



Community Health Assessment Quarterly

Volume 4, Issue 2

Spring 2009

Suicide in Multnomah County

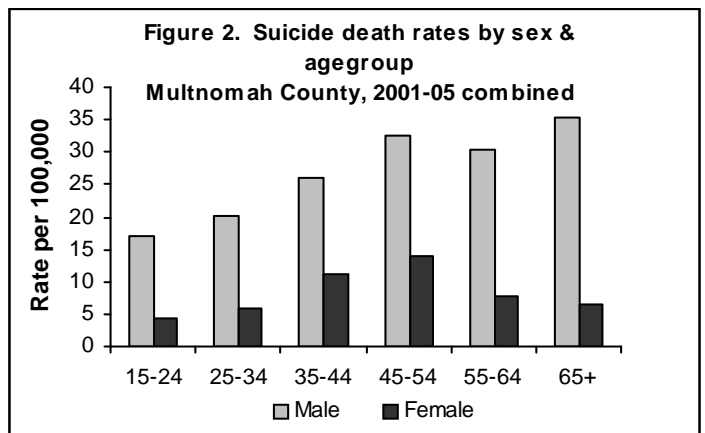
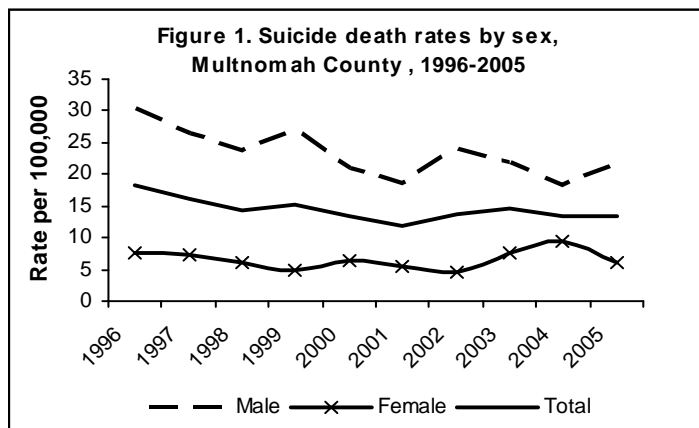
Introduction - Suicide ranks as one of the ten leading causes of death in the U.S., Oregon and Multnomah County. In 2005, Oregon had the 14th highest suicide rate of all states in the nation.¹ In Multnomah County there were 95 suicide deaths (17% of all suicides in Oregon)² and 464 suicide attempt hospitalizations in the same year.³

Data are routinely collected for suicide deaths and hospitalizations related to suicide attempts. Suicide deaths represent a small proportion of subset of people who contemplate and attempt suicide. The actual number of attempts (including those that are not hospitalized) and associated risk factors are unknown. However, studies have linked certain characteristics to an elevated risk of suicide including depression or other mental illness, substance abuse, a family history of suicide, living alone, unemployment, and being an older, White male.⁴

This report examines suicide-related hospitalizations and deaths in Multnomah County by age group and sex. Older males have high suicide death rates, and adolescents appear to have high suicide attempt rates both in Multnomah County and nationally. Strategies for prevention are also presented.

Suicide Mortality — In Multnomah County, the age-adjusted death rate for suicide was 13.5 per 100,000 population in 2005, the most recent year for which data are available.⁵ During the same year, Oregon had a age-adjusted suicide death rate of 14.8 per 100,000 while the national rate was 10.9.⁶ The county's overall suicide death rate remained relatively stable between 1996 and 2005 (see Figure 1).

The death rates for both men and women over this 10 year period did not change in a statistically significant way even though it appears that the male rate decreased.



In general, men have higher suicide death rates than women and this pattern is evident in Multnomah County also. The age-adjusted death rate for men was 21.7 per 100,000 (73 deaths) in 2005 while the same rate for women was 5.9 (22 deaths). Women had significantly lower suicide death rates compared with men between 1996 and 2005.

In addition to differences by sex there is also a difference in death rates by age-group. Figure 2 shows suicide mortality by age group and sex for

the 2001-05 period. The highest risk for suicide mortality occurs among men who are 65 years or older. Since the early 1990's, the suicide rate among adolescents and young adults has declined nationwide, including in Oregon. In all age groups, males have higher mortality rates than females. Suicide death rates by age-group in Multnomah County were not statistically different from the nation during the 2001-05 period.

During the 2001-05 period the majority of suicide deaths in Multnomah County involved firearms. Poisoning and suffocation-related deaths were the next most common mechanisms used (see Table 1).²

Men were more likely to use firearms. Among men in the state of Oregon, 61% of the suicide deaths involved firearms in 2006. In the same year, suicide deaths among women most often involved consumption of poison (51%).¹ County mortality data for 2005 show that half of the male suicide deaths involved firearms but among women other methods were more common.

Hospitalized Suicide Attempts — The most current hospitalization data available for Multnomah County indicate that between 2000 and 2006 the overall rate of suicide attempt-related hospitalizations increased.³

For women this rate was significantly higher in 2006 compared with 2002; however, there was no statistically significant increase among men. Among women, the age-adjusted rate increased from 55 to 90 hospitalizations per 100,000 persons. For men the rate rose from 44 to 52 per 100,000 and the combined age-adjusted hospitalization rate grew from 49 to 71 per 100,000. These trends are the same statewide, however Multnomah

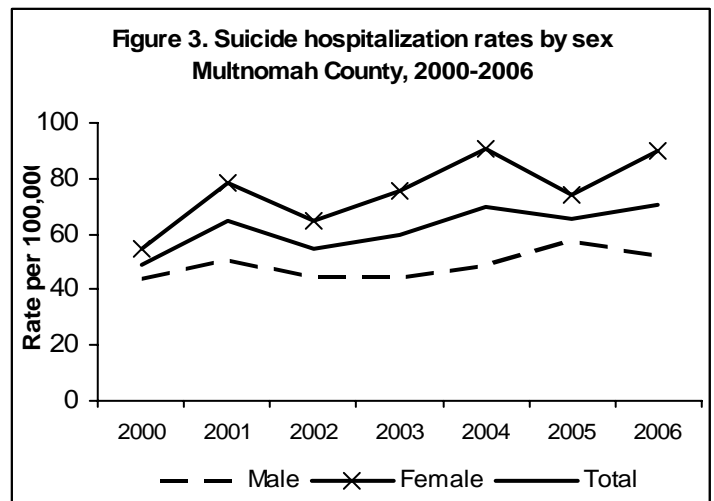


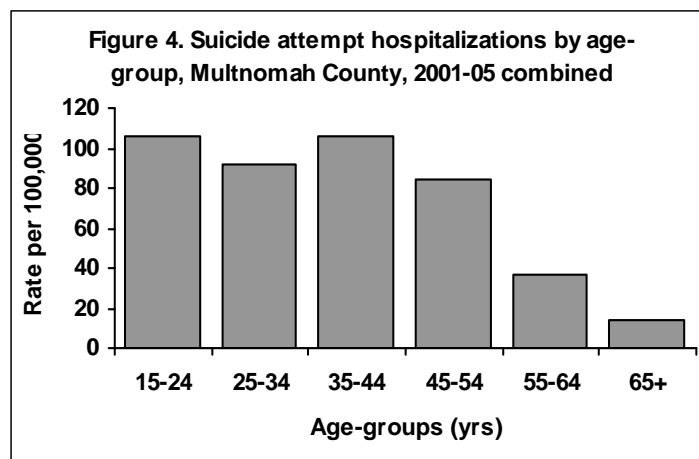
Table 1. Number and percent of suicide deaths and suicide attempt hospitalizations by mechanism, Multnomah County, 2001-05 combined ^{2,3}

Mechanism	Suicide deaths		Hospitalized suicide attempts	
	%	N	%	N
Firearm	40.8	194	0.9	20
Poisoning	21.7	103	93.3	2056
Suffocation	22.5	107	0.4	9
Cut/pierce	NR	NR	3.9	87
Other	13.7	65	1.4	31

* NR—not reported due to small number of deaths to protect confidentiality

County's suicide hospitalization rates are higher than the state rates. In 2006, females in Oregon had an age-adjusted hospitalization rate of 71.5 per 100,000 and men statewide had a rate of 38.5.¹

As in Oregon and the nation, female suicide-related hospitalization rates in Multnomah County are typically higher than those of males while male suicide death rates are higher than those of females.³ One explanation for this discrepancy is that men are more likely to select firearms as a mechanism of death which is more lethal than



other common mechanisms. Women are more likely to attempt suicide using poison.

The age-groups most likely to be hospitalized for suicide attempts in the 2001-05 period were 15 to 24 year olds (rate of 109 per 100,000) and 35 to 44 year olds (rate of 106 per 100,000). Hospitalization rates were also high in the 25 to 34 and 45 to 54 year old groups (see figure 4.)

By far the most likely mechanism by which suicide was attempted among those who were hospitalized was poisoning. Cutting and piercing were the next most likely mechanisms used in suicide attempts that resulted in hospitalizations. Firearms were among the least likely mechanisms used by those hospitalized for suicide attempts although they are the most common mechanism among suicide deaths.

The high rates of suicide attempt hospitalization in Multnomah County among women, the age-groups noted previously, and those involving the use of poison provide direction for prevention efforts in this county.

Suicide in older male adults— Older adults, especially non-Hispanic White males, have higher rates of suicide mortality than any other age-group. In 2003, Oregon had the 4th highest suicide death rate among adults aged 65 or older.⁶ Suicide rates for older adult males were nine times higher than the death rate for older adult females in the state.

According to a 2006 report by Oregon Department of Human Services, some of the risk factors for higher suicide death rates among older adults include depression, a sense of isolation, and being divorced or widowed. The National Institute of Mental Health reports that older adults with chronic physical illness, requiring home health-care, or who are hospitalized are more likely to be depressed than those living in the community.⁴

Older adults have more frequent contact with their health care providers than any other group. In the U.S. and in Oregon, most of the older adults who committed suicide had visited their primary care provider in the month prior to their death. As depression and other mental illness is under-diagnosed and under-treated in general, there are numerous missed opportunities to treat depression during primary healthcare visits.

Other barriers include the stigma associated with mental illness and the inability to pay for mental health treatment that is not adequately covered by Medicare or other healthcare plans.

Over the next few decades “baby boomers” will swell the numbers of older adults in Oregon. It is likely that the numbers of suicide deaths in this age group will also rise.

Prevention— One strategy for suicide prevention is to improve the identification of persons who are at high risk for suicide because of depression, other mental illness, a family history of suicide, or other individual risk factors.⁷ Training for health care providers and “gatekeepers” such as teachers and counselors in a school setting is effective in improving the detection of depression and suicide ideation. In the case of health care providers, additional training on the use of antidepressants and other medication for mental illness has also been

shown to be effective in increasing the number of people identified as being at risk for suicide, and in decreasing the number of suicides and suicide attempts.

Psychotherapy alone or in combination with medication also holds promise in reducing suicide and suicide attempts although long-term outcomes of this strategy need to be studied further.⁷

The Oregon Department of Human Services created a plan in 2006 to prevent suicide among older adults. In this plan, the state outlined strategies to strengthen prevention efforts in the clinical setting and in the community along with better monitoring of data related to suicide.⁶

Given the high rate of suicide attempt hospitalizations among adolescents and young adults, prevention efforts must also center around these age groups. Routine screening for suicide risk factors is effective only in certain populations such as the high school and college student populations. The U.S. Preventive Services Task Force recently issued recommendations that teens should be screened by health care providers using valid and reliable questionnaires.⁸ This recommendation includes both teens who are at high risk for suicide as well as those without

symptoms. However, the Task Force stated that routine screening should occur only when psychotherapy is an option rather than relying solely on antidepressants.

Studies indicate that the choice of method of committing suicide is related to the ease of access to a given method. Prevention strategies must focus on reducing easy access to lethal means. Data indicate that there is a link between states with high gun ownership and an increased suicide rate. Keeping guns locked in the home may prevent suicide deaths among youth.⁹

As noted earlier, in Multnomah County, the most common mechanism in suicide deaths involved firearms, while poisoning was associated with an overwhelming number of suicide attempt hospitalizations. Information on demographic groups at higher risk of committing suicide along with an understanding of the most common mechanisms involved provide areas of focus for policies aimed at reducing suicide rates.

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Community Health Assessment

Quarterly is published four times per year, by Multnomah County Health Department Health Assessment and Evaluation Office 426 SW Stark St 9th Floor, Portland OR 97204. If you have questions or comments, please email Maya Bhat at maya.bhat@co.multnomah.or.us or by phone at 503-988-3663 x29055 This publication is available online at: <http://www.mchealth.org/hra/haq/suicide.pdf>