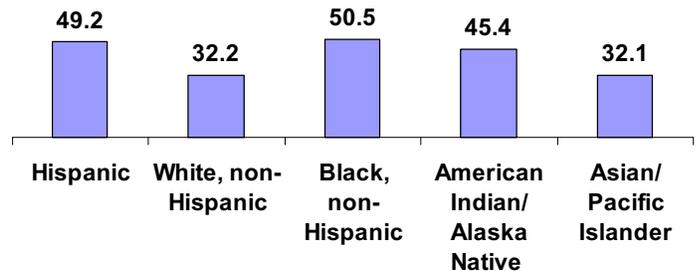


- ▶ Percent of low-income children ages 2-4 who are **obese**, United States, by race/ethnicity.¹²

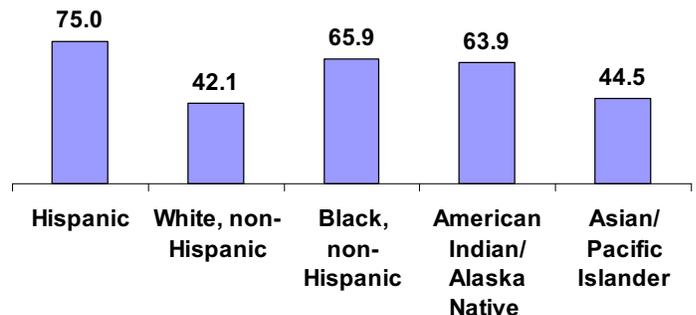
Note: Obesity is defined as ≥ 95 th percentile BMI-for-age using the 2000 CDC growth chart for children ages 2 and older. ¹³



- ▶ Percent of Oregon children whose mothers did **not breastfeed (any)** at six months, by race/ethnicity of the mother.¹⁰



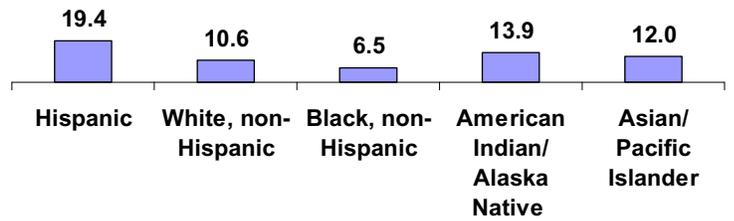
- ▶ Percent of 2 year old children in Oregon who consume **soda** (or sugar sweetened beverages like Kool-Aid) in a typical week, by race/ethnicity of the mother.¹⁴



HEALTH EQUITY: RACE/ETHNICITY

BACKGROUND DATA

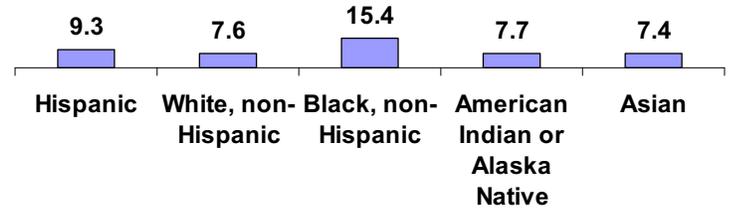
- ▶ Percent of Oregon mothers of 2 year olds who reported a **need for food stamps** in the past year, but who didn't receive food stamp assistance, by race/ethnicity.¹⁰



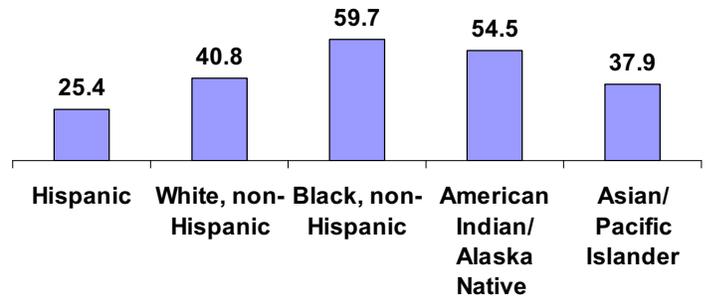
ASTHMA

- ▶ Percent of children ages 0-17 with **current asthma**, United States, by race/ethnicity.¹⁵

Note: Estimate for American Indian and Alaska Native is considered unstable (relative standard error is greater than 30).



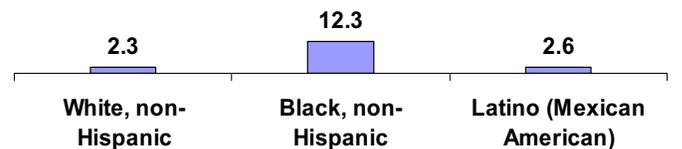
- ▶ Percent of Oregon mothers of 2 year olds who have **family history of asthma**, by race/ethnicity of the mother.¹⁰



ELEVATED BLOOD LEAD LEVELS

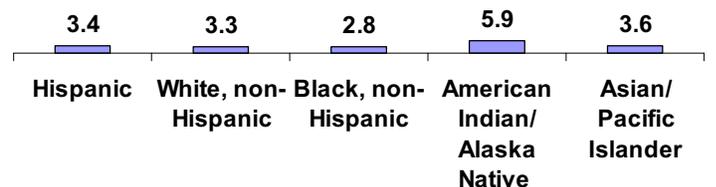
- ▶ Percent of children ages 1-5 with **blood lead levels** ≥ 5 $\mu\text{g}/\text{dL}$, United States, by race/ethnicity.¹⁶

Note: Blood lead levels $\geq 10\mu\text{g}/\text{dL}$ are considered elevated¹⁷ but adverse health affects have been shown at lower levels.¹⁸



DRUG AND ALCOHOL ABUSE

- ▶ Percent of Oregon mothers of 2 year olds who needed help with a **drug or alcohol problem** in the past year, by race/ethnicity.¹⁰



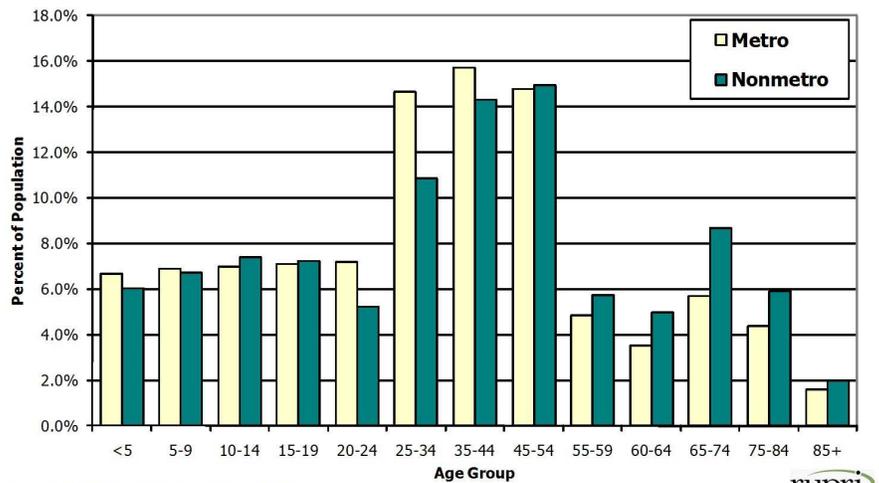
HEALTH EQUITY: RURAL/URBAN

The majority of Oregon’s 36 counties are designated as rural and/or frontier. In spite of protective factors, such as strong community bonds and healthful opportunities to enjoy fresh air and activity, rural residents also experience health disparities. In particular, these communities encounter disparities in their access to health care and preventive services. Great travel distances and a shortage of health care providers are just a few of the barriers that rural residents face in accessing timely and quality health care. Many rural communities are also undergoing demographic change, with the graying of rural residents, movement of young people to urban centers, and introduction of new cultural and ethnic groups through in-migration. As such, rural Oregonians face distinct challenges and are therefore included as a special topic in our “Health Equity” section.

Note: There are four main definitions of rural that are widely accepted by researchers and policymakers. The Census Bureau bases their definition on census block groups and blocks. The Office of Management and Budget offers a county-based categorization into metropolitan, micropolitan, and nonmetro. Rural-urban community areas (RUCA) categorizes census tract/zip codes according to size and commuting patterns. Finally, the Oregon Office of Rural Health uses the distance from the center of a population center of 40,000 or more persons.

DEMOGRAPHICS

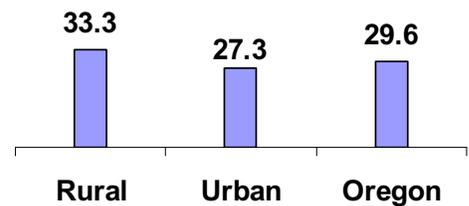
- ▶ Age distribution in Oregon of persons living in **metro and nonmetro** areas, 2000.¹⁹



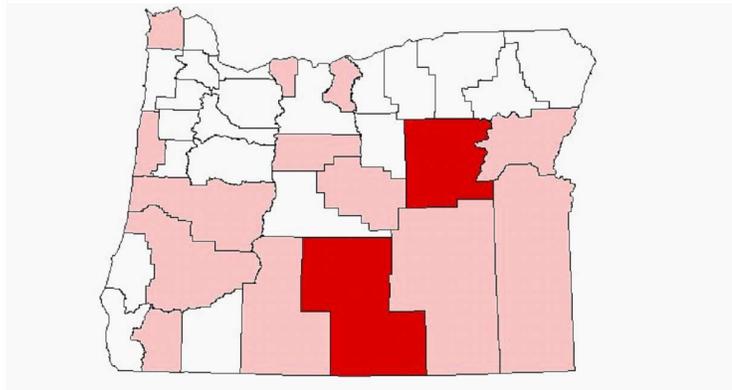
Source: U.S. Census Bureau, Census 2000



- ▶ Percent of population **under 200%** of the Federal Poverty Level.²⁰

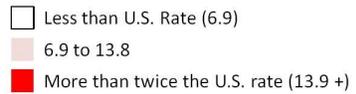


- ▶ **Infant deaths** per 1,000 live births, 2000-2004 five year average.¹⁹



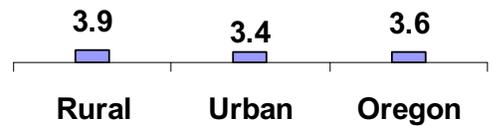
Source: NCHS Natality and Mortality Detail Files
Data access from the Area Resource File
Health Resources and Services Administration, HHS

Infant Mortality Rate – Infant Deaths per 1,000 Births

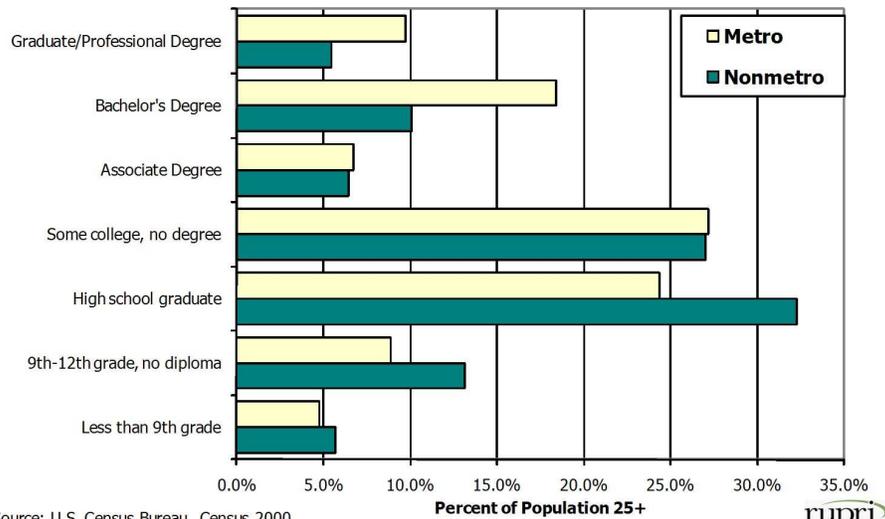


SOCIO-ECONOMIC FACTORS

- ▶ Percent of households receiving **public assistance**.²⁰



- ▶ **Educational attainment** in Oregon among persons 25 years and older, metro versus nonmetro, 2000. 17.9% of rural residents do not have a high school diploma, compared to 12.9% of urban residents.¹⁹



Source: U.S. Census Bureau, Census 2000



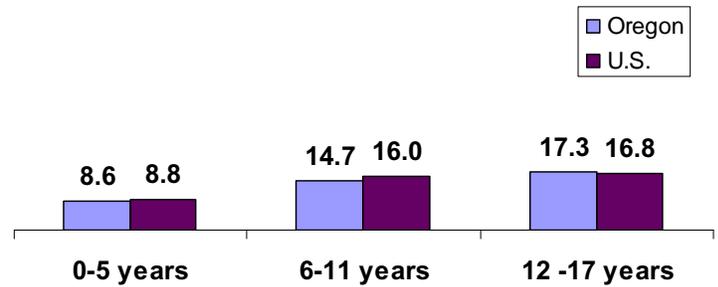
HEALTH EQUITY: CHILDREN WITH SPECIAL HEALTH CARE NEEDS (CSHCN)

Children with special health care needs (CSHCN) are defined by their ongoing need for health and health related services beyond typical needs, and not necessarily by their specific health conditions. Children may have a physical, emotional or behavioral problem, or a combination of special needs. One in five households, both in Oregon and nationally, has a child with special health care needs.⁸ This can be challenging for a family, and may include increased school absences, payments above and beyond those covered by insurance, and inability to find adequate daycare. A medical home, family centered care, and access to health care and related services are all of utmost importance for this group of children with diverse, chronic medical conditions and disabilities. It is important to note that despite the burdens, many families find fulfillment and meaning in caring for children with special health care needs.

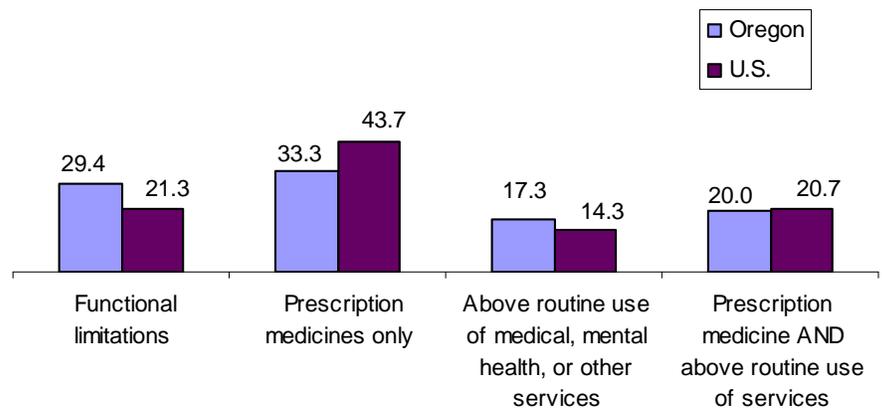
PREVALENCE

- ▶ Percent of the child population ages 0-17 that is considered to have **special health care needs**, by age.⁸

Note: Special health care needs are defined as one or more of the following: (1) need or use of prescription medications; (2) an above routine use of services; (3) need or use of specialized therapies or services; (4) need or use of mental health counseling; and/or (5) a functional limitation.²⁴

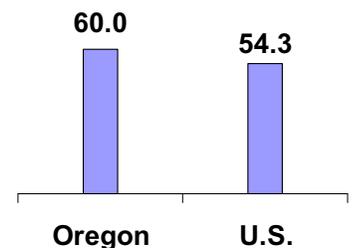


- ▶ Among CSHCN ages 0-17, **description of special health care needs**.⁸



- ▶ Percent of CSHCN ages 0-17 with two or more **functional limitations**.

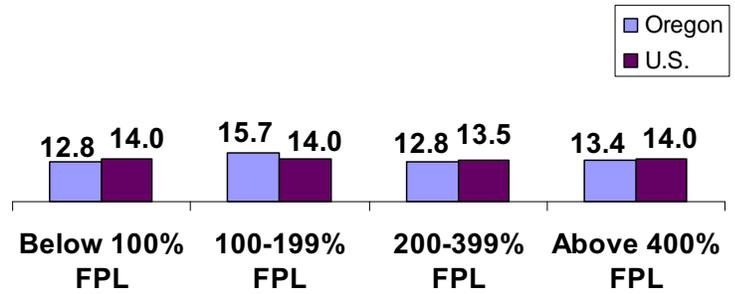
Note: Functional limitations are based on a series of 15 questions and may include difficulties with breathing, chronic pain or performing age-appropriate activities.⁸



HEALTH EQUITY: CHILDREN WITH SPECIAL HEALTH CARE NEEDS (CSHCN)

BACKGROUND DATA

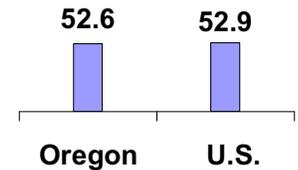
- ▶ Percent of CSHCN ages 0-17, by **income**.⁸



MEDICAL HOME

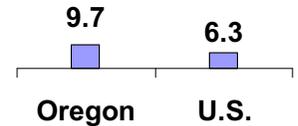
- ▶ Percent of CSHCN ages 0-17 who do **not** receive coordinated, ongoing, comprehensive care within a **medical home**.⁸

Note: This survey defines a medical home as whether a child receives needed referrals, family centered care, effective care coordination, a usual source of care and maintains adequate communication with a doctor.



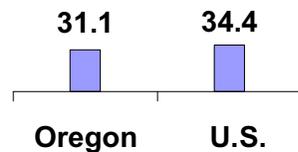
ACCESS TO CARE

- ▶ Percent of CSHCN ages 0-17 with unmet needs for **preventive dental care**.⁸



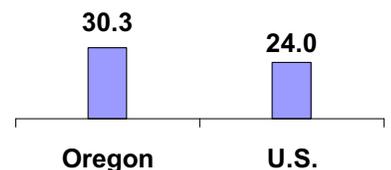
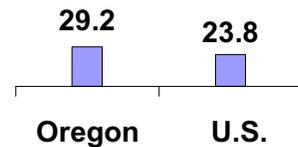
FAMILY CENTERED CARE

- ▶ Percent of CSHCN ages 0-17 **without family-centered health care**.⁸



IMPACT ON THE FAMILY

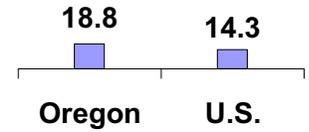
- ▶ Percent of CSHCN ages 0-17 who have conditions that cause family members to **reduce or stop working**.⁸
- ▶ Percent of CSHCN ages 0-17 **whose conditions affect their activities** usually, always or a great deal.⁸



HEALTH EQUITY: CHILDREN WITH SPECIAL HEALTH CARE NEEDS (CSHCN)

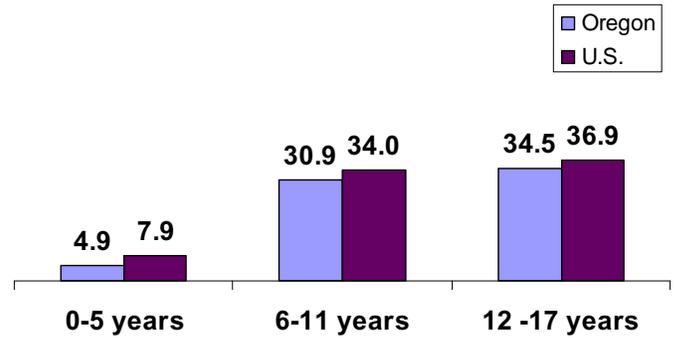
BACKGROUND DATA

- ▶ Percent of CSHCN ages 0-17 with 11 or more days of **school absences** due to illness.⁸

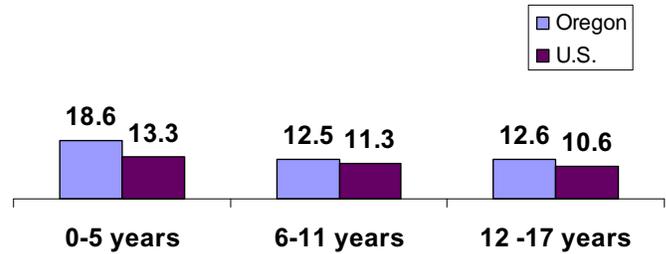


CONDITIONS

- ▶ Percent of CSHCN with **attention deficit disorder or attention deficit hyperactivity disorder (ADD or ADHD)**, according to parent report.⁸



- ▶ Percent of CSHCN with **mental retardation or a developmental delay**, according to parent report.⁸



Topics for Prioritization



Child Safety



Healthy Child Development



Healthy Environments



Healthy Food and Physical Activity



Neighborhood Assets



Oral Health



Parent Skills and Resources



Safe, Stable and Nurturing Relationships



Screening/Linkages/Systems

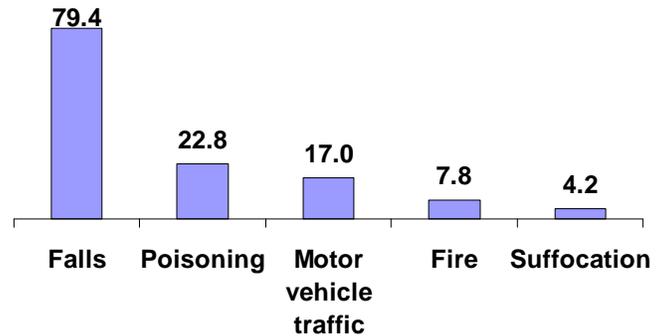


Nationally, unintentional injuries—specifically motor vehicle crashes, drowning and fires/burns—are the leading cause of death for children aged 1 to 8 years old. Children are at increased risk for many injuries due to their developmental stage; they are curious and busy learning about their environment, their physical coordination and cognitive abilities are still developing, and their small size and developing bones and muscles make them more susceptible to injury if they are not protected or properly restrained. Safety devices, such as child safety seats, bike helmets, and carbon monoxide alarms, are key components of child health. Public health has a vital role in preventing childhood unintentional injuries through policy endeavors, supporting prevention partnerships and programs, and supporting communities and families with access to safety education, training and supplies.

UNINTENTIONAL INJURY

- ▶ Average annual rate of **hospitalizations** per 100,000 children ages 0-8, Oregon.²⁵

Note: Annually, 705 children are hospitalized in Oregon due to unintentional injuries. We presented five categories of unintentional injury out of more than 15 that are monitored by injury prevention specialists.

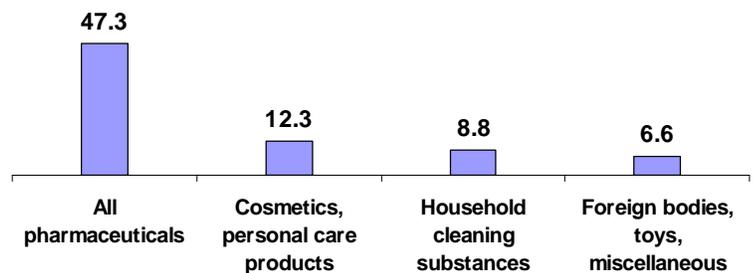


- ▶ Annual number of **falls from windows** among children ages 1-8, Oregon.²⁶

45 falls in 2008 (Oregon)

- ▶ Percent of **pediatric poisoning exposure cases** tracked by the Oregon Poison Center in children birth to 5 years old, Oregon.²⁷

Note: In 2008, there were 23,185 pediatric poisoning exposure cases followed by the Oregon Poison Center. We present four poisoning exposure categories out of the more than 36 that are monitored by the Poison Center. The Oregon Poison Center provides emergency information and resources for the public and health care providers, resulting in the prevention of many unnecessary emergency room visits.





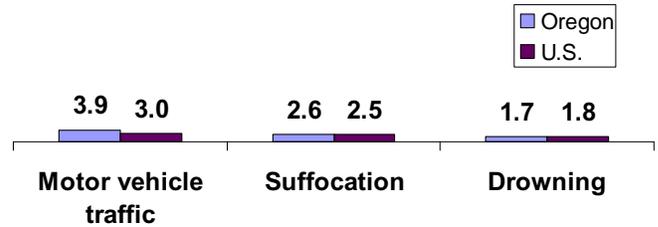
- ▶ Percent of children ages 1-5 who have been **injured and required medical attention** in the past 12 months.³



MORTALITY

- ▶ Average **annual mortality** rate per 100,000 children, ages 0-8.

Note: Multiple years are combined to gain adequate sample size. This is a subset of total mortality due to unintentional injury, averaging about 40 deaths per year among children 0-8 in Oregon. Use caution when interpreting death rate for Oregon due to small numbers.²⁸



SAFE SLEEP

- ▶ Percent of mothers whose babies are most often laid to **sleep on their stomachs**.¹⁰

Note: This comparison between state and national data is an approximation. National data is based on a median for 36 states participating in PRAMS who met a minimum response rate. Oregon state data is based on a weighted percentage.



ABUSE AND NEGLECT

- ▶ Please see Safe, Stable and Nurturing Relationships starting on page 33.



HEALTHY CHILD DEVELOPMENT

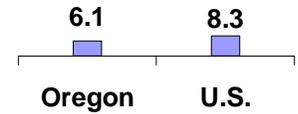
HEALTHY CHILD DEVELOPMENT

Physical, mental, social, emotional and cognitive development are deeply interconnected and determine a child’s readiness to learn and succeed. Not only is healthy child development determined by a child’s individual domains of wellness, but it is also influenced by families, caregiving relationships, community infrastructures (such as integrated comprehensive healthcare services, developmental screening and referral systems, access to quality child care, and linked developmental resources) and early learning opportunities.

EARLY PHYSICAL DEVELOPMENT

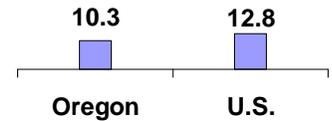
- ▶ Percent of all births that are considered **low birthweight**.⁵

Note: Low birthweight is defined as less than 2,500 grams or 5lb. 8oz.



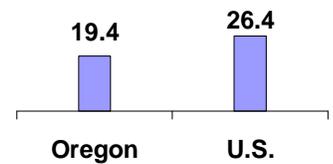
- ▶ Percent of all births delivered **preterm**.⁵

Note: Preterm births are those births at or before 37 weeks gestation.

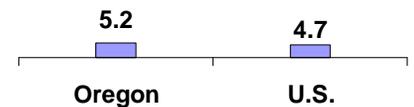


EMOTIONAL, DEVELOPMENTAL OR BEHAVIORAL PROBLEMS

- ▶ Percent of children 4 months to 5 years whose parent/caregiver has any concerns about their **learning, development or behavior**.³

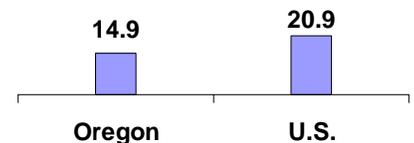


- ▶ Percent of children ages 0-8 who need treatment or counseling for an **emotional, developmental or behavioral problem**.³



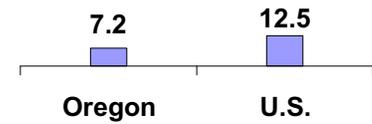
DEVELOPMENTAL MILESTONES

- ▶ Percent of parents of children ages 4 months to 5 years who are concerned about how their child **talks and makes speech sounds**.³





- ▶ Percent of parents of children ages 4 months to 5 years who are concerned about whether their child **understands what the parent says**.³



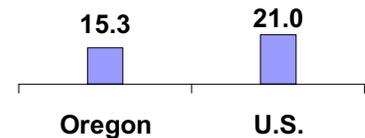
- ▶ Percent of parents of children ages 4 months to 5 years who are concerned about how their child **uses his/her hands and fingers** to do things.³



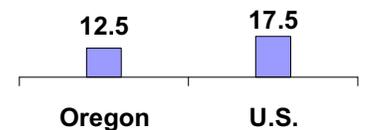
- ▶ Percent of parents of children ages 4 months to 5 years who are concerned about how their child **uses his/her arms and legs**.³



- ▶ Percent of parents of children ages 4 months to 5 years who are concerned about how their child **behaves**.³



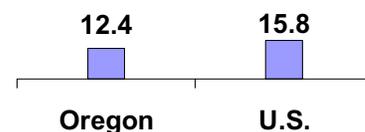
- ▶ Percent of parents of children ages 4 months to 5 years who are concerned about how their child **gets along with others**.³



- ▶ Percent of parents of children ages 10 months to 5 years who are concerned about how their child is **learning to do things** for himself/herself.³



- ▶ Percent of parents of children ages 18 months to 5 years who are concerned about how their child is **learning pre-school or school skills**.³

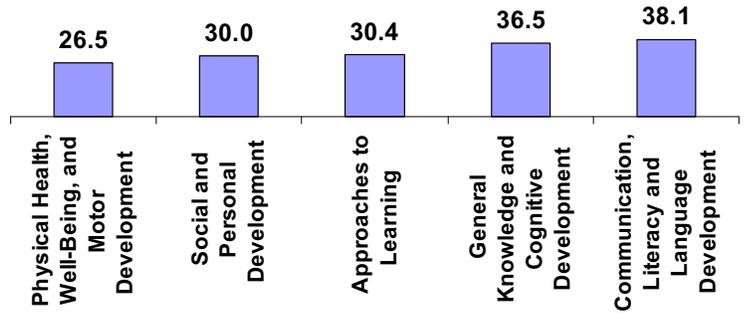




SCHOOL READINESS

- ▶ Percent of children entering Oregon kindergartens in 2008 who did **not** meet a particular domain of **school readiness**, according to kindergarten teachers.²⁹

Note: This survey instrument is currently under review and should be interpreted with caution.



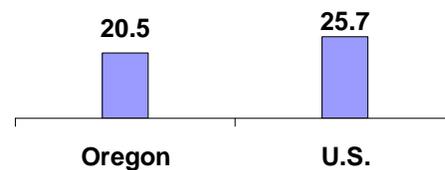


We spend the majority of our time indoors. The health of indoor environments has a profound impact on the health of women, children and families over the lifespan. Substandard housing has been associated with childhood lead poisoning, residual mercury exposure, injuries, respiratory diseases such as asthma and quality of life issues. Harmful chemicals such as tobacco smoke, combustion gases and other indoor toxicants pose a health risk and are of great concern for children due to their smaller relative size, rapid biological and cognitive development, and exploratory behaviors that increase their proportional exposure. Pregnancy and early childhood are examples of sensitive windows of development in which low dose exposures to hormonally active chemicals may disrupt fetal growth and influence adult disease.

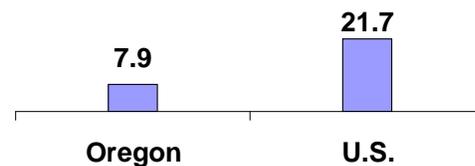
Chemicals with toxic properties enter homes in a variety of ways. They are walked into homes unknowingly as pesticide-containing dirt on shoes and domestic house pets. Pollen and other respiratory triggers also enter the home this way. Consumer cleaning products used in the home may elevate the risk of sensitivity among asthmatic persons. The places where children live, play, and learn can impact health, either for the better or the worse.

EXPOSURE TO TOBACCO

- ▶ Percent of children ages 0-8 living in a household where someone **smokes** cigarettes, cigars or pipe tobacco.³



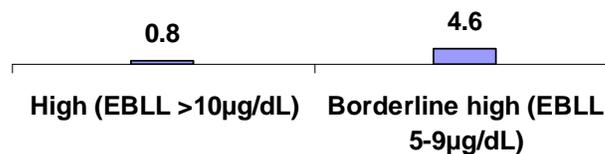
- ▶ Among children ages 0-8 living in a home where someone smokes, percent of children exposed to **second-hand smoke in their home**.³



RISKS IN THE HOME ENVIRONMENT

- ▶ Percent of children up to 72 months of age with **elevated blood lead levels (EBLL)** in Oregon.³⁰

Note: A blood lead level of 10µg/dL is considered high and warrants further physical exam. Blood lead levels between 5-9µg/dL are considered borderline-high and education about lead is recommended.





- ▶ Percent of **poison exposure calls** to the Oregon Poison Center related to children under the age of 5 in 2008. ³¹ **46% (Oregon)**
- ▶ Percent of **poison fatalities** among children under the age of 5. ³¹ **2% (Oregon)**
Please see Child Safety starting on page 16 for more information on poison-related hospitalizations.

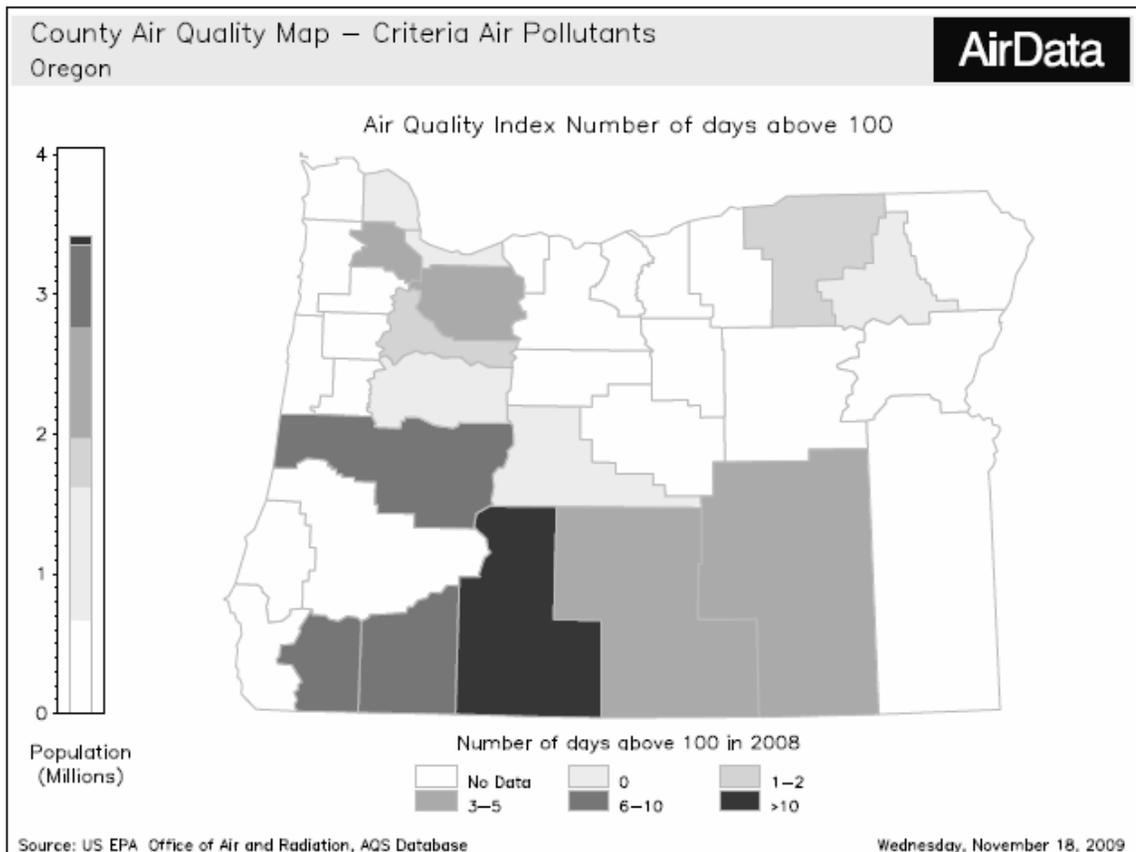
ENVIRONMENT-RELATED HEALTH CONDITIONS

- ▶ Percent of children ages 0-8 with **current asthma**.³² **5% (Oregon)**

AIR QUALITY

- ▶ Number of days in 2008 that the **air quality** index was above recommended levels, by county.

*Note: Air Quality Index values above 100 indicate unhealthy levels of air pollutants. Fifteen counties statewide provided data for 2008.*³³





ACCESS TO HEALTHY FOODS

- ▶ Please see Neighborhood Assets starting on page 26.

QUALITY AND AFFORDABLE HOUSING

- ▶ Please see Neighborhood Assets starting on page 26.

NEIGHBORHOOD UPKEEP AND SAFETY

- ▶ Please see Neighborhood Assets starting on page 26.

ACCESS TO PHYSICAL ACTIVITY RESOURCES

- ▶ Please see Neighborhood Assets starting on page 26.



HEALTHY FOOD AND PHYSICAL ACTIVITY

HEALTHY FOOD AND PHYSICAL ACTIVITY

Healthy eating and physical activity are essential for proper growth and development for every young Oregonian. Unhealthy eating habits and physical inactivity are associated with increased risk for heart disease, cancer, stroke and obesity. While we often think of obesity as a consequence of overeating and unhealthy eating, it is also associated with economic and food insecurity as families use limited resources to purchase cheap, calorie-dense foods. One of the best things that people of all ages can do to improve their health over the lifespan is to practice good nutrition and be physically active. These seemingly simple health recommendations are a complicated challenge for many Oregon families due to social and economic realities.

OBESITY

- ▶ Percent of children **participating in WIC** ages 2-5 who are obese.³⁴
- ▶ Percent of children ages 2-11 who are considered **obese**, United States.³⁵



11% of children ages 2-5 (U.S.)
 15% of children ages 6-11 (U.S.)

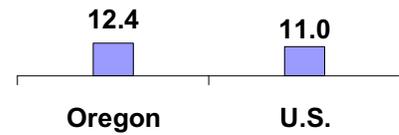
NUTRITION

- ▶ For information on **breastfeeding**, please see Safe, Stable and Nurturing Relationships starting on page 33.
- ▶ Percent of mothers who report that their 2 year old child ate **restaurant, fast food or take-out** food three or more times in the past week.³⁶ **14.5% (Oregon)**
- ▶ Percent of mothers who report that their 2 year old child consumes **soda pop** (or other sugar sweetened beverages like Kool-Aid) in a typical week.¹⁰ **35.9% (Oregon)**
- ▶ Percent of mothers who report that their 2 year old child does **not** eat fresh or canned **fruit** daily (during a typical week).¹⁰ **49.4% (Oregon)**
Note: The American Dietetic Association recommends that children 2-3 years old consume one serving of fruit daily.³⁷
- ▶ Percent of mothers who report that their 2 year old child does **not eat vegetables** (other than potatoes) daily.¹⁰ **60.9% (Oregon)**
Note: The American Dietetic Association recommends that children 2-3 years old consume one serving of vegetables daily.³⁷
- ▶ Percent of mothers who report that their 2 year old child consumes **french fries** at least once in a typical week.¹⁰ **67.9% (Oregon)**



FOOD INSECURITY

- ▶ Percent of households that found it difficult to get **adequate food** for the household (not limited to households with children).³⁸



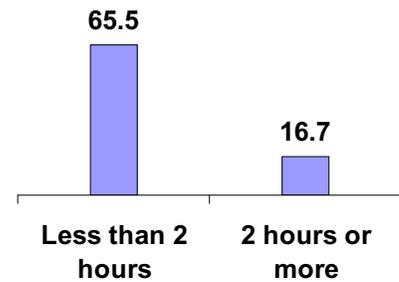
CHILDHOOD DIABETES

- ▶ The incidence of type II diabetes is extremely rare among children younger than 10 years of age. Each year, there are 20 new cases per 100,000 children in this age group across the United States.³⁹ Oregon is in the process of developing a Childhood Diabetes Database (CDD), and it is anticipated that preliminary incidence and prevalence information will be available by fall 2010.⁴⁰

SCREEN TIME

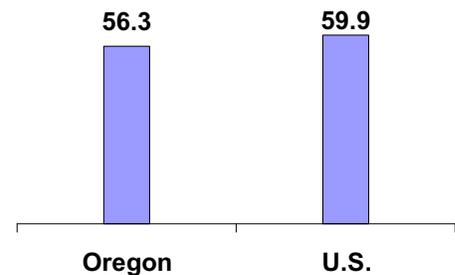
- ▶ Percent of 2 year old children in Oregon who exceed the recommended amount of time spent **watching television or videos** on an average day.¹⁰

*Note: The American Academy of Pediatrics recommends that children under 2 years not watch any television or videos.*⁴¹



- ▶ Percent of children ages 2-8 who watch two or more hours of television or videos on an average weekday.³

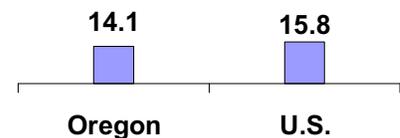
*Note: The American Academy of Pediatrics recommends that parents limit screen time to one to two hours per day for children older than 2 years.*⁴¹



PHYSICAL ACTIVITY

- ▶ Percent of children ages 6-8 who do **not** participate in some form of **vigorous physical activity** for at least 20 minutes, three days a week.³

*Note: Vigorous physical activity is defined as exercise that makes them sweat or breathe hard. The U.S. Department of Health and Human Services recommends that children engage in vigorous physical activity at least three days per week.*⁴²

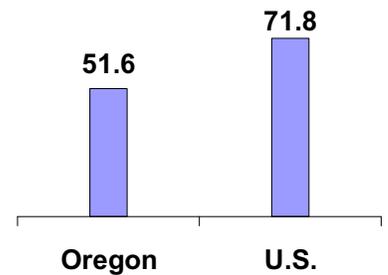
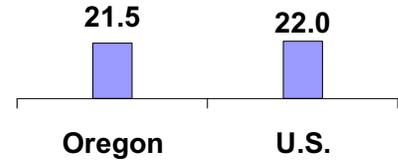




Neighborhood assets—such as access to healthy food vendors, quality child care, affordable housing, social capital and access to safe places for physical activity—have a profound effect on the day-to-day reality of life for families. These neighborhood features impact daily choices for local transportation, access to physical activity, opportunities for good nutrition, educational support, and a sense of safety and social cohesion. Depending on their availability, these features can be protective or risk factors for the health of women, children and families in Oregon and are vital to the underlying health of our communities.

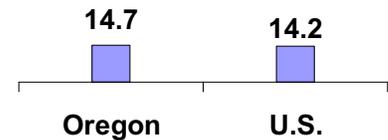
ACCESS TO HEALTHY FOODS

- ▶ Percent of census tracts **without healthy food retailers** (supermarkets, larger grocery stores, warehouse clubs, and fruit and vegetable markets) within 1/2 mile of boundary.⁴³
- ▶ Percent of **farmers markets** that do **not** accept WIC coupons.⁴³



SUPPORTIVE SERVICES

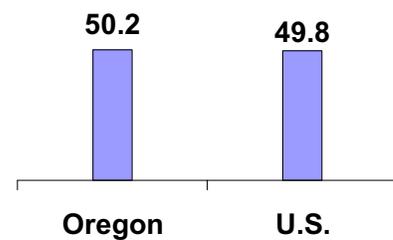
- ▶ Percent of children ages 0-8 whose neighborhoods do **not** have an available **library or bookmobile**.³



QUALITY AND AFFORDABLE HOUSING

- ▶ Percent of renters who spend more than 30% of their income on housing (considered "**housing burdened**").

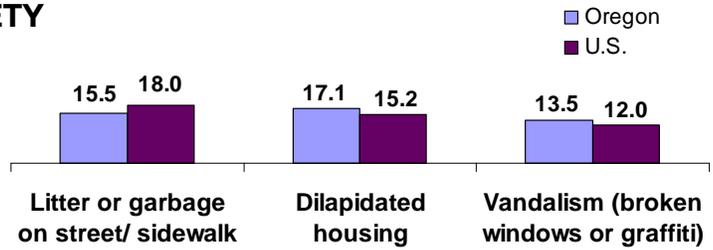
Note: This is not limited to renters with children.⁴⁴



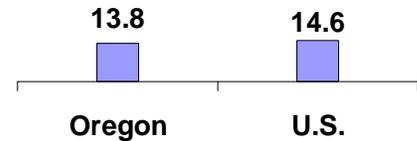


NEIGHBORHOOD UPKEEP AND SAFETY

- ▶ Percent of parents with children ages 0-8 who report problems with **neighborhood upkeep**.³

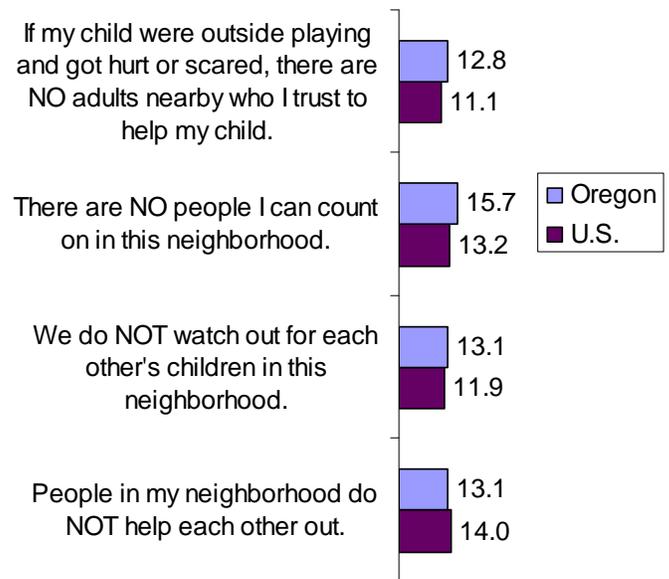


- ▶ Parents who feel their child aged 0-8 is **not safe** in their community or neighborhood (at least sometimes).³



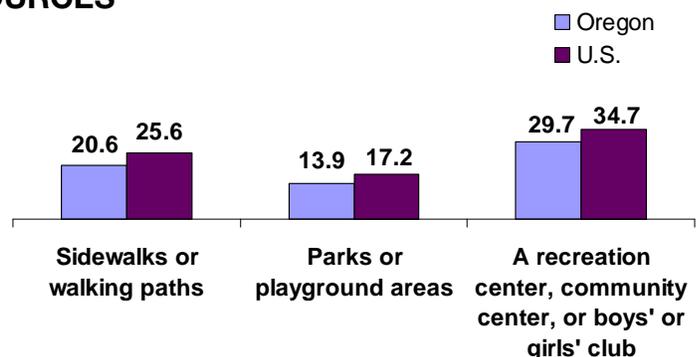
NEIGHBORHOOD SOCIAL SUPPORT

- ▶ Percent of parents who **agree** with the following statements:³



ACCESS TO PHYSICAL ACTIVITY RESOURCES

- ▶ Percent of parents with children ages 0-8 who live in neighborhoods **without infrastructure for physical activity**.³





ORAL HEALTH

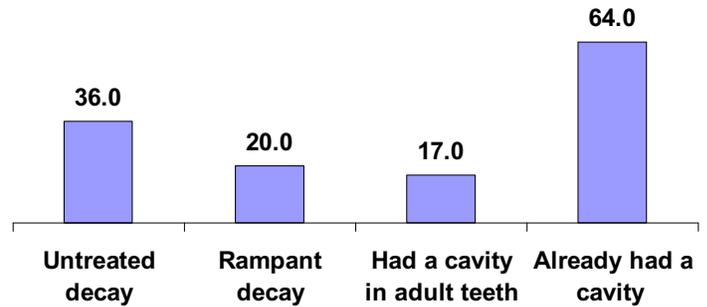
ORAL HEALTH

Oral health is an often overlooked yet vital component of overall health. Tooth decay often causes oral pain and infection, can affect eating habits and nutrition, and impacts communication as well as physical appearance. Between 2002 and 2007, the Smile Survey found that the oral health of Oregon's school children worsened in every major measurement from 2002, including a 49% increase in untreated decay.⁴⁵ These factors can affect school attendance and success, self-esteem, and general health for our children. Over time, oral disease can become more complex and impact other health outcomes such as heart and respiratory conditions and auto-immune diseases. A healthy mouth is essential to a healthy body for the children of Oregon.

DENTAL DECAY

- ▶ Percent of first through third grade children who have experienced **dental decay**, Oregon.¹¹

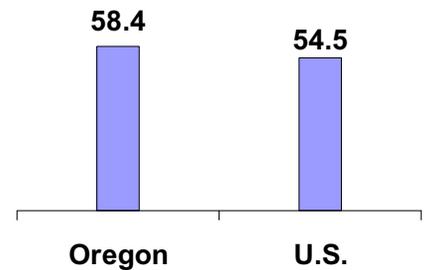
Note: "Rampant" decay means past or present decay in seven or more teeth.



PREVENTIVE DENTAL CARE

- ▶ Percent of children ages 1-4 who did **not** receive a **preventive dental visit** in the past year.³

Note: The American Academy of Pediatric Dentistry recommends that children receive a preventive visit within the first 12 months.⁴⁶



- ▶ Percent of children ages 5-8 who did **not** receive a **preventive dental visit** in the past year.³



- ▶ Percent of mothers who did **not** receive information from a health care worker about how to care for their 2 year old child's **teeth and gums**.¹⁰

26.6% (Oregon)

- ▶ Percent of third grade children **without dental sealants**.¹¹

57% (Oregon)

Note: Sealants are thin plastic coatings applied to permanent molars that are highly effective against tooth decay.



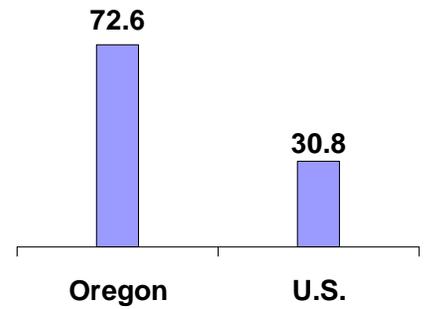
- ▶ Percent of first grade children who have **never been to a dentist**.¹¹

9% (Oregon)

COMMUNITY FLUORIDATION

- ▶ Percent of persons living in a community where the water is **not optimally fluoridated**.⁴⁷

Note: The optimal level of fluoride in drinking water is 0.7-1.2 parts per million to prevent tooth decay.⁴⁸





PARENT SKILLS AND RESOURCES

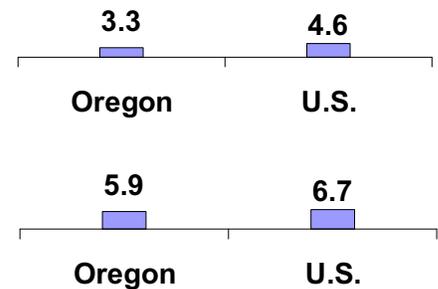
PARENT SKILLS AND RESOURCES

Parenting skills greatly influence healthy development of children. However, parents who face chronic stressors such as poverty, unemployment and harassment, and those who experience physical and/or mental health illness or struggle with drug and alcohol addictions are at much greater risk of engaging in negative and/or harmful parenting techniques. Some parents have limited access to quality child care, which can be a stressor for both children and parents. The ultimate goal of most parenting interventions is to strengthen parental skills and confidence in order to promote child health and wellness.

PARENT MENTAL HEALTH

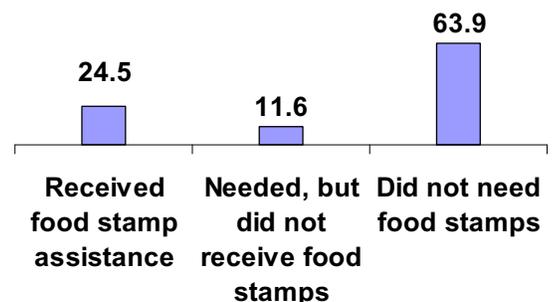
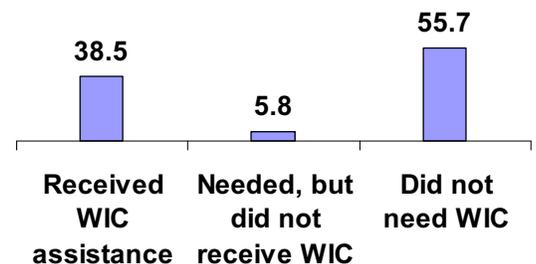
- ▶ Percent of mothers of 2 year old children who experienced a period of two or more weeks when they **felt sad, blue, depressed** or lost interest in things they usually enjoyed during the **second year** of their child's life.¹⁰
- ▶ Percent of children ages 0-8 with fathers whose **mental and emotional health** is fair or poor.³
- ▶ Percent of children ages 0-8 with mothers whose **mental and emotional health** is fair or poor.³

22.7% (Oregon)



FINANCIAL SUPPORTS

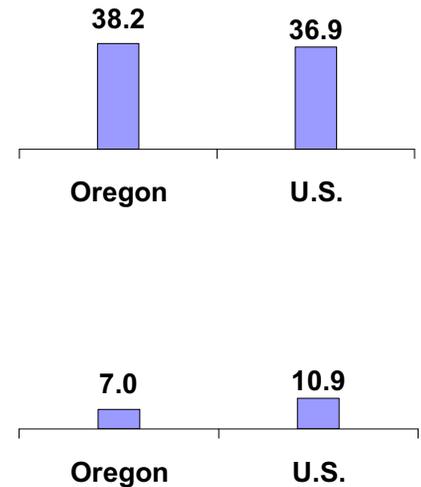
- ▶ Percent of mothers of 2 year old children who needed nutrition assistance from the **WIC** program, Oregon.³⁶
- ▶ Percent of mothers of 2 year old children who needed **food stamp** assistance, Oregon.³⁶





PARENT STRESS

- ▶ Among children ages 0-8 who receive at least 10 hours of childcare a week, percent of parents/caregivers who had to make different arrangements for **child care** at the last minute due to circumstances beyond their control (during the previous month).³
- ▶ Percent of children ages 0-8 whose parents do **not** have someone they can turn to for day-to-day **emotional help** with parenthood/raising children.³



ACCESS TO CHILD CARE

- ▶ Percent of counties that have established or emerging **relief nurseries**.⁴⁹

41.7% (Oregon)

*Note: Relief nurseries provide early childhood education and family services to families at high risk of involvement with the child welfare system.*⁴⁹

- ▶ **Child care slots** available in a listed child care or family care facility.⁵⁰

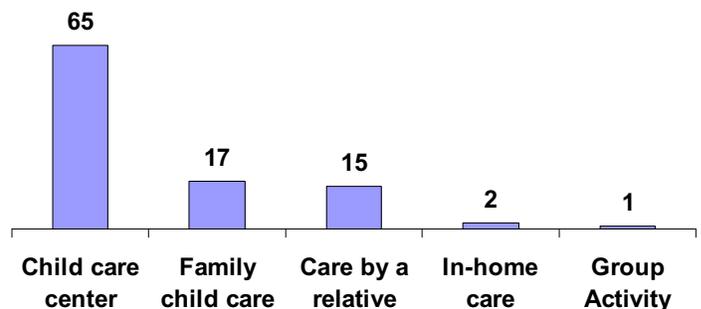
18 per 100 children ages 0-12 (Oregon)

*Note: The 2009 benchmark set by the Oregon Progress Board is 25 slots.*⁵¹

- ▶ Percent of children ages 0-4 in paid child care.⁵²

32.9% (Oregon)

- ▶ Among children ages 0-4 in paid child care in Oregon, location of child care.⁵²





QUALITY CHILD CARE

- ▶ Percent of child care providers (for children ages 0-4) who are unpaid. **67% (Oregon)**

*Note: This refers to relatives caring for children outside the home and non-relatives caring for children in or outside the home and is a proxy for **unlicensed child care**.*⁵³

- ▶ Percent of children ages 0-4 who do **not always feel safe and secure** in their child care setting, according to their parents.⁵⁴ **19% (Oregon)**
- ▶ Percent of children ages 0-4 who have parents who reported that their child's arrangement was **not just what the child needs**.⁵⁴ **46% (Oregon)**

DRUG AND ALCOHOL PROBLEMS

- ▶ Percent of mothers with 2 year old children who received help for a **drug or alcohol problem** in the last 12 months.³⁶ **2.5% needed and received help**
0.7% needed and did NOT receive help
(Oregon)

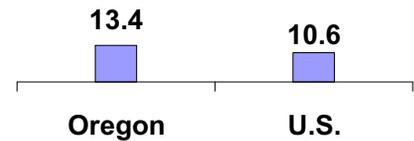


Safe, stable and nurturing relationships (SSNRs) provide children healthy relationships that are free from harm, are predictable and consistent, and are responsive to children’s needs. SSNRs promote health through early childhood and throughout the lifespan. SSNRs are one of the best protective factors against lifelong chronic diseases such as cardiovascular disease, diabetes, and obesity. SSNRs are a prevention strategy for child maltreatment and adverse childhood experiences. SSNRs are believed to positively affect children’s neurological and hormonal developmental pathways, which can enhance children’s stress reaction, and hence buffer them from the severe negative consequences of childhood stressors and/or adverse childhood experiences.

CHILD MALTREATMENT

- ▶ **Child victimization rate** among children ages 0-17. The child victimization rate equals the number of child victims divided by the child population, multiplied by 1,000.⁵⁵

Note: The victimization rate is based on children for whom an incident of abuse or neglect has been substantiated or indicated by an investigation or assessment.



- ▶ Percent of children ages 0-8 who are victims of **child abuse and neglect**.⁵⁶

Note: Approximately one in four reports of abuse are founded and result in the classification of child as a victim or abuse/neglect.

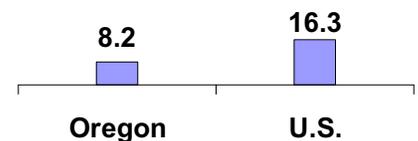
1.6% (Oregon)

- ▶ Rate of **hospitalizations** per 100,000 children due to abuse or neglect among children ages 0-8.⁵⁷

6.8/100,000 children (Oregon)

EXPOSURE TO VIOLENCE AND BULLYING

- ▶ Percent of children ages 6-8 who **bully** or are cruel or mean to others (at least sometimes).³
- ▶ Percent of mothers with 2 year old children who experienced some form of **intimate partner violence** (including a partner who yelled, screamed or threatened, limited contact with friends or family, prevented access to shared income, or was physically or sexually violent).¹⁰
- ▶ Percent of mothers with 2 year old children who have needed or received **services for family violence** problems in the past 12 months.¹⁰



8.5% (Oregon)

4.6% (Oregon)



SAFE, STABLE AND NURTURING RELATIONSHIPS (SSNR)

SAFE, STABLE AND NURTURING RELATIONSHIPS

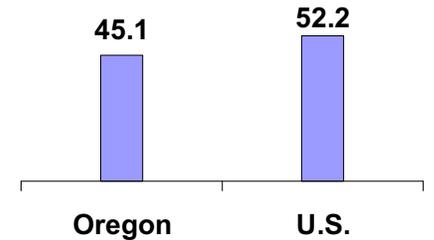
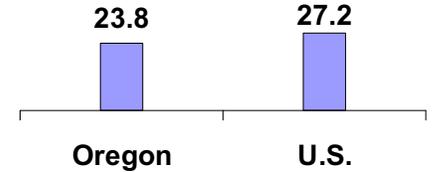
- ▶ Average annual **homicide** rate per 100,000 children, ages 0-8.⁵⁸

Note: Multiple years are combined to gain adequate sample size. Use caution when interpreting death rate for Oregon due to small numbers.



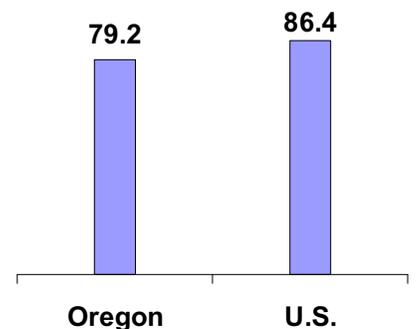
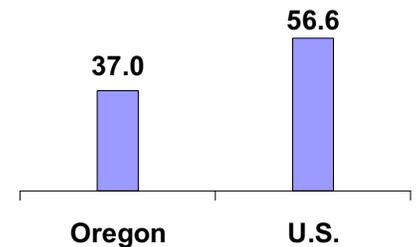
FAMILY PROTECTIVE FACTORS

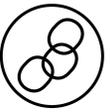
- ▶ Percent of children ages 0-8 who live in a household where all the family members **eat a meal together less** than five days a week.³
- ▶ Percent of children ages 6-8 who **stayed home alone** (without an adult or teenager present) in the past week.³
- ▶ Percent of children ages 0-5 whose parent/caregiver or other family member did **not read to them every day**.³



ATTACHMENT AND BONDING

- ▶ Percent of children who are **not breastfed** at 6 months of age.⁵⁹
- ▶ Percent of children who are **not exclusively breastfed** at 6 months of age.⁵⁹

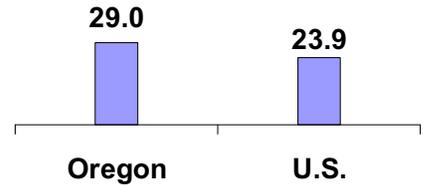




Access and integration of physical, mental and oral health care, behavioral health services and interventions, child care, and early learning opportunities, as well as appropriate referrals to other providers and/or community services, is critical to promoting whole child wellness. Due to the complexity of child health policies, agencies and programs that are intertwined in promoting child health and wellness, most states have an Early Childhood Comprehensive System (ECCS) that helps to create a “system of systems.”

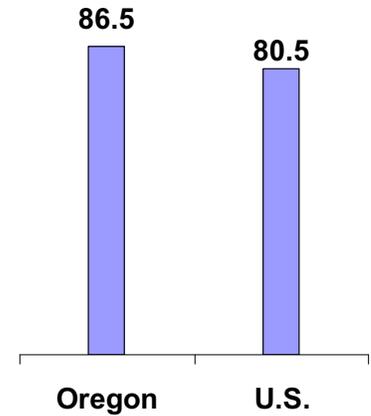
SCREENINGS AND PREVENTIVE CARE

- ▶ Percent of 19 to 35 month old children who have **not** received the full schedule of age-appropriate immunizations.⁶⁰



- ▶ Percent of parents who do **not** complete a **standardized developmental screening** for developmental or behavioral problems for their child ages 10 months to 5 years.

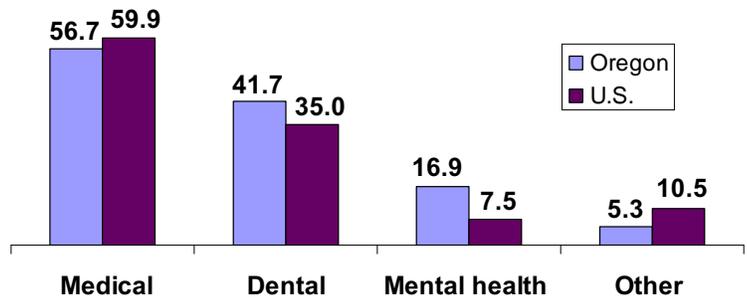
Note: Examples of standardized and validated screening tools include the Ages and Stages questionnaire or parent's Evaluation of Developmental Status.³

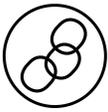


- ▶ Percent of children ages 0-8 with **no preventive medical visits** in the past year.³



- ▶ Percent of children ages 0-8 who had **delayed medical care** or did **not** receive medical care.³





- ▶ Among children ages 0-8 who currently have asthma, percent who have an asthma **action plan**.⁶¹

22% (Oregon)

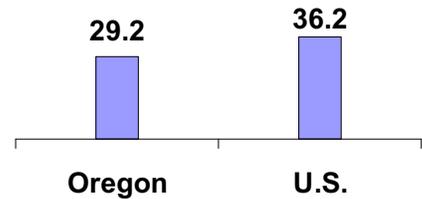
Note: data may be unreliable due to small sample size (RSE=34).

ACCESS TO HEALTH CARE

- ▶ Percent of children ages 0-8 who do **not** have any kind of **health care coverage**, including health insurance, prepaid plans such as HMOs, or government plans such as Medicaid.³



- ▶ Percent of children ages 0-8 who have health care coverage provided by **Medicaid** or the State Children's Health Insurance Program, S-CHIP.³



- ▶ Percent of children ages 0-8 who currently have health care coverage, but who sometime in the past 12 months, were **not covered** by any health insurance.³



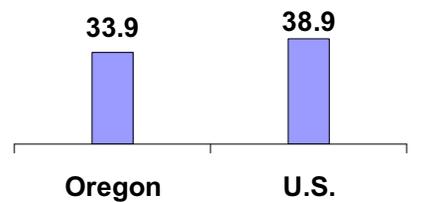
- ▶ Percent of children in first through third grade who **lack dental insurance**.¹¹

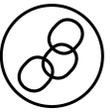
24.1% (Oregon)

COORDINATED SYSTEMS

- ▶ Percent of children ages 0-8 **without a medical home**.

Note: The National Survey of Children's Health defines a 'Medical home' as "medical care for infants, children, and adolescents that is accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective."³





- ▶ Percent of children ages 0-5 who have any developmental problems for which they have a written intervention plan called an **Individual Family Services Plan (IFSP)** or **Individualized Education Program (IEP)**.³



SCREENING/LINKAGES/SYSTEMS

- ▶ Percent of 2 year old children who qualified for early intervention (EI) but **did not receive EI services** because there were no openings, or they did **not** have transportation, child care, or time off.¹⁰

8.8% (Oregon)

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- ¹¹ Oregon Department of Human Services, Office of Family Health. Oregon Smile Survey 2007. Available from: <http://www.odha.org/new/documents/SmileSurvey2007.pdf>.
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- ²⁸ Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS). Available from URL: www.cdc.gov/ncipc/wisqars. Accessed 2/2/10. Note: Data for Oregon are based on small numbers, thus rates may be unstable and should be interpreted with caution. Multiple years are combined to gain an adequate sample size (2003-2006).
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- ⁵⁷ Oregon Department of Human Services, Office of Disease Prevention and Epidemiology. Hospitalization Data 2003-2007. Abuse reporting is based on ICD-9 code (995.5 for neglect or abuse) and has substantial limitations due to underreporting and coding issues. The seven codes used to describe abuse include: unspecified child abuse, psychological/emotional abuse, nutritional neglect, sexual abuse, physical abuse, shaken baby syndrome, and other child abuse/neglect. These data were analyzed by Matthew Laidler in the Oregon Department of Human Services, Injury and Violence Prevention Program.
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- ⁶⁰ Centers for Disease Control and Prevention. National, State and Local Area Vaccination Coverage Among Children Aged 19–35 Months, United States, 2008. Morbidity and Mortality Weekly Report (MMWR) 2009; 58: 921-926 (August 28, 2009). Data from the MMWR was provided by the National Immunization Survey 2008, which samples households with children 19-35 months in all 50 states and has a household response rate of 63.2%. Parent reports were followed with confirmation of the vaccination by the child's provider (for 71% of respondents). Overall, 18,430 children were included in the final weighted survey results.
- Recommended immunizations for this age group (4:3:1:3:3:1) includes: ≥4 doses of diphtheria, tetanus toxoid, and any acellular pertussis vaccine including diphtheria and tetanus toxoid vaccine or diphtheria, tetanus toxoid, and pertussis vaccine, ≥3 doses of poliovirus vaccine; ≥1 dose of measles, mumps, and

rubella vaccine; ≥ 3 doses of Haemophilus influenzae type b vaccine; ≥ 3 doses of hepatitis B vaccine; and ≥ 1 dose of varicella vaccine.

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Oregon Child Health 2010 Data and Resource Guide



RESOURCES

General resources on child health

- Maternal and Child Health Bureau (MCHB): mchb.hrsa.gov/
- Association of Maternal & Child Health Programs (AMCHP): www.amchp.org
- Healthy People 2010: www.healthypeople.gov
- Oregon Office of Family Health (OFH): www.oregon.gov/DHS/ph/ofhs
- Oregon Public Health Division (OPHD): www.oregon.gov/DHS/ph
- Maternal and Child Health Library at Georgetown University: www.mchlibrary.info
- Women's and Children's Health Policy Center: www.jhsph.edu/wchpc/publications
- CityMatch: www.citymatch.org
- National Association of County and City Health Officials (NACCHO)- MCH Program: www.naccho.org/topics/HPDP/mch.cfm
- Child Trends: www.childtrends.org

MCH data

- Oregon Pregnancy Risk Assessment Monitoring System (PRAMS). Available at: www.oregon.gov/DHS/ph/pnh/prams
- Oregon PRAMS2. Available at: www.oregon.gov/DHS/ph/pnh/prams
- Oregon Vital Statistics, Annual Report. Available at: www.dhs.state.or.us/dhs/ph/chs/data
By county: www.dhs.state.or.us/dhs/ph/chs/data/birth/trends.shtml
- Oregon Behavioral Risk Factor Surveillance System (BRFSS). Available at: www.dhs.state.or.us/dhs/ph/chs/brfs
- Oregon Population Survey. Available at: www.oregon.gov/DAS/OPB/popsurvey.shtml
- Oregon Population Estimates, Portland State University Population Research Center. Available at: www.pdx.edu/prc
- National Survey of Children's Health. Available at: www.nschdata.org
- Annie E. Casey Foundation, Kids Count Data Center: datacenter.kidscount.org/databook/2009/Default.aspx

Health equity

Racial/ethnic

- Oregon Office of Multicultural Health and Services: www.oregon.gov/DHS/ph/omh
- Promoting Health Equity: A Resource to Help Communities Address Social Determinants of Health. Centers for Disease Control and Prevention. Available at: www.cdc.gov/nccdphp/dach/chaps/pdf/SDOHworkbook.pdf

Urban/rural

- Office of Rural Health, Oregon Health & Science University: www.ohsu.edu/oregonruralhealth

- The Health and Well-Being of Children in Rural Areas: A Portrait of the Nation 2005, HRSA. Available at: mchb.hrsa.gov/ruralhealth
- Rural Assistance Center (RAC): www.raonline.org

Children with special health care needs (CSHCN)

- Oregon Center for Children and Youth with Special Health Needs (OCCYSHN): www.ohsu.edu/cdrc/oscsnh
- National Survey of Children with Special Health Care Needs Chartbook, 2005-2006, HRSA. Available at: mchb.hrsa.gov/cshcn05

Child safety

General safety information

- Child Safety Network: www.csn.org
- Safe Kids Oregon: www.safekidsoregon.org and www.oregon.gov/DHS/ph/safekids
- Oregon DHS Injury and Violence Prevention Program data. Available at: www.oregon.gov/DHS/ph/ipe
- Injuries among Children and Adolescents, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention: www.cdc.gov/Ncipc/factsheets/children.htm
- Safe Kids USA: www.usa.safekids.org
- Center for Research on Occupational and Environmental Toxicology, Education and Schools: www.croetweb.com/links.cfm?subtopicID=383
- U.S. Consumer Product Safety Commission: www.cpsc.gov

Motor vehicle accidents

- Child passenger safety studies and reports, National Highway Traffic Safety Administration. Available at: www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.9f8c7d6359e0e9bbb30811060008a0c
- Alliance for Community Traffic Safety, Child Safety Seats: www.actsoregon.org
- Oregon Department of Transportation, Transportation Safety: www.oregon.gov/ODOT/TS/safetybelts.shtml#Child_Booster_Seat_help

Sudden Infant Death Syndrome (SIDS) and other Sudden Unexplained Infant Death (SUID)

- DHS Babies First! website: www.oregon.gov/DHS/ph/ch/bf1/sids.shtml
- National Sudden and Unexplained Infant/Child Death & Pregnancy Loss Resource Center: www.sidscenter.org
- First Candle - helping babies survive and thrive: firstcandle.org/health/health_backto.html

Child abuse and neglect

- Oregon Child Abuse and Neglect Reports www.oregon.gov/DHS/abuse/publications/children/index.shtml#annualrpts

Healthy child development

Early learning/cognitive delays

- Research and Training Center on Family Support and Children's Mental Health, Portland State University: www.rtc.pdx.edu

Age appropriate developmental milestones

- Learn the signs. Act early. Centers for Disease Control and Prevention, National Center on Birth Defects and Developmental Disabilities: www.cdc.gov/ncbddd/actearly/milestones
- Speech and language developmental milestones, National Institute on Deafness and other Communication Disorders: www.nidcd.nih.gov/health/voice/speechandlanguage.asp
- Social emotional development, Zero to Three: www.zerotothree.org/site/PageServer?pagename=key_social

School readiness

- Oregon Department of Education. Kindergarten Readiness Survey, 2008. Available at: www.ode.state.or.us/gradelevel/kindergarten/2008kindergartenreadinesssurveyreportfinal.pdf
- Child Trends Databank, Early School Readiness: www.childtrends.databank.org/indicators/7EarlySchoolReadiness.cfm
- Technical report: School readiness, American Academy of Pediatrics. Available at: aappolicy.aappublications.org/cgi/reprint/pediatrics;121/4/e1008.pdf
- Prepare my child for school, US Department of Education: www.ed.gov/parents/earlychild/ready/resources.html

Healthy child development

- Oregon Assuring Better Child Health and Development (ABCD) Early Childhood Screening Initiative: www.oregon.gov/DHS/ph/ch/abcd_screening.shtml
- National Scientific Council on the Developing Child, Harvard University: developingchild.harvard.edu/initiatives/council

Healthy environments

General information:

- Children's Environmental Health, Toxicology Consulting Services, Oregon Department of Human Services. Available at: www.oregon.gov/DHS/ph/envtox/kids.shtml

Second hand smoke

- U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006. Available at: www.surgeongeneral.gov/library/secondhandsmoke
- Smokefree Oregon, American Lung Association in Oregon: www.smokefreehousingnw.com

Lead poisoning

- Lead Program, Centers for Disease Control and Prevention: www.cdc.gov/nceh/lead
- Lead Poisoning Prevention Program, OR Department of Human Services: www.oregon.gov/DHS/ph/lead

Asthma

- The Burden of Asthma in Oregon: 2008. Oregon DHS, Asthma Program. Available at: www.oregon.gov/ph/asthma/docs/burden.pdf
- Geographic Disparities in Pediatric Asthma Control Among Oregon Children on Medicaid, Oregon DHS. Available at: www.oregon.gov/DHS/ph/asthma/pubs.shtml

- Asthma home environment checklist, Environmental Protection Agency (EPA). Available at: www.epa.gov/asthma/pdfs/home_environment_checklist.pdf

Healthy housing

- Healthy housing reference manual. Centers for Disease Control and Prevention and U.S. Department of Housing and Urban Development. 2006. Available at: www.cdc.gov/nceh/publications/books/housing/housing.htm
- Healthy homes, Centers for Disease Control and Prevention: www.cdc.gov/healthyhomes
- Seattle-King Healthy Homes II Project: www.kingcounty.gov/healthservices/health/chronic/asthma/healthyhomes2.aspx

Chemicals

- Safer Chemicals, Healthy Families: www.saferchemicals.org
- Metro Grow Smart, Grow Safe; A consumer guide to lawn and garden products 6th edition, 2009. Available at: library.oregonmetro.gov/files/gsgs_11-5_web.pdf
- Resources: Ways to protect the very young from toxic chemicals. The Collaborative on Health and the Environment. Available at: www.chenw.org/cgi-bin/toolkit.cgi
- Eco-healthy Child Care: www.oeonline.org/our-work/kidshealth/ehcc
- Easy Tips for Keeping an Eco-healthy Home: www.oeonline.org/our-work/kidshealth/tinyfootprints

Healthy food and physical activity

Community tools to address obesity and physical activity

- We Can! National Heart Lung and Blood Institute We Can! www.nhlbi.nih.gov/health/public/heart/obesity/wecan
- Obesity Prevention: Interventions in Community Settings. The Community Guide: www.thecommunityguide.org/obesity/communitysettings.html
- Action Strategies Toolkit: a guide for local and state leaders working to create healthy communities and prevent childhood obesity, Robert Wood Johnson Foundation. Available at: www.leadershipforhealthycommunities.org/images/stories/toolkit/lhc_action_strategies_toolkit_0900504final.pdf

General nutrition and food safety

- Healthy Youth! Nutrition topics. National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. Available at: www.cdc.gov/HealthyYouth/nutrition/index.htm
- Food and Nutrition Information Center, USDA National Agricultural Library: fnic.nal.usda.gov
- Gateway to Federal Food Safety Information: www.foodsafety.gov
- Core Nutrition Messages, USDA Food and Nutrition Service: www.fns.usda.gov/fns/corenutritionmessages/Messages.htm

Food insecurity

- Food insecurity and hunger statistics. Oregon Center for Public Policy. Available at: www.ocpp.org/cgi-bin/display.cgi?page=iss080116hunger
- Childhood Food Insecurity: Health Impacts, Screening and Intervention. Oregon State University. Online module, available at: ecampus.oregonstate.edu/workforce/childhood-food-insecurity
- Oregon Food Bank. Available at: www.oregonfoodbank.org

Nutrition programs

- Women, Infants, and Children. Available at: www.fns.usda.gov/wic
- Supplemental Nutrition Assistance Program (SNAP), Oregon DHS: www.oregon.gov/DHS/assistance/foodstamps/foodstamps.shtml

Breastfeeding

- Breastfeeding Promotion, Oregon DHS: www.oregon.gov/DHS/ph/bf
- Breastfeeding Coalition of Oregon: www.breastfeedingor.org
- Breastfeeding, Centers for Disease Control and Prevention: www.cdc.gov/breastfeeding/index.htm

Physical activity

- 2008 Physical Activity Guidelines, U.S. Department of Health and Human Services: www.health.gov/PAGuidelines/default.aspx
- How much physical activity do children need?, Centers for Disease Control and Prevention: www.cdc.gov/physicalactivity/everyone/guidelines/children.html

Screen time reduction

- Active Bodies Active Minds, University of Washington: depts.washington.edu/tvhealth
- Children, Adolescents and Television. American Academy of Pediatrics. Available at: aappolicy.aappublications.org/cgi/reprint/pediatrics;107/2/423.pdf
- Internet and Media Use, American Academy of Pediatrics: www.aap.org/healthtopics/mediause.cfm

Neighborhood assets

Sample tools for conducting a community windshield survey

- Heart-Healthy and Stroke-Free: A social environment handbook. Centers for Disease Control and Prevention. Available at: www.cdc.gov/dhdsp/library/seh_handbook/chapter_five.htm
- Community assessment windshield survey. Available at: <https://medinfo.ufl.edu/courses/public/publicDocDownload.php?courseid=65;mid=2136>
- Pediatric Education in Community and Office Settings, Starter Kit for Community Preceptors. American Academy of Pediatrics. Available at: practice.aap.org/content.aspx?aid=1733

Access to healthy foods

- Healthy Aging in Oregon Counties, Physical Environment, Oregon Department of Human Services, Health Promotion and Chronic Disease Prevention. Available at: oregon.gov/DHS/ph/hpcdp/docs/healthyagingreport/countydata/physicalenvironment.pdf
- Khan LK, Sobush K, Keener D et al. Recommended Community Strategies and Measurements to Prevent Obesity in the United States. Morbidity and Mortality Weekly Report (Vol 58, no. RR-7) July 24, 2009. Available at: www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm
- State Indicator Report on Fruits and Vegetables, 2009. Centers for Disease Control and Prevention. Available at: www.fruitsandveggiesmatter.gov/health_professionals/statereport.html

Neighborhood social support

- Kawachi I. Social capital and community effects on population and individual health. Ann N Y Acad Sci. 1999;896:120–130. Available at: www.tanyatelfairsharpe.com/societal_pdfs/social_cap_kawachi .pdf

- Kawachi I, Kennedy BP, Lochner K. Long live community: social capital as public health. *The American Prospect*. November/December 1997:56-59. Available at: www.prospect.org/cs/articles?article=long_live_community
- Lochner K, Kawachi I, Kennedy BP. Social capital: a guide to its measurement. *Health & Place* 5(1999): 259-70. Available at: www.abrasco.org.br/GTs/GT%20Promocao/A%20Guide%20to%20its%20Measurement..pdf

Neighborhood upkeep and safety

- Vest J, Valadez A. Perceptions of neighborhood characteristics and leisure-time physical inactivity, Austin/Travis County, Texas, 2004. *Morbidity and Mortality Weekly Report* (Vol 54, no. 37) September 23, 2005. Available at: www.cdc.gov/mmwr/preview/mmwrhtml/mm5437a4.htm

Quality childcare

- National Resource Center for Health and Safety in Child Care and Early Education: nrckids.org/CFOC/index.html
- Oregon Commission for Child Care: www.employment.oregon.gov/EMPLOY/CCC/index.shtml
- National Association for the Education of Young Children (NAEYC): www.naeyc.org
- State of Oregon, Maternal and Child Health, Healthy Child Care: www.oregon.gov/DHS/ph/ch/hcco/about_us.shtml
- Oregon Association for the Education of Young Children, Quality Child Care: www.oregonaeyc.org
- Child Care Resource and Referral Network: www.oregonchildcare.org
- National Resource Center for Health and Safety in Child Care and Early Education: nrc.uchsc.edu

Transportation

- At the intersection of public health and transportation: promoting healthy transportation policy. American Public Health Association. Available at: www.apha.org/NR/rdonlyres/43F10382-FB68-4112-8C75-49DCB10F8ECF/0/TransportationBrief.pdf
- Does the built environment influence physical activity? Examining the evidence. Committee on Physical Activity, Health, Transportation, and Land Use. Transportation Research Board, Institute of Medicine of the National Academies. Special report 282. January 11, 2005. Available at: www.iom.edu/en/Reports/2005/Does-the-Built-Environment-Influence-Physical-Activity-Examining-the-Evidence----Special-Report-282.aspx

Quality and affordable housing

- U.S. Department of Health and Human Services. The Surgeon General's Call to Action to Promote Healthy Homes. U.S. Department of Health and Human Services, Office of the Surgeon General, 2009. Available at: www.surgeongeneral.gov/topics/healthyhomes/calltoactiontopromotehealthyhomes.pdf
- Oregon Housing and Community Services, Department of Human Services: www.oregon.gov/OHCS

Access to physical activity opportunities

- Overweight and Physical Activity among Children: a Portrait of States and the Nation, 2005, HRSA. Available at: nschdata.org/ViewDocument.aspx?item=90
- The Built Environment: Designing Communities to Promote Physical Activity in Children, American Academy of Pediatrics. Available at: aappolicy.aappublications.org/cgi/reprint/pediatrics;123/6/1591.pdf

- Active Living Resource Center: www.activelivingresources.org/index.php

Oral health

Cavity prevention and treatment

- Oral Health Care During Pregnancy & Early Childhood – Practice Guidelines, published by the New York State Department of Health. Available at: www.health.state.ny.us/publications/0824.pdf
- Oregon Oral (Dental) Health Program: oregon.gov/DHS/ph/oralhealth/index.shtml
- Children’s Oral Health, Centers for Disease Control and Prevention: www.cdc.gov/OralHealth/topics/child.htm

Secondary systemic health issues

- U.S. Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General*. www.surgeongeneral.gov/library/oralhealth
- Oral – Systemic Health, American Dental Association: www.ada.org/public/topics/oralsystemic.asp

Oral health home / System integration

- Dental Home Online Resource Center, American Academy of Pediatric Dentistry: www.aapd.org/dentalhome

Fluoridation of drinking water

- Division of Oral Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. Achievements in Public Health, 1900-1999: Fluoridation of Drinking Water to Prevent Dental Caries. Morbidity and Mortality Weekly Report (Vol 48, no. 41) October 22, 1999. Available at: www.cdc.gov/mmwr/preview/mmwrhtml/mm4841a1.htm

Oregon data and reports

- Oregon Smile Survey 2007. Available at: oregon.gov/DHS/ph/oralhealth/docs/smile_2007.pdf
- The Burden of Oral Disease in Oregon. Available at: oregon.gov/DHS/ph/oralhealth/docs/burden.pdf
- Oregon Oral Health Profile, Centers for Disease Control and Prevention: apps.nccd.cdc.gov/nohss/bystate.asp?stateid=41

Parenting skills and resources

Parental mental health

- National Mental Health Information Center, SAMHSA: mentalhealth.samhsa.gov/cmhs/ChildrensCampaign/parents.asp
- Adults’ Environment and Behavior: mental health of parents, Urban Institute. Available at: www.urban.org/publications/900873.html
- Caregiver – Child: Mutual influences on mental health. Focal Point, Summer 2008. Research and Training Center on Family Support and Children’s Mental Health, Portland State University. Available at: www.rtc.pdx.edu/pgFPS08TOC.php

Parenting tips

- Parenting help, Boystown: www.parenting.org
- Parenting skills: 21 tips and ideas to help you make a difference: ncadi.samhsa.gov/govpubs/PHD826/

- Oregon State University Extension Service, Family and Community Health: extension.oregonstate.edu/fch/healthy-families/parenting-resources

Drug and alcohol problems

- Oregon Partnership: www.orpartnership.org
- Oregon DHS Addiction Services: www.oregon.gov/DHS/addiction/index.shtml
- Facts for families, American Academy of Child and Adolescent Psychiatry: www.aacap.org/cs/root/facts_for_families/children_of_alcoholics

Adverse childhood experiences

- Adverse Childhood Experiences (ACE) Study, Centers for Disease Control and Prevention and Kaiser Permanente. Available at: www.acestudy.org

Safe, stable, and nurturing relationships (SSNR)

Parenting skills and other protective factors

- Safe, stable and nurturing relationships. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention: www.cdc.gov/ViolencePrevention/pub/healthy_infants.html
- The Incredible Years: www.incredibleyears.com
- Parent-Child Interaction Therapy (PCIT): www.pcit.org
- Promoting First Relationships, University of Washington: www.pfrprogram.org/index.html

Child abuse, neglect and maltreatment

- Status of Children in Child Protective System, 2008. Oregon DHS, Adults and Families Division. Available at: dhsforms.hr.state.or.us/Forms/Served/DE1535.pdf
- Child maltreatment. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention: www.cdc.gov/ViolencePrevention/childmaltreatment/index.html

Harassment and bullying

- Stop bullying now! What can adults do? HRSA: stopbullyingnow.hrsa.gov/adults/default.aspx
- Facts for families, American Academy of Child and Adolescent Psychiatry: www.aacap.org/cs/root/facts_for_families/bullying
- National Crime Prevention Council: www.ncpc.org/topics/bullying

Attachment and bonding

- Social emotional development, Zero to Three: www.zerotothree.org/site/PageServer?pagename=key_social
- Safe, stable and nurturing relationships. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention: www.cdc.gov/ViolencePrevention/pub/healthy_infants.html
- Promoting nurturing environments for young children, NCAST: www.ncast.org
- Understanding the effects of maltreatment on early brain development, Child Welfare Information Gateway: www.childwelfare.gov/pubs/focus/earlybrain/earlybraina.cfm

Help for parents with children with special needs

- Oregon Council on Developmental Disabilities, Inclusive Child Care Program: ocdd.org/index.php/ocdd/whatwedo/15

Screening/linkages/systems

Access to healthcare coverage

- Oregon Healthy Kids: www.oregonhealthykids.gov
- Oregon Health Plan: www.oregon.gov/DHS/healthplan

Access to childcare

- Oregon Child Care Resource and Referral Network: www.oregonchildcare.org
- Oregon Child Care Division: www.oregon.gov/EMPLOY/CCD/index.shtml
- Oregon Commission for Child Care: www.oregon.gov/EMPLOY/CCC/index.shtml
- Weber B, Vorpapel B and Kruse D. Child Care and Education in Oregon and Its Counties: 2008. Oregon Childcare Research Partnership, June 2009. Available at: www.hhs.oregonstate.edu/hdfs/sites/default/files/StateandCountyProfiles2008.pdf
- Child Care Subsidy Program: www.oregon.gov/DHS/children/childcare/subsidy.shtml
- Child Care Law Center (Includes Americans with Disabilities Act related to child care): www.childcarelaw.org/index2.shtml

Access to early intervention services

- Oregon Council on Developmental Disabilities: ocdd.org/index.php/ocdd/policy_detail/early_intervention_and_special_education
- Oregon Assuring Better Child Health and Development (ABCD) Early Childhood Screening Initiative: www.oregon.gov/DHS/ph/ch/abcd_screening.shtml
- Early Hearing Detection and Intervention: www.oregon.gov/DHS/ph/ch/hearing/index.shtml
- Newborn metabolic screening: www.oregon.gov/DHS/ph/nbs/index.shtml
- Babies First! Public health nurse home visiting program: www.oregon.gov/DHS/ph/ch/bf1/index.shtml

Medical home

- National Center of Medical Home Initiatives, American Academy of Pediatrics: www.medicalhomeinfo.org/states/state/oregon.html
- Oregon Pediatric Society: www.oregonpediatricsociety.org
- Building your medical home, American Academy of Pediatrics: www.pediatricmedhome.org

Care coordination

- Oregon Maternity Case Management: www.oregon.gov/DHS/ph/ch/maternity_case_management.shtml
- Oregon Center for Children and Youth with Special Health Needs (OCCYSHN): www.ohsu.edu/cdrc/oscsnh

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APPENDIX A EXPLANATION OF DATA SOURCES

Air Data, U.S. Environmental Protection Agency.

The AirData web site offers yearly summaries of air pollution data taken from the Environmental Protection Agency's databases. Information is available about where air pollution comes from (emissions), and how much pollution is present in the air (monitoring). Emissions data are typically estimated from the amount of material consumed or produced and are most often provided by state environmental agencies. Across the United States, ambient concentrations of pollutants in outdoor air are measured in monitoring stations typically owned and operated by state environmental agencies. The hourly or daily average pollutant concentrations are forwarded to the EPA's database, where the EPA then computes a yearly summary for each monitoring station. More information is available online at: www.epa.gov/air/data/index.html.

American Community Survey, United States Census Bureau.

The American Community Survey (ACS) is an annual nationwide survey that provides data users with housing, social, and economic data that is updated yearly and can be compared across states, communities and population groups. In January 2005, the US Census Bureau implemented the ACS in every county of the United States, with an annual sample of 3 million housing units. Data are collected by mail, with computer-assisted telephone interviewing follow-ups for non-responsive sample addresses. More information is available online at: www.census.gov/acs/www/index.html.

Behavioral Risk Factor Surveillance System Survey, Centers for Disease Control and Prevention.

The Behavioral Risk Factor Surveillance System Survey (BRFSS) is the largest continuous telephone health survey system in the world, tracking health conditions and risk behaviors yearly since 1984. BRFSS is state-based, and collects information primarily related to chronic disease and injury. Every year, states conduct monthly telephone surveillance of non-institutionalized adults 18 years and older using a random-digit-dial sample. States forward their responses to the Centers for Disease Control and Prevention, where the data are then aggregated for each state. More information is available online at: www.cdc.gov/brfss/index.htm.

Behavioral Risk Factor Surveillance System Survey Data, Child Asthma Call-back Survey, Centers for Disease Control and Prevention.

The BRFSS Child Asthma Call-back Survey is a companion survey to the BRFSS core questionnaire and replaces the National Asthma Survey, conducted from February 2003 to March 2004. The survey has been conducted as a BRFSS call-back since 2005. Using the Random Child Selection Module and the Child Asthma Prevalence Module, households that have a child with asthma are identified for a follow-up phone call. The survey results in

information about asthma prevalence, severity and control, quality of life, appropriate use of medications, and environmental triggers. More information is available online at: www.cdc.gov/asthma/survey/brfss.html.

Current Population Survey, United States Census Bureau.

The Current Population Survey (CPS) is a monthly nationwide survey of approximately 60,000 households conducted by the US Census Bureau for the US Bureau of Labor Statistics. The core survey is the primary source of information on the employment characteristics of the non-institutionalized civilian population, ages 15 years and older, both nationally and for every state. In addition to the core survey, the Annual Social and Economic Supplement (ASEC) and the October School Enrollment Supplement provide additional data used to estimate the status and well-being of children. The CPS sample is selected from a complete address list based on census addresses. It is administered by field representatives, either in person or by telephone. More information is available online at: www.census.gov/popest/national/asrh.

Current Population Survey, Food Security Supplement, United States Department of Agriculture (USDA) and the United States Census Bureau.

The CPS Food Security Supplement collects information on households' economic access to enough food, actual food spending and use of Federal and community food assistance programs. All households interviewed in the CPS in December are eligible for the supplement. More information is available online at: www.ers.usda.gov/briefing/foodsecurity.

Kindergarten Readiness Survey (Oregon), Oregon Department of Education (ODE).

The Kindergarten Readiness Survey is a voluntary, annual survey completed by kindergarten teachers in Oregon. Teachers in all Oregon school districts are invited to participate. Teachers rate their perception of a child's readiness through the use of sixteen measures representing five domains. Measures were selected from characteristics rated in the 1995 National Household Education Survey as essential to school readiness. The readiness domains include: approaches to learning; social and personal development; physical health, well-being, and motor development; general knowledge and cognitive development; and communication, literacy and language development. Survey results are reported as averages, and are not adjusted for group size. *Note: this survey is currently under evaluation and will be redesigned in the coming years.* More information is available online at: www.ode.state.or.us/gradelevel/kindergarten/2008kindergartenreadinesssurveyreportfinal.pdf.

National Health Interview Survey (NHIS), Centers for Disease Control and Prevention, National Center for Health Statistics.

The National Health Interview Survey is a nationwide sample survey of the non-institutionalized civilian population in the United States. The sample is designed to estimate the national prevalence of health conditions, health service utilization, and health problems, and includes an oversample of Black, Hispanic and Asian persons. Information on personal and demographic characteristics, illnesses, injuries, impairments, chronic conditions, activity limitation, utilization and other health topics is collected during personal household interviews through self-reports or by a member of the household. For most health topics, the survey collects data over a year. More information is available online at: www.cdc.gov/nchs/nhis.htm.

The revised 1997 Office of Management and Budget race categories were used for this survey (www.whitehouse.gov/omb/fedreg_1997standards). Respondents could select one or more of five groups: White, Black or African American, American Indian or Alaska Native, Asian, Native

Hawaiian or Other Pacific Islander. Respondents who checked two or more races are not shown in this analysis. Data on Hispanic/Latino ethnicity was captured by separate questions and combined in NHIS analysis.

National Health and Nutrition Examination Survey (NHANES), Centers for Disease Control and Prevention, National Center for Health Statistics.

The National Health and Nutrition Examination Survey assesses the health and nutritional status of the non-institutionalized civilian population through direct physical examinations and interviews, using a complex stratified, multistage, probability sampling design. Individuals of all ages are sampled. Specific groups, including persons of Mexican origin, receive expanded screening and sampling to increase their representation in the data. Interviewers visit 15 US locations annually, where they survey and report for approximately 5,000 people. In general, multiple years of data are necessary for adequate sample sizes for subgroup analysis. Survey respondents could check one or more categories for race and ethnicity. More information is available online at: www.cdc.gov/nchs/nhanes.htm.

The revised 1997 Office of Management and Budget race categories were used for this survey (www.whitehouse.gov/omb/fedreg_1997standards). Respondents could select one or more of five groups: White, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander. Respondents who checked two or more races are not shown in this analysis. Data on Hispanic/Latino ethnicity was captured by separate questions and combined in analysis.

National Immunization Survey, Centers for Disease Control and Prevention.

The National Immunization Survey (NIS) is a continuing nationwide telephone sample survey of families with children ages 19 to 35 months old. The survey provides estimates of vaccine-specific coverage for the country, states, and selected urban areas. The NIS uses a two-stage sample design that includes household data collection and provider record check. Using a random-digit-dial sample of telephone numbers, interviewers collect information on the vaccinations received by all age-eligible children, as well as information on the vaccination provider. In the second phase, all vaccination providers are contacted by mail. The provider and household responses are combined to produce more accurate estimates of vaccination coverage in children. More information is available online at: www.cdc.gov/vaccines/stats-surv/imz-coverage.htm#nis.

National Survey of Children's Health, Maternal and Child Health Bureau and the National Center for Health Statistics.

The National Survey of Children's Health (NSCH) produces national and state level prevalence estimates for a variety of physical, emotional, and behavioral health indicators and measures of children's experiences within the health care system. The survey includes questions about the family as well as respondents' perceptions of the neighborhood in which the children live. The survey was conducted as a module of the State and Local Area Integrated Telephone Survey (SLAITS). Using a random-digit-dial sample of households with children younger than 18 years of age in each state, interviewers randomly selected one child for a detailed interview with a parent or guardian who knew about the child's health. The NSCH follows federal guidelines (by Office of Management and Budget) on racial/ethnic data collection. More information is available online at: www.childhealthdata.org.

National Survey of Children with Special Health Care Needs, Maternal and Child Health Bureau and the National Center for Health Statistics.

The National Survey of Children with Special Health Care Needs (NS-CSHCN) was conducted to assess the prevalence and impact of special health care needs among children in all states, with particular focus on the extent to which children with special health care needs have medical homes, adequate health insurance, and access to needed services. The survey was conducted as a module of the State and Local Area Integrated Telephone Survey (SLAITS). Using a random-digit-dial sample of households with children younger than 18 years of age in each state, interviewers screened for children with special health care needs. If CSHCN were identified in the household, a detailed interview was conducted for one randomly selected child. Detailed interviews were also conducted for a separate national sample of children to generate estimates of children without special health care needs for comparison on the study measures. Respondents were parents or guardians who knew about the children's health and health care. The NSCSHCN follows federal guidelines (by Office of Management and Budget) on racial/ethnic data collection. More information is available online at: www.cdc.gov/nchs/about/major/slaits/nscshcn_05_06.htm.

National Vital Statistics System, Centers for Disease Control and Prevention, National Center for Health Statistics.

The National Vital Statistics System collects and publishes data on births and deaths in the United States. Data on births and deaths are obtained from the registrations offices in all states. Birth certificates provide birth data, including race/ethnicity by report of the mother at the time of birth, and information from hospital records, such as birthweight. Many states now gather information on births to parents of Hispanic origin. More information is available online at: www.cdc.gov/nchs/vitalstats.htm.

Oregon Lead Surveillance Data, Oregon Department of Human Services, Childhood Lead Poisoning Surveillance Program.

In Oregon, elevated blood lead levels (EBLLs) became a reportable condition by Oregon Administrative Rule in 1991. Since March 2002, all Oregon blood lead test results have been reportable by both labs and providers within seven days. Oregon uses a CDC data management system (STELLAR) to track multiple tests and addresses for individual children. The surveillance system receives all blood lead level (BLL) results for adults and children. More information on state surveillance is available online at: www.cdc.gov/nceh/lead/data/state/ordata.htm.

Oregon Population Survey, Oregon Progress Board.

The Oregon Population Survey is a telephone survey of more than 4000 households conducted by the State every two years. The survey collects data on a variety of social, economic, demographic and opinion topics for a consortium of partners who use the data for a more in-depth picture of the lives of Oregonians. More information is available online at: oregon.gov/DAS/OPB/popsurvey.shtml.

Oregon Pregnancy Risk Assessment Monitoring System (PRAMS), Oregon Department of Human Services, Office of Family Health.

The Oregon Pregnancy Risk Assessment Monitoring System (PRAMS) is a random stratified survey of postpartum women that collects state-specific, population-based data on maternal attitudes and experiences before, during and shortly after pregnancy. Women who have had a recent live birth are sampled from state birth certificate files. The survey is administered primarily

by mail, with multiple follow-up attempts. A telephone interview is initiated after repeated mailings fail to produce a response. Oregon PRAMS has been continuously collected since 1998. Women from racial and ethnic minorities are oversampled. Information on the mother's race/ethnicity is derived from birth certificate data. More information is available online at: www.oregon.gov/DHS/ph/pnh/prams/index.shtml.

Oregon Pregnancy Risk Assessment Monitoring System 2 (PRAMS-2), Oregon Department of Human Services, Office of Family Health.

The Oregon Pregnancy Risk Assessment Monitoring System 2 (PRAMS-2) is a follow-back survey of Oregon PRAMS respondents upon the second birthday of their child. The survey includes topics such as well child care, nutrition, social support, maternal physical activity, multivitamin use, child care and screen time. Information on the mother's race/ethnicity is derived from birth certificate data and used as a proxy for the child's race. The survey has been conducted for the 2004 and 2005 birth cohorts. More information is available online at: www.oregon.gov/DHS/ph/pnh/prams/index.shtml.

Oregon Smile Survey, Oregon Department of Human Services, Office of Family Health.

The Oregon Smile Survey is a statewide assessment of the oral health of first, second, and third-graders attending Oregon public schools. Using national Basic Screening Survey (BSS) criteria, dental hygienists performed a visual screening of each child's mouth. Parents were also invited to participate by completing a questionnaire with questions about the child's age, race/ethnicity, participation in the Federal Free or Reduced Lunch (FRL) Program, language spoken at home, gender, medical insurance, dental insurance, and time since last dental visit. When the parent questionnaire was not completed or unavailable, the child's race/ethnicity was determined by a visual assessment from the dental hygienist. More information is available online at: www.odha.org/new/documents/SmileSurvey2007.pdf.

Pediatric Nutrition Surveillance System (PedNSS), Centers for Disease Control and Prevention.

The Pediatric Nutrition Surveillance System is a program-based surveillance system that monitors the nutritional status of low-income children in federally funded maternal and child health programs. PedNSS produces prevalence and trends for nutrition-related indicators using existing data from the Special Supplemental Nutrition Program for Women, Infants and Children (WIC); the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) Program; and other Title V Maternal and Child Health Programs. Data are collected on demographics, anthropometry, anemia status, infant feeding practices, and health risk behaviors of children who attend public clinics for routine care, nutrition education and supplemental foods. Data is collected at the clinic level, and aggregated at the state level to be submitted to the CDC for analysis. In 2008, forty-three states in the United States contributed data representing over 8 million children. More information is available online at: www.cdc.gov/PEDNSS.

Public Elementary/Secondary School Universe Survey, U.S. Department of Education, National Center for Education Statistics.

The Public Elementary/Secondary School Universe Survey provides general information about public schools, as well as student information including counts of free and reduced price lunch eligible students, migrant students, and counts of students by race/ethnicity. More information is available online at: nces.ed.gov/programs/digest/d08/tables/dt08_042.asp.

U.S. Census, U.S. Census Bureau, Population Estimates Program.

The US government conducts a census, or count, of the population every ten years, as mandated by the US Constitution. There are two mailed forms used to collect the census data, a long form and a short form. The majority of households receive the short form questionnaire, consisting of demographic and housing related questions. The long form, administered to one in six households, includes additional questions about education, employment, income, ancestry, homeowner costs, and housing details. If a census form is not completed and returned, the household may receive a visit from a census taker, who conducts the survey in person. The census aims to count all US residents, both citizens and non-citizens. More information is available online at: www.census.gov/popest/states/asrh/stasrh.html.

Note: The U.S. Census Bureau uses the 2000 Census as a base figure and estimates annual population changes, incorporating changes in migration and racial/ethnic groups.

VitalStats, Oregon Department of Human Services, Center for Health Statistics.

The Oregon Center for Health Statistics maintains data on births, deaths, divorces, domestic partnerships, fetal deaths, induced abortions, marriage, teen pregnancy, and teen suicide. More information is available online at: www.dhs.state.or.us/dhs/ph/chs/data/vstats.shtml.

Web-based Injury Statistics Query and Reporting System (WISQARS), Centers for Disease Control and Prevention, National Center for Health Statistics.

The Web-based Injury Statistics Query and Reporting System is an interactive database system that provides customized reports of injury-related data at the state and national level. Separate databases are maintained for injury mortality data, data from the National Violent Death Reporting System, and estimates of nonfatal injuries treated in hospital emergency departments. More information is available online at: www.cdc.gov/injury/wisqars/index.html.