

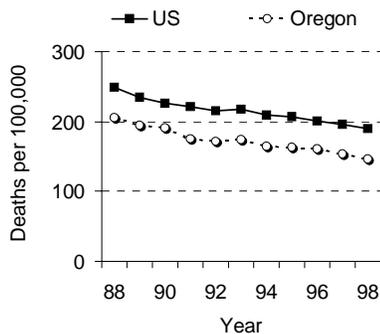
## TOO MUCH OF THE GOOD LIFE—CARDIOVASCULAR DISEASE IN OREGON

**C**ARDIOVASCULAR DISEASE (CVD) kills more Oregonians each year than all forms of cancer, AIDS, suicides and injuries combined. In 1999, heart disease and stroke combined accounted for 10,069, or 34%, of all deaths in Oregon. In 1999, over 100,000 hospitalizations in Oregon were for heart disease and stroke, at a cost of \$633 million. In this *CD Summary*, we review the epidemiology of CVD and related risk factors among Oregonians, and describe our Cardiovascular Health Program.

### HEART DISEASE AND STROKE

Similar to the U.S. as a whole, age-adjusted death rates for heart disease in Oregon have declined 29% over the past decade, from 206/100,000 in 1988 to 147/100,000 in 1998 (see figure).

#### Heart disease death rates

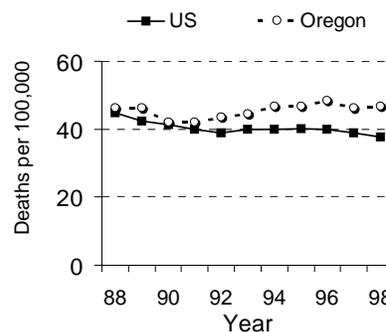


Overall, men have a higher heart disease death rate than women. The death rate increases exponentially with age, doubling between persons 55–64 years of age and those 65–74 years of age, and then increasing more than six times between persons of 65–74 years of age and those 80+ years of age. Sixteen percent of Oregon adults  $\geq 65$  years of age (19% of men and 14% of women) report having been diagnosed with coronary heart disease or angina.\*

In 1999, 2,817 Oregonians died from stroke, representing over 26% of CVD deaths. While Oregon's age-adjusted death rates due to stroke have been higher

than the U.S. rates for the last 30 years, the disparity has grown wider since 1990 (see figure).

#### Stroke death rates



Since 1990, the stroke death rate in Oregon has increased by 22%. Oregon's death rate from stroke is the sixth-highest in the nation and is 28% higher than the overall U.S. rate. Reasons for this remain unclear (ideas, anyone?). In 2000, 10% of Oregon adults  $\geq 65$  years of age report having been diagnosed with a stroke.

### RISK FACTORS

Much of the CVD burden is preventable. Although most of us are stuck with our age, sex and genes, we are able to modify many of the risk factors for CVD including: smoking, obesity, hypertension, high cholesterol, unhealthy eating, and physical inactivity.

#### Smoking

According to the Centers for Disease Control and Prevention (CDC), nearly one-fifth of all deaths from CVD are attributable to smoking.<sup>1</sup> That's approximately 2,019 deaths in Oregon each year. Although the prevalence of smoking has gradually declined over the past 5 years since Oregonians passed a tobacco excise tax which in part funds the Tobacco Prevention and Education Program, approximately 500,000 adult Oregonians, or one in five, continue to smoke. The risk of CVD increases steadily with the number of years a person has smoked; however, individuals who stop smoking

eventually reduce their risk for CVD to a level approaching that of nonsmokers.<sup>2</sup>

#### Obesity

Being obese increases one's likelihood of dying from CVD even without the presence of other risk factors. Unfortunately, the past decade has seen a dramatic rise in the prevalence of obesity, both in Oregon and the rest of the country.<sup>3</sup> Currently, 37% of adult Oregonians are overweight (25 = BMI <30) and 20% are obese (BMI =30). (See *CD Summary* Nov. 23, 1999.)

#### Physical Inactivity and Poor Nutrition

Physical inactivity and poor nutritional habits account for 300,000 preventable deaths each year and contribute to high rates of obesity.<sup>4</sup> Physically inactive people are almost twice as likely to develop heart disease as people who engage in regular physical activity.<sup>5</sup> Significant health benefits can be obtained by including a moderate amount of physical activity (30 minutes of brisk walking) on most, if not all, days of the week. Yet, 65% of adult Oregonians are not regularly active, and 15% of Oregon adults never get off the couch at all.

Consumption of fruits and vegetables serves as a marker for a healthy diet. In 2000, only 27% of adult Oregonians reported eating a least five fruits and vegetables daily. Not surprisingly perhaps, fewer men (22%) reported eating a least five fruits and vegetables a day than women (31%). In addition, studies have found that foods eaten away from home generally have higher fat and cholesterol content than foods eaten at home.<sup>6</sup> Oregonians report eating an average of 3 meals per week from a take-out place.

#### Hypertension and High Cholesterol

In 1999, 23% of adult Oregonians reported that a physician or other health care professional had ever told them that their blood pressure was high, and 29% reported having ever been told that they had high blood cholesterol.

\* Data from Oregon's 2000 Behavioral Risk Surveillance Survey



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**Diabetes**

People with diabetes have more than twice the risk of developing CVD than those without diabetes, even when glucose levels are under control. And mirroring the trends in obesity, the diabetes death rate and the prevalence of diagnosed diabetes have steadily increased over the past decade in Oregon. (See *CD Summary*, October 24, 2000).

**SO WHAT IS THE BOTTOM LINE?**

The table summarizes the relationship between coronary heart disease and risk factors among Oregon adults. Although Oregonians with coronary heart disease were as likely to smoke as those without, those with coronary heart disease were 1.3 times more likely to be former smokers (49% vs. 37%). This relationship was stronger for men than women. The good news is that many stop smoking after being diagnosed with CVD; the bad news is that a similar number of people with CVD as those without continue to smoke.

(Help is available through the Oregon Quit Line—1-877-279-7867; see *CD Summary* Sept. 27, 1999). Oregonians with CVD were 1.4 times more likely to be obese (32%) than those without (23%). Although similar numbers were trying to lose weight, those with CVD were more specific in how they were trying to take off the pounds (limiting calories and fat intake). Oregonians with CVD were 1.8 times more likely to be physically inactive (36%) than those without (20%), and were 30% less likely to report eating 5 fruits and vegetables per day (20%) than those without (30%). This latter relationship was particularly true in women. Clearly, patients need to be encouraged to get off the couch, and not reach for the potato chips. Finally, Oregonians with CVD were 3.0 times more likely to have been diagnosed with diabetes (21%) than those without (7%). This should be added impetus for patients with diabetes to eat right, exercise, control their blood sugars, and take a baby aspirin a day (see our web

site <http://www.ohd.hr.state.or.us/diabetes/gdlnes/home.htm> for a copy of the Population-Based Guidelines for Diabetes Mellitus).

**OREGON'S CARDIOVASCULAR HEALTH PROGRAM**

The purpose of our new Cardiovascular Health Program is to improve cardiovascular health statewide through policy and environmental changes

addressing obesity, physical inactivity, and nutrition. Examples of policy and environmental changes include:

- developing safe routes to school so that children can walk and bike rather than be driven
- promoting walking and biking to work
- improving the availability of fresh fruits and vegetables, through farmers' markets
- discouraging schools from signing exclusive pouring contracts with soft drink companies
- increasing the availability of milk, water, and juice in school and workplace vending machines, and
- encouraging health care providers to implement the American Heart Association's secondary prevention guidelines for cardiovascular disease.

A Cardiovascular Health Advisory Council will be established to provide input and direction to a statewide strategic planning process to address CVD. The plan will describe risk factors and disease burden, address priority populations, and identify both population-based strategies and evidence-based interventions to successfully reduce cardiovascular disease in Oregon. For more information, call us at 503/731-4273.

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**Coronary heart disease and risk factors among Oregonians ≥40 years**

RISK FACTOR*	CORONARY HEART DISEASE		
	Yes (%)	No (%)	Prevalence Ratio (PR)
Current Smoker	16	17	1.0
Former Smoker	49	37	1.3
Male	62	43	1.4
Female	31	32	1.0
Overweight (BMI 25 – 29.9)	36	39	0.9
Obese (BMI >30)	32	23	1.4
Trying to lose weight	38	38	1.0
Restrict calories to lose/maintain weight	19	12	1.6
Less fat intake to lose/maintain weight	35	30	1.2
Physical inactivity	36	20	1.8
5 or more fruits & vegetables per day	20	30	0.7
Male	22	23	1.0
Female	18	36	0.5
Diagnosed with diabetes	21	7	3.0

Source: 2000 BRFSS

\* Hypertension and high cholesterol were not asked on the 2000 BRFSS