

LEADING CAUSES OF DEATH AND RELATED BEHAVIORS

DURING THE 20th century, the leading causes of death have changed from infectious diseases to chronic diseases. In 1900, the major causes of death were pneumonia, influenza, and tuberculosis. At the beginning of the 21st century, the leading causes of death are heart disease, cancer, stroke, diabetes and lung diseases. Environmental and public health improvements combined with advances in medical technology and pharmaceuticals have assisted us in reducing infectious disease deaths; they have also increased the number of people who live for many years with chronic disabling conditions. As the “baby boomer” population ages, the number of Oregonians affected by chronic diseases will escalate and significantly impact the population’s health status and resultant health care needs, unless we significantly change our lifestyle choices and take preventive measures. We recently published an assessment of chronic diseases in Oregon titled: “Keeping Oregonians Healthy.” This *CD Summary* reviews information compiled in that report.

Chronic diseases are major causes of disability and death for Oregonians. During 1997, chronic diseases claimed the lives of over 20,300 Oregonians accounting for over 70% of deaths in Oregon. Hospitalization costs of these diseases were greater than \$780 million in 1997. The table shows 1997 Oregon deaths and hospitalizations due to chronic diseases.

SELECTED CHRONIC DISEASES

Cardiovascular Disease. Cardiovascular disease is the number one killer of Oregonians, claiming more lives each year than cancer, injuries, suicide and AIDS combined (see figure). The primary cardiovascular diseases, heart disease and stroke, accounted for 10,924 deaths, or 38% of all deaths in 1997.

Cancer. Cancer is the second leading cause of death in Oregon. During 1997, 16,352 cancer cases were diagnosed in Oregonians, and 6,790 people died from cancer-related causes. Breast cancer was

the most frequently reported cancer; 3,017 new cases of breast cancer were diagnosed in Oregonians and 487 Oregonians die from breast cancer. Lung cancer is the second most frequently reported cancer in Oregon, with 2,297 cases diagnosed in 1997. Lung cancer is the leading cause of cancer deaths in Oregon, killing 2,038 Oregonians in 1997 (30% of all cancer deaths).

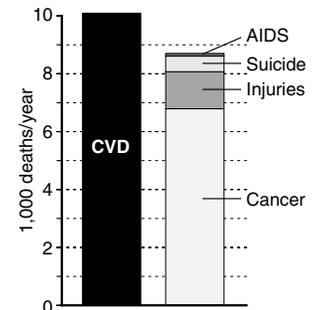
Chronic lung diseases. Emphysema, bronchitis, and asthma, have become an increasingly common killer of Oregonians over the past several decades and are now the fourth leading cause of death for both men and women. In addition to the 1,648 Oregonians whose deaths were due to chronic lung diseases, COPD was a contributing factor in another 1,777 deaths.

Diabetes. Over 115,000 Oregonians have been diagnosed with diabetes and an estimated 60,000 have undiagnosed diabetes. Since 1987, the death rate from diabetes has been increasing in Oregon. The risk of cardiovascular disease and stroke is higher for people with diabetes than those without diabetes.

MODIFIABLE RISK FACTORS

Heart disease, stroke, cancer, chronic lung disease and diabetes are all significantly affected by three modifiable behaviors: tobacco use, proper nutrition/weight control, and physical activity (see figure, *verso*). In addition, clinical screening tests allow for earlier detection, treatment, and management of certain chronic diseases. Oregonians who use tobacco, do not exercise, and eat diets high in fat and low in fresh fruits and vegetables are at a higher risk for many chronic diseases than those

Cardiovascular Disease as a Major Cause of Death—Oregon, 1997



who maintain healthier lifestyles. Some of these factors are modifiable through individual behavioral changes, health care provider practices and a community’s social environment.

Tobacco Use. Tobacco use contributed to nearly 1/4 of deaths among Oregonians in 1997. According to Oregon physicians, tobacco use contributed to 6,370 deaths; an estimated additional 800 deaths were due to second-hand smoke exposure. Currently, 500,000 or 22% of adult Oregonians smoke.

Physical Activity. While Oregon is one of the most physically active states in the U.S., 71% of Oregonians do not meet the recommended guidelines for physical activity (at least 30 minutes per day on at least 5 days each week).

Diet. Good nutrition lowers a person’s risk for many chronic diseases including heart disease, stroke, certain cancers, and diabetes. In Oregon, only 31% of women and 19% of men eat the recommended five daily servings of fruits and vegetables.

Preventive Screenings. An improvement in early disease detection activities such as

Chronic Disease Deaths and Hospitalizations—Oregon, 1997

Disease	Deaths	% of Deaths	Hospitalizations	Cost of Hospitalizations
Heart disease and stroke	10,924	38	48,842	\$563,324,335
Cancer	6,790	24	12,938	\$158,982,396
Chronic lung disease	1,648	6	6,045	\$36,378,915
Diabetes	816	3	9,208	\$21,508,519
Total	20,178	70	77,043	\$780,194,165



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cholesterol screening, mammography and colon cancer screening can help improve the health of Oregonians. While nearly 80% of women 40 years and older report having had a mammogram and breast exam within the past two years, this varies by age; less than 60% of women 70 years or older have had a mammogram within the past two years. The U.S. Preventive Services Task Force recommends annual fecal occult blood testing or sigmoidoscopy (or both) for all persons age 50 or older.² However, fewer than half of Oregonians 50 years or older report ever having had a sigmoidoscopic or proctoscopic exam.

THE FUTURE

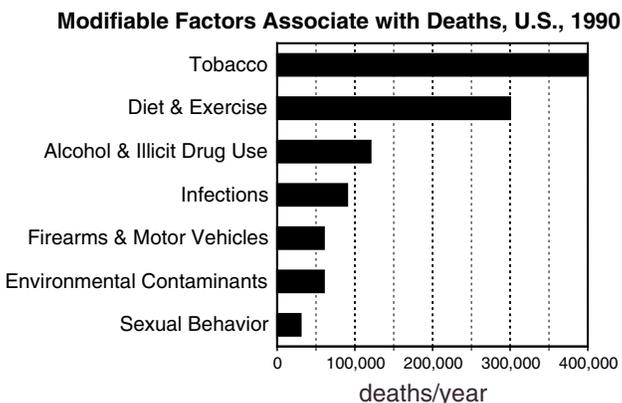
As we face an aging society, we cannot prevent death; however we can strive for successful aging, including a “compression of morbidity” where, on average, active and healthy life is prolonged and most disability is compressed to the years right before death. Promoting successful aging is the shared responsibility of the community, public health, the public and private medical systems, and the individual.

Because chronic disease risk factors are so prevalent throughout our community, population-wide health promotion and disease prevention efforts are necessary. These efforts require the creation of a social environment that promotes healthy behaviors and lifestyles. The community can encourage tobacco-free environments and cessation; high-fiber, low-fat diets; regular physical activity; and early disease detection and screening. Health care providers can identify risk factors and screen for early disease, as well as support individuals in adopting healthy lifestyles. Together, Oregonians can reduce the impact of many chronic diseases.

CREATING A STATE OF HEALTH

The assessment is the kickoff for a summit titled: “Creating a State of Health” aimed at improving the health of Oregonians, which takes place in early February, 2000. Participants will contribute ideas for steps Oregon can take to increase health-promoting environments in schools, work-sites, and other community settings.

The “Keeping Oregonians Healthy” assessment can be obtained on the web at www.ohd.hr.state.or.us/cdpe/hpcdp/docs/healthor.pdf, or by calling 503/731-4273.



Shigella in Bean Dip

BON VIVANTS up and down the West Coast are reeling from an outbreak of *Shigella sonnei* infections traced to contaminated 5-layer bean dip. As we go to press, case counts are climbing rapidly, with almost 100 lab-confirmed cases already identified in Oregon, Washington, California, and Idaho. The outbreak was initially cracked by the Seattle/King County Health Department, investigating a cluster of illnesses following a birthday party.

The implicated product was produced by Señor Felix’s (Baldwin Park, Calif.) and contains layers of black or pinto beans, salsa, guacamole, cheese, and sour cream; the contaminated batches obviously contained something extra. The dip was sold at Trader Joe’s, Costco, Zupan’s, Wal-Mart, Sam’s Club, and other fine stores nationwide under the following brand names: Señor Felix’s Five Layered Party Dip, Delicioso 5 Layer Dip, Trader Joe’s Five Layered Fiesta Dip, and The Carryout Cafe Mexican Fiesta Party Dip 5 Layer.

Shigellosis typically has an incubation period of 1–3 days, and is characterized by diarrhea (sometimes bloody), vomiting, and fever that may last for several days to a week or more. Thorough handwashing is essential to preventing secondary transmission, which is common. Antibiotics are often unnecessary. That said, the outbreak bug is resistant to ampicillin and TMP/SMX and sensitive to ciprofloxacin. Clusters of cases and patients with a history of illness following Señor Felix’s bean dip consumption should be reported to the local health department for follow-up.

An investigation at the plant is ongoing to determine the cause of the problem.

REFERENCES

1. McGinnis JM, Foege WH. Actual causes of death in the United States. *JAMA* 1993;270:2207-12.
2. U.S. Preventive Services Task Force. Guide to Clinical Preventive Services, 2nd ed. Baltimore: Williams and Wilkins, 1996.