LOCATIONS

BEND
Human Services Building
2577 NE Courtney Drive
541-322-7400

Downtown Health Center
(Serving young adults through age 25)
1128 NW Harriman
541-322-7457

Ensworth Elementary School
School-Based Health Center
2150 NE Daggett Lane
541-693-2222

Community Support Services
Behavioral Health
1128 NW Harriman Street
541-330-4637

Seniors’ Mental Health Program
1130 NW Wall Street
541-385-1746

REDMOND
Becky Johnson Center
412 NW 8th Street
541-617-4775

Lynch Elementary School
School-Based Health Center
1314 SW Kalama
541-504-3589

LA PINE
La Pine Community Campus
(Limited hours)
51605 Coach Rd.
Clinic: 541-322-7400
School-Based Health Center: 541-536-0400

South County Services Center
Behavioral Health
51340 Highway 97
541-322-7500

DESCHUTES COUNTY
HEALTH SERVICES
Clinic Services
Communicable Disease
Women, Infant and Children Program (WIC)
Maternal and Child Health Services
Prevention and Education Programs
Child & Family Behavioral Health Program
Adult Behavioral Health Treatment
Seniors Mental Health
Developmental Disabilities

Health Services Director:
Scott Johnson, M.Ed.

Medical Directors:
Richard Fawcett, M.D.
Mary Norburg, M.D.
Stephen Knapp, M.D.
Marc Williams, M.D.

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

Behavioral Health
Addictions and Mental Health Advisory Board:
Chair: Dolores Ellis
Vice-Chair: Glenda Lantis
Developmental Disabilities Planning Committee:
Coordinator: Kathy Drew

24-hour Mental Health crisis services:
541-322-7500

Web Site:
www.deschutes.org/mentalhealth

Public Health
Public Health Advisory Board:
Chair: Aylett Wright B.A.
Vice-Chair: Mary Jeanne Kuhar, M.D.

Communicable Disease Reporting
541-322-7418

Web Site:
www.deschutes.org/health

Deschutes County Health Services 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 Services Department is pleased to present the Deschutes County Health Report, compiled in 2009, for 2010 release. The purpose of this report is to provide region-specific data that can be used by local government and community agencies, health care providers, school districts, and other interested community members and groups to help identify and better address the health needs of Deschutes County residents.

The health indicators examined in this report are used to represent trends, when possible, by tracking measurable changes over time. To the extent that they are available, we also provide established national and statewide goals to gauge our progress. Our concept of health is broad, as indicated by the inclusion of local data regarding issues such as poverty, homelessness, domestic violence, and unemployment.

Areas where Deschutes County meets state or national health objectives or has improved significantly over the past several years:

- Child immunization rates - dramatic improvement in the up-to-date rate for two-year-olds
- Breastfeeding initiation rate - exceptional among Women, Infants, and Children programs across the country at 93%
- Air quality - ranked at the highest level at the Air Quality Index 96% of the time in 2008
- The establishment of successful harm reduction programs for people who use injection drugs
- First trimester prenatal care - continuing to rank among the highest in Oregon
- Smoking rate among eleventh graders dropped from a reported 27% to 19.1%
- 78% of women in need of publicly funded contraceptive services were served compared to the state average of 58.5%

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

- Indicators of decreasing economic vitality - soaring unemployment rates, housing foreclosures, and bankruptcy rates
- More Deschutes County families in need of assistance for day-to-day needs, such as housing, food, and health care expenses
- Lack of fluoridated community water supplies
- Rising rates of Central Oregonians without health care coverage
- Cancer rates that are statistically significantly higher than the statewide average - malignant melanoma, prostate, thyroid, and the “all cancer” rate
- STDs sexually transmitted infections that have risen dramatically over the past ten years
- Pregnant women who smoke
- Alcohol, tobacco and prescription drug use above state average among adolescents
- Suicide death and attempts continue to be a high burden of disease
- Large number of people with little to no access to adequate food, shelter and healthcare

The information provided in this report will motivate local government, community agencies, and citizens to collaboratively address the growing health needs across our county.

**EMERGENCY PREPAREDNESS**

Deschutes County Health Services Department works closely with Deschutes County Emergency Management, first responders, local hospitals, and other community organizations to mitigate, prepare for, and respond to emergencies or disasters. Emergency scenarios include natural disasters, hazardous materials accidents, pandemic influenza, bio-terrorism, and other hazards. Preparedness education and outreach efforts are focused on the general public, vulnerable populations, schools, and the business and healthcare communities.

In April 2009, the Deschutes County Public Health Reserve Corps (DCPRHC) was established in order to support the public health emergency preparedness program. The goal of the DCPRHC is to have a group of volunteer health professionals and support staff who are pre-trained, pre-verified, and ready to contribute their time and expertise for preparedness and response in public health emergencies. The Corps can also support public health activities in times of non-crisis by staffing immunization clinics, participating in preparedness exercises, and engaging in other preparedness activities at community events. To learn more about the DCPRHC, contact Holly Nyquist at 541-322-7440.

**DATA SOURCES**

**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. NCHS is a key element of our national public health infrastructure, providing important surveillance information that helps identify and address critical health problems.

**ORANGE COUNTY HEALTH REPORT 2009**

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In April 2009, cases of a new influenza A illness—originally called swine flu—appeared in Mexico and quickly spread to the United States and other countries. On June 11, 2009, the World Health Organization declared that a global pandemic of H1N1 was underway, indicating widespread illness throughout the world. The United States continues to report the largest number of novel H1N1 cases of any country worldwide. Most people who have become ill have recovered without requiring medical treatment. Nineteen counties throughout Oregon have confirmed cases of H1N1 illness, with the first confirmed case in Deschutes County reported in mid-June. The true number of H1N1 illnesses is thought to be significantly higher than the number of “confirmed” cases, as those with mild illness generally do not seek medical care. Public health staff report cases have remained low throughout the summer and possibly increased in the fall.

Novel influenza A (H1N1) is a respiratory illness related to seasonal influenza, but not usually seen in people. Similar to other respiratory diseases, it is spread from person to person through coughing and sneezing. The symptoms of H1N1 flu in people are similar to the symptoms of regular human flu and include fever, cough, sore throat, body aches, headache, chills, and fatigue. Some people have reported diarrhea and vomiting. H1N1 may also cause a greater risk of influenza-related complications to people with underlying medical conditions.

Preventing a flu illness - What you can do to stay healthy:

• Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
• If you don’t have a tissue, cover your cough with your shirt sleeve, not your hands.
• Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand cleaners are also effective. Try to avoid close contact with sick people.
• Get plenty of sleep, be physically active, manage your stress, drink plenty of fluids, and eat nutritious food.

OTHER COMMUNICABLE DISEASES

• Norwalk-like Viruses: In 2008, Deschutes County initiated 11 outbreak investigations of Noro-like illness, involving several dozen individual cases. 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 one or two days, with no long-term health effects related to their illness.
• West Nile virus 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. West Nile virus was first detected in Oregon in August 2004, with the first human, equine, and avian cases diagnosed. Since then, cases have increased significantly in Oregon, resulting in two human deaths. There have been no human cases acquired in Deschutes County. Deschutes County Health Services continues to conduct surveillance of West Nile virus through testing of mosquitoes and dead birds.
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ECONOMY

In December 2008, the National Bureau of Economic Research declared that the United States had been in recession since December 2007. Since then, unemployment rates have soared, as have housing foreclosures, bankruptcy rates, and other leading indicators of decreasing economic vitality. As a result, more Deschutes County families find themselves in need of assistance in order to meet day-to-day needs such as housing, food, and health care expenses.

Unemployment*, 1990-2009

*Data is from January of each year and is seasonally adjusted to reflect jobs that do not continue throughout the full calendar year.

Source: Oregon Employment Department

Median Household Income

Living Oregon HIV/AIDS Cases as of 12/31/2008

Source: DHS/Offerice of Disease Prevention and Epidemiology, HIV/STD/ TB Program

Personal Income, 2008

Source: U.S. Census, American Community Survey

Contraception

The Ryan White HIV Case Management Program in Deschutes County has had an average of 55 HIV positive clients participating in 2008-09. In addition to case management services, Deschutes County Health Services provides STI testing and treatment, HIV counseling and testing, and outreach that includes mobile van HIV testing services, free HIV testing day annually, and World AIDS Day activities each December. Wellness classes with a support component are offered twice a year to HIV positive persons and their partners.

HIV/AIDS Cases by Year of First Diagnosis, 1990-2007

Note: There have been an alarming six new cases of HIV/AIDS diagnosed in Deschutes County (as of 10/30/09). Half of these had progressed to full blown AIDS when first tested and diagnosed.

Source: DHS/Offerice of Disease Prevention and Epidemiology, “Epidemiologic Profile of HIV/AIDS in Oregon, 2007”

GIARDIASIS

Giardiasis is an illness caused by the parasite, Giardia lamblia. Infection occurs after swallowing polluted water, eating uncooked contaminated food or by touching and putting contaminated objects in the mouth. Children in day care and their close contacts are at the greatest risk, as are hikers, campers, and others who drink untreated water from potentially contaminated sources. Travelers to disease endemic areas should heed travel warnings on water quality. Infection often occurs without symptoms however, the most common symptoms of giardiasis are diarrhea, stomach cramps, and nausea. Over the past several years, the incidence of giardiasis in Oregon has consistently ranked higher than the national average. Giardiasis can be prevented with proper hand washing and by avoiding exposure to fecally contaminated water.

Giardiasis Cases, 1999-2008

Source: DHS/Offerice of Disease Prevention and Epidemiology, Selected Reportable Communicable Disease Summary, 2007

Chronic Hepatitis C is a liver disease caused by the Hepatitis C virus. It is spread by direct contact with human blood with most infections caused by the sharing of needles during injection drug use. The virus can also be transmitted through sexual contact and from infected mothers to their infants at birth. There is no vaccine for Hepatitis C.

*Note: Based on the graph above, it looks as though local Hepatitis C cases have been declining in recent years. That is not the case. Hepatitis C became a reportable disease in 2005, which led to an initial surge in testing and reporting.

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, although outbreaks can occur. Children under four years of age have the highest rates of illness. Campylobacter is usually spread by eating or drinking contaminated food or water. It is sometimes spread through contact with infected people or animals. Campylobacteriosis can be

Chronic Hepatitis C - Yearly Incidence

Communicable Disease Summary, 2007
Sexually Transmitted Infections (STIs)

The number of sexually transmitted infections (STIs) reported and requiring clinical follow-up in Deschutes County has increased by 64% since 1996, while the population has only grown approximately 70% during that time. Follow-up for each case involves communication with the person testing positive for an STI in order to ensure treatment for the infection acquired and to determine the number of additional individuals who may have been exposed through sexual contact. Communication is then made with each of the potential contacts to notify them of their exposure and determine whether treatment may be necessary.

Deschutes County STI Cases, 1998-2008:

Chlamydia

Chlamydia is a common sexually transmitted infection (STI) caused by a bacterial infection. It is transmitted through oral, vaginal and anal sex. In 2008, as in previous years, Chlamydia accounted for the vast majority of STI diagnoses in Deschutes County – over 97%. Cases of Chlamydia have increased dramatically over the past ten years. Health officials are concerned with the rise in STIs as having one STI increases the number of additional individuals who may have been exposed to ensure treatment for the infection acquired and to determine risk factors related to each infection.

Since 2006, public health outreach in Deschutes County involves a risk reduction program known as Needle Exchange. The Needle Exchange Program operates from the health services department and includes a mobile unit staffed by public health workers trained to provide drug treatment referrals, HIV testing, and risk reduction education to persons who inject drugs. The number of people accessing needle exchange services has increased dramatically since 2006. Since 2006, public health outreach in Deschutes County involves a risk reduction program known as Needle Exchange. The Needle Exchange Program operates from the health services department and includes a mobile unit staffed by public health workers trained to provide drug treatment referrals, HIV testing, and risk reduction education to persons who inject drugs. The number of people accessing needle exchange services has increased dramatically since 2006.

Communicable Disease Cases Requiring Epidemiological Investigation, Excluding STIs

HIV/AIDS

There has been a total of 33 new HIV positive cases identified in Deschutes County since reporting began in October 2001. At the end of 2008, 74 Deschutes County residents were reported to be living with HIV/AIDS. This is considered a substantial underestimate for the County for several reasons: Many people are diagnosed elsewhere and then relocate to Central Oregon to live; HIV reporting began only relatively recently (October 2001); only half of all persons in the nation are ever tested for HIV; and estimates from the federal government show that one in five persons living with HIV in the United States are infected and do not know it.

Several indirect indicators of risk for HIV infection exist in Deschutes County. Since the two major routes of HIV transmission are unprotected sex and the sharing of needles by persons who inject drugs, behavioral factors related to sex and drug use can serve as indirect indicators of possible true HIV rates in the County. For example, high rates of sexually transmitted infections (STIs) among young adults and teens serve as a marker of unprotected sex. Case counts of STIs have skyrocketed in Deschutes County in the past ten years, leaving public health officials concerned that the true incidence of HIV may be much higher than currently understood.

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Individuals with no health insurance

The percentage of uninsured Central Oregonians shown above equals approximately 37,489 people. Of those, 8,912 are children under the age of 18 years. The lack of health insurance has serious consequences. Because individuals without health insurance do not access routine care, preventive care, health screenings, or even acute care at the same rates as the insured, they face increased severity of illness and possibly premature death. Nationally, studies find worse outcomes for the uninsured, who have chronic conditions such as diabetes, hypertension, HIV infection, end-stage renal disease, as well as for many cancers and traumatic conditions such as car accidents. Individuals without health insurance often do not receive timely screenings that would catch cancers at an early stage or receive monitoring and treatment to control chronic conditions. Consequently, individuals without health insurance receive medical care that is often ‘too little and too late,’ which makes health care much more expensive, a cost typically borne largely by the public.

The Medicare population in Deschutes County is expected to triple between 2010-2040. There is serious reason to be concerned about where these people will receive care.

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Oregon Health Plan Enrollees

As of November 2008, there were 13,531 Oregon Health Plan clients in Deschutes County. Of those, 776 individuals 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; however, there has recently been an increase in local clinical capacity to serve Medicaid eligible clients at local federally-qualified health care centers.
POVERTY, HUNGER, HOMELESSNESS

HUNGER

During the 2005-2007 period, Oregon had 12.4% of its population (458,000 people) living in households that struggled with hunger or were “food insecure.” After being named the “Hungriest State in the Nation” in 2000, anti-hunger advocates joined forces to bring attention to the issue and implemented a five-year action plan to reduce hunger in Oregon. Success followed: In 2005, Oregon dropped from #1 to #17, a statistically significant improvement. However, rising joblessness and rising food and fuel costs have meant more families are struggling to meet their food needs. The result was a plunge back up to a 93 ranking for “very low food security.”

Source: Oregon Hunger Relief Taskforce

Food Bank Programs – Monthly Average for Individuals Receiving Food, 2000-2009

The amount of food accessed through local emergency food pantries has been steadily climbing over the past decade. While a portion of that can be attributed to a rise in population, most is likely due to rising unemployment, the recession, and rising food and fuel costs. The graph above represents the average number of people struggling to meet their food needs. The primary self-reported reason for homelessness is economic hardship. In 2009, 54% reported that they were homeless because they could not afford rent. Only 14% had access to some form of shelter by a local housing provider. The remaining 86% were staying with family or friends, living outdoors or in cars, or staying in motel rooms. The number of emergency or transitional housing beds available throughout the region is extremely limited based on the need: there are approximately 217 emergency beds, 166 transitional housing beds, and 40 overflow beds, which includes vouchers for short-term motel stays.

Source: NeighborImpact

HOMELESSNESS

The dramatic increase in students living without a fixed, regular, and adequate nighttime residence can likely be attributed to the recent foreclosure crisis and recession. The numbers are expected to continue rising and 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: Oregon Department of Education

Every year at the end of January, the Homeless Leadership Coalition, with the help of numerous volunteers, conducts a count of homeless residents living in Deschutes, Jefferson and Crook counties. This count is a part of a national effort to identify the number of people struggling to find appropriate and adequate housing. This one-day count will provide the most up-to-date information about the number of individuals in Central Oregon who are struggling to find adequate housing. Through this data, local agencies and programs are able to qualify for increased funding, better target support services, and develop comprehensive plans to address poverty and homelessness in Central Oregon. The data from the past four years has shown an alarming increase in the number of people, adults and children, who are homeless or in transitional housing.

Source: Oregon Department of Education

ENVIRONMENTAL HEALTH

Drinking Water

In Deschutes County, 168 public water systems serve a total population of 131,384. From July 1, 2008 to June 30, 2009:

- Three systems did not meet federal EPA standards at some time. All three were returned to compliance.
- There were a total of 39 water quality alerts, all of which have been resolved.

Source: Deschutes County Environmental Health Division

Food Safety

In 2008, Deschutes County Environmental Health inspected 640 food service establishments for sanitation and cleanliness. The inspections were also used to provide education for preventing food borne illness and to raise awareness on the importance of hand washing and hygiene, time and temperature control for potentially hazardous foods, and cross-contamination. The Deschutes County Environmental Health Division also investigated over 150 food borne illness complaints in 2008.

Source: Deschutes County Environmental Health Division

Outdoor Air Quality

Motor vehicle emissions are the primary source of air pollution in Deschutes County. Emissions from cars contribute to ground level ozone pollution (smog), especially on hot summer days. Other major causes of pollution are wood stoves, gas-powered lawn mowers, motor boats, paint, solvents, aerosols, outdoor burning, and forest fires.

In 2008, Deschutes County had 350 days ranked at the highest level of the Air Quality Index (“good”) and 15 ranked as “moderate.”

Source: Oregon Department of Environmental Quality

Solid Waste

*Recovery refers to that which is recycled, composted, or used in energy recovery.

Source: Oregon Department of Environmental Quality

The pie charts above illustrate the breakdown of recovered waste for Deschutes County and the state of Oregon as a whole. It is expected that 2008 data will show Deschutes County mirroring the state much more closely, as much of our waste and yard debris has been going to energy recovery since 2007. This has been the result of increased interest in, and subsequent economic incentives for, renewable energy.

Source: Oregon Department of Environmental Quality
Methamphetamine (Meth)
Although there has been a significant decline in the number of meth lab seizures due to restrictions on the availability of pseudoephedrine, meth continues to be widely abused and trafficked throughout the Central Oregon region. Large-scale drug trafficking organizations, primarily from Mexico and California, typically distribute meth throughout the region after transporting it up the I-5 and Highway 97 corridors from the south. Serious meth-related crime is a regular problem reflected by identity theft, abused and neglected children, and other serious person and property crimes.

In 2008, the CODE team had 112 arrests due to meth possession and seized approximately five pounds of meth.

Sources: Central Oregon Drug Enforcement Team; Deschutes County Sheriff's Office

Use of Methamphetamines

Prescription Drug Abuse
Recent data indicate prescription drug abuse is the fastest growing type of substance abuse in Oregon. Treatment admissions for non-prescribed use of prescription drugs increased by 332% in Oregon from 1997-2006. Internet sites advertising and selling controlled prescription drugs increased by 70% between 2006 and 2007. Eighty-four % of sites selling these drugs did not require a prescription. Oregon is fourth among states leading the country in non-prescribed use of prescription drugs.

Surveys conducted by the Deschutes County Health Services Needle Exchange Program show that the spread of blood borne illness, including HIV and Hepatitis C, is reduced among Deschutes County residents in addiction treatment. According to the National Institute of Mental Health, the risk of infection through sharing needles decreases 70% with each additional year of abstinence. The program has also increased awareness of disease prevention education and referrals.

Drug Treatment
Deschutes County Residents in Addiction Treatment, 2005-2008

Mental illnesses and conditions that disrupt a person's thinking, feeling, and ability to relate to others, and daily functions. Serious mental illnesses include major depression, schizophrenia, bipolar disorder, obsessive compulsive disorder, panic disorder, post traumatic stress disorder, and borderline personality disorder. Most people diagnosed with a serious mental illness can experience relief from their symptoms by actively participating in an individual treatment plan.

Without treatment, the consequences of mental illness for the individual and society are alarming. Untreated mental illness is thought to cost more than $100 billion each year in the United States. Along with the economic cost to society is the effect on the individual: unnecessary disability, unemployment, substance abuse, homelessness, incarceration, and suicide are all significantly more common among those with serious mental illness.

Furthermore, a seven-year mortality data analysis commissioned by the Oregon Addiction and Mental Health Division showed that Oregonians who receive public substance abuse and/or mental health treatment have an average age of death that is significantly lower than the general population. This translates into between 16 and 35 years of potential life lost, depending on the type of treatment received.

Adults in Good Mental Health,* 2004-2007
*Response to survey question asking if person had no poor mental health in past 30 days.

Adults in Good Mental Health, 2004-2007

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Adults in Good Mental Health, 2004-2007
*Response to survey question asking if person had no poor mental health in past 30 days.
Adults 45 Years and Older Reporting Frequent Mental Distress, 2004-2007

Oregon Health Plan Clients Served by Deschutes County Behavioral Health, 2005-2008

Years of Potential Life Lost (YPLL)

Years of Potential Life Lost (YPLL) is the amount of time deceased individuals would have lived to a predetermined expected life, if not for dying prematurely. Individuals with both mental health issues and substance abuse lost an average of 34.5 years of potential life. Those with substance abuse issues alone lost 29.3 YPLL, while persons with mental health problems lose approximately four YPLL more than the general population.

Remaining Gap in Mental Health Services

There are barriers within Oregon’s mental health care system that make access a challenge for many. Clients within Oregon’s Medicaid program are typically able to find reasonable care when needed; however, those who are not Medicaid-eligible often face challenges in accessing treatment that is not focused solely on crisis services. There are an estimated 27,609 persons with mental health problems lose approximately four YPLL more than the general population.

ALCOHOL & 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.

Youth Use of Alcohol At Least Once in Past 30 Days, 2007-2008

Binge Drinking at Past 30 Days, 2007-2008

*Eligibility is from November of each year
Source: Oregon Division of Medical Assistance Programs; Deschutes County Behavioral Health Division

Use of Illicit Drugs Within the Past 30 Days, 2007-2008

ILlicit Drugs

Illicit drug use in Oregon exceeds the national per capita average, with higher rates of methamphetamine, marijuana, and illicit use of prescription drugs. A 2008 study by ECONorthwest puts total direct economic costs from illicit drug abuse at $2.7 billion. Arrests for drug violations increased 44% from 2003-2007, and 27% of the Oregon corrections population is in the system due primarily to drug offenses, nearly three times higher than any other primary offense category.

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 and harmfully impact other areas of the country. Data from the HIDTA program and the Central Oregon Drug Enforcement (CODE)* team indicate continued high rates of methamphetamine abuse and growing rates of marijuana and prescription drug abuse. Heroin use among younger populations also seems to be on the rise.

*Inhalants are products inhaled to get a high, such as paint, glue and many other household products.
### Tobacco & Other Substance Abuse

**Tobacco - Adults**

Tobacco use remains the leading preventable cause of death in Oregon, contributing to approximately 7,000 deaths each year. The economic costs of tobacco use are equally staggering in that it is estimated to be responsible for over $2 billion in Oregon. Tobacco use is steadily declining in Deschutes County but still remains higher than both state and national objectives.

*Updated data not available*

### Tobacco-Related Deaths, Deschutes County, 2006

In 2006, 21% of all deaths in Deschutes County were tobacco-related. Tobacco-related deaths are mainly due to three causes: cardiovascular disease, cancer, and respiratory disease.

*Statistically significantly lower than the state rate*

### Every Year in Deschutes County...***

- 230 people die from tobacco use (23% of local deaths)
- 4,359 people suffer from a serious illness caused by tobacco use
- Over $35 million is spent on medical care for tobacco-related illness
- Over $537 million is lost from decreased productivity due to tobacco-related disability and death

*Statistically significantly lower than the state rate*

### Tobacco Linked Deaths, Deschutes County, 2006

While the prevalence of adult smokers in Deschutes County appears to be decreasing, we still have a great deal of work to be done to prevent the vast degree of death and disability caused by smoking cigarettes.

*Statistically significantly lower than the state rate*

### Pregnant Women Who Use Tobacco

While smoking during pregnancy causes the passage of substances such as nicotine, hydrogen cyanide, and carbon monoxide from the placenta into the fetal blood supply. These substances restrict growth, development, and oxygenation of the growing infant’s access to oxygen and can lead to adverse pregnancy and birth outcomes such as low birthweight, preterm delivery, intrauterine growth retardation, and infant mortality. Maternal smoking has also shown to increase the risk of respiratory infections and inhibit allergic immune responses in infants.

*2005 data*

### True Cost of a Pack of Cigarettes

While the prevalence of adult smokers in Deschutes County appears to be decreasing, we still have a great deal of work to be done to prevent the vast degree of death and disability caused by smoking cigarettes.

*Updated data not available*

### Tobacco & Other Substance Abuse

**Tobacco Use (Smoking), Adults, 2004-2007**

*Statistically significant difference compared to Oregon*

*Data from 2007 only*
Of the 424 unintentional injury deaths listed above, 192 were due to motor vehicle accidents (45.3%). 102 were due to falls (24.1%). Source: DHS/Oregon Center for Health Statistics

The risk of fatal falls increases significantly with age. While the 2005 all-age death rate for falls in Oregon was 10.50 per 100,000, the death rate for those 75-84 years was 73.8. For those 85 and over, the death rate jumps up to 274.2 per 100,000. Many falls can be prevented through modifications to the living environment, regular vision checks, and exercise.

Source: DHS/Oregon Center for Health Statistics

Fall hospitalization rate per 100,000 for adults 75 years and older in Oregon, Hospital Discharge Database, 2002-2006

Source: Healthy Aging in Oregon Counties, 2009

Unintentional falls are the leading cause of injuries, fatal and nonfatal, for adults over the age of 65 years and are associated with the loss of independence and functional decline. In 2006, the estimated cost of hospitalization due to falls in Deschutes County was over four million dollars.

Source: Healthy Aging in Oregon Counties, 2009

Rarely or Never Wore a Bike Helmet During Past 12 Months*, 2007-2008

*Among those who rode a bicycle during that time

Source: Oregon Health Teens Survey, 2007-2008


Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (BRFSS)

THE HEALTH CONSEQUENCES OF OBESITY

- Coronary heart disease
- Type 2 diabetes
- Cancer (prostate, breast, and colon)
- High blood pressure
- High cholesterol
- Stroke
- Liver and gallbladder disease
- Sleep apnea and respiratory problems
- Osteoarthritis
- Gynaecological problems (infertility, abnormal menses)

Source: Centers for Disease Control and Prevention
CHILDHOOD CHRONIC DISEASE

ASHTMA

Diagnosis of Asthma, 2007-2008

Childhood asthma is a disorder with genetic predispositions and a strong allergic component. Approximately 75 to 80% 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, 2007-2008; American Lung Association

INJURY

Injury is the third leading cause of death in Oregon and claims more potential years of life lost in Oregon than cancer, heart disease, or stroke. For persons under 44 years of age, injury is the leading cause of death in Oregon. By implementing proven interventions, such as child car seats, seat belts, environmental measures to lessen traffic speed and volume in neighborhoods, bicycle helmets, and smoke detectors, injury deaths among children can be reduced significantly.

Source: DHS/Oregon Injury Prevention and Epidemiology Program

UNINTENTIONAL INJURY

More than 2,100 Oregonians die each year as the result of injury, and more than 1,400 of these are the result of unintentional injuries.

*U.S. data is from 2008

Source: DHS/Oregon Center for Health Statistics, Behavioral Risk Factor Surveillance System (BRFSS); Centers for Disease Control and Prevention, BRFSS

DIABETES

Diabetes has physical, psychological, and social consequences for children. Children and adolescents are developing obesity-related diseases, such as Type 2 diabetes, that were once seen only in adults. Obese children are more likely to have risk factors for cardiovascular disease, including high blood pressure, high blood pressure, and abnormal glucose tolerance. One study of 5- to 17-year-olds found that 70% of obese children had at least one risk factor for cardiovascular disease and 39% of obese children had at least two risk factors.

Source: Centers for Disease Control and Prevention, “Obesity: Halting the Epidemic by Making Health Easier, 2009”

NUTRITION AND PHYSICAL ACTIVITY

Chronic diseases are heavily impacted by poor nutrition and lack of physical activity. Inactivity and poor food choices contribute significantly to the development of obesity, high blood pressure, heart disease, cancer, and diabetes, and are leading causes of disease and death among Deschutes County residents.

*Healthy People 2010 Objective: 5%.

Source: Oregon Healthy Teens Survey, 2007-2008

CONSEQUENCES OF OBESITY IN CHILDREN AND ADOLESCENTS

Obesity has physical, psychological, and social consequences for children. Children who are overweight or obese are developing obesity-related diseases, such as Type 2 diabetes, that were once seen only in adults. Obese children are more likely to have risk factors for cardiovascular disease, including high blood pressure, high blood pressure, and abnormal glucose tolerance. One study of 5- to 17-year-olds found that 70% of obese children had at least one risk factor for cardiovascular disease and 39% of obese children had at least two risk factors.

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For more information on nutrition needs go to: www.mypyramid.gov

For more information on physical activity recommendations go to: www.cdc.gov/physicalactivity/everyone/guidelines/index.html

Are You Getting Enough?

PHYSICAL ACTIVITY

Adults:

1) At least 150 minutes of moderate intensity aerobic activity (equivalent to brisk walking) every week

2) Muscle strengthening on two or more days that works all major muscle groups

Children and Adolescents:

1) At least 60 minutes every day. This activity should be age appropriate and include a mix of aerobic and muscle and bone strengthening activities.

For more information on physical activity recommendations go to: www.cdc.gov/physicalactivity/everyone/guidelines/index.html

NUTRITION

How many fruits and vegetables did you eat yesterday? Can you eat more today? To get a healthy variety, think color. Eating fruits and vegetables of different colors gives you a wide range of valuable nutrients.

Nutrition needs vary based on gender, age, body size and physical activity level. A good rule of thumb is to make sure that you are eating lots of fruits and vegetables, whole grains, and low fat protein sources such as meat and beans while making sure to limit excessive amounts of sugars and saturated or trans fats.

For more information on nutrition needs go to: www.mypyramid.gov
Arthritis is a disease that can be chronic and life threatening. It causes stiffness, tiredness, and pain. Many places as possible can often control asthma. In 2007, the total cost of asthma hospitalization in Oregon was estimated at more than $28 million.

Asthma is a lung disease that can be chronic and life threatening. It causes shortness of breath, coughing, and wheezing. Asthma symptoms occur when one is exposed to a trigger such as tobacco smoke, mold, pollen, animal fur, and other irritating particles in the air. There is no cure for asthma, but it can be managed effectively with quality medical care and good patient self-management. Limiting exposure to asthma or allergy triggers from as many places as possible can often control asthma. In 2007, the total cost of asthma hospitalization in Oregon was estimated at more than $28 million.

Help for those with chronic health conditions!

Living Well with Chronic Conditions
Living Well with Chronic Conditions is a six-week workshop that provides tools for living a healthy life with ongoing health conditions, including diabetes, arthritis, asthma, heart disease, and any other condition that requires ongoing care.

Through weekly sessions, the workshop provides support for continuing normal daily activities and dealing with the many challenges that chronic conditions may bring about. The workshop typically costs $10 and is available in communities throughout Central Oregon.

To register or obtain more information, please call 541-322-7430 or visit: www.livingwell.co.org

Economic Burden of Chronic Disease
Over 75% of medical costs in the state of Oregon can be attributed to chronic disease. Hospital inpatient payments for treating three chronic conditions - diabetes, congestive heart failure and coronary heart disease - have increased over 20% from 2005-2007. If there is sustained growth in the number of Oregonians who have chronic diseases but do not have adequate access to disease management and primary care services, spending for expensive inpatient care will only continue to drive health care spending.

Treatment of chronic disease is just part of the costs incurred. A tremendous burden is also felt on businesses and affects competitiveness. Individuals with chronic conditions can be absent more or have decreased effectiveness while at work. With almost 40% of adult Oregonians reporting at least one chronic condition, productivity likely suffers as a result. Many simple and inexpensive changes can be made in the workplace to create an environment that embraces and encourages healthy eating and physical activity, thereby boosting morale and productivity as a result.

In Oregon, all children are required to have certain immunizations in order to attend school or childcare. Parents who have an objection to vaccines have the option of signing a "religious exemption" to some or all of the vaccines required. In signing such an exemption, those parents accept the authority of the local public health agency to exclude their child from school and/or childcare if a case of a disease for which they are not protected should occur.

Religious exemptions have been on the rise in recent years, with Deschutes County rates growing to alarming levels. Deschutes County’s exemption rate is significantly higher than the statewide average and continues to rank among the highest in Oregon. This is concerning for public health officials because as the pool of unvaccinated children grows, the greater the susceptibility of all community members to disease. Babies who are too young to have received their primary series of immunizations are at a particularly high risk, as are those members of the community - children and adults - who have medical conditions that preclude them from vaccinations.

Pockets of Under-Immunized Children
While most of the schools in Deschutes County have fairly low exemption rates, there are pockets of schools with extremely high rates, which consequently drives up our overall rate. It is this clustering of exemptions at specific schools within the county that has the greatest public health implications. Exemptions are at increased risk of acquiring and transmitting disease. When there are pockets of underimmunized youth in a community, especially when those children congregate in crowded areas like schools, the potential for disease spread is significantly magnified.

Persuitis Booster Shot - Adult Vaccine Helps Protect Babies
Persuitis, also known as whooping cough, is a highly contagious respiratory disease. It can cause rib fractures through severe coughing and can result in hospitalization and death. Infants are at the highest risk, having greater rates of hospitalization and complications from pertussis than older patients. Of the 100 nationwide deaths from pertussis between 2000-2004, 76 occurred in infants age one month or younger. Because the first dose of pertussis-containing vaccine (DTP) isn’t given until two months of age, those under two months, and those older babies whose parents elect to forgo vaccination - are the most vulnerable to infection. Adolescents and adults can spread the disease to infants.

In recent years, four Oregon babies have died from pertussis. In the first few months of 2009, two Deschutes County infants were hospitalized with complications from the disease. It is crucial that adults and older children who spend time with infants be vaccinated with a booster dose to keep from spreading the disease to unimmunized or incompletely immunized babies. Adults who work around infants, such as health care workers and child care providers, should also receive the DTaP vaccine. Persons 10 years and older can receive DTaP vaccine in place of a routine booster dose of tetanus (Td) vaccine.
**ORAL HEALTH**

Dental decay remains a serious public health problem for Deschutes County residents. While tooth decay is largely preventable, it remains the most common chronic disease of children aged 5 to 17 years—five times more common than asthma—and is also a serious concern for many adults. Untreated decay can lead to infection, pain, and the loss of teeth. Emerging evidence points to a strong link between oral diseases and many medical conditions and poor health outcomes.

Source: DHS/Oral Health Program

**DENTAL VISITS**

**FLUORIDATED WATER**

Fluoridation of community water supplies 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: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System

**DIABETES**

Type 2 diabetes, formerly known as adult-onset diabetes, is being diagnosed more frequently in children and adolescents. The Centers for Disease Control and Prevention estimates that one in three U.S. children born since 2000 will develop diabetes in their lifetime as rates of overweight and obesity continue to rise among youth.

Source: Centers for Disease Control and Prevention

**NUTRITION AND PHYSICAL ACTIVITY**

Consumption of 5 Fruits and Vegetables Daily, 2007-2008

Source: Oregon Health Teens Survey, 2007-2008

Physically Active four or more days during the past week*, 2007-2008

Source: Oregon Health Teens Survey, 2007-2008

* For a total of at least 60 minutes per day

**INFANT MORTALITY**

Rate of Infant Mortality* Per 1,000 Live Births, 1995-2006

Source: DHS/Oregon Center for Health Statistics; CDC/ National Center for Health Statistics

*Infant mortality is the death of a child prior to its first birthday

The Deschutes County infant mortality rate has been consistently lower than the national rate until just recently. The cause of the rise in rate from 2005 to 2006 is unknown thus far. 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.

Source: DHS/Oregon Center for Health Statistics; CDC/ National Center for Health Statistics

**BREASTFEEDING**

Breastfeeding Initiation, 2008

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

Oregon ranks third in the nation for breastfeeding initiation at 89%. The Deschutes County initiation rate through the Women, Infant, and Children program (WIC) is even higher than the statewide average at 93%. Both the County and State rate far surpass the Healthy People 2010 objective of 75% breastfeeding initiation. 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 infections, allergies, colds, and illnesses. These babies are also less likely to develop chronic conditions including obesity and diabetes later in life.

State Ranking of Breastfeeding Rates, 2008

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

- Percent Ever Breastfed: Oregon ranks 3rd
- Percent Breastfeeding at 6 Months: Oregon ranks 1st
- Percent Breastfeeding at 12 Months: Oregon ranks 1st
- Percent Exclusively Breastfeeding at 3 months: Oregon ranks 2nd
- Percent Exclusively Breastfeeding at 6 months: Oregon ranks 2nd
ADEOLSCeNT SuICIde ATTemPTS

Suicide is the second leading cause of death among 15-24-year-old Oregonians. The frequency of reported suicide attempts is higher among girls compared to boys. In 2007, 74% of all reported attempts were among girls. A similar proportion of girls compared to boys is noted in past years. Although girls are more likely than boys to attempt suicide, boys are more likely to use more lethal means in their attempts. In 2006, the suicide death rate among males 15-24 years of age was 6 times higher than females in the same age group—a trend that generally continues throughout the life course among males. The suicide attempt data below does not reflect the true magnitude of suicide attempts by Oregon youth, since the AdoLeSCeNT SuICIde ATTemPTS

Oregon Adolescent Suicide Attempts*, 1990-2007

Sexual Intercourse With Two or More Partners, 2005-2006

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

CHILD ABUSE AND NEGLECT

Child maltreatment includes all types of abuse and neglect that occur among children under the age of 18. There are four common types of abuse: physical, emotional, sexual, and neglect. Child maltreatment has a negative effect on health in that abused children often suffer physical injuries, stress that can disrupt early brain development, and an increased risk of future problems with alcoholism, depression, drug abuse, eating disorders, obesity, smoking, sexual promiscuity, suicide, and certain chronic diseases.

A 2005 study reported that 14 percent of U.S. children experienced some form of child maltreatment. In terms of sexual abuse, one in four girls and one in seven boys will be the victim of some type of sexual abuse or assault before the age of 18.

DOMESTIC VIOLENCE

Intimate partner violence (IPV) impacts individuals, families, and communities throughout Central Oregon. A survey conducted in 2001-2002 found that one in ten Oregon women age 20-55 experienced IPV as defined by physical and/or sexual assault by an intimate partner. In the five years preceding the survey—more than 85,000 women were victims of IPV. Applied to the local level, that would equal approximately 10,262 women in Central Oregon.

KIDS CENTER

KIDS Center serves approximately 700 children per year in the Tri-County area who need evaluation and treatment for sexual abuse, physical and emotional abuse, and neglect. Within the past year, the Center has seen an increase in kids seen as a result of Karly’s Law, a new Oregon law enacted to protect children who may have been physically abused. An additional 100 kids were seen as a result of this law, designed to ensure that children with suspicious physical injuries are seen by a medical professional with clinical expertise in the recognition and treatment of child abuse.

While KIDS Center serves victims of all types of abuse, historically the vast majority of care given at the Center has been for child sexual abuse. To combat this threat in our community, KIDS Center is spearheading a revolutionary sexual abuse prevention training and outreach program in Central Oregon. This national research-based program equips KIDS Center with the tools to enable adults to prevent, recognize, and react responsibly to child sexual abuse. It is designed for every 10 adults trained in the program, 10 children are better protected. To find out more, call the KIDS Center Prevention Program at 541-383-5958.
### ADOLESCENT SUICIDE ATTEMPTS

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### Number of Suicide Attempts, Deschutes County Youth Under 18 Years, 2007

- **Suicide Attempts**:
  - **Detected Suicide**: 277
  - **Not Detected Suicide**: 1,494
  - **Total**: 1,771

### Suicidal Intent

- **Number of Intent**: 228
- **Number Undecided**: 37
- **Number of Undetected**: 1,494

### Suicide Attempts in the Past 12 Months, 2007-2008

- **Suicide Attempts**:
  - **Detected Suicide**: 277
  - **Not Detected Suicide**: 1,494
  - **Total**: 1,771

### Suicide Attempts by Gender

- **Males**: 93
- **Females**: 1,778

### Suicide Attempts by Age

- **15-17 Years**: 887
- **18 Years and Older**: 884

### Specific Demographics

- **Gender**: Males 1,421 (85.5%), Females 246 (14.5%)
- **Race/Ethnicity**: White, 1,470 (85.6%)
- **Twelve Months**: 2007-2008, 2,224
- **Year**: 2007-2008

### Adolescent Suicide Attempts, 1990-2007

- **Suicide Attempts**: 2,266
- **Attempted Suicide**: 1,771
- **Detected Suicide**: 277
- **Not Detected Suicide**: 1,494

### Factors Associated with Suicide

- **Relationship Problems**: 1,494
- **Depression**: 1,494
- **Alcohol Use**: 1,494
- **Drug Use**: 1,494

### Intentional Physical Harm by an Adult

- **Suicide Attempts**:
  - **Detected Suicide**: 277
  - **Not Detected Suicide**: 1,494
  - **Total**: 1,771

- **Males**: 93
- **Females**: 1,778

- **Race/Ethnicity**: White, 1,470 (85.6%)
- **12 Months**: 2007-2008, 2,224
- **Year**: 2007-2008

### Youth Suicide Attempts

- **Suicide Attempts**: 2,266
- **Attempted Suicide**: 1,771
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The Center provides a wide range of services to children and families, including:

- **Crisis Services**: 1,494 people
- **Protective Services**: 1,494 people
- **Medical Services**: 1,494 people

### Child Abuse and Neglect

Child maltreatment includes all types of abuse and neglect that occur among children under the age of 18. There are four common types of abuse—physical, emotional, sexual, and neglect. Child maltreatment has a negative effect on health in that abused children often suffer physical injuries, stress that can disrupt early brain development, and an increased risk of future problems with alcoholism, depression, drug abuse, eating disorders, obesity, smoking, sexual promiscuity, suicide, and certain chronic diseases. A 2005 study reported that 14 percent of U.S. children experienced some form of child maltreatment. In terms of sexual abuse, one in four girls and one in seven boys will be the victim of some type of sexual abuse or assault before the age of 18.

### Child Sexual Abuse

Sexual abuse is one of the most serious forms of maltreatment that a child can experience. It's estimated that for every 1 adult trained in this training and outreach program in Central Oregon, this national child sexual abuse. To combat this threat in our community, KIDS Center is spearheading a revolutionary sexual abuse prevention training and outreach program in Central Oregon. This national research-based program, titled to help educators, adults to prevent, recognize, and react responsibly to child sexual abuse, is designed for every KIDS Center serves approximately 700 children per year in the Tri-County area who need evaluation and treatment for sexual abuse, physical and emotional abuse, and neglect. Within the past year, the Center has seen an increase in kids seen as a result of Karly’s Law, a new Oregon law enacted to protect children who may have been physically abused. An additional 100 kids were seen as a result of the law, designed to ensure that children with suspicious physical injuries are seen by a medical professional with clinical expertise in the recognition and treatment of child abuse.

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### Study on IPV

A study was conducted to understand the prevalence and impact of intimate partner violence (IPV) in central Oregon. The study surveyed 1,494 people and found that:

- **277 women and children were protected, fed, clothed, and lodged for 3,113 days.**

### Domestic Violence

Intimate partner violence (IPV) impacts individuals, families, and communities throughout Central Oregon. A survey conducted in 2001-2002 found that one in ten Oregon women age 20-55 experienced IPV is defined as physical and/or sexual assault by an intimate partner. In the five years preceding the survey—more than 85,000 women were victims of IPV. Applied to the local level, that would equal approximately 10,262 women in Central Oregon.

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ADOLESCENT WEIGHT CONCERNS

Trying to Lose Weight, 2007-2008

Source: Oregon Healthy Teens Survey, 2007-2008

ORAL HEALTH

Dental decay remains a serious public health problem for Deschutes County residents. While tooth decay is largely preventable, it remains the most common chronic disease of children aged 5 to 17 years—five times more common than asthma—and is also a serious concern for many adults. Untreated decay can lead to infection, pain, and the loss of teeth. Emerging evidence points to a strong link between oral diseases and many medical conditions and poor health outcomes.

Source: DHS/Oral Health Program

DENTAL VISITS

No Dental Visit Within Past 12 Months, 8th Graders, 2005-2008

Source: Oregon Health Teens Survey, 2005-2008

DIABETES

Type 2 diabetes, formerly known as adult onset diabetes, is being diagnosed more frequently in children and adolescents. The Centers for Disease Control and Prevention estimates that one in five children and adolescents will develop diabetes in their lifetime as rates of overweight and obesity continue to rise among youth.

Source: Centers for Disease Control and Prevention

NUTRITION AND PHYSICAL ACTIVITY

Consumption of 5 Fruits and Vegetables Daily, 2007-2008

Source: Oregon Health Teens Survey, 2007-2008

Physically Active four or more days during the past week*, 2007-2008

Source: Oregon Health Teens Survey, 2007-2008

FLUORIDATED WATER

Fluoridation of community water supplies 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

MATERNAL, CHILD, and ADOLESCENT HEALTH

LOW BIRTHWEIGHT

Low Birthweight Rate of Low Birthweight* Infants Per 1000, 1995-2007

Source: Oregon Healthy Teens Survey, 2007-2008

*Low birthweight is defined as under 2500 grams

3. N/A is not available

Deschutes County has made some progress toward the Healthy People 2010 objective of 50 low birthweight infants per 1,000 births. A newborn’s weight at birth is closely linked to its risk of early death and long-term morbidity. Low birthweight infants who survive are at increased risk for health problems ranging from neurodevelopmental disabilities to respiratory disorders.

Source: DHS/Oregon Center for Health Statistics; CDC National Center for Health Statistics

Infant Mortality

Rate of Infant Mortality* Per 1,000 Live Births, 1995-2006

Source: DHSS/Oregon Center for Health Statistics; CDC National Center for Health Statistics

*Infant mortality is the death of a child prior to its first birthday

The Deschutes County infant mortality rate has been consistently lower than the national rate until just recently. The cause of the rise in rate from 2005 to 2006 is unknown thus far. Factors that affect 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.

Source: DHS/Oregon Center for Health Statistics; CDC National Center for Health Statistics

BREASTFEEDING

Breastfeeding Initiation, 2008

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

Oregon ranks third in the nation for breastfeeding initiation at 89%. The Deschutes County initiation rate through the Women, Infant, and Children program (WIC) is even higher than the statewide average at 93%. Both the County and State rate far surpass the Healthy People 2010 objective of 75% breastfeeding initiation. 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 infections, allergies, colds, and illnesses. These babies are also less likely to develop chronic conditions including obesity and diabetes later in life.

State Ranking of Breastfeeding Rates, 2008

• Percent Ever Breastfed: Oregon ranks 3rd
• Percent Breastfeeding at 6 Months: Oregon ranks 1st
• Percent Breastfeeding at 12 Months: Oregon ranks 1st
• Percent Exclusively Breastfeeding at 3 months: Oregon ranks 2nd
• Percent Exclusively Breastfeeding at 6 months: Oregon ranks 2nd

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

Arthritis is an umbrella term used to describe over 100 different types of rheumatic diseases and conditions that affect joints, the tissue surrounding the joints, and other connective tissue. Certain rheumatic conditions can also involve the immune system and various organs of the body. Arthritis is the leading cause of disability in the United States.

While 27% of Oregonians have been diagnosed with arthritis, it is not just a condition that affects the elderly. Nearly 65% of those affected are under the age of 65. Susceptibility to arthritis is affected by some non-modifiable risk factors, such as age, genetics, and gender. However, there are several modifiable risk factors that individuals can influence: overweight and obesity, joint injuries, certain types of infections, and occupations that involve repetitive knee bending.

Help for those with chronic health conditions!

LIVING WELL WITH CHRONIC CONDITIONS

Living Well with Chronic Conditions is a six-week workshop that provides tools for living a healthy life with ongoing health conditions, including diabetes, arthritis, asthma, heart disease, and any other condition that requires ongoing care.

Through weekly sessions, the workshop provides support for continuing normal daily activities and dealing with the many challenges that chronic conditions may bring about. The workshop typically costs $10 and is available in communities throughout Central Oregon.

To register or obtain more information, please call 541-322-7430 or visit: www.livingwellco.org

Economic Burden of Chronic Disease

Over 75% of medical costs in the state of Oregon can be attributed to chronic disease. Hospital inpatient payments for treating three chronic conditions - diabetes, congestive heart failure and coronary heart disease - have increased over 20% from 2005-2007. If there is sustained growth in the number of Oregonians who have chronic diseases but do not have adequate access to disease management and primary care services, spending for expen- sive care will only continue to drive health care spending.

Treatment of chronic disease is just part of the costs incurred. A tremendous burden is also felt on businesses and affects competi- tiveness. Individuals with chronic conditions can be absent more or have decreased effectiveness while at work. With almost 40% of adult Oregonians reporting at least one chronic condition, productivity likely suffers as a result. Many simple and inexpensive changes can be made in the workplace to create an environment and culture that embraces and encourages healthy eating and physical activity, thereby boosting morale and productivity as a result.

Arthritis

Arthritis Prevalence, Adults 2004-2007

*U.S. data is from 2007 Source: DHHS/Oregon Center for Healthy Statistics, Behavioral Risk Factor Surveillance System (BRFSS); Centers for Disease Control and Prevention, BRFSS

Arthritis is a chronic disease that can be chronic and life threatening. It causes stiffness of breath, coughing, and wheezing. Asthma symptoms occur when one is exposed to a trigger such as tobacco smoke, mildew, pollen, animal fur, and other irritating particles in the air. There is no cure for asthma, but it can be managed effec- tively with quality medical care and good patient self-manage- ment. Limiting exposure to asthma or allergy triggers can be as simple as possible or can often control asthma. In 2007, the total cost of asthma hospitalization in Oregon was estimated at more than $28 million.

*U.S. data is from 2008 Source: DHHS/Oregon Asthma Program

Asthma

Asthma Prevalence, Adults 2004-2007

Asthma is a lung disease that can be chronic and life threatening. It causes shortness of breath, coughing, and wheezing. Asthma symptoms occur when one is exposed to a trigger such as tobacco smoke, mildew, pollen, animal fur, and other irritating particles in the air. There is no cure for asthma, but it can be managed effec- tively with quality medical care and good patient self-manage- ment. Limiting exposure to asthma or allergy triggers can be as simple as possible or can often control asthma. In 2007, the total cost of asthma hospitalization in Oregon was estimated at more than $28 million.

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IMMUNIZATIONS

Percentage of Two-Year-Olds Fully Covered With Recommended Vaccines, 2008

The up-to-date rate for Deschutes County two-year-olds improved dramatically in 2007. Reasons for the drastic increase include multiple factors, including a large increase in the amount of local vaccine data reported to the statewide immunization registry and a change by some clinical practices to provide doses closer to the recommended intervals.

Population-based immunization rates are calculated to reflect the percentage of children considered “up to date” on their immu- nizations 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 Rec- ommended Schedule. The vaccines included prevent ten dis- eases: diptheria, tetanus, pertussis, polio, measles, mumps, rubella, Haemophilus influenza type b, hepatitis B, and chicken pox.

Religious Exemptions to Vaccines, 2006-2009

In Oregon, all children are required to have certain immunizations in order to attend school or childcare. Parents who have an objec- tion to vaccines have the option of signing a “religious exemp- tion” to some or all of the vaccines required. In signing such an exemption, those parents accept the authority of the local public health agency to exclude their child from school and/or childcare if a case of a disease for which they are not protected should occur.

Religious exemptions have been on the rise in recent years, with Deschutes County rates growing to alarming levels. Deschutes County’s exemption rate is significantly higher than the statewide average and continues to rank among the highest in Oregon. This is concerning for public health officials because as the pool of un- vaccinated children grows, the greater the susceptibility of all community members to disease. Babies who are too young to have received their primary series of immunizations are at a particu- larly high risk, as are those members of the community - children and adults – who have medical conditions that preclude them from vaccinations.

Pockets of Under-Immunized Children

While most of the schools in Deschutes County have fairly low ex- emption rates, there are pockets of schools with extremely high rates, which consequently drives up our overall rate. It is this clustering of exemptions at specific schools within the county that has public health officials most concerned. Exemptors are at in- creased risk of acquiring and transmitting disease. When there are pockets of under-immunized youth in a school or under-immunized youth in a community, especially when those children congregate in crowded areas like schools, the potential for disease spread is significantly magnified.

Pertussis Booster Shot - Adult Vaccine Helps Protect Babies

Pertussis, also known as whooping cough, is a highly contagious respira- tory disease. It can cause rib fractures through se- vere coughing and can result in hospitalization and death. Infants are at the highest risk, having greater rates of hospital- ization and complications from pertussis than older patients. Of the 100 nationwide deaths from pertussis during 2000-2004, 76 occurred in infants age one month or younger. Because the first dose of pertussis-containing vaccine (DTaP) isn’t given until two months of age, those under two months and those older babies whose parents elect to forgo vaccination - are the most vulnerable to infection. Adolescents and adults can spread the disease to infants.

In recent years, four Oregon babies have died from pertussis. In the first few months of 2009, two Deschutes County infants were hospitalized with complications from the disease. It is crucial that adults and older children who spend time with infants be vacci- nated with a booster dose to keep from spreading the disease to unvaccinated or incompletely immunized babies. Adults who work around infants, such as health care workers and child care providers, should also receive the DTaP vaccine. Persons 10 years and older can receive DTaP vaccine in place of a routine booster dose of tetanus (Td) vaccine.

QUESTIONS ABOUT IMMUNIZATIONS?

Deschutes County Immunization Coordinator

541-322-7452

www.deschutes.org/healthreport

www.deschutes.org/healthreport
CHILDHOOD CHRONIC DISEASE

INJURY

Injury is the third leading cause of death in Oregon and claims more potential years of life lost in Oregon than cancer, heart disease, or stroke. For persons under 44 years of age, injury is the leading cause of death in Oregon. By implementing proven interventions, such as child car seats, seat belts, environmental measures to lessen traffic speed and volume in neighborhoods, bicycle helmets, and smoke detectors, injury deaths among children can be reduced significantly.

Source: DHS/Oregon Injury Prevention and Epidemiology Program

CONSEQUENCES OF OBESITY IN CHILDREN AND ADOLESCENTS

Identify two physical, psychological, and social consequences for children. Children and adolescents are developing obesity-related diseases, such as Type 2 diabetes, that were once seen only in adults. Obese children are more likely to have risk factors for cardiovascular disease, including high blood pressure, high blood sugar, and abnormal glucose tolerance. One study of 5- to 17-year-olds found that 22% of obese children had at least one risk factor for cardiovascular disease, and 19% of obese children had at least two risk factors.


Overweight or At Risk for Overweight, 2007-2008

OVERWEIGHT AND OBESITY*

Overweight or At Risk for Overweight, 2007-2008

• Healthy People 2010 Objective: 5%.

*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.

Although Deschutes County is doing well compared to the state, 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. Source: Oregon Healthy Teens Survey, 2007-2008

INJURY

Diabetes is a serious medical condition that affects approximately 200,000 Oregonians and contributes significant costs to our health care system. A conservative estimate of diabetes care in 2006 puts the cost at over $2 billion for the state of Oregon. The problem is also a growing one in that there has been a 35% increase in diabetes diagnosis between 1997 and 2006 throughout the state. In Deschutes County, the prevalence of diabetes is slightly lower than the state rate, however it is still two times higher than the Healthy People 2010 Objective.

Type 2 diabetes accounts for about 90% to 95% 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.


CONSEQUENCES OF OBESITY IN CHILDREN AND ADOLESCENTS

NUTRITION AND PHYSICAL ACTIVITY

Incorporates both drowning and other mishaps, but not voluntarily jumping from a watercraft.


*Nutrition and physical activity recommendations go to: www.cdc.gov/physicalactivity/everyone/guidelines/index.html

PHYSICAL ACTIVITY

Adults:
• At least 150 minutes of moderate intensity aerobic activity (equivalent to brisk walking) every week — AND —
• Muscle strengthening on two or more days that works all major muscle groups

Children and Adolescents:
• At least 60 minutes every day. This activity should be age appropriate and include a mix of aerobic and muscle and bone strengthening activities.

Are You Getting Enough?

Do you eat the recommended amounts of fruits and vegetables daily? How about grains, protein, and dairy products? Do you drink enough water?

For more information on nutrition needs go to: www.mypyramid.gov

NUTRITION

How many fruits and vegetables did you eat yesterday? Can you eat more today? To get a healthy variety, think color. Eating fruits and vegetables of different colors gives your body a wide range of valuable nutrients.

Nutrition needs vary based on gender, age, body size and physical activity level. A good rule of thumb is to make sure that you are eating lots of fruits and vegetables, whole grains, and low fat protein sources such as meat and beans while making sure to limit excessive amounts of sugars and saturated or trans fats.

For more information on nutrition needs go to: www.mypyramid.gov
Of the 424 unintentional injury deaths listed above, 192 were due to motor vehicle accidents (45.3%). 102 were due to falls (24.1%).

Source: DHS/Oregon Center for Health Statistics

*updated data not available

The risk of fatal falls increases significantly with age. While the 2005 all-age death rate for falls in Oregon was 10.50 per 100,000, the death rate for those 75-84 years was 73.8. For those 85 and over, the death rate jumps up to 274.2 per 100,000. Many falls can be prevented through modifications to the living environment, regular vision checks, and exercise.

Source: DHS/Oregon Center for Health Statistics

Fall hospitalization rate per 100,000 for adults 75 years and older in Oregon, Hospital Discharge Database, 2002-2006

Source: Healthy Aging in Oregon Counties, 2009

Unintentional falls are the leading cause of injuries, fatal and nonfatal, for adults over the age of 65 years and are associated with the loss of independence and functional decline. In 2006, the estimated cost of hospitalization due to falls in Deschutes County was over four million dollars.

Source: Healthy Aging in Oregon Counties, 2009

Rarely or Never Wore a Bike Helmet During Past 12 Months*, 2007-2008

*Among those who rode a bicycle during that time

Source: Oregon Health Teens Survey, 2007-2008

Intentional injury refers to those injuries that have been purposely inflicted, either by the self or another. Examples are assaults, homicides, self-inflicted injuries and suicides.

Source: DHS/Oregon Center for Health Statistics

The health consequences of obesity

- Coronary heart disease
- Type 2 diabetes
- Cancer (endometrial, breast, and colon)
- High blood pressure
- High cholesterol
- Stroke
- Liver and gallbladder disease
- Sleep apnea and respiratory problems
- Osteoarthritis
- Gynecological problems (infertility, abnormal menses)

Source: Centers for Disease Control and Prevention

Since 1990, obesity rates have doubled for adults in Oregon and tripled for children. It has been estimated that health care spending per capita would be 10% lower if the rate of obesity had held steady since 1987. Obesity rates among all groups in society—regardless of age, race, gender, ethnicity, socioeconomic status, education level, or geographic region—have increased significantly.

Source: Centers for Disease Control and Prevention; Office for Oregon Health Policy and Research

THE HEALTH CONSEQUENCES OF OBESITY

Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (BRFSS)

• Healthy People 2010 Objective for obesity: 15%
• In adults, obesity is defined as a Body Mass Index (BMI) of 30 or more; overweight is a BMI of 25 or more. BMI is a measure of a person’s weight in relation to his or her height. It is calculated as weight in kilograms (kg) divided by the square of height in meters (m2).

Source: DHS/Oregon Center for Health Statistics, Behavioral Risk Factor Surveillance System (BRFSS)

THE HEALTH CONSEQUENCES OF OBESITY

Source: Centers for Disease Control and Prevention


Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (BRFSS)

Rates of Cancer Cases 1996-2005

Source: DHS/Oregon Cancer Registry (OxCaRe): Cancer in Oregon, 2009 (new data not available)

Unintentional Fatal Falls by Age, Oregon, 2006

Source: DHHS/Oregon Center for Health Statistics

Fall hospitalization rate per 100,000 for adults 75 years and older in Oregon, Hospital Discharge Database, 2002-2006

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Source: Centers for Disease Control and Prevention
TOBACCO & OTHER SUBSTANCE ABUSE

TOBACCO - Adults

Tobacco use remains the leading preventable cause of death in Oregon, contributing to approximately 7,000 deaths each year. The economic costs of tobacco use are equally staggering in that it is estimated to be responsible for over $2 billion in Oregon. Tobacco use is steadily declining in Deschutes County but still remains higher than both state and national objectives.

Every Year in Deschutes County:
• 230 people die from tobacco use (23% of local deaths)
• 4,359 people suffer from a serious illness caused by tobacco use
• Over $35 million is spent on medical care for tobacco-related illness
• Over $57 million is lost from decreased productivity due to tobacco-related disability and death

Source: Oregon Tobacco Prevention and Education Program, Deschutes County Tobacco Fact Sheet 2009

In 2006, 21% of all deaths in Deschutes County were tobacco-related. Tobacco-related deaths are mainly due to three causes: cardiovascular disease, cancers, and respiratory disease.

Tobacco-Linked Deaths, Deschutes County, 2006

While the prevalence of adult smokers in Deschutes County appears to be decreasing, we still have a great deal of work to be done to prevent the vast degree of death and disability caused by smoking cigarettes.

Pregnant Women Who Use Tobacco

Tobacco use during pregnancy causes the passage of substances such as nicotine, hydrogen cyanide, and carbon monoxide from the placenta into the fetal blood supply. These substances restrict the growing infant’s access to oxygen and can lead to adverse pregnancy and birth outcomes such as low birthweight, preterm delivery, intrauterine growth retardation, and infant mortality. Maternal smoking has also been shown to increase the risk of respiratory infections and inhibit allergic immune responses in infants.


True Cost of a Pack of Cigarettes

Source: TobaccoFreeKids.org; Centers for Disease Control and Prevention

ADULT CHRONIC DISEASE

A chronic disease is an long-term illness or condition, such as heart disease, asthma, cancer and diabetes. The costs attributed to the treatment of chronic disease are staggering, and there is a direct connection between the burden of chronic disease and the rising costs of health care. For every dollar spent on health care in the United States, more than 75 cents goes toward the treatment of chronic illness. The impact this has on us as individuals and as a community, is great. Chronic diseases impact productivity, quality of life, longevity, and the economic well-being of our communities and our state.

There is a human cost to rising rates of chronic disease that cannot be ignored - a reduced quality of life linked to the symptoms of chronic illness, such as pain, fatigue, anxiety, and depression. These symptoms can cause the individuals to miss work and many other positive aspects of life because they are left to manage their disease on a continual basis.

The majority of chronic conditions result largely from individual behavior choices and are primarily related to three behaviors: tobacco use, physical inactivity and poor nutrition. For people diagnosed with chronic conditions, good disease management, including changes in tobacco use, nutrition, and physical activity, dramatically reduces the risk of complications.

Source: DHS/Oregon Health Promotion/Chronic Disease Prevention Program; 2009 Alaska Manifest of Chronic Disease

Causes of Death by Disease

The Oregon Tobacco Quit Line, a free service to help tobacco users who want to quit, is available to all Oregonians.

1-800-784-8669 (English)
1-877-266-3869 (Spanish)

Source: Oregon Tobacco Prevention and Education Program
Adults 45 Years and Older Reporting Frequent Mental Distress, 2004-2007

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<td>15.3%</td>
<td>14.4%</td>
<td>15.3%</td>
<td>15.2%</td>
<td>15.1%</td>
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<tr>
<td>Deschutes County</td>
<td>17.5%</td>
<td>16.6%</td>
<td>17.5%</td>
<td>17.4%</td>
<td>17.3%</td>
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Source: DHS/Oregon Center for Health Statistics, Behavioral Risk Factor Surveillance System (BRFSS); “Healthy Aging in Oregon Counties, 2009”

Years of Potential Life Lost (YPLL)

Years of Potential Life Lost (YPLL) is the amount of time deceased individuals would have lived to a predetermined expected life, if not for dying prematurely. Individuals with both mental health issues and substance abuse lost an average of 34.5 “years of potential life.” Those with substance abuse issues alone lost 29.3 YPLL, while persons with mental health problems lose approximately four YPLL more than the general population.

Years of Potential Life Lost

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Source: Oregon Division of Medical Assistance Programs; Deschutes County Behavioral Health Division

ALCOHOL & 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.

Remaining Gap in Mental Health Services

There are barriers within Oregon’s mental health care system that make access a challenge for many. Clients within Oregon’s Medicaid program are typically able to find reasonable care when needed; however, those who are not Medicaid-eligible often face challenges in accessing treatment that is not focused solely on crisis services. There are an estimated 27,609 persons in Oregon with a mental illness that are currently uninsured and not receiving services. Because of this gap in care, the numbers of individuals with serious mental illnesses who end up in emergency rooms, jails, and prisons, continue to grow.

Source: National Alliance on Mental Illness

11th Graders who have ridden in a vehicle with a teenage driver who had been drinking alcohol at least once, 2007-2008

*Inhalants are products inhaled to get a high, such as paint, glue and many other household products.

During the past 30 days, number of teenagers riding with a parent or other adult driver who had been drinking, 2007-2008

Use of Illicit Drugs Within the Past 30 Days, 2007-2008

*Elighted drugs areillicit drugs used Oregon exceeds the national per capita average, with higher rates of methamphetamine, marijuana, and illicit use of prescription drugs. A 2008 study by ECONorthwest puts total direct economic costs from illicit drug abuse at $2.7 billion. Arrests for drug violations increased 44% from 2003-2007, and 27% of the Oregon corrections population is in the system due primarily to drug offenses, nearly three times higher than any other primary offense category.

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 and harmful impact other areas of the country. Data from the HIDTA program and the Central Oregon Drug Enforcement (CODE) team indicate continued high rates of methamphetamine abuse and growing rates of marijuana and prescription drug abuse. Heroin use among younger populations also seems to be on the rise.

Source: Oregon HIDTA Program, 2008 Drug Threat Assessment; Deschutes County Sheriff’s Office

The Central Oregon Drug Enforcement team is a multi-agency narcotics investigation team comprised of detectives from the Bend Police Department, Deschutes County Sheriff’s Office, Redmond Police Department, Prineville Police Department, Crook County Sheriff’s Office, Jefferson County Sheriff’s Office, Deschutes County District Attorney Office, United States Drug Enforcement Administration, and the Oregon National Guard.
Deschutes County Residents in Addiction Treatment, 2005-2008

Since its inception in 2006, the number of needles taken in by the Needle Exchange Program has increased by 1,153%. The number of individual client encounters has increased as public health staff work to build trust within the community. Preventing disease among persons who inject drugs, reduces illness among Deschutes County Residents. Exchanging used needles for new, clean ones prevents the spread of blood borne illnesses, including HIV and Hepatitis B and C. While participating in the needle exchange program, clients are exposed to disease prevention education, given the opportunity to be tested for HIV and Hepatitis C, and provided with addiction and mental health information and referrals.

Needle Exchange Program

The purpose of the Deschutes County Health Services Needle Exchange Program is to reduce disease transmission.

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Food Stamp Program, Average Monthly Participants 2003-2009

The Food Stamp Program is a federal nutrition program intended to help improve the health and well being of low-income households and individuals by providing them a means to meet their nutritional needs. Oregon's food stamp eligibility criteria is based on monthly income at 185% of the Federal Poverty Level. From 2003-2007, the average number of participants in Deschutes County remained fairly stable. Starting in 2008, however, the number jumped substantially and has continued to rise at alarming levels. A point-in-time look at May 2009 shows an increase of over 11,000 participants over the 2006 number.

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The National Institute of Mental Health estimates that 26.2% of Americans ages 18 and older - about one in four adults - suffer from a diagnosable mental disorder in a given year. When applied to the 2008 population estimates for Deschutes County, this figure translates to 43,758 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 be 10,021 individuals.

Mental illnesses are medical conditions that disrupt a person's thinking, feeling, and ability to relate to others, and daily functions. Serious mental illnesses include major depression, schizophrenia, bipolar disorders, obsessive compulsive disorders, panic disorder, post traumatic stress disorder, and borderline personality disorder. Most people diagnosed with a serious mental illness can experience relief from their symptoms by actively participating in an individual treatment plan.

Without treatment, the consequences of mental illness for the individual and society are alarming. Untreated mental illness is thought to cost more than $100 billion each year in the United States. Along with the economic cost to society, the effect on the individual: unnecessary disability, unemployment, substance abuse, homelessness, incarceration, and suicide are all significantly more common among those with serious mental illness. Furthermore, a seven-year mortality data analysis commissioned by the Oregon Addiction and Mental Health Division showed that Oregonians who receive public substance abuse and/or mental health treatment have an average age of death that is significantly lower than the general population. This translates into between 16 and 35 years of potential life lost, depending on the type of treatment received.

Adults in Good Mental Health,* 2004-2007

"Response to survey question asking if person had no poor mental health in past 30 days.

AduLTS BehAVIORAL HeALTHe

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Adults in Good Mental Health,* 2004-2007

*Response to survey question asking if person had no poor mental health in past 30 days.

AduLTS BehAVIORAL HeALTHe
Every year at the end of January, the Homeless Leadership Coalition, with the help of numerous volunteers, conducts a count of homeless residents living in Deschutes, Jefferson and Crook counties. This count is a part of a national effort to identify the number of people struggling to find appropriate and adequate housing. This one-day count will provide the most up-to-date information about the number of individuals in Central Oregon who are struggling to find adequate housing. Through this data, local agencies and programs are able to qualify for increased funding, better target support services, and develop comprehensive plans to address poverty and homelessness in Central Oregon. The data from the past four years has shown an alarming increase in the number of people, adults and children, who are homeless or in transitional housing.

The primary self-reported reason for homelessness is economic hardship. In 2009, 54% reported that they were homeless because they could not afford rent. Only 14% had access to some form of shelter by a local housing provider. The remaining 86% were staying with family or friends, living outdoors or in cars, or staying in motel rooms. The number of emergency or transitional housing beds available throughout the region is extremely limited based on the need: there are approximately 217 emergency beds, 166 transitional housing beds, and 40 overflow beds, which includes vouchers for short-term motel stays.

Source: NeighborImpact; Homeless Leadership Coalition

The amount of food accessed through local emergency food pantries has been steadily climbing over the past decade. While a portion of that can be attributed to a rise in population, most is likely due to rising unemployment, the recession, and rising food and fuel costs. The graph above represents the average number of individuals receiving food, 2000-2009.

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Source: NeighborImpact

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COMMUNICABLE DISEASE

Sexually Transmitted Infections (STIs)
The number of sexually transmitted infections (STIs) reported and requiring clinical follow-up in Deschutes County has increased by 63% since 1996, while the population has only grown approximately 70% during that time. Follow-up for each case involves communication with the person testing positive for an STI in order to ensure treatment for the infection acquired and to determine the number of additional individuals who may have been exposed through sexual contact. Communication is then made with each of the potential contacts to notify them of their exposure and determine whether treatment may be necessary.

Deschutes County STI Cases, 1998-2008:

Chlamydia
Chlamydia is a common sexually transmitted infection (STI) caused by a bacterial infection. It is transmitted through oral, vaginal, and anorectal sex. In 2008, as in previous years, Chlamydia accounted for the vast majority of STI diagnoses in Deschutes County—over 97%. Cases of Chlamydia have increased dramatically over the past ten years. Health officials are concerned with the rise in STIs as having one STI increases the chances of contracting HIV if exposed. Rationale for the increase in cases can be attributed to several factors including increased testing, increased/improved partner notification, and comprehensive education in the community regarding the risk of acquiring Chlamydia. Although curable, the infection can have severe consequences, including pelvic inflammatory disease, and epididymitis which can lead to infertility. Possible complications in newborns of infected mothers are pneumonia and blindness.

HIV/AIDS
There has been a total of 33 new HIV positive cases identified in Deschutes County since reporting began in October 2001. At the end of 2008, 74 Deschutes County residents were reported to be living with HIV/AIDS. This is considered a substantial underestimate for the County for several reasons: Many people are diagnosed elsewhere and then relocate to Central Oregon to live; HIV reporting began only relatively recently (October 2001); only half of all persons in the nation are ever tested for HIV; and estimates from the federal government show that one in five persons living with HIV in the United States are infected and do not know it. Stigma surrounding HIV and AIDS as well as unfounded fears of contagion help to keep this epidemic underground in Oregon, particularly in rural areas.

Several indirect indicators of risk for HIV infection exist in Deschutes County. Since the two major routes of HIV transmission are unprotected sex and the sharing of needles by persons who inject drugs, behavioral factors related to sex and drug use can serve as indirect indicators of possible true HIV rates in the County. For example, high rates of sexually transmitted infections (STI) among young adults and teens serve as a marker of unprotected sex. Case counts of STIs have skyrocketed in Deschutes County since reporting began in October 2001. At the end of 2008, 74 Deschutes County residents were reported to be living with HIV/AIDS. This is considered a substantial underestimate for the County for several reasons: Many people are diagnosed elsewhere and then relocate to Central Oregon to live; HIV reporting began only relatively recently (October 2001); only half of all persons in the nation are ever tested for HIV; and estimates from the federal government show that one in five persons living with HIV in the United States are infected and do not know it. Stigma surrounding HIV and AIDS as well as unfounded fears of contagion help to keep this epidemic underground in Oregon, particularly in rural areas.

Since 2006, public health outreach in Deschutes County involves a risk reduction program known as Needle Exchange. The Needle Exchange Program operates from the health services department and includes a mobile unit staffed by public health workers trained to provide drug treatment referrals, HIV testing, and risk reduction education to persons who inject drugs. The number of people accessing needle exchange services has risen drastically. Further, there has been a noticeable influx of clients who report having a history of injecting methamphetamine, a drug known to be associated with high levels of unprotected sex and multiple partners, another indirect risk-indicator for HIV transmission in Deschutes County.

UNINSURED

Individuals with no health insurance

The percentage of uninsured Central Oregonians shown above equals approximately 37,489 people. Of those, 8,912 are children under the age of 18 years. The lack of health insurance has serious consequences. Because individuals without health insurance do not access routine care, preventive care, health screenings, or even acute care at the same rates as the insured, they face increased severity of illness and possibly premature death.

Nationally, studies find worse outcomes for the uninsured. People who have chronic conditions such as diabetes, hypertension, HIV infection, end-stage renal disease, as well as for many cancers and traumatic conditions such as car accidents. Individuals without health insurance often do not receive timely screenings that would catch cancers at an early stage or receive necessary treatment and training to control chronic conditions. Consequently, individuals without health insurance receive some care that is often ‘too little and too late,’ which makes health care much more expensive, a cost typically borne largely by the public.

MEDICARE

Medicare Population Forecast for Deschutes County, 2010-2040

The Medicare population in Deschutes County is expected to triple between 2010-2040. There is serious reason to be concerned about where these people will receive care.

MEDIICAID

Oregon Health Plan Enrollees
As of November 2008, there were 13,531 Oregon Health Plan clients in Deschutes County. Of those, 776 individuals 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 have to accept them as patients. The result has been an inability for many with OHP Standard coverage to access care and establish a medical home; however, there has been an increase in local clinical capacity to serve Medicaid-eligible clients at local federally-qualified health care centers.
**ECONOMY**

In December 2008, the National Bureau of Economic Research declared that the United States had been in recession since December 2007. Since then, unemployment rates have soared, as have housing foreclosures, bankruptcy rates, and other leading indicators of decreasing economic vitality. As a result, more Deschutes County families find themselves in need of assistance in order to meet day-to-day needs such as housing, food, and health care expenses.

Unemployment*, 1990-2009

*Data is from January of each year and is seasonally adjusted to reflect jobs that do not continue throughout the full calendar year.

Source: Oregon Employment Department

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**CHRONIC HepATITIS C**

Communicable Disease Summary, 2007

Deschutes County has had an average of 55 HIV positive clients participating in 2008-09. In addition to case management services, Deschutes County Health Services provides STI testing and treatment, HIV counseling and testing, and outreach that includes mobile van HIV testing services, free HIV testing day annually, and World AIDS Day activities each December. Wellness classes with a support component are offered twice a year to HIV positive persons and their partners.

HIV/AIDS Cases by Year of First Diagnosis, 1990-2007

Note: There have been an alarming six new cases of HIV/AIDS diagnosed in Deschutes County (as of 10/30/09). Half of these had progressed to full blown AIDS when first tested and diagnosed.

Source: DHS/Oregon Center for Health Statistics

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**Living Oregon HIV/AIDS Cases as of 12/31/2008**

Source: DHS/Organization of Disease Prevention and Epidemiology, HIV/STD/ TB Program

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**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, although outbreaks can occur. Children under four years of age have the highest rates of illness. Campylobacter is usually spread by eating or drinking contaminated food or water.

Communicable Disease Summary, 2007

Chronic Hepatitis C is a liver disease caused by the Hepatitis C virus. It is spread by direct contact with human blood with most infections caused by the sharing of needles during injection drug use. The virus can also be transmitted through sexual contact and from infected mothers to their infants at birth. There is no vaccine for Hepatitis C.

*Note: Based on the graph above, it looks as though local Hepatitis C cases have been declining in recent years. That is not the case. Hepatitis C became a reportable disease in 2005, which led to an initial surge in testing and reporting.

Source: Deschutes County Communicable Disease Program

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**Top 10 Leading Causes of Death by Type, Deschutes County 2006**

Source: DHS/Oregon Center for Health Statistics

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**MEDIAN Household Income**

Source: U.S. Census, American Community Survey

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**Personal Income, 2008**

Source: U.S. Bureau of Economic Analysis

Deschutes County’s per capita personal income fell 0.2% from 2007. Nationally, average per capita income grew 2.2% for 2007 to 2008. Per capita income is calculated by dividing an area’s total personal income by the population.

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**Unemployed 2009-2009**

*Unemployment rates not seasonally adjusted

The Associated Press Economic Stress Index measures the relative impact of the recession and its recovery by integrating the cumulative effect of three economic indicators: unemployment, foreclosures, and bankruptcy. Deschutes County ranked fourth among American counties of more than 25,000 people in a measurement of the yearly rise in the AP Index. The higher the index’s number for a county, the worse the recession’s impact.

Source: Associated Press

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**HIV/AIDS**

There is a rapid HIV test that gives accurate results in just 20 minutes. Testing is available at several locations throughout Deschutes County. Call 541-322-7400 for more information or to schedule an appointment.

**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, although outbreaks can occur. Children under four years of age have the highest rates of illness. Campylobacter is usually spread by eating or drinking contaminated food or water. It is sometimes spread through contact with infected people or animals. Campylobacteriosis can be
United States continues to report the largest number of novel H1N1 cases of any country worldwide. Most people who have become ill have recovered without requiring medical treatment. Nineteen counties throughout Oregon have confirmed cases of H1N1 illness, with the first confirmed case in Deschutes County reported in mid-June. The true number of H1N1 illnesses is thought to be significantly higher than the number of “confirmed” cases, as those with mild illness generally do not seek medical care. Public health staff report cases have remained low throughout the summer and possibly increased in the fall.

Novel Influenza A (H1N1) is a respiratory illness related to seasonal influenza, but not usually seen in people. Similar to other respiratory diseases, it is spread from person to person through coughing and sneezing. The symptoms of H1N1 flu in people are similar to the symptoms of regular human flu and include fever, cough, sore throat, body aches, headache, and fatigue. Some people have reported diarrhea and vomiting. H1N1 may also cause a greater risk of influenza-related complications to people with underlying medical conditions.

Preventing a flu illness - What you can do to stay healthy:
- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- If you don’t have a tissue, cover your cough with your shirt sleeve, not your hands.
- Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-hand based cleaners are also effective.
- Avoid touching your eyes, nose or mouth. This is how germs can spread.
- Try to avoid close contact with sick people.
- Get plenty of sleep, be physically active, manage your stress, drink plenty of fluids, and eat nutritious food.

OTHER COMMUNICABLE DISEASES
- Norwalk-like Viruses: In 2008, Deschutes County initiated 11 outbreak investigations of Noro-like illness, involving several dozen individual cases. 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 one or two days, with no long-term health effects related to their illness.
- West Nile virus 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. West Nile virus was first detected in Oregon in August 2004, with the first human, equine, and avian cases diagnosed. Since then, cases have increased significantly in Oregon, resulting in two human deaths. There have been no human cases acquired in Deschutes County, Deschutes County no. However, cases continue to conduct surveillance of West Nile Virus through testing of mosquitoes and dead birds.

PREVENTING A FLU ILLNESS

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- If you don’t have a tissue, cover your cough with your shirt sleeve, not your hands.
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- Get plenty of sleep, be physically active, manage your stress, drink plenty of fluids, and eat nutritious food.
INTRODUCTION

The Deschutes County Health Services Department is pleased to present the Deschutes County Health Report, compiled in 2009, for 2010 release. The purpose of this report is to provide region-specific data that can be used by local government and community agencies, health professionals, schools, businesses, and other interested community members and groups to help identify and better address the health needs of Deschutes County residents.

The health indicators examined in this report are used to represent trends, when possible, by tracking measurable changes over time. To the extent that they are available, we also provide established national and statewide goals to gauge our progress. Our concept of health is broad, as indicated by the inclusion of local data regarding issues such as poverty, homelessness, domestic violence, and unemployment. Areas where Deschutes County meets state or national health objectives or has improved significantly over the past several years:

- Child immunization rates - dramatic improvement in the up-to-date rate for two-year-olds
- Breastfeeding initiation rate - exceptional among Women, Infants, and Children programs across the country at 93%
- Air quality - ranked at the highest level of the Air Quality Index 96% of the time in the 2008
- The establishment of successful harm reduction programs for people who use injection drugs
- First trimester prenatal care - continuing to rank among the highest in Oregon
- Smoking among eleventh graders has dropped from a reported 27% to 19.1%
- 78% of women in need of publically funded contraceptive services were served compared to the state average of 58.5%

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

- Indicators of decreasing economic vitality - soaring unemployment rates, housing foreclosures, and bankruptcy rates
- More Deschutes County families in need of assistance for day-to-day needs, such as housing, food, and health care expenses
- Lack of fluoridated community water supplies
- Rising rates of Central Oregonians without health care coverage
- Cancer rates that are statistically significantly higher than the statewide average - malignant melanoma, prostate, thyroid, and the "all cancer" rate
- Sexually transmitted infections that have risen dramatically over the past ten years
- Pregnant women who smoke
- Alcohol, tobacco and prescription drug use above state average among adolescents
- Car crashes and attempts continue to be high among adolescents
- Large number of people with little to no access to adequate food, shelter and healthcare services

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EMERGENCY PREPAREDNESS

Deschutes County Health Services Department works closely with Deschutes County Emergency Management, first responders, local hospitals, and other community organizations to mitigate, prepare for, and respond to emergencies or disasters. Emergency scenarios include natural disasters, hazardous materials accidents, pandemic influenza, bio-terrorism, and other hazards. Preparedness education and outreach efforts are focused on the general public, vulnerable populations, schools, and the business and healthcare communities.

In April 2009, the Deschutes County Public Health Reserve Corps (DCPhRC) was established in order to support the public health emergency needs. The goal of the DCPhRC is to have a group of volunteer health professionals and support staff who are pre-trained, pre-verified, and ready to contribute their time and expertise for public health emergency preparedness. The Corps can also support public health activities in times of non-crisis by staffing immunization clinics, participating in preparedness exercises, and engaging in health promotion activities at community events. To learn more about the DCPhRC, contact Holly Nyquist at 541-322-7440.

DATA SOURCES

Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing random sample of landline 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. In Oregon, 3,000 to 5,000 adults are interviewed on questions related to health risk behavior 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 survey. http://www.cdc.gov/brfs.

Center 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), which is 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/Oregon Addictions and Mental Health Division

The Department of Human Services’ Addictions and Mental Health Division (AMH) works to assist Oregonians and their families to become independent, healthy and safe by promoting resilience and recovery through culturally competent, integrated, evidence-based treatments of addictions, pathological gambling, mental illness and emotional disorders, and preventing and reducing the negative effects of addictions and mental health disorders, http://www.oregon.gov/DHS/addiction

DHS/Center for Health Statistics

The Center for Health Statistics (CHS) is responsible for registering, certified, amend and issuing Oregon vital records. The CHS is also responsible for administering the statewide youth and adult behavioral health surveys. http://www.dhs.state.or.us/dhs/ph/chs
LOCATIONS

BEND
Human Services Building
2577 NE Courtney Drive
541-322-7400

Downtown Health Center
(Serving young adults through age 25)
1128 NW Harriman
541-322-7457

Ensworth Elementary School
School-Based Health Center
2150 NE Daggett Lane
541-693-2222

Community Support Services
Behavioral Health
1128 NW Harriman Street
541-330-4637

Seniors’ Mental Health Program
1130 NW Wall Street
541-385-1746

REDMOND
Becky Johnson Center
412 SW 8th Street
541-617-4775

Lynch Elementary School
School-Based Health Center
1314 SW Kalam
541-504-3589

LA PINE
La Pine Community Campus
(Limited hours)
51605 Coach Rd.
Clinic: 541-322-7400
School-Based Health Center:
541-536-0400

South County Services Center
Behavioral Health
51340 Highway 97
541-322-7500

DESCHUTES COUNTY
HEALTH SERVICES
Clinic Services
Communicable Disease
Women, Infant and Children Program
(WIC)
Maternal and Child Health Services
Prevention and Education Programs
Child & Family Behavioral Health Program
Adult Behavioral Health Treatment
Seniors Mental Health
Developmental Disabilities

Health Services Director:
Scott Johnson, M.Ed.

Medical Directors:
Richard Fawcett, M.D.
Mary Norburg, M.D.
Stephen Knapp, M.D.
Marc Williams, M.D.

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

Behavioral Health
Addictions and Mental Health Advisory Board:
Chair: Dolores Ellis
Vice-Chair: Glenda Lantis
Developmental Disabilities Planning Committee:
Coordinator: Kathy Drew

24-hour Mental Health crisis services:
541-322-7500

Web Site:
www.deschutes.org/mentalhealth

Public Health
Public Health Advisory Board:
Chair: Aylett Wright B.A.
Vice-Chair: Mary Jeanne Kuhar, M.D.

Communicable Disease Reporting
541-322-7418

Web Site:
www.deschutes.org/health

Deschutes County Health Services 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.