

DESCHUTES COUNTY HEALTH REPORT

2007



The Deschutes County Health Department
presents this report to the residents of Deschutes County so they may be
better informed about the health issues and behaviors that affect their lives.

INTRODUCTION

The Deschutes County Health Department is pleased to present the *Deschutes County Health Report*, a compilation of key health indicators for our county. The goal of this report is to provide health data that can be used by local government and community agencies, health care providers, and other interested community members and groups to help identify and better address the health needs of Deschutes County.

The health indicators examined in this report are used to represent trends by tracking measurable changes over time. As much as possible we use established national and statewide goals, such as the U.S. Surgeon General’s Healthy People 2010 objectives and the Oregon Progress Board’s 2005 benchmarks, to gauge our progress. Our concept of health is broad, as indicated by the inclusion of data regarding issues such as poverty, homelessness, and violent injury.

The *Deschutes County Health Report* identifies several important areas where the County meets national health objectives or has improved over the last several years. Some examples are:

- First trimester prenatal care – Deschutes County has

consistently ranked among the highest in Oregon.

- Teen pregnancy rates – dropping to an all time low in Deschutes County.
- Breastfeeding initiation – Oregon’s Women, Infants, and Children (WIC) program ranks first in the nation for breastfeeding initiation. The Deschutes County WIC initiation rate is even higher.

The report also points to areas where significant work still needs to be done. Examples are:

- Rising obesity rates, especially in children
- Immunization rates far below the state average
- Alcohol, tobacco, and other drug use among adolescents
- High percentage of residents without health care coverage
- Lack of fluoridated water supplies to prevent tooth decay and improve oral health

It is our hope that the information provided by this report will motivate local government, community agencies, and citizens to collaboratively address the growing health needs across our county. By improving the health of our residents, we strengthen the community as a whole.

NOTE ON DATA AND BENCHMARKS

(Healthy People 2010 Objectives and Oregon 2005 Benchmarks)

This report relies exclusively on secondary data, i.e. data collected by other organizations, and utilizes the most current data available from these sources. Healthy People 2010 objectives and Oregon 2005 Benchmarks are given in relation to Deschutes County data when available and appropriate. Healthy People 2010 is a federal initiative which sets national disease prevention and health promotion objectives to be achieved by the end of this decade. Oregon Benchmarks are set by the Oregon Progress Board as statewide objectives.

TABLE OF CONTENTS

Demographics	pg 2	Maternal, Child & Adolescent Health.	pg 9
Economy	pg 3	Unintentional Injury.	pg 14
Access to Healthcare	pg 4	Substance Abuse.	pg 16
Poverty, Hunger, Homelessness.	pg 5	Alcohol & Illicit Drug Use.	pg 17
Adult Chronic Disease	pg 6	Environmental Health.	pg 19
Oral Health	pg 8	Communicable Disease	pg 20
Mental Health	pg 8	Data Sources	pg 22

DEMOGRAPHICS

Deschutes County Population by Age, 2006

	0-17 years	18-64 years	65+ years
	34,381	98,246	19,988
total %	(22.5%)	(64.4%)	(13.1%)

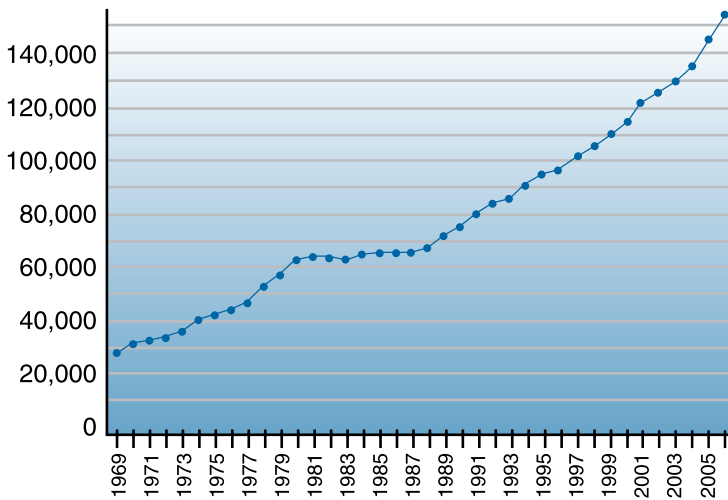
Source: Portland State University-Population Research Center, 2006 Age Estimates

Oregon Population by Age, 2006

	0-17 years	18-64 years	65+ years
	872,280	2,356,686	461,539
total %	(23.6%)	(63.9%)	(12.5%)

Source: Portland State University-Population Research Center, 2006 Age Estimates

Deschutes County Population 1969-2006



Population of Deschutes County, 2006: 152,615. Deschutes County continues to be the fastest growing county in Oregon, with a 32.3% increase in population from April 2000 - July 2006.

Source: Portland State University-Population Research Center, 2005 Oregon Population Report and 2006 Preliminary Population Estimates.

Education Level - 2005*

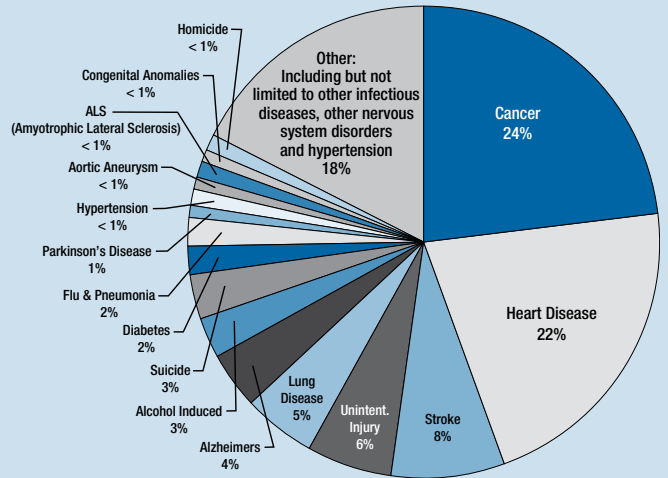
	Deschutes County	Oregon	United States
Less than HS degree	12%	13%	16%
HS Graduate	22%	26%	30%
Some College, no Degree	28%	26%	20%
Associate Degree	9%	7%	7%
Bachelor Degree	21%	18%	18%
Graduate or Professional Degree	8%	10%	10%

* Numbers may not add up to 100% due to rounding.

Source: U.S. Census, 2005 American Community Survey

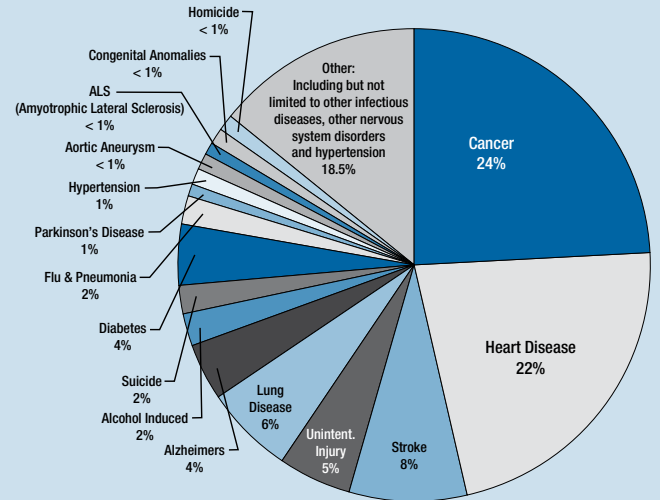
Leading Causes of Death Deschutes County, 2004

Source: DHS/Center for Health Statistics



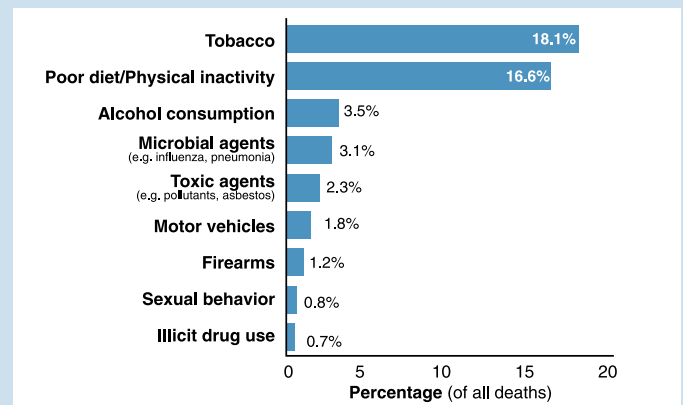
Leading Causes of Death Oregon, 2004

Source: DHS/Center for Health Statistics



Actual Causes Associated with Death United States, 2000*

Behavioral and lifestyle choices such as smoking, poor nutrition, and physical inactivity are major contributors to the leading killers, which include heart disease, cancer and stroke. It is anticipated that the consequences of physical inactivity and poor nutrition will soon overtake tobacco as the leading cause of death in the United States.



*Most current analysis of actual causes of death.

Source: Mokdad et al., Journal of the American Medical Association, March 10, 2004 - Vol 291, No. 10.

Births & Deaths, Deschutes County, 2000-2005

	2000	2001	2002	2003	2004	2005
Births	1,438	1,480	1,487	1,575	1,663	1,783
Birth Rate	12.3	12.1	11.8	12.1	12.3	12.4
Deaths	916	957	973	997	961	N/A*
Death Rate	7.9	7.8	7.7	7.6	7.1	N/A*

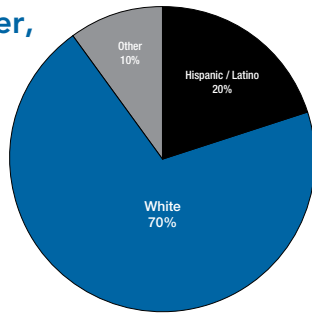
*N/A = Not Available
Source: DHS / Center for Health Statistics

Emerging Access Needs

While only 5.2% of the Deschutes County population in 2005 was made up of Hispanics, 12% of births in 2005 were to Hispanic mothers. As the Hispanic and other minority populations continue to grow in Deschutes County, we must work to reduce cultural and linguistic barriers that prevent equal access to public information and community services.

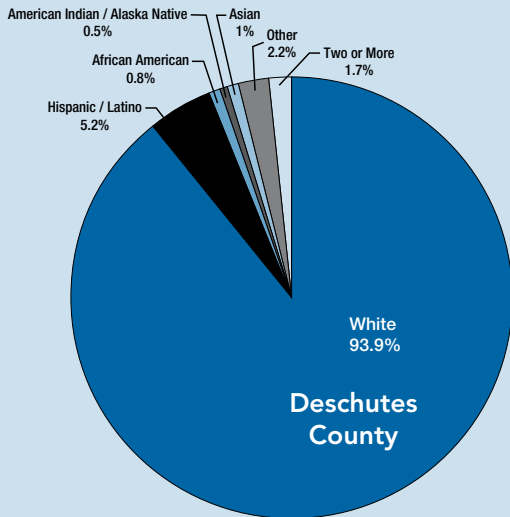
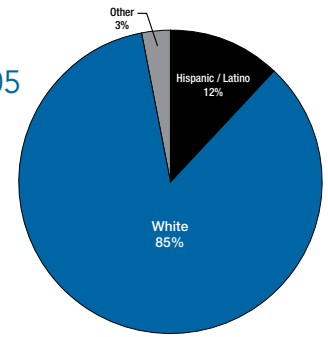
Race / Ethnicity of Mother, Oregon Births, 2005

Source: DHS / Center for Health Statistics



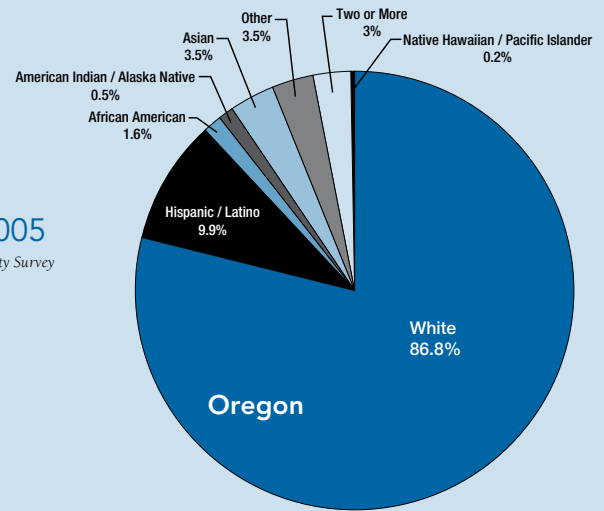
Race / Ethnicity of Mother, Deschutes County Births, 2005

Source: DHS / Center for Health Statistics



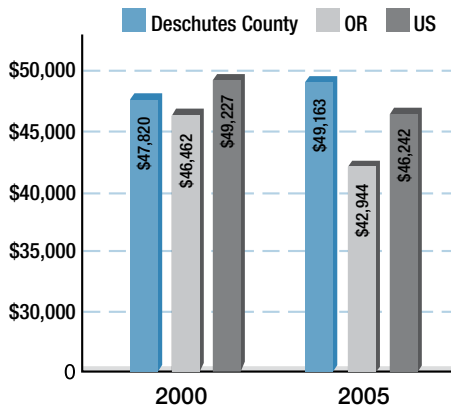
Race / Ethnicity, 2005

Source: U.S. Census, 2005 American Community Survey



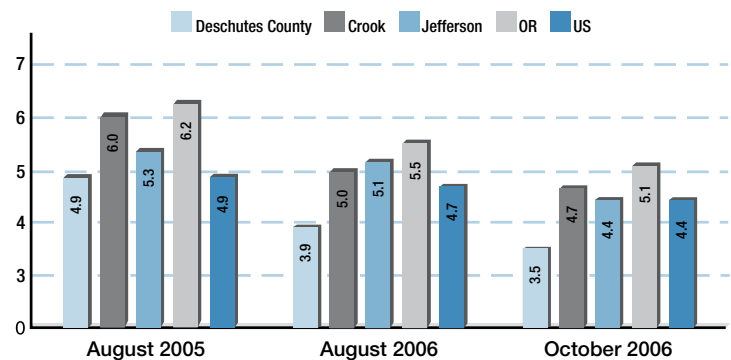
ECONOMY

Median Household Income



Source: U.S. Census, 2005 American Community Survey

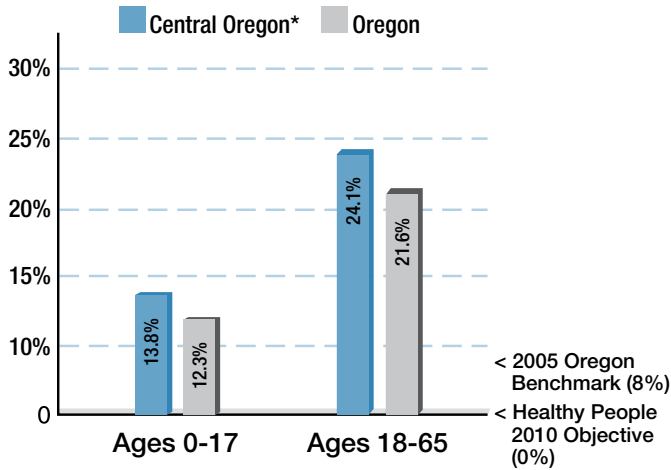
Unemployment Rates



Source: U.S. Census, 2005 American Community Survey; Oregon Employment Department

ACCESS TO HEALTH CARE

Uninsured:
Individuals with No Health Insurance, 2004

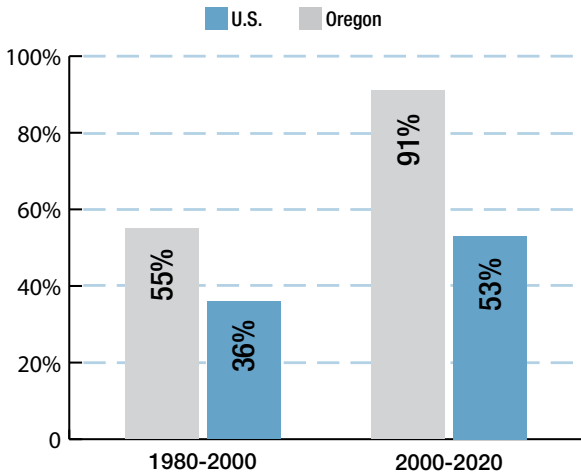


*Combined regional estimates for Crook, Deschutes and Jefferson counties.
Source: Oregon Population Survey, 2004

The percentage of uninsured Central Oregonians shown above equals approximately **32,450 people**. Of those, **6,120 are children** under the age of 18 years.

The consequences of high uninsured rates can be devastating. The Kaiser Commission on Medicaid and the Uninsured conducted a thorough review of the past 25 years of health services research on the effects of health insurance coverage. The results demonstrated that the uninsured receive less preventive care, are diagnosed at more advanced stages, and once diagnosed, tend to receive less therapeutic care such as drugs and surgical interventions.

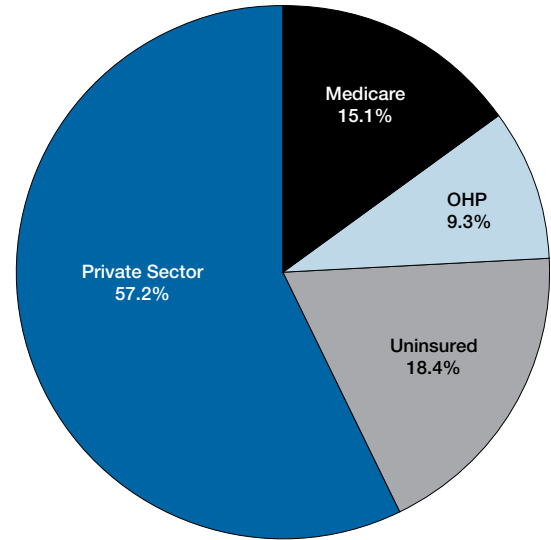
MEDICARE
Projected Change in Oregon & U.S. Population
65+ Years of Age



If population projections hold true, the increase in residents 65+ years of age in Deschutes County will be significant. There is serious reason to be concerned about where these people will receive care.

Source: Health Resources and Services Administration

Central Oregon Population
by Source of Coverage*



*Note: OHP data is from 6/06. The most current Medicare, private sector and uninsured data is from 2003 and 2004.
Source: Oregon Population Survey, 2004

Consequences of High Uninsured and Medicaid Rates:

The “cost-shifting” cycle. This refers to the shifting of people and costs between segments of the health care market. When Medicare and Medicaid reimbursements fail to cover the full cost of providing care, there is a “cost shift” to private payers to make up the difference. The increasing costs are passed along to employers and consumers in the form of higher premiums, which changes the market and makes health coverage less affordable.

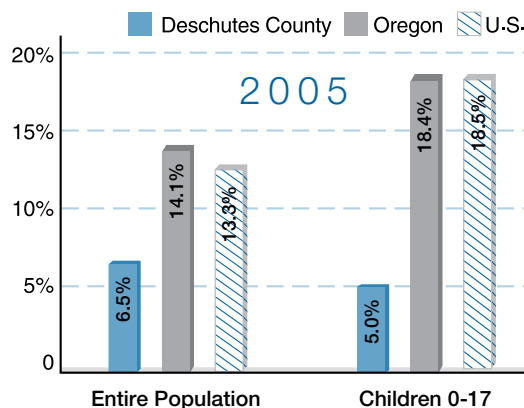
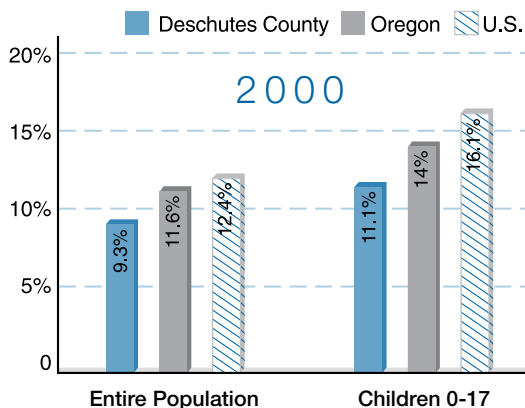
MEDICAID

Oregon Health Plan Enrollees, December 2006

As of December, 2006 there were 11,490 Oregon Health Plan enrollees in Deschutes County. Of those, 436 people were enrolled in the OHP Standard plan, which makes them “open card” patients. While they are permitted to seek care from any provider, there is no requirement that providers accept them as patients. The result has been an inability for many with OHP Standard coverage to access care and establish a medical home.

POVERTY, HUNGER & HOMELESSNESS

Poverty: Individuals Living in Poverty, 2000 vs 2005



In Deschutes County, a total of 9,072 individuals, including 1,522 children, were living in poverty in 2005.

Source: U.S. Census Bureau, American Community Survey, 2005

HOMELESSNESS

Tri-County Homeless Count, 7.26.06

- 1344 individuals
- 727 adults (54%)
- 617 were children under the age of 18 (46%)
 - 154 were under the age of 6 years

On January 26, 2006, the Homeless Leadership Council, with the help of 50+ volunteers, conducted a count of homeless residents living in Deschutes, Jefferson and Crook counties. The primary self-reported reason for homelessness was economic hardship as 44% reported that they were homeless because they could not afford rent. Only 365 people (27%) had access to some form of shelter by a local housing provider. The remaining 979 (73%) were living with family or friends, living outdoors or in cars, or staying in motel rooms. Currently, there are only 195 emergency shelter beds and 145 transitional housing beds available in the region.

Source: NeighborImpact

Homeless Students, 2005/06 School Year

A total of 534 homeless students were identified in Deschutes County during the 2005/06 school year. Statewide, 13,159 homeless students were identified. These numbers are thought to be a significant undercount as many students, especially at the high school level, do not want it known that they are homeless.

Source: Bend/La Pine School District; Redmond School District; Sisters School District; Oregon Department of Education.

- Unexpected events, such as paying for an emergency visit to the hospital or a car repair, can quickly force families into poverty.

- In 2005, there was a monthly average of 13,712 participants in Deschutes County's Food Stamp Program

Source: Neighborhood Impact

- During the 2005-06 school year, 33.7% of students in Deschutes County public schools were approved for Free and Reduced Lunch Programs.

Source: Oregon Department of Education

HUNGER

Oregon's national hunger ranking has dropped from #1 in 2002 to #17 in 2004, according to the United States Department of Agriculture. The change is thought to be the result of improved food stamp outreach and increased funding for and use of emergency food. While access to food has improved, it is important to note that the poverty still exists, and many families are often forced to choose between food and other expenses.

Food Bank Programs, 2005

While the Deschutes County population increased by 24% from 2000-2005, the number of people accessing food bank programs each month increased by 45%. This increase may be a reflection of the rising cost of living coupled with local wages that have not kept pace with housing and energy costs.

- Monthly average of individuals receiving food through emergency food bank programs in Deschutes County: 4998

Source: NeighborImpact

ADULT CHRONIC DISEASE

Many factors contribute to developing chronic disease. Many of these factors are lifestyle behaviors that can be modified. By altering behaviors, we can reduce the risk of developing heart disease, stroke, cancer, diabetes, lung disease and arthritis. For people diagnosed with chronic conditions, good disease management, including changes in nutrition and physical activity, dramatically reduces the risk of complications.

Communities, schools, worksites and health care sites can support and promote healthy behaviors through policies and environments like smoke-free worksites, healthy cafeteria meals, sidewalks and bike paths, incentives for bicycle and pedestrian commuters, worksite health promotion programs, and insurance coverage for preventive services such as mammography and tobacco cessation.

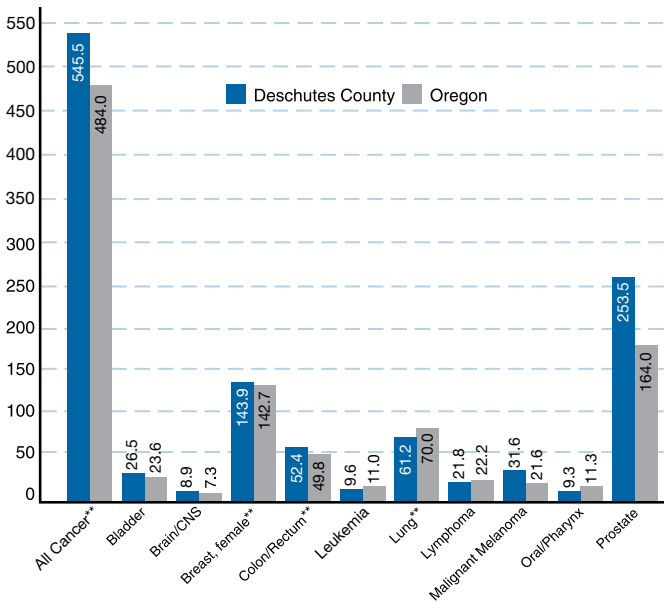
Cancer Cases and Deaths Deschutes County, 1999-2003

Type of Cancer	Number of Malignant Cases	Number of Deaths	Mortality to Incidence Ratio*
All Cancers	707	232	.39
Bladder	38	5	.13
Brain / CNS	11	8	.73
Breast, female	98	17	.17
Colon / Rectum	67	21	.31
Leukemia	11	8	.73
Lung	80	64	.80
Lymphoma	30	10	.33
Malignant Melanoma	44	6	.14
Oral / Pharynx	12	3	.25
Prostate	159	11	.07

*Mortality to Incidence Ratio (M/I) provides a measure of disease severity. The closer a M/I value is to 1.0, the poorer the expected outcome for a patient with cancer of that type.

Source: DHS-Oregon Cancer Registry (OSCaR) / Cancer in Oregon, 2003

Rates* of Cancer Cases, 1996-2003



* Age Adjusted Rates per 100,000 **Data range is 1999-2003

Source: DHS-Oregon Cancer Registry (OSCaR), 2004

Cardiovascular Disease

	Deschutes County	Oregon	Healthy People 2010 Objective
Coronary heart disease	4.3%*	3.8%*	
Heart attack	3.9%*	3.6%*	
Stroke	2.1%*	2.6%**	
Heart disease death rate	161.42***	179.23**	166
Stroke death rate	60.15***	61.94**	48

* Behavioral Risk Factor Surveillance System, 2002-2005 combined dataset

** Behavioral Risk Factor Surveillance System, 2005

*** Age-Adjusted death rate per 100,000 population - Oregon Death Certificates, 2004

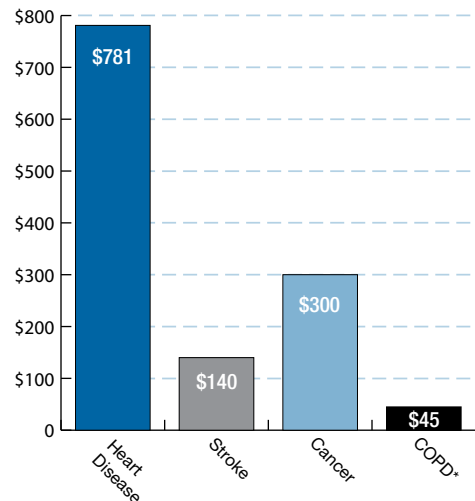
Cardiovascular disease (CVD) includes coronary heart disease, atherosclerosis, stroke and high blood pressure. It is the number one cause of death and disability in the United States and in Oregon.

Source: DHS-Oregon Heart Disease and Stroke Prevention Program

The Economic Impact of Cardiovascular Disease

There were over 40,000 hospitalizations of Oregonians for cardiovascular disease in 2004 (State Hospital Discharge Index), resulting in more than \$1.1 billion in hospital costs for heart disease, stroke, and related diseases. Cardiovascular disease-related hospitalizations greatly exceeded the costs of other chronic disease-related causes of hospitalization (see graph below). It is important to recognize that hospitalization costs reflect only a portion of the full financial burden of cardiovascular disease. Other expenditures include medications, rehabilitation, outpatient care, long-term care, and loss of productivity.

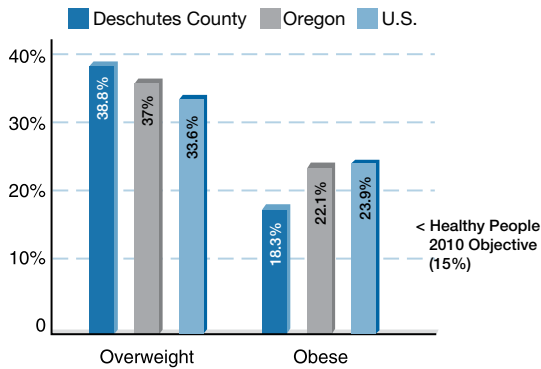
Hospitalization Costs by Principal Diagnosis, 2004



*Chronic obstructive pulmonary disease

Source: DHS/Heart Disease and Stroke Prevention Program, Oregon Heart Disease and Stroke Report, 2006; Oregon Hospital Discharge Index

Overweight and Obesity* among Adults, 2005



*In adults, obesity is defined as a Body Mass Index (BMI) of 30 kg/m² or more; overweight is a BMI of 25 kg/m² or more. BMI is calculated as weight in kilograms (kg) divided by the square of height in meters (m²).

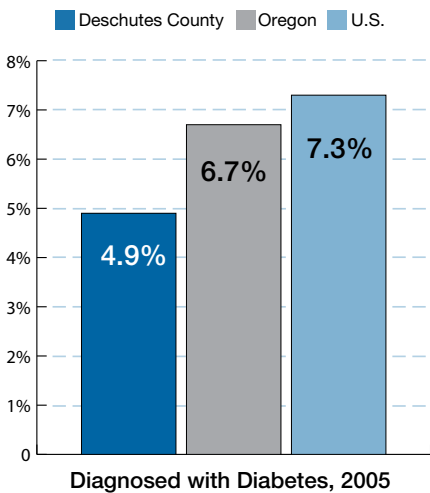
Overweight and obesity are major contributors to many preventable causes of death. Being overweight or obese substantially raises the risk of illness from high blood pressure, high cholesterol, type 2 diabetes, heart disease and stroke, gallbladder disease, arthritis, sleep disturbances and problems breathing, and certain types of cancers.

Source: Centers for Disease Control and Prevention. State-Specific Prevalence of Obesity among Adults - United States, 2005. MMWR September 15, 2006; 55 (No. 36); Behavior Risk Factor Surveillance System

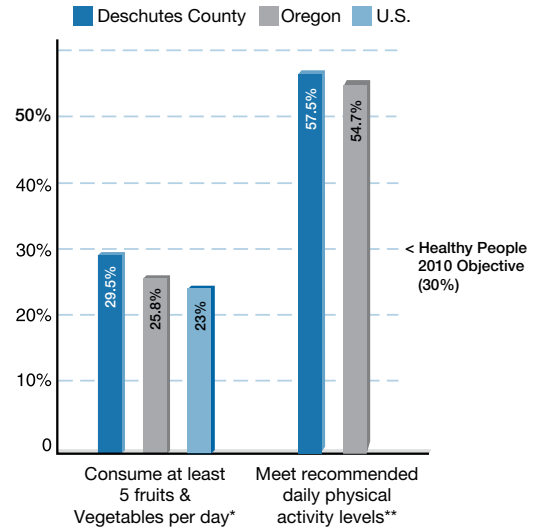
Diabetes

Diabetes can lead to serious complications and premature death, but people with diabetes can take steps to control the disease and lower the risk of complications. Type 2 diabetes accounts for about 90 percent to 95 percent of all diagnosed cases of diabetes. Many people with type 2 diabetes can control their blood glucose by following a healthy meal plan and exercise program, losing excess weight, and taking oral medication. Risks for the development of type 2 diabetes include older age, obesity, a family history of diabetes, a history of gestational diabetes, impaired glucose metabolism, physical inactivity, and race/ethnicity. Recent studies suggest that type 2 diabetes in children and adolescents, although still rare, is being diagnosed more frequently. This trend is thought to be tied to rising obesity rates in children and adolescents.

Source: Behavior Risk Factor Surveillance System; DHS/Oregon Asthma Program; Centers for Disease Control and Prevention



Nutrition and Physical Activity in Adults, 2002-2005



* U.S. percentage is from 2005 only

** moderate-intensity physical activity for 30+ minutes per day

Source: Behavior Risk Factor Surveillance System; DHS/Health Promotion and Chronic Disease Prevention Program

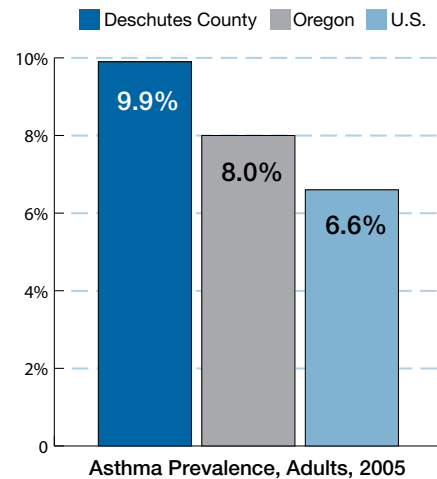
Chronic diseases are heavily impacted by poor nutrition and lack of physical activity. Deschutes County falls far short of the Healthy People 2010 objective for improved nutrition which calls for 75% of the population to consume the minimum servings of fruits (two daily servings) and 50% to consume the minimum servings of vegetables (three daily servings with at least 1/3 being dark green/deep-yellow). However, the County exceeds Healthy People 2010 objective for daily physical activity levels.

Source: Behavior Risk Factor Surveillance System; DHS/Health Promotion and Chronic Disease Prevention Program.

Asthma

Asthma is a lung disease that can be chronic and life threatening. Triggers include viruses, allergies, tobacco smoke, and gases and particles in the air. Limiting exposure to asthma or allergy triggers can often control asthma.

Source: DHS/Oregon Asthma Program; Behavioral Risk Factor Surveillance System, 2005



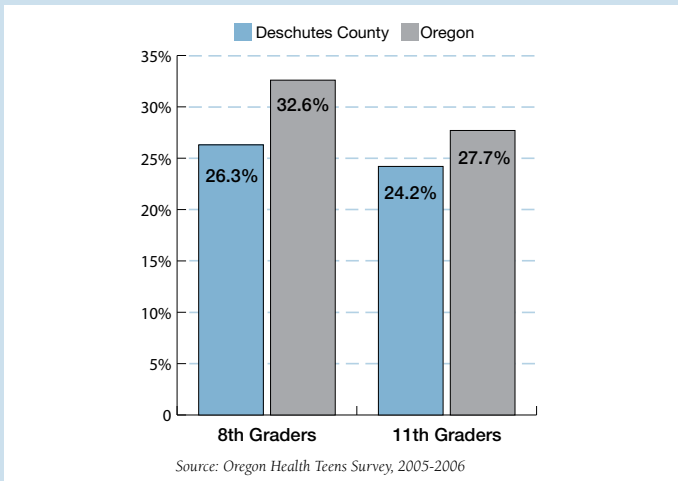
ORAL HEALTH

Although tooth decay is largely preventable, it remains the most common chronic disease of children age 5 to 17 years—5 times more common than asthma. Untreated decay can lead to infection, pain, and the loss of teeth. Poor children have nearly 12 times more restricted-activity days because of dental-related illness than children from higher-income families. Pain and suffering due to untreated tooth decay can

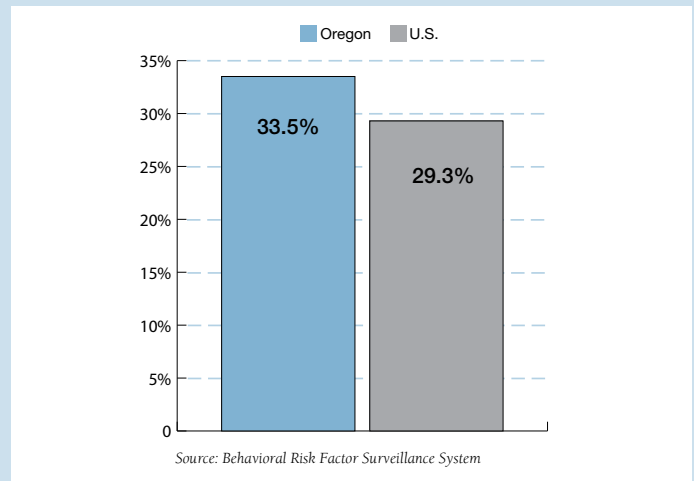
lead to problems in eating, speaking, and learning. Many adults also have untreated tooth decay: In the U.S., 27% of those 35 to 44 years old and 30% of those 65 years and older. Emerging evidence points to a strong link between oral diseases and many medical conditions and poor health outcomes.

Source: Centers for Disease Control and Prevention, Preventing Dental Caries

No dental visit within past 12 months, 2005-2006



No dental visit within past 12 months, Adults, 2004



Fluoridated Water

Fluoridation of community water is the single most effective public health measure to prevent tooth decay and improve oral health over a lifetime. More than 50 years of scientific research has found that people living in communities with fluoridated water have healthier teeth and fewer cavities than those living where the water is not fluoridated. While many communities have naturally occurring fluoride at levels sufficient to prevent tooth decay, there are thousands of communities where naturally occurring fluoride levels are deficient. It is in these places that small amounts of fluoride have been added to drinking water supplies, resulting in decreasing rates of tooth decay. Water fluoridation is extremely cost effective. Every dollar spent on community water fluoridation saves from \$7 to \$42 in treatment costs, depending on the size of the community.

Source: Surgeon General Statement on Community Water Fluoridation, December 3, 2001; DHS/Oral Health Program

Population Served by Floridated Water Systems

- Healthy People 2010 Objective: 75%
- United States: 68%
- Oregon: 20%
- Deschutes County: less than 1%

Source: Centers for Disease Control and Prevention; DHS / Drinking Water Program

Dental Care During Pregnancy

Fewer than half the women in Oregon seek needed dental care during pregnancy, and only one-third receive education on how to care for their infant's teeth.

Source: DHS / Oral Health Program

MENTAL HEALTH

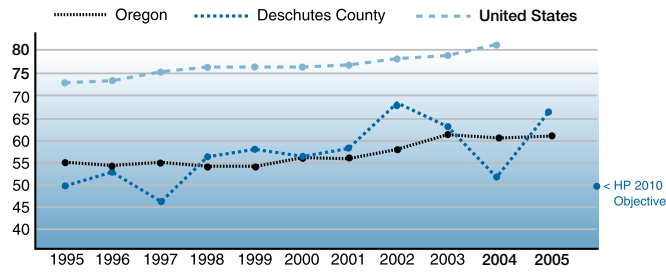
The National Institute of Mental Health estimates that 26.2% of Americans ages 28 and older (about one in four adults) suffer from a diagnosable mental disorder in a given year. When applied to the 2006 population estimates for Deschutes County, this figure translates to 29,559 Deschutes County residents. Although mental disorders are widespread in the population, the main burden of illness is concentrated in a much smaller proportion: About 6%, or 1 in 17, who suffer from a serious mental illness. Applied to Deschutes County, that would equal 6,955 individuals.

The annual prevalence of mental disorders among older adults (ages 55 years and older) is not as well documented as that for younger adults. The experience of loss with aging (loss of physical capacities, loss of social status and self-esteem, and the death of friends and loved ones) can lead to bereavement-associated depression. Among adults, suicide rates increase with age and are very high among those 65 years and older.

Source: Surgeon General Statement on Community Water Fluoridation, December 3, 2001; DHS/Oral Health Program

MATERNAL, CHILD & ADOLESCENT HEALTH

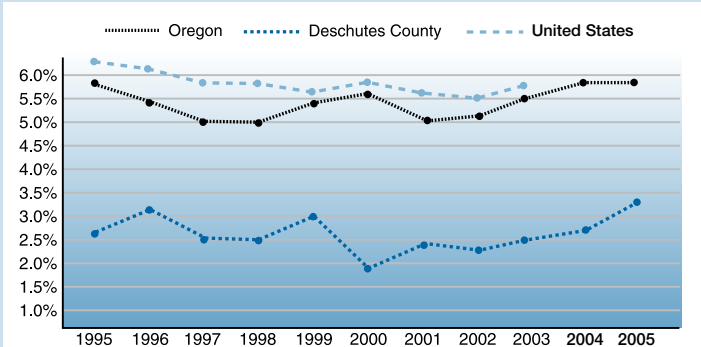
Low Birthweight Rate of Low Birthweight* Infants per 1,000



*Low birthweight is defined as under 2500 grams
Source: DHS/Oregon Center for Health Statistics; CDC/National Center for Health Statistics

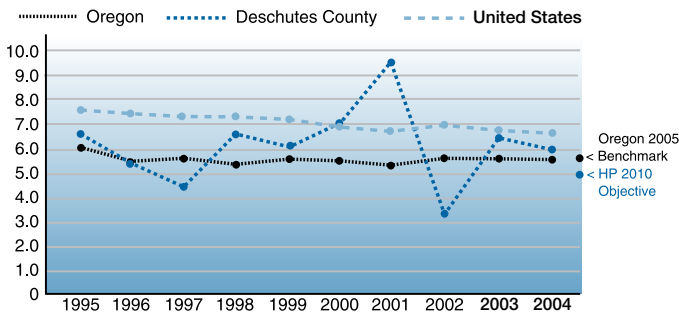
Deschutes County is still far from meeting the Healthy People 2010 objective of 50 low birthweight infants per 1,000 births. Low birthweight infants who survive are at increased risk for health problems ranging from neurodevelopmental disabilities to respiratory disorders.

Prenatal Care Percent of Pregnant Women getting Inadequate Prenatal Care*



*Inadequate prenatal care is defined as care that began in the third trimester or consisted of less than five prenatal visits.
Source: DHS/Oregon Center for Health Statistics

Infant Mortality Rate of Infant Mortality* per 1,000 Live Births



*Infant mortality is defined as the death of a child prior to its first birthday.
Source: DHS-Oregon Health Services, 2004

While the Deschutes County infant mortality rate has been consistently lower than the national rate, it is still significantly higher than the Healthy People 2010 objective of 4.5 per 1,000 live births. Factors that effect infant mortality include smoking, substance abuse, poor nutrition, lack of prenatal care, medical problems, and chronic illness. Early and continuous prenatal care helps identify conditions and behavior that can lead to infant deaths.

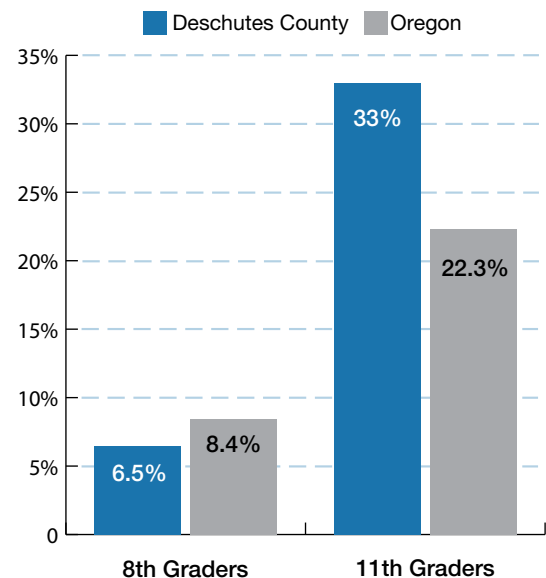
Percent of Women Receiving First Trimester Care

	1999	2000	2001	2002	2003	2004	2005
Deschutes County	83.5%	88.2%	89.7%	91.5%	90.0%	88.9%	90.2%
Oregon	80.9%	81.1%	81.5%	81.6%	81.1%	80.4%	81.0%
United States	81.3%	81.1%	81.5%	81.6%	81.1%	83.9%	N/A*
OR 2005 Benchmark							>>85%
Healthy People 2010							>>90%

Deschutes County has consistently ranked among the top Oregon counties with the highest rates of first trimester prenatal care. Early and continuous prenatal care is an important way to improve the long-term health of mothers and to prevent adverse birth outcomes.

* N/A = Not Available
Source: DHS/Center for Health Statistics; CDC/National Center for Health Statistics

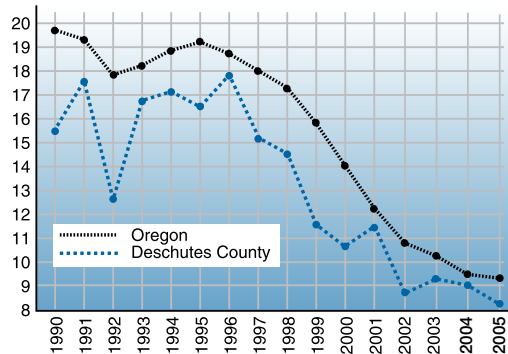
Sexual Intercourse with Two or More Partners, 2005-2006



Source: Oregon Healthy Teens Survey, 2005-2006

Teen Pregnancy Rate of Teen Pregnancy per 1,000 Females Ages 10-17

Teen pregnancy has decreased dramatically over the last several years and is at an all time low in both Deschutes County and Oregon.



* Preliminary rolling rate October 2004 - September 2005
Source: DHS-Oregon Health Services, 2004

Breastfeeding

The American Academy of Pediatrics (AAP) recommends that breastfeeding continue for at least one year. Breastfed babies are sick less than babies who are fed infant formula, and they have fewer ear aches, allergies, colds, and illnesses. These babies are also less likely to develop chronic conditions including obesity and diabetes later in life. Oregon's Women, Infants, and Children (WIC) program ranks **first in the nation** for breastfeeding initiation at 87.6%. The Deschutes County initiation rate is even higher. Of infants born between January 1, 2006 and September 25, 2006, who were enrolled in Deschutes County WIC and had their first certification before three months of age, 92.8% initiated breastfeeding. Both the County and State rate far surpass the Healthy People 2010 objective of 75% breastfeeding initiation.

Source: DHS/Oregon WIC Program; Centers for Disease Control and Prevention

Immunization

Population-based immunization rates are calculated to reflect the percentage of children considered "up to date" on their immunizations by two years of age. The rates are affected by multiple factors, including parental choice to delay vaccination and clinical decisions to provide vaccines at intervals different from the Recommended Schedule*. The vaccines included prevent ten diseases: diphtheria, tetanus, pertussis, polio, measles, mumps, rubella, Haemophilus influenzae type b, hepatitis B, and chicken pox.

Percentage of Two-year-olds Fully Covered with Recommended* Vaccines, 2005

Deschutes County: 51.0% Oregon: 71.8%

*Vaccines recommended by the Advisory Committee on Immunization Practices (ACIP). The Committee develops written recommendations for the routine administration of vaccines to the pediatric and adult populations. ACIP is the only entity in the federal government which makes such recommendations.

Source: DHS/Immunization Program

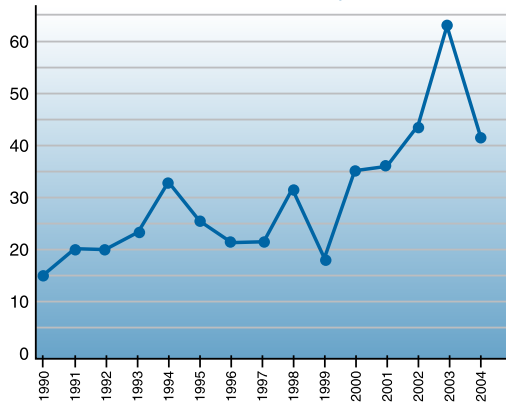
ADOLESCENT SUICIDE

In 2004, suicide claimed the lives of 67 Oregon youth aged 10-24 years. Suicide was the second leading cause of death among Oregonians aged 10-24 years. Oregon's youth suicide rate has been higher than the national rate for decades. For every suicide death among youth under 18 years, there are an estimated 134 suicide attempts that are treated in hospital emergency rooms. In Oregon in 2004, 81% of suicide

deaths in youth 24 years and under were among males, while 19% were among females. Firearms were used in 54% of Oregon youth suicide deaths. Factors associated with youth suicide include: prior suicide attempt, history of depression, substance abuse, family history of suicide, incarceration, firearm access and feelings of hopelessness.

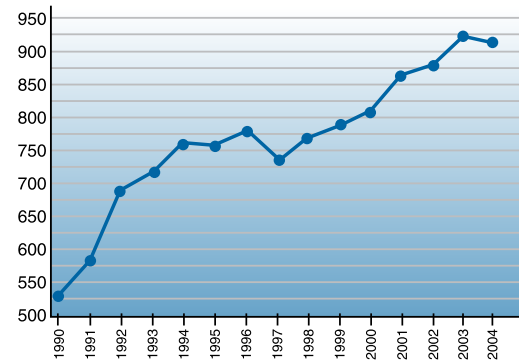
Sources: DHS/Center for Health Statistics, Youth Suicide Facts, 2006; Oregon Vital Statistics Annual Report, 2004, Volume 2, Morbidity

Deschutes Co. Adolescent Suicide Attempts*



Source: DHS/Center for Health Statistics

Oregon Adolescent Suicide Attempts*

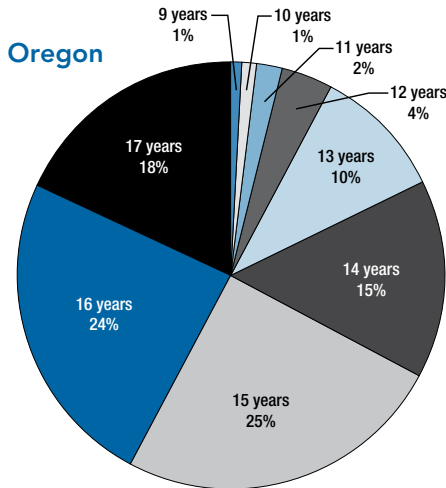


Source: DHS/Center for Health Statistics

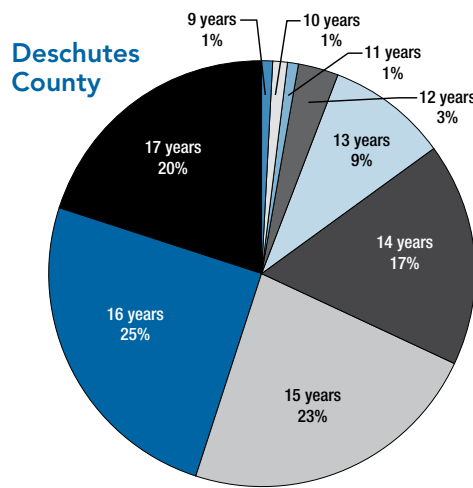
*These numbers reflect suicide attempts resulting in hospitalizations or deaths of children ages 10-17.

When health is absent, wisdom cannot reveal itself, art cannot manifest, strength cannot fight, wealth becomes useless, and intelligence cannot be applied.
 - Herophilus, Greek physician (335 BC - 280 BC)

Percentage of Adolescent Suicide Attempts by Age, 2000-2004



Source: DHS/Center for Health Statistics



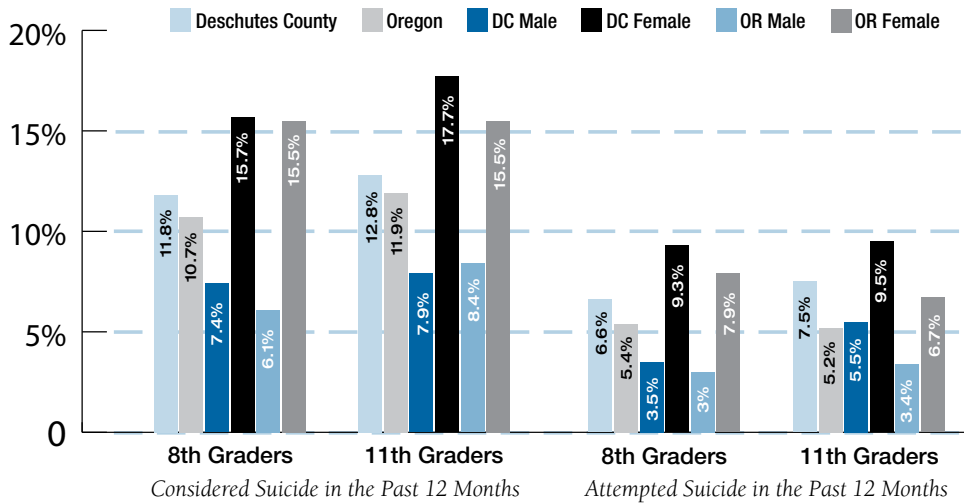
Source: DHS/Center for Health Statistics

Reasons given for Suicide Attempts, Oregon Minors, 2004

Reasons	Total
Total	852
Family Discord	487
School Related Problems	246
Argument w/ Boy/Girlfriend	180
Substance Abuse	118
Peer Pressure/Conflict	82
Rape or Sexual Abuse	65
Death of Family Member/Friend	49
Move or New School	47
Physical Abuse	42
Problems with the Law	34
Suicide by Friend/Relative	22
Pregnancy	7
Other Reasons	343

Source: DHS/Center for Health Statistics

Adolescent Mental Health 8th and 11th Graders, 2005-2006



Sources: Oregon Healthy Teens Survey, 2005-2006

Protective Factors

that shield people from the risks associated with suicide:

- Family and community support
- Skills in problem solving, conflict resolution, and nonviolent handling of disputes
- Cultural and religious beliefs that discourage suicide and support self-preservation instincts
- Effective clinical care for mental, physical, and substance use disorders
- Easy access to a variety of clinical interventions and support

Child Abuse and Neglect

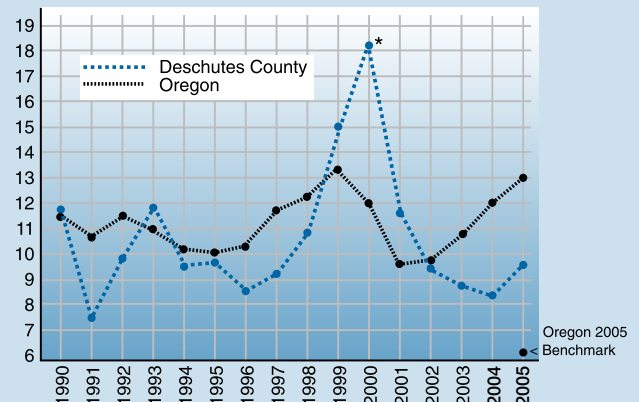
Foster Care - 10.1% of children in foster care in Deschutes County did not have stable placements in 2005, meaning that they were moved three or more times in the previous 12 months. Statewide, the percentage is 15.4%

Recurrence of Maltreatment - In 2005, 10.2% of child abuse/neglect victims in Deschutes County were re-abused within six months of prior victimization. Statewide, the percentage is 12.2%

Sources: Children First for Oregon

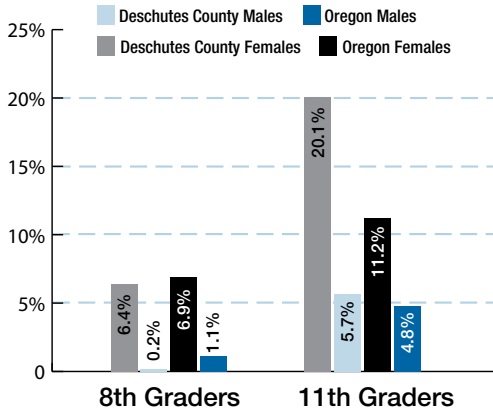
Rate of Children (under 18 years) who were Abused or Neglected**

*The sharp rise and fall of rates from 1999-2001 is attributed to changes in child abuse definitions and procedures.
** Per 1,000 persons under 18 years.



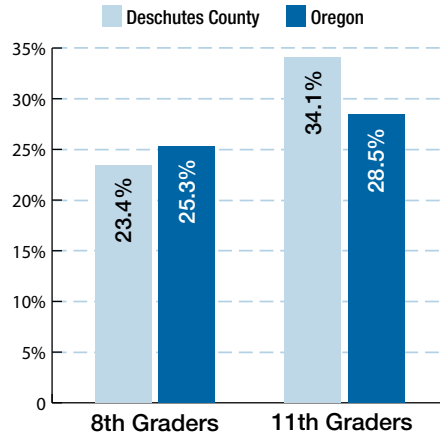
Oregon 2005 Benchmark

Sexual Contact from an Adult at Any Time During Life



Source: Oregon Healthy Teens Survey, 2005-2006

Intentional Physical Harm by an Adult



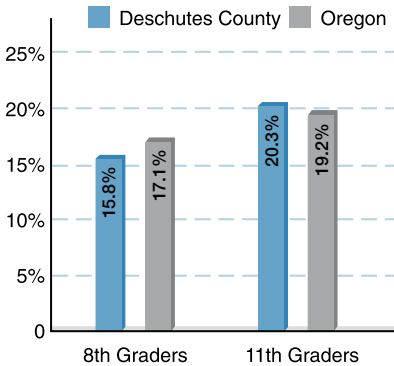
Source: Oregon Healthy Teens Survey, 2005-2006

KIDS Center

The KIDS Center serves approximately 450 children annually who need evaluation and treatment for sexual abuse, physical and emotional abuse, and neglect. The Center is also spearheading a revolutionary sexual abuse prevention training and outreach program in Central Oregon. This national research-based program, called Darkness to Light, educates adults to prevent, recognize, and react responsibly to child sexual abuse. It's estimated that for every adult trained in this program, 10 children are better protected. To find out more, call the KIDS Center Prevention Program at 541-312-5092

CHILDHOOD CHRONIC DISEASE

Asthma in Children Diagnosis of Asthma, 2005-2006



Childhood asthma is a disorder with genetic predispositions and a strong allergic component. Approximately 75 to 80 percent of children with asthma have significant allergies. Asthma is controllable through the proper use of medications and the reduction of exposure to asthma triggers.

Source: Oregon Healthy Teens Survey, 2005-2006; American Lung Association

Diabetes in Children

The national prevalence of diagnosed diabetes among people under 20 years of age is 0.22%. Applying this percentage to the local level, approximately 90 Deschutes County residents under 20 years of age are likely to have diabetes. Recent studies suggest that type 2 diabetes in children and adolescents (previously thought of as adult-onset diabetes), although still rare, is being diagnosed more frequently. This trend is thought to be tied to rising obesity rates in children and adolescents.

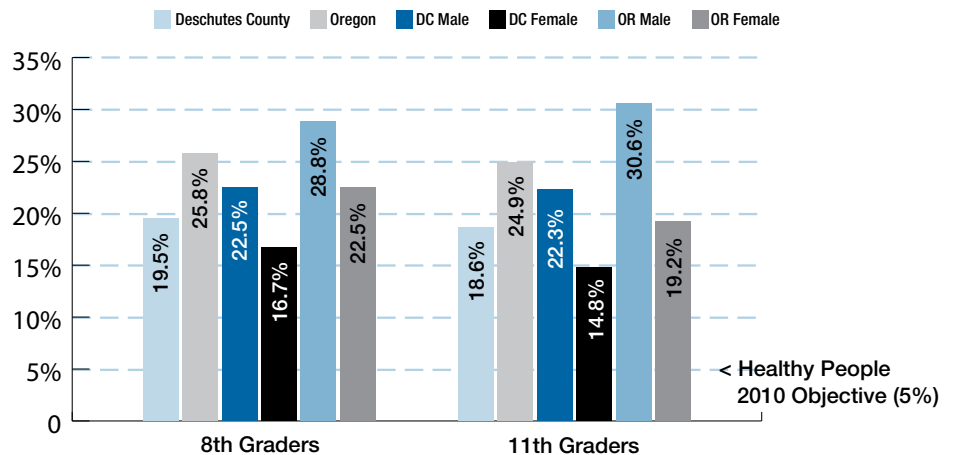
Source: Centers for Disease Control and Prevention

Overweight & Obesity* in Children Overweight or At Risk for Overweight, 2005-2006

There has been a startling rise in obesity rates in children over the past two decades. The trend is occurring throughout the United States, in all age groups, across all socioeconomic strata, and among all ethnic groups. Although Deschutes County is doing better compared to Oregon as a whole, the percentage of overweight and obese children in the County still far exceeds the Healthy People 2010 objective, which calls for only 5% of children and adolescents as overweight or obese.

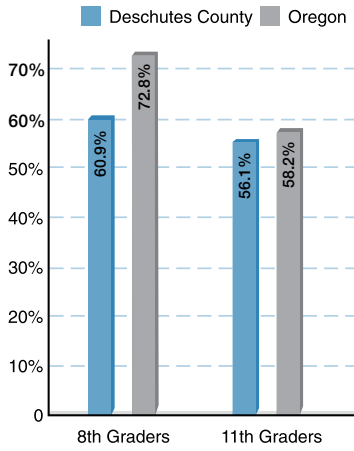
*In those aged 6 to 19 years, overweight or obesity is defined as at or above the sex- and age-specific 95th percentile of Body Mass Index (BMI) based on CDC Growth Charts.

Source: Oregon Health Teens Survey, 2005-2006; Centers for Disease Control and Prevention



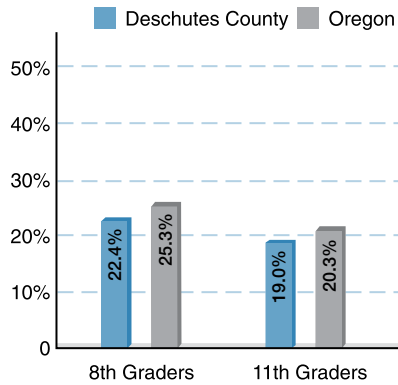
Nutrition and Physical Activity in Children

Physically Active Four or More Days During the Past Week*, 2005-2006



*For a total of at least 60 minutes per day
 Source: Oregon Health Teens Survey, 2005-2006

Consumption of 5 Fruits and Vegetables Daily, 2005-2006



Source: Oregon Health Teens Survey, 2005-2006

Public Health Defined

“Public health is what we, as a society, do collectively to assure the conditions in which people can be healthy.”

-Institute of Medicine

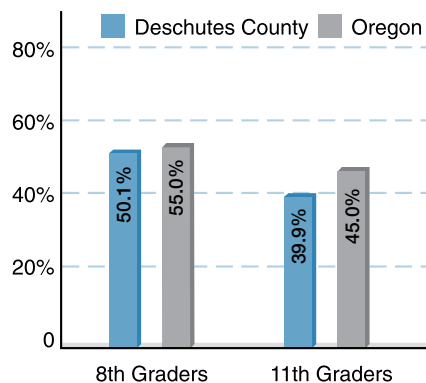
Regular physical activity and the consumption of at least five servings of fruits and vegetables per day has been shown to have a protective affect against certain cancers, a reduced risk of cardiovascular disease and high blood pressure, and is an effective strategy to prevent obesity. **Deschutes County eighth and eleventh graders fall short of state averages for both physical activity and daily consumption of fruits and vegetables.**



Screen Time

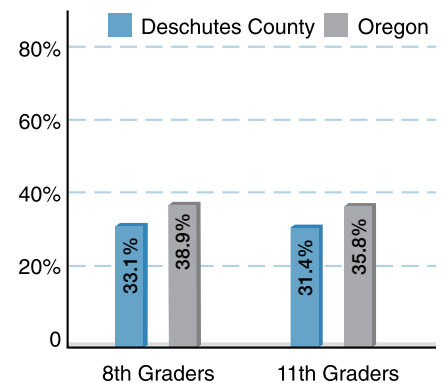
The amount of time spent utilizing a computer, television, video games, and text messaging has become known as “screen time.” Significant time spent utilizing these various types of media is thought to be a contributing factor to rising obesity trends throughout the country. According to a 2005 Kaiser Family Foundation report, children ages 8 to 18 spend more time (44.5 hours per week) in front of computer, television, and game screens than any other activity in their lives except sleeping.

Spend 2+ Hours Watching TV Daily* 2005-2006



*on an average school day
 Source: Oregon Health Teens Survey, 2005-2006

Spend 2+ Hours on Internet or Video Games Daily* 2005-2006



*on an average school day
 Source: Oregon Health Teens Survey, 2005-2006

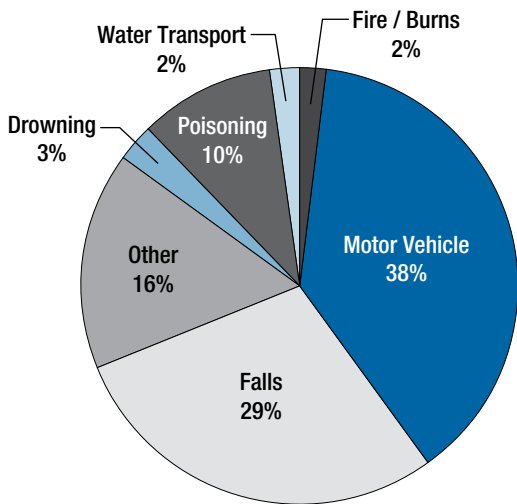
UNINTENTIONAL INJURY

Injuries, both violent and unintentional, are a significant public health issue. According to the Centers for Disease Control and Prevention, injuries claim more potential years of life lost prematurely before age 65 than any other cause of death. While injury is the fourth leading cause of death in the United States, it is **the leading cause of death for children and young adults** between 1 and 44 years of age. Extensive research has shown that injuries are similar to diseases in that injuries are not accidents, do not occur at random, and have identified risk and protective factors making them preventable.

For children in particular, risk occurs primarily because of environments where heavy neighborhood traffic makes outdoor play areas unsafe or where safety devices, such as bicycle helmets, car seats, or smoke detectors, are unaffordable or may seem less important than other necessities. By implementing proven interventions, such as child car seats, environmental measures to lessen traffic speed and volume in neighborhoods, bicycle helmets, and smoke detectors, injury deaths among children can be reduced significantly.

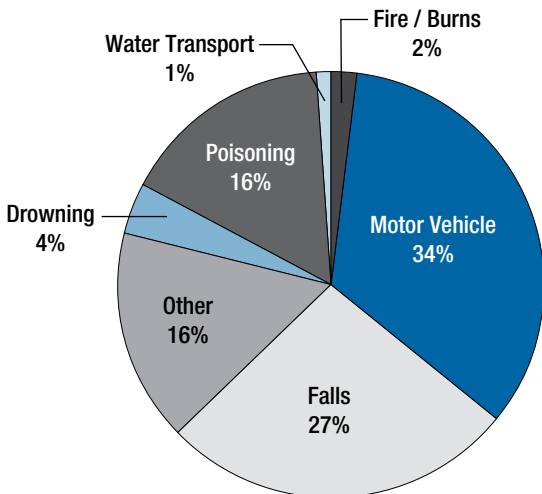
Sources: Centers for Disease Control and Prevention; Society for Public Health Education

Unintentional Injury Deaths
Deschutes County, 2004



Source: DHS/Center for Health Statistics

Unintentional Injury Deaths
Oregon, 2004



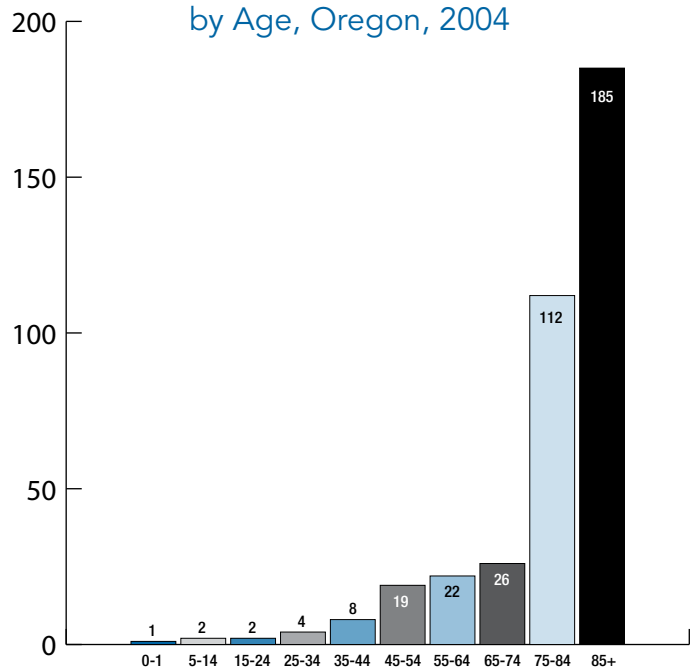
Source: DHS/Center for Health Statistics

	1999	2000	2001	2002	2003	2004	Total
Oregon	1,144	1,211	1,257	1,382	1,388	1,423	7,805
Deschutes County	39	45	42	39	56	58	279

Of the 279 unintentional injury deaths in Deschutes County, 133 were due to motor vehicle accidents (47.7%). Fifty-six were due to falls (20.1%).

Sources: DHS/Center for Health Statistics

Unintentional Fatal Falls
by Age, Oregon, 2004



The risk of fatal falls increases significantly with age. While the all-age death rate for Oregon is 10.63 per 100,000, the death rate for those 75 years and older is 129.58. Many falls can be prevented through modifications to the living environment, regular vision checks, and exercise.

Sources: DHS/Center for Health Statistics; Centers for Disease Control and Prevention

Domestic Violence

Intimate partner violence (IPV) is a public health problem that impacts individuals, families, and communities throughout Oregon. A survey conducted in 2001-2002 found that one in ten Oregon women age 20-55 experienced IPV (defined as physical and/or sexual assault by an intimate partner) in the five years preceding the survey, equaling more than 85,000 women. Applied to the local level, that would equal approximately 11,000 women in Deschutes County.

- The Central Oregon Battery and Rape Alliance (COBRA) answered 1,930 hotline calls from Deschutes County residents in 2005.
- COBRA provided shelter to 125 adults and 148 children in Deschutes County in 2005.

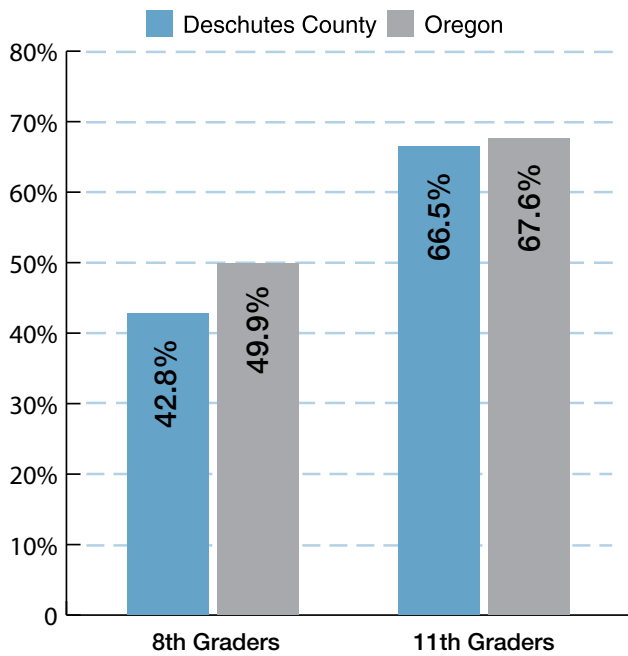
Source: DHS/Injury and Violence Prevention Program; Central Oregon Battery and Rape Alliance (COBRA)

All-Terrain Vehicle (ATV) Deaths and Injuries

- In the United States, between 1982-2003, there were 5,791 ATV-related deaths. Thirty-two percent of those deaths occurred among children under age 16.
- In Oregon, between 1999-2004, 18 children under age 18 died as a result of ATV-related injuries. The average age of death was 13.7 years. Only two of these children were wearing a helmet at the time of the incident.
- Since 1999, the number of hospital admissions among children in Oregon for major trauma due to ATV-related injuries has increased by 146.

Source: DHS/Office of Disease Prevention and Epidemiology, CD Summary, May 16, 2006

Rarely or Never Wore a Bike Helmet During Past 12 months*, 2005 - 2006



*Among those who rode a bicycle during that time

Source: DHS/Office of Disease Prevention and Epidemiology, CD Summary, May 16, 2006

Concussion in Teen Sports

Mild Traumatic Brain Injury (MTBI), commonly known as concussion, arises from blunt trauma or acceleration or deceleration forces to the head. While many youth - and even coaches or parents - may not consider the injury serious, the reality is that up to 15% of MTBI patients experience persistent disabling conditions. In addition, youth who have sustained an MTBI and **return to play before healing has occurred are three times more likely to sustain another MTBI**, which can cause longer-lasting damage, such as brain swelling, permanent brain damage, and (rarely) even death.

Oregon data: Using injury rates from a recent study conducted by the Centers of Disease Control and Prevention, the Oregon Injury Prevention Program estimated that at least 8,500 injuries, including **678 MTBIs**, were experienced by Oregon student athletes in the 2004-2005 school year.

Source: CD Summary, December 12, 2006, Vol. 55, No. 25; DHS/Injury Prevention Program; Centers for Disease Control and Prevention

Sport	MTBI as % of injuries	Estimated concussions	Rate / 1000 exposures
Girls soccer	15%	96	0.35
Girls basketball	12%	86	0.24
Boys basketball	3%	28	0.07
Football	10%	348	0.44
Boys soccer	10%	72	0.23
Wrestling	5%	34	0.12

Violent Injury Firearm Deaths, 1997 - 2004

	1997	1998	1999	2000	2001	2002	2003	2004
Oregon	428	441	391	378	360	376	393	383
Deschutes County	15	13	13	N/A*	16	21	12	17

*County level data not available for 2000

Source: DHS/Center for Health Statistics

Of the 107 firearm deaths in Deschutes County, 1997-2004 (excluding 1999), 91 were due to suicide (85%). In Oregon, of the 3,150 firearm deaths, 2,493 were due to suicide (79%).

SUBSTANCE ABUSE

Tobacco Adults

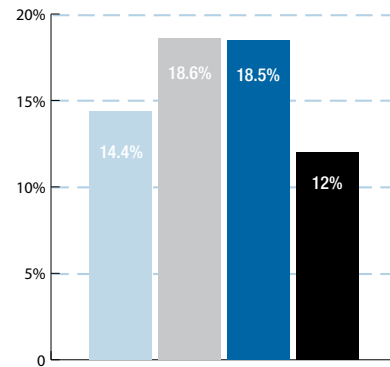
Tobacco use remains the leading preventable cause of death in the United States, causing nearly 440,000 deaths each year and resulting in an annual cost of more than \$75 billion in direct medical costs. More than 8.6 million people in the United States have at least one serious illness caused by smoking. Tobacco use is steadily declining in Deschutes County but still remains higher than both state and national objectives. Rates are especially high among County youth.

- In 2004, 22.6% of all deaths in Deschutes County were tobacco-related. Tobacco-related deaths are mainly due to three causes: cardiovascular disease, cancers, and respiratory disease.

Sources: DHS/Center for Health Statistics

Tobacco Use (Smoking), Adults, 2005

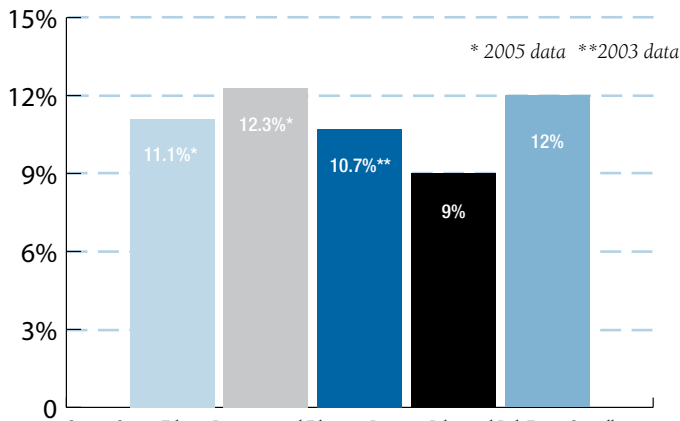
Deschutes County Oregon United States Healthy People 2010 Objective



Source: Oregon Tobacco Prevention and Education Program; Behavioral Risk Factor Surveillance System, 2005; Centers for Disease Control and Prevention

Pregnant Women Who Use Tobacco (Smoking)

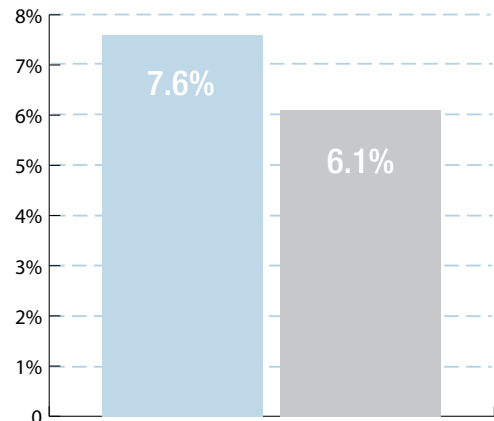
Deschutes County Oregon United States 2005 Oregon Benchmark Healthy People 2010 Objective



Source: Oregon Tobacco Prevention and Education Program; Behavioral Risk Factor Surveillance System, 2005; Centers for Disease Control and Prevention

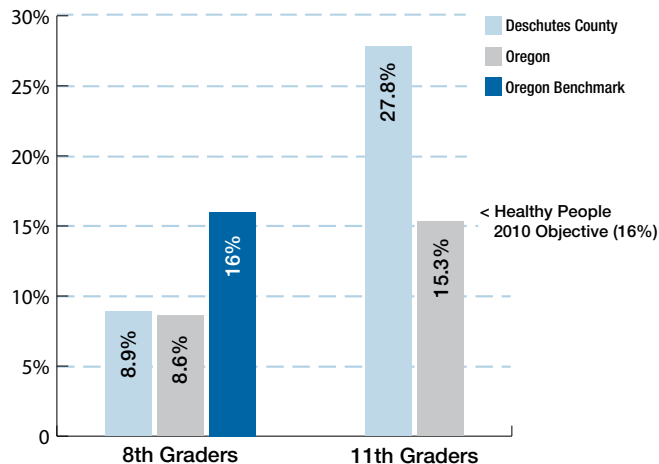
Smokeless Tobacco*, Adults, 2005

Deschutes County Oregon



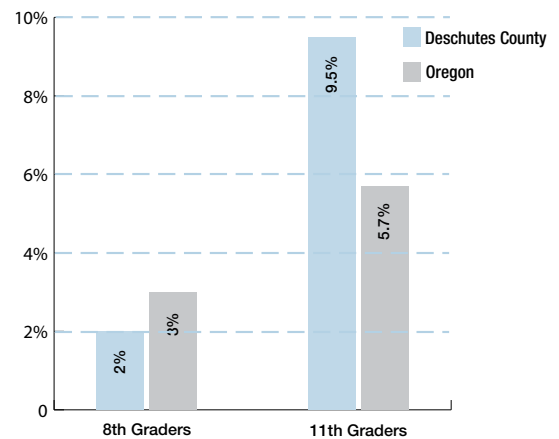
Source: Oregon Tobacco Prevention and Education Program

8th and 11th Graders who Smoked Cigarettes in the Past 30 Days, 2005-2006



Source: Oregon Healthy Teens Survey, 2005-2006; Centers for Disease Control and Prevention

8th and 11th Graders Who Used Smokeless Tobacco in the Past 30 Days, 2005-2006



Source: Oregon Healthy Teens Survey, 2005-2006

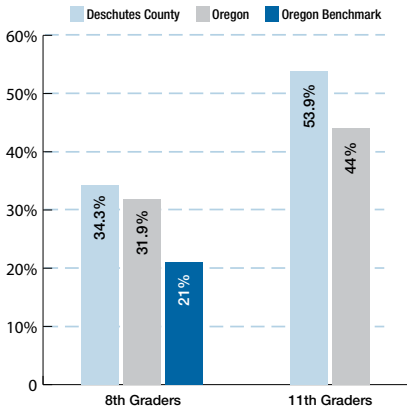
ALCOHOL AND ILLICIT DRUG USE

Alcohol is the most commonly used and abused drug among youth in the United States. Age at first use of alcohol is an important indicator of future consumption. Youth who use alcohol before the age of 15 are five times more likely to develop alcohol dependence as an adult.

These youth are also more likely to develop other drug dependency problems. Prevention and intervention can help to reduce risk factors and boost protective factors that guard against initiation of alcohol and drug use.

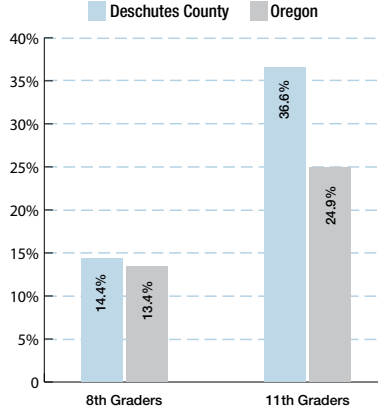
Source: Centers for Disease Control and Prevention

**8th and 11th Graders:
Use of Alcohol at Least Once
in the Past 30 Days, 2005-2006**



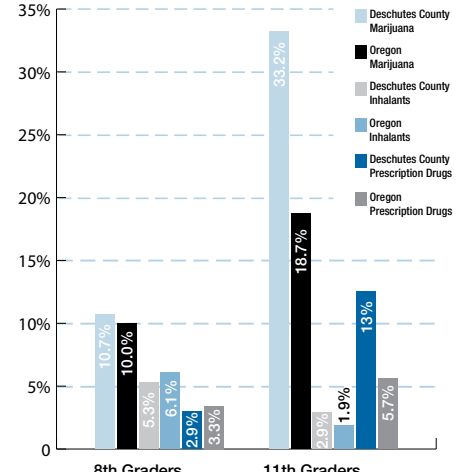
Source: Oregon Healthy Teens Survey, 2005-2006; Centers for Disease Control and Prevention

**8th and 11th Graders:
Binge Drinking*
in the Past 30 Days, 2005-2006**



* Five or more drinks of alcohol in a row
Source: Oregon Healthy Teens Survey, 2005-2006; Centers for Disease Control and Prevention

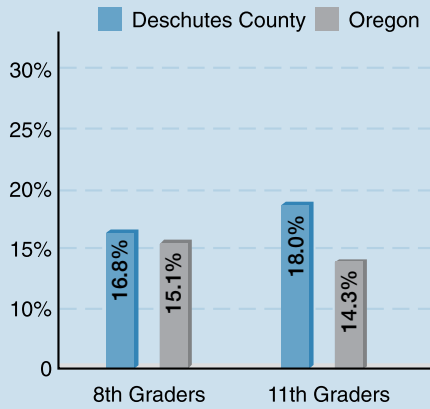
**8th and 11th Graders:
Use of Illicit Drugs within
the Past 30 Days, 2005-2006**



Source: Oregon Healthy Teens Survey, 2005-2006

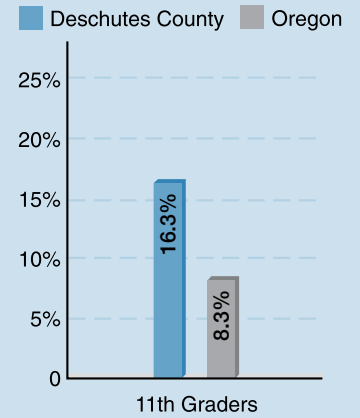
During the Past 30 Days, Rode With a Parent or Other Adult Driver Who Had Been Drinking, 2005-2006

Source: Oregon Healthy Teens Survey, 2003



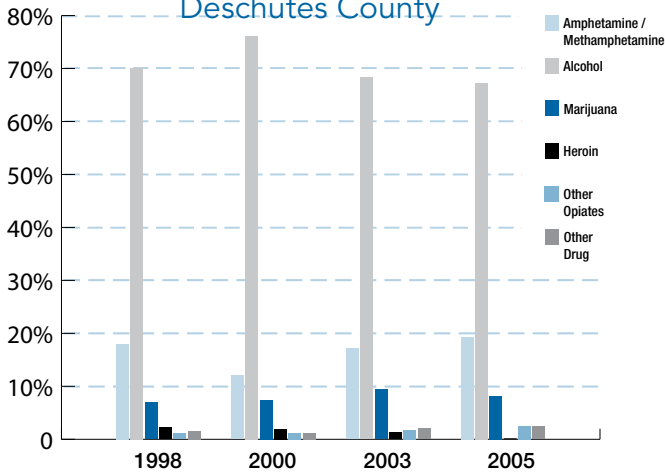
11th Graders Who Drank Alcohol and Drove at Least Once, 2005-2006

Source: Oregon Healthy Teens Survey, 2003



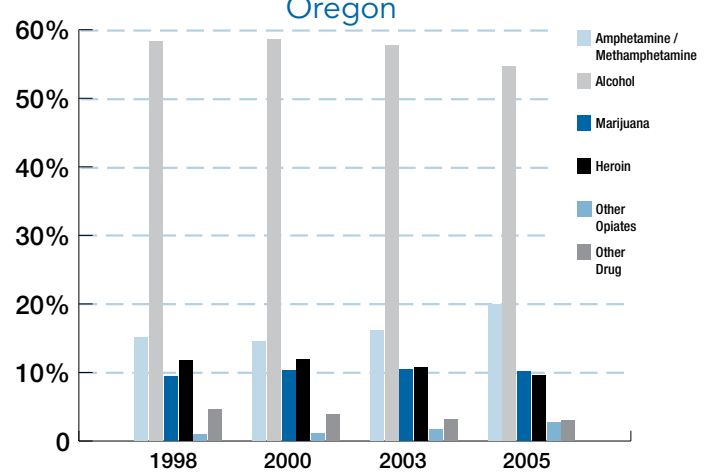
Treatment by Primary Substance Abused

Deschutes County



Source: DHS/Addictions and Mental Health Division

Oregon



Source: DHS/Addictions and Mental Health Division

METHAMPHETAMINE

Methamphetamine, or “meth”, is a highly addictive, synthetic stimulant drug that affects the central nervous system. The ingredients used to manufacture meth are highly toxic and include benzene, paint thinner, Drano, battery acid, ephedrine, white gas, starter fluid, and more. Chronic meth use can lead to psychotic behavior and debilitating health effects, such as extreme weight loss, the development of open sores on the face and arms, cardiovascular complications, and a severe decline in oral health. The manufacture of meth exposes humans, animals, and the environment to toxic and explosive chemicals.

Disease Transmission

Disease transmission among meth users is a very real possibility. In a July 2005 survey of Deschutes County Jail inmates, 60% of admitted meth users acknowledged injection as the primary route of exposure. Of the injection drug users, 35% reported that within the past six months they had used needles or other injection equipment that had been previously used by someone else. Because of this, injection drug users are vulnerable to a diverse range of infectious and communicable diseases, including HIV and hepatitis C, which can result in considerable morbidity and mortality. It can also result in the spread of these diseases to others in the community, including those who do not use drugs. Unfortunately, intensive treatment geared for meth addicts is limited in Central

Oregon. Users often face waits of up to two weeks for treatment, during which time many of them relapse.

- In 1999, Deschutes County was designated a “High-Intensity Drug Trafficking Area” (HIDTA), a federal label for areas within the United States that exhibit serious drug trafficking problems.
- In 2005, the Deschutes County Sheriff’s Office had 328 arrests due to meth possession – 14% of the total arrests for the year.

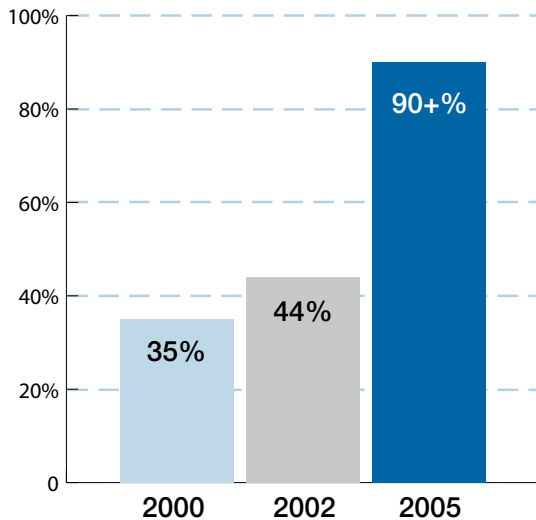
Meth Seizures

- From 7/1/04-6/30/05, the CODE Team* seized 13.8 pounds of meth.
- From 7/1/05-6/30/06, the CODE Team seized 12.9 pounds of meth.
- During just the first quarter of 06/07, the CODE Team seized over 8.5 pounds of meth.

**The Central Oregon Drug Enforcement team is a multi-agency narcotics investigation team comprised of detectives from the Bend Police Department, Deschutes County Sheriffs Department, Redmond Police Department, Prineville Police Department, Crook County Sheriffs Department, Jefferson County Sheriffs Department, Deschutes County District Attorneys Office, United States Drug Enforcement Administration, and the Oregon National Guard.*

Source: Central Oregon Drug Enforcement Team; Deschutes County Mental Health Department; Deschutes County Sheriffs Office; Deschutes County Health Department; Office of National Drug Control Policy; KIDS Center

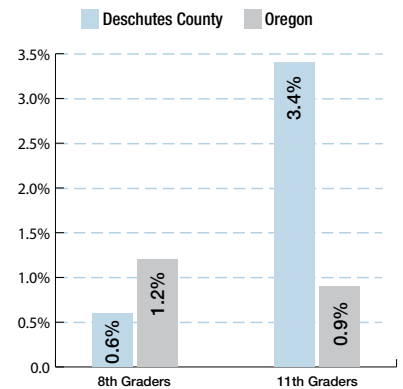
Purity* of Meth seized in Central Oregon



*The purity of meth directly relates to its addictiveness. The higher the purity, the more addictive the drug. Only super labs found in Mexico and California are able to produce meth of such high purity, which means that most meth in Central Oregon is now transported here, not manufactured here.

Source: Central Oregon Drug Enforcement (CODE) Team

8th & 11th Graders: Use of Methamphetamines within the Past 30 Days, 2005 - 2006



Source: Oregon Healthy Teens Survey, 2005-2006

Deschutes County Clients of the KIDS Center

In 2005, 25% of the caregivers that brought children to the KIDS Center for a child abuse evaluation self-reported that there was meth in the home environment. In 2006, 27% disclosed meth in the home. These numbers are thought to be an under-representation due to the reluctance in self-reporting meth use around children.

A December, 2006 point-in-time survey of KIDS Center therapists found that 61% of therapy clients have meth in their home environments. This figure is more likely an accurate representation of the problem given that therapists build trust with kids and their families over an extended period of time.

Source: KIDS Center

ENVIRONMENTAL HEALTH

Drinking Water

- All properly tested water from community water systems in Deschutes County currently meets federal drinking water standards.
- There were no waterborne disease outbreaks in Deschutes County throughout 2004-2005, however there were four E. coli/boil water alerts. All were taken care of and there were no reported human cases as a result.

Source: Deschutes County Environmental Health Division

Food Safety

Deschutes County has approximately 650 food service establishments. Each of these is inspected twice a year, matching the most per capita anywhere in the state. In addition, the summer season brings over 300 temporary restaurants that require inspection.

- Deschutes County Public and Environmental Health investigated over 100 food borne illness complaints in 2005.

Source: Deschutes County Environmental Health Division; Deschutes County Health Department

Hazardous Waste

- Currently there are 109 environmental cleanup sites throughout Deschutes County, as listed by the Oregon Department of Environmental Quality. To be included on the list, the sites have known or suspected hazardous substance contamination.
- There are currently no federal Superfund sites in Deschutes County.

Sources: Oregon Department of Environmental Quality, Environmental Cleanup Site Information Database, 12-04-2006; United States Environmental Protection Agency

Outdoor Air Quality

The 1990 Clean Air Act reduced emissions from industry to less than 15% of pollutants. Motor vehicles are now the primary source of air pollution in Oregon. Emissions from cars contribute to ground level ozone pollution (smog), especially on hot summer days. Other major causes of pollution are from wood stoves, gas-powered lawn mowers, motor boats, paints, solvents, aerosols, and outdoor burning. In 2005, Deschutes County had 346 days ranked at the highest level of the Air Quality Index (“good”) and 19 ranked as “moderate.”

- Deschutes County is in compliance with all federal air quality standards.

Source: Oregon Department of Environmental Quality, 2005 Oregon Air Quality Data Summaries

Solid Waste

Deschutes County is among the highest producing counties in Oregon for pounds of municipal solid waste landfilled or incinerated per capita. The two main contributors are construction waste resulting from rapid population growth and waste from the tourism-based economy.

- Deschutes County ranked 16th of Oregon counties in

the amount of solid waste “recovered” per capita in 2005. Recovery refers to solid waste that is recycled, composted, or used in energy recovery.

- Of the 62,523 tons of recovered waste in Deschutes County in 2005, 72% was recycled, 23% was composted, and 5% was burned for energy.

Pounds of Municipal Solid Waste Disposed Per Capita, 1992 - 2005

	1992	1994	1996	1998	2000	2002	2004	2005
Oregon	1,513	1,483	1,539	1,609	1,617	1,554	1,630	1,667
Deschutes County	1,720	2,155	2,070	1,884	1,904	2,049	2,237	2,240
Oregon Benchmark								1,575

Source: DHS/Environmental Toxicology Program; Deschutes County Health Department

Recreational Water and Blue-Green Algae

Most algae are harmless, but there are several species of blue-green algae that may produce harmful toxins. During warm weather periods, blue-green algae blooms may concentrate to hazardous levels. Advisories are issued when cell counts exceed certain limits or when potentially harmful toxin levels are found. Toxins in water may be absorbed by humans when swallowed and when inhaled as droplets or spray in the air, potentially causing harmful short-term and long-term health effects. Pets and other animals are also at risk. Since June 2004, health advisories have been issued at four bodies of water in Deschutes County because of significant blooms of blue-green algae: Lava Lake, Crane Prairie Reservoir, Paulina Lake, and Wickiup Reservoir.

Source: DHS/Environmental Toxicology Program; Deschutes County Health Department

Vector Borne Diseases: West Nile Virus

West Nile Virus (WNV) is transmitted to humans and animals through the bite of infected mosquitoes. The vast majority of those infected with the virus have no symptoms or have a mild fever and flu-like illness. In rare cases, the virus can cause encephalitis, an inflammation of the brain, or death. WNV was first detected in Oregon in August 2004 with the first human, horse, and bird cases diagnosed. Since then, cases have increased significantly in Oregon, resulting in one human death in 2006. There have been no human cases acquired in Deschutes County. The Deschutes County Health Department continues to conduct surveillance of WNV through the testing of mosquitoes and dead birds.

West Nile Virus, Human Cases, Oregon, 2005

2004 - 1
2005 - 8
2006 - 70*

*Includes 3 cases that were acquired out of state

Source: DHS/Office of Disease Prevention and Epidemiology, Communicable Disease Surveillance Report, 2005

WHY RECYCLE?

There are significant energy savings and greenhouse gas reductions made as a result of recovered waste. For example, making aluminum from old beverage containers uses 93% less energy than making aluminum from bauxite. Newsprint made from old newspapers requires 43% less energy to make than newsprint made from wood. Additionally, net greenhouse gas reduction associated with materials recycled, composted, and burned for energy in 2005 are estimated at 3.3 million metric tons of carbon dioxide equivalent. The Oregon Department of Environmental Quality estimates that number to be comparable to removing 710,000 average passenger cars from Oregon roads.

Source: State of Oregon Department of Environmental Quality

COMMUNICABLE DISEASE

Sexually Transmitted Infections (STIs)

The number of STIs reported and requiring clinical follow-up in Deschutes County has increased by 314% since 1998.

CHLAMYDIA

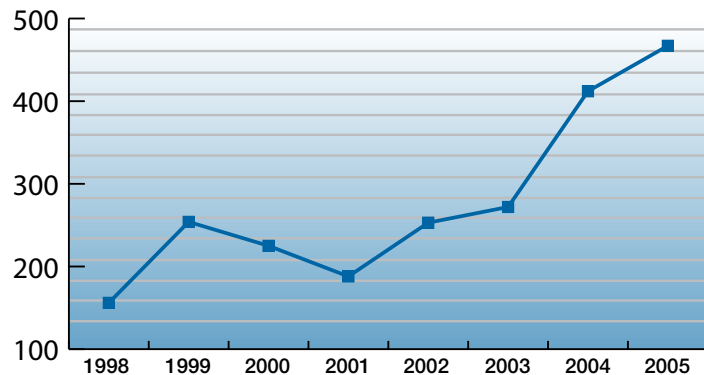
In 2006, Chlamydia accounted for over 97% of the STD diagnosis in Deschutes County. Chlamydia, a bacterial infection, is transmitted through oral, vaginal and anal sex. Although curable, it can have severe consequences including infertility and problems in newborns of infected mothers. Symptoms of Chlamydia are often mild or absent, which can delay diagnosis long enough to cause serious complications.

Deschutes County STI Cases, 1998-2006

	Chlamydia	Gonorrhea	Early Syphilis
1998	73	0	0
1999	145	7	0
2000	170	5	0
2001	207	11	1
2002	197	6	0
2003	177	3	1
2004	280	6	1
2005	314	8	1
2006	372	7	3

Communicable Disease Cases

Requiring Epidemiological Investigation, Excluding STIs



The number of communicable disease cases requiring in-depth epidemiological investigation in Deschutes County has increased by nearly 200% since 1998.

Source: Deschutes County Health Department

HIV/AIDS

Oregon instituted HIV reporting in October 2001, as part of a national effort to better track infection rates and to present a more accurate epidemiological picture of the problem in our state. Prior to HIV reporting, only diagnosed AIDS cases were reported to the State. Since HIV reporting began, Deschutes County has reported a total of 32 confirmed, HIV positive tests. While the numbers may seem small, it is important that they be understood in the appropriate context. They cannot be considered a true picture of HIV in this community for several reasons: HIV reporting began just five years ago, many people get tested for HIV outside of Deschutes County and then move here at a later date, and only about half of all persons in the United States report ever having been tested for HIV, meaning that there is a significant number of persons living with HIV who do not yet know it.

There are currently 55 HIV positive clients enrolled in the Ryan White Case Management Program with the Deschutes County Health Department. Case managers help determine eligibility for prescription drugs, health insurance, housing, disability, medical and dental care, and mental health counseling. It is anticipated that HIV caseloads will grow steadily over the next few years as more people move into the area and local opportunities for testing become increasingly available. Additionally, the implementation of named reporting of HIV infection will assist in accurately determining the severity of the epidemic and effectively slow its spread through enhanced partner notification. The Centers for Disease Control and Prevention recommends that everyone seriously consider being tested for HIV at least once, as there are estimated to be over 250,000 U.S. citizens with HIV who are not even aware they have the virus.

HIV/AIDS, Deschutes County and Oregon, 2000-2005

	Deschutes AIDS Cases	Deschutes HIV+ Cases	Oregon AIDS	Oregon HIV+
2000	4	N/A*	201	N/A*
2001	3	N/A*	253	N/A*
2002	5	16	262	716
2003	5	1	174	321
2004	3	7	208	288
2005	2	8	140	284

*HIV+ reporting began in October 2001

Source: DHS/Office of Disease Prevention and Epidemiology, Communicable Disease Surveillance Report, 2005

GIARDIASIS

Giardiasis is a diarrheal illness caused by the parasite, *Giardia Lamblia*. *Giardia* is one of the most common causes of waterborne disease (drinking and recreational) in humans in the United States. Symptoms generally begin 1-2 weeks after becoming infected and last 2-6 weeks.

Giardiasis Cases, 1998-2005

	Deschutes County	Oregon
1998	89	839
1999	102	896
2000	53	789
2001	34	514
2002	29	435
2003	21	402
2004	28	439
2005	11	419

Source: DHS/Office of Disease Prevention and Epidemiology; Deschutes County Communicable Disease Program

CAMPYLOBACTERIOSIS

Campylobacter is the most common bacterial cause of diarrhea in the United States. Most cases occur as single cases in the summer months and not as part of a large outbreak. Campylobacteriosis is a bacterial infection that affects the intestines and, on rare occasions, the bloodstream. *Campylobacter* is usually spread by eating or drinking contaminated food or water. It is sometimes spread through contact with infected people or animals. Symptoms generally appear 2-5 days after the contact is made. Most people will recover without any formal treatment.

Campylobacter, 1998-2005

	Deschutes County	Oregon
1998	89	839
1999	102	896
2000	53	789
2001	34	514
2002	29	435
2003	21	402
2004	28	439
2005	11	419

Source: DHS/Office of Disease Prevention and Epidemiology; Deschutes County Communicable Disease Program

OTHER COMMUNICABLE DISEASES

- Norwalk-like viruses are very contagious and can spread easily from person to person. Symptoms include nausea, vomiting, diarrhea, and some stomach cramping. In most people the illness is self-limiting with symptoms lasting for about 1 or 2 days, with no long-term health effects related to their illness. While not reportable in Oregon by law,

the Deschutes County Health Department investigates numerous outbreaks throughout the year.

- Pertussis, or whooping cough, is a highly contagious respiratory disease caused by a bacterium found in the mouth, nose and throat of an infected person. Pertussis poses significant risk for hospitalization and death of infants (less than 6 months). In 2004, Oregon experienced an upswing in the number of pertussis cases, reaching the highest level since 1959. More than 80% of all cases were located in Benton, Lane, Douglas, and Clackamas counties. Deschutes County had two confirmed cases.

- Hepatitis C is a liver disease caused by a virus spread through needle-sharing, occupational needlesticks, and in childbirth by infected mothers. While 80% of infected people have no symptoms, the infection can lead to serious liver disease. A new reporting process, begun in 2005, is anticipated to provide a more accurate picture of the burden in Deschutes County. There were 290 positive lab reports of Hepatitis C in 2005.

- Influenza. On average, 5%-20% of the American population gets the flu each year, resulting in 36,000 deaths nationwide. Deschutes County had 15 deaths due to influenza/pneumonia in 2004.

Source: DHS/Office of Disease Prevention and Epidemiology; Deschutes County Communicable Disease Program

PANDEMIC PLANNING

In cooperation with local and statewide partners, the Deschutes County Health Department conducted a pandemic exercise on November 1-2, 2006. The Health Department is continuously improving plans for preparedness by working with the Deschutes County Emergency Manager to coordinate response to events. Partners in that process include schools, health systems, and local business establishments.



DID YOU KNOW?

There is a new rapid HIV test that gives accurate results in just 20 minutes. Testing is available at several locations throughout Deschutes County.

DATA SOURCES

Oregon Healthy Teens Survey

Since 2000, the Youth Risk Behavior Survey and the Oregon Public School Drug Use Survey have been combined into a single annual survey, Oregon Healthy Teens. The OHT is Oregon's effort to monitor the health and well-being of adolescents through a comprehensive, school-based, anonymous and voluntary survey. OHT is conducted among 8th and 11th graders statewide.

<http://www.dhs.state.or.us/dhs/ph/chs/youthsurvey>

Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing random-digit dialed telephone survey of adults concerning health-related behaviors. The BRFSS was developed by the Centers for Disease Control and Prevention and is conducted in all states in the United States. Each year, 3,000-15,000 adult Oregonians are interviewed on questions related to health behavior risk factors such as seat belt use, diet, weight control, tobacco and alcohol use, physical exercise, preventive health screenings, and use of preventive and other health care services. The data are weighted to represent all adults aged 18 years and older. Each state may add questions to the CD survey. <http://www.cdc.gov/brfss>

Centers for Disease Control and Prevention

The Centers for Disease Control and Prevention (CDC) is one component of the federal Department of Health and Human Services (HHS). This serves as the principal agency in the United States government for protecting the health and safety of all Americans. The CDC's mission is to promote the health and quality of life by preventing and controlling disease, injury, and disability. <http://www.cdc.gov>

DHS/Center for Health Statistics

The Center for Health Statistics (CHS) is responsible for registering, certifying, amending, and issuing Oregon vital records. <http://www.dhs.state.or.us/dhs/ph/chs>

DHS/Office of Disease Prevention and Epidemiology

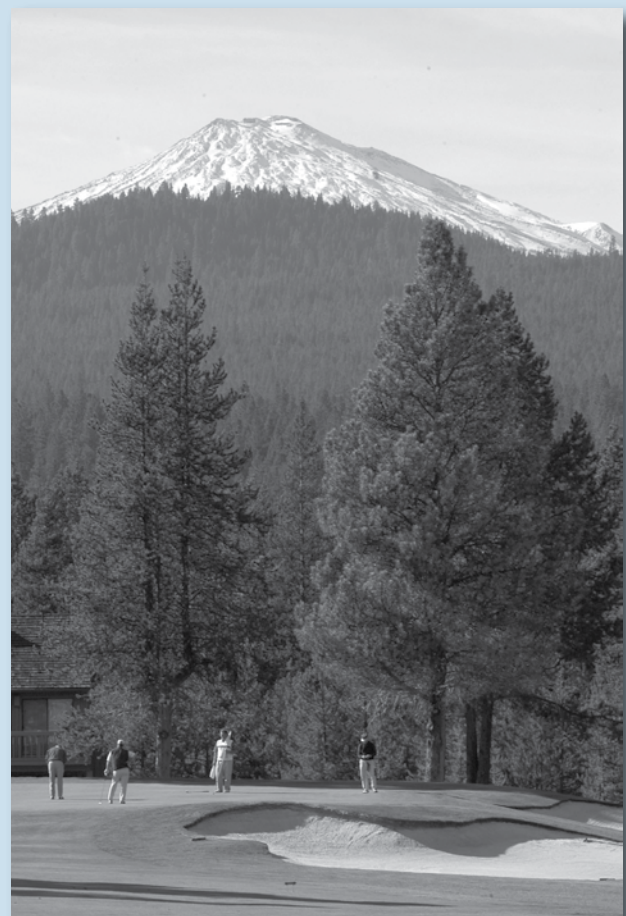
The Office of Disease Prevention and Epidemiology identifies, monitors and seeks to control the factors that threaten the health of Oregonians. The Office is comprised of the following programs: Injury Prevention and Epidemiology, HIV/STD/TB Program, Health Promotion and Chronic Disease Prevention, and Acute and Communicable Disease Program. <http://www.oregon.gov/DHS/ph/odpe>

National Center for Health Statistics

The National Center for Health Statistics (NCHS) is the Nation's principal health statistics agency. NCHS collects data from birth and death records, medical records, interview surveys, and through direct physical exams and laboratory testing to guide actions and policies with the aim of improving the health of residents of the United States. NCHS is a key element of the national public health infrastructure, providing important surveillance information that helps identify and address critical health problems. <http://www.cdc.gov/nchs/hus.htm>

Portland State University, Population Research Center

The Population Research Center began in 1956, initiated by the State of Oregon with the purpose to prepare annual population estimates for cities and counties in order to distribute state tax revenues. The original program was transferred in 1965 to Portland State University, where it has taken on additional duties including the Oregon State Data Center, the lead agency in the state for relationships with the U.S. Census Bureau. <http://www.pdx.edu/prc>



DESCHUTES COUNTY HEALTH REPORT



Services and Information



Clinic Services

Family planning
Sexually transmitted disease
Teen pregnancy prevention

Communicable Disease

Immunization, communicable disease epidemiology, HIV testing, counseling, case management, Emergency preparedness

Women, Infants and Children Program (WIC)

Nutrition counseling
Breastfeeding promotion and education
Maternity case management
Prenatal care, home visiting nurses

Maternal and Child Health Services

Maternity case management
Visiting nurses
Well child clinics
Prenatal care

Prevention and Education Programs

Tobacco prevention and education
Breast and cervical cancer program
HIV prevention and testing
Chronic Disease Prevention
Community Wellness

To download a copy of this report, visit: www.deschutes.org/healthreport

HEALTH DEPARTMENT CONTACT INFORMATION

Bend

Health and Human Services Building
2577 N.E. Courtney Drive
Bend, Oregon 97701
541-322-7400

Downtown Health Center

(Serving young adults through age 25)
1128 NW Harriman
Bend, Oregon 97701
541-322-7457

Redmond

Becky Johnson Center
412 S.W. 8th Street
Redmond, Oregon 97756
541-617-4775

La Pine (Thursdays only)

La Pine Community Campus
51605 Coach Rd.
La Pine, Oregon 97739
541-322-7400

Health Department Website

www.deschutes.org/health

Communicable Disease Reporting

541-322-7418

MISSION STATEMENT

The mission of Deschutes County Health Department is to promote and protect community health and safety through assessment, collaboration, policy development, education, prevention, and the delivery of compassionate care.

Public Health Director

Daniel Peddycord, BSN, MPA/HA

Medical Directors

Mary Norburg, M.D.
Stephen Knapp, M.D.
Richard Fawcett, M.D.

Public Health

Advisory Board Members

Chair: Michael Bonetto, Ph.D., MPH, MS

Vice-Chair: James Rizenthaler, M.D.

Secretary: Nancy Knoble, B.S.

Valle Nazar-Stewart, Ph.D.

Harold Kemple, DDS

Pete Mellinger, Ph.D.

Mary Jeanne Kuhar, M.D.

Aylett Wright, B.A.

Richard Miller, M.D.

Craig Bennett, M.D.

Nancy Ruel

Top Ten Public Health Achievements - U.S.

- Vaccination
- Motor-vehicle safety
- Safer workplaces
- Control of infectious diseases
- Decline in deaths from coronary heart disease and stroke
- Safer and healthier foods
- Healthier mothers and babies
- Access to family planning
- Fluoridation of drinking water
- Recognition of tobacco use as a health hazard

Source: *Morbidity and Mortality Weekly Report*; April 02, 1999; 48(12): 241-243