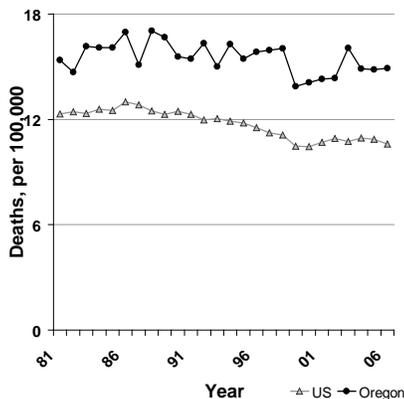


OREGON PUBLIC HEALTH DIVISION • DEPARTMENT OF HUMAN SERVICES

SUICIDES INCREASE AMONG MIDDLE-AGED WOMEN

Suicide rates in Oregon have been higher than the national average for more than two decades; in 2005, Oregon's rate was 37% higher than the national rate of 10.9 per 100,000 persons (figure 1). Overall, suicide remains the 9<sup>th</sup> the leading cause of death in our state. In the early 1990's, persons ≥65 years had the highest suicide rate, but over the past 15 years, rates among the elderly have declined, while the rates among middle-aged persons, particularly women, have increased. This CD Summary reviews trends in suicide deaths in Oregon, and provides information on clinical implications.

Figure 1. Age-adjusted suicide rates, US and Oregon, 1981–2006



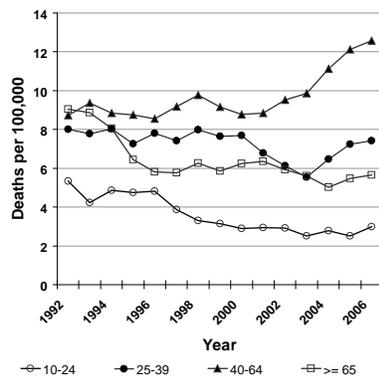
A TALE OF TWO TRENDS

Overall, the trend in suicide rates in Oregon has been similar to the national trend, just higher. The peak age-adjusted rate in Oregon occurred in 1988, with 17.0 suicides per 100,000 persons. The national average peaked in 1986, at 12.9 suicides per 100,000.<sup>1</sup>

From 1988 to 1999, both national and Oregon suicide rates declined. The lowest age-adjusted rate in Oregon occurred in 1999, at 13.9 suicides per 100,000, a 19% decline from the 1988 peak. The national average fell during the same period. Unfortunately, starting in 1999, rates began to increase.

The rate of suicide among Oregon men is typically much higher than the rate among women — as much as 5 times higher. In recent years, women have started to close some of that gap. From 1992 to 2006, suicide rates generally stagnated or decreased for both males and females of all age groups except for middle-aged women, 40–64 years old (figure 2). Midlife is when most suicides occur: 44% of suicides among men, and 59% of suicides among women occur for those 40–64 years old. The average rate for women\* in this age group increased 43% from 1999 to 2006. For men in the same age group, the rate increased only slightly during the same period. The rate for men in other age groups actually decreased from 1992 to 2006.

Figure 2. Suicide rates\* among Oregon women by age group, 1992–2006



HOW IT CAME TO THIS

Use of a firearm was the most common mechanism of suicide among men, and poisoning the most common among women (table, verso). The most common substances involved in poisoning suicide were prescription drugs. Among women, 72% of poisoning suicides were attributable to prescription drugs, including psychiatric drugs (45%) and opiates such as oxycodone and methadone (36%). Similar percentages of poisoning

\* 3-year moving average of rates

suicides among men involved opiates (35%), with fewer involving psychiatric drugs (34%).

THE OTHER SIDES OF THE COIN

Suicide is a multifactorial behavior (table, verso). Overall, 34% of women who died by suicide and 17% of men had previously attempted suicide. Suicides are often precipitated by more than one stressful event. However, some factors are notable predictors; nearly 80% of suicide victims in Oregon have a diagnosed mental disorder, substance use disorder, or depressed mood, according to the Oregon Violent Death Reporting System. The most frequently diagnosed mental disorder in suicides is major depression (77%), followed by bipolar disorder (14%) and anxiety disorder (11%). Only about 40% of these individuals were reported as receiving treatment for mental illness around the time of their death.

While women are more likely to have a diagnosed mental health issue than men, they are also more likely to be in treatment for that illness. This may represent a difference in health care seeking behavior between men and women, especially where mental health services are concerned.

Women suicide victims have higher rates of substance abuse and dual diagnosis compared to men, whereas men more often demonstrate alcohol dependence. Of note, among persons with a substance abuse problem who died by suicide, more than 90% of women and more than 50% of men died by poisoning.

A problem with an intimate partner, physical health problems, and loss of job or other financial problems were reported for approximately 30% of suicide victims. Men were more likely to have experienced physical illness themselves, and death of a family member, and women were more likely to report financial problems, problems with an intimate partner, or legal issues.



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**Suicide factors among Oregon men and women 2003–2006**

Factor	Men	Women
Mechanisms of suicide		
Firearm	58%	29%
Poisoning	20%	55%
Mental behavioral health		
Mental health problem	75%	87%
Depressed mood at time around death	60%	70%
Diagnosed disorder	37%	63%
Current treatment*	33%	61%
Substance abuse	12%	20%
Alcohol dependence	26%	21%
Other factors		
Job/financial problem	29%	20%
Physical illness	27%	36%
Intimate partner problem	29%	24%
Legal problem	18%	8%
Family member death	6%	11%

\*For mental illness or substance abuse

**CLINICAL IMPLICATIONS: SCREEN**

A systematic review of suicide prevention strategies indicates that identifying mental health problems early, treating them properly and restricting access to lethal methods are important and effective in reducing suicide.<sup>2</sup> Universal screening for depression among adults is an important first step to address this problem. A variety of screening instruments are available. However, for providers looking for a really brief instrument, a simple question, such as “Do you often feel sad or depressed?” may identify a substantial

number of depressed patients. Clinicians may choose the method and screening instrument that best fits their personal preference, the patient population served, and the practice setting.<sup>3,4</sup>

*Practice Guideline for the Assessment and Treatment of Patients with Suicidal Behaviors*, developed by the American Psychiatric Association can help clinicians assess and manage suicidal patients. The guidelines are available in the Psychiatric Practice section of the APA web site.<sup>5</sup>

Although suicide risk is a problem throughout the life span, midlife suicide rates, particularly among women, are rising in Oregon. It isn’t yet clear which risk factors play the most significant role in this increase. Nonetheless, universal screening for depression among adults and treatment for mental illness are imperative to prevent suicide.

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**Peanut Butter Outbreak**

Unless you’ve been living under a rock, you’ve probably heard about

the latest foodborne horror: the peanut butter fiasco. At press time >550 confirmed *Salmonella* Typhimurium cases nationwide have been linked to the outbreak, 11 of them in Oregon. The outbreak may be much larger: for every reported case an estimated 20–50 people get sick but are not specifically diagnosed — because they do not seek medical attention or no stool specimens are obtained for culture if they did. Oregon’s cases ranged in age from 2–36 years (median=13 years). The young age likely reflects the typical age of peanut butter eaters. Three were female and eight male. Cases were from 7 counties. None of the 11 confirmed Oregon cases were hospitalized and none died, probably because none of the Oregon cases were elderly people in nursing homes where the deaths nationally occurred.

Three brands have been specifically linked to illnesses (King-Nut, Austin, Keebler), and others certainly contributed. The source of the outbreak appears to be systemic problems with peanut processing and quality assurance at a Georgia plant. This plant was† a supplier of peanuts and peanut derivatives (butter, paste, etc.) to hundreds of food processors and manufacturers. As many as 1200 different food products may eventually be recalled, shattering previous records (current list: [www.fda.gov](http://www.fda.gov)).

† Ed. note: I think we can confidently use the past tense here.