



# Public Health Approach to Suicide Prevention

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# Welcome and thanks

- Definitions
- Models
- Data
- Resources

# Two things

1. Healthcare = Illness care
2. Public health = Population health



# Public health is

the organized response by society to protect and promote health, and to prevent injury, illness and disability.

Public health efforts focus on the upstream determinants (environmental, social and behavioral determinants) of preventable health problems.

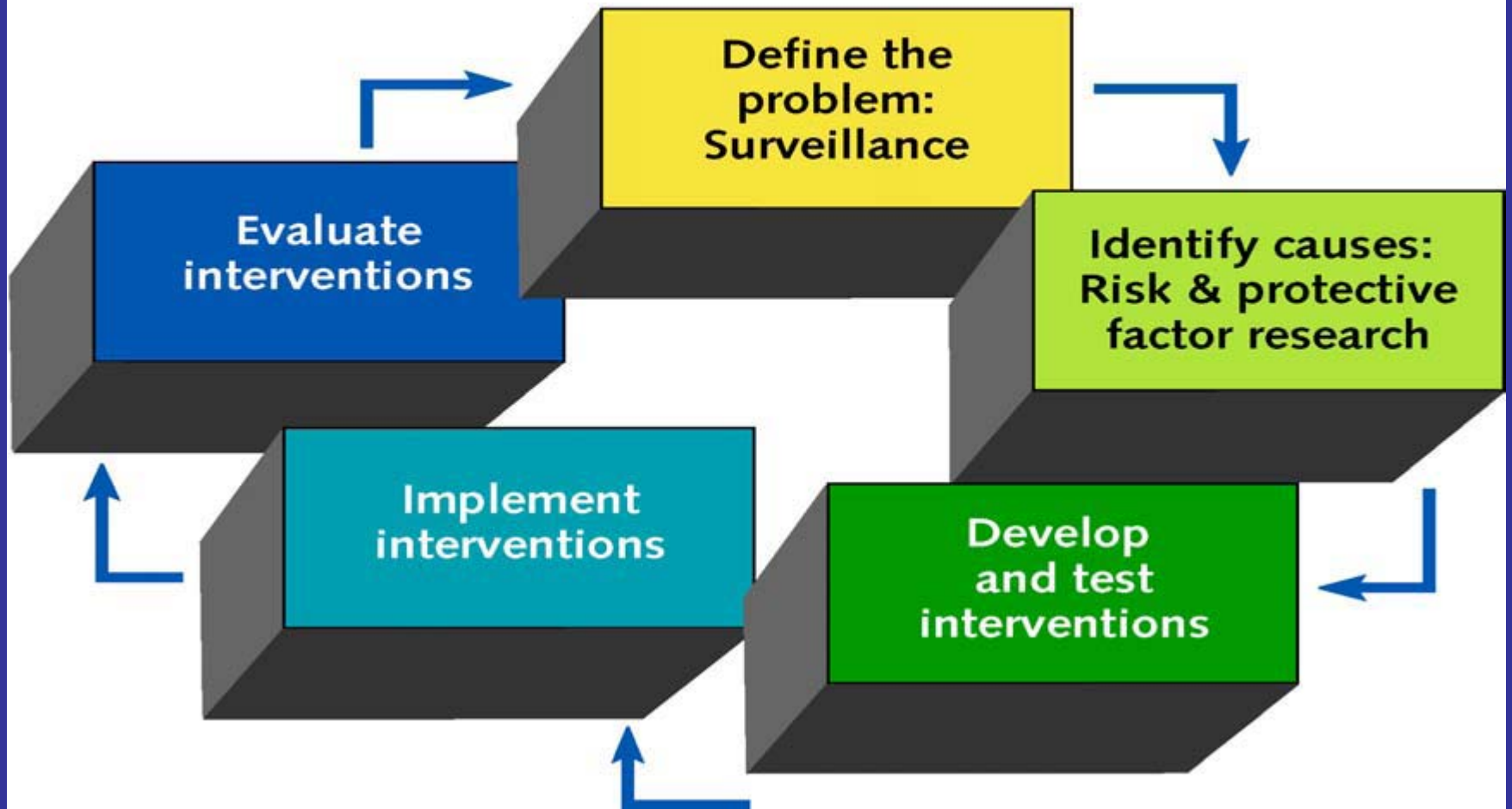
Public health is characterized by planning and intervening for better health in populations rather than focusing exclusively on the health of identifiable individuals.



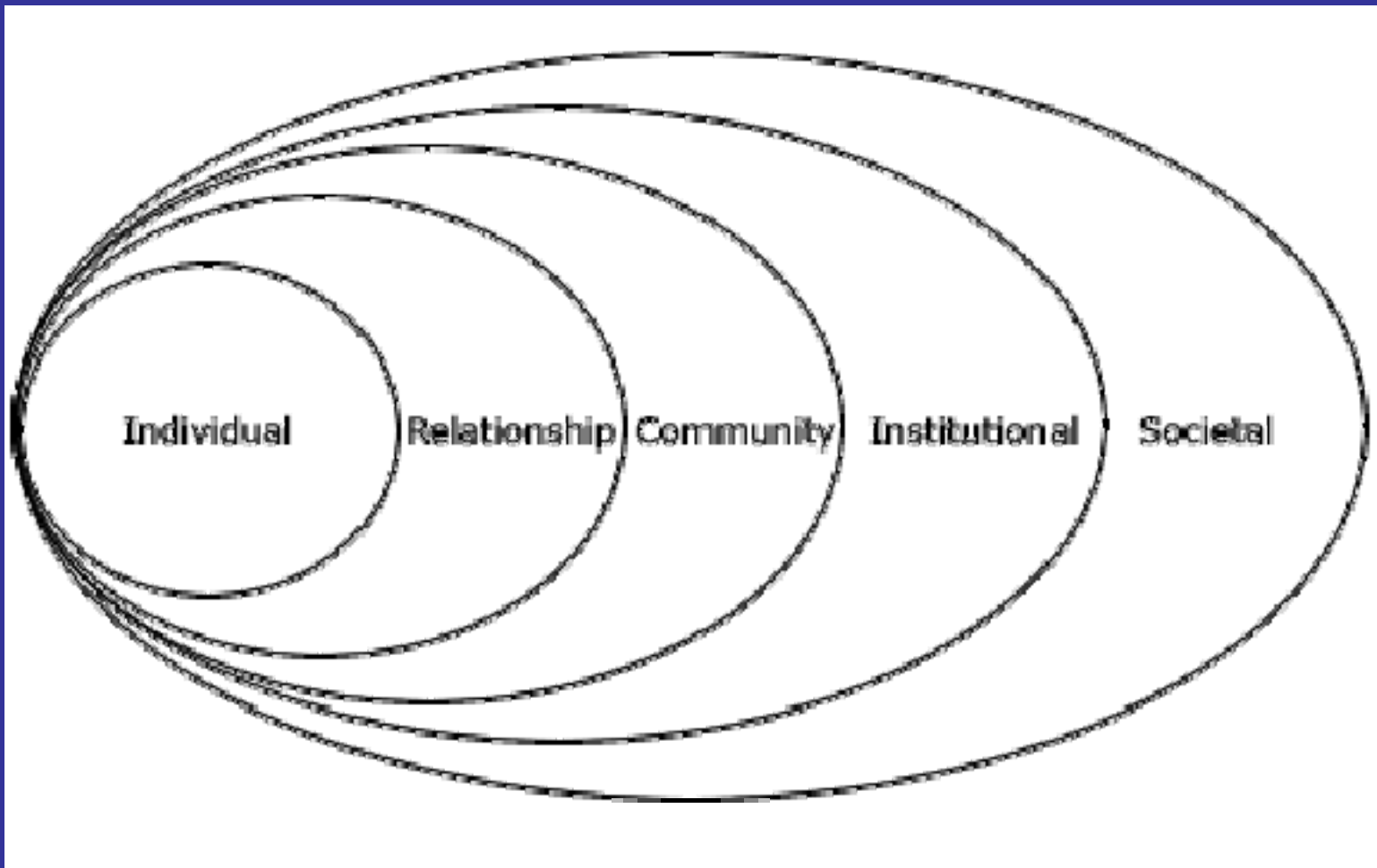
Public health is a particular set of measures and activities, most of which have primary prevention as their goal.

Public health aims to prevent through an organized effort, the occurrence of health problems in whole populations before they occur.

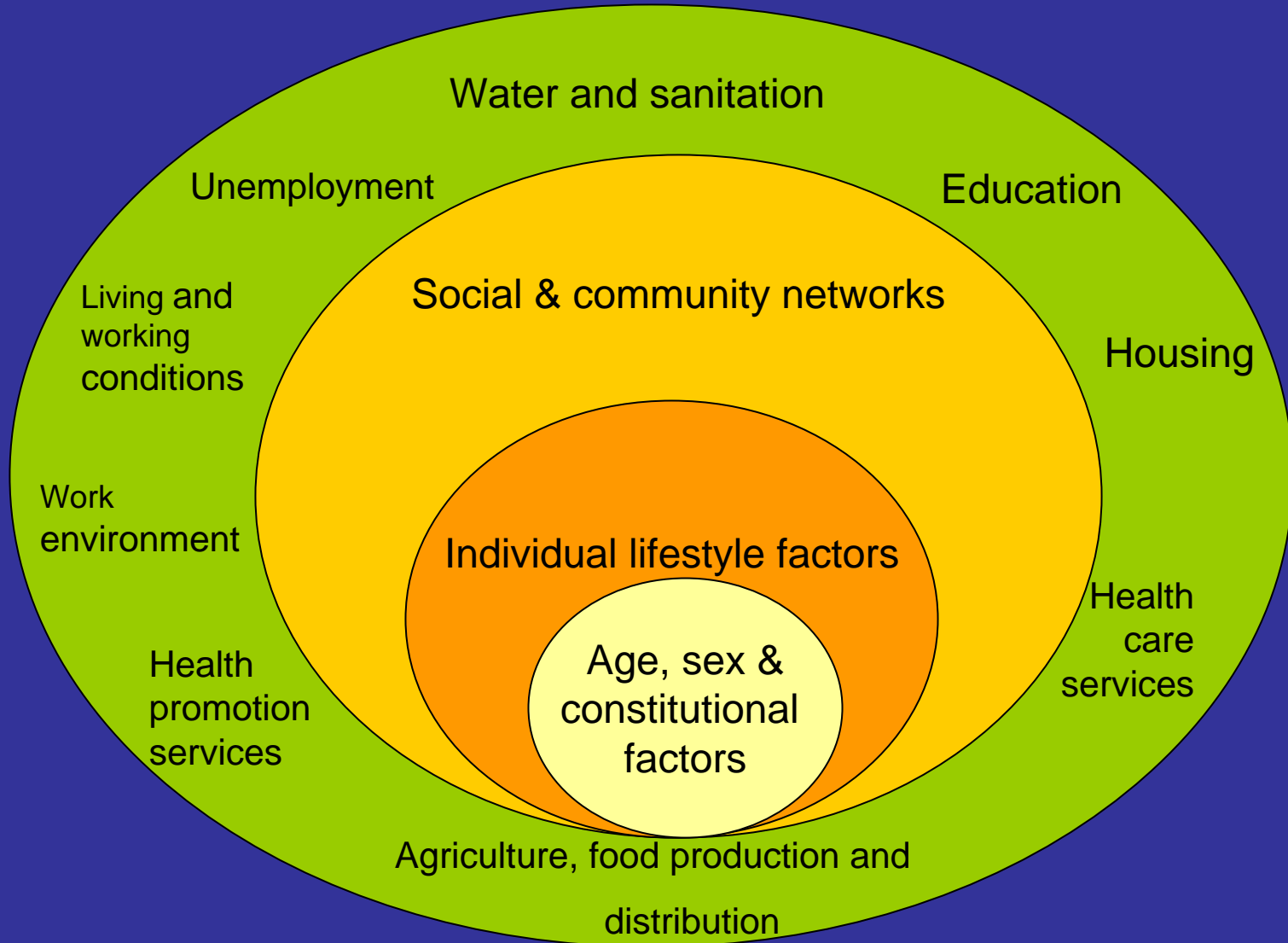
# The Public Health Approach to Prevention



# Socio-ecological model



# Model of health



General socioeconomic, environmental, and social conditions

A vibrant, multi-colored sky with blue, teal, and white clouds. The text "Imagine a healthy community" is centered in the upper half of the image.

Imagine a healthy community



Data

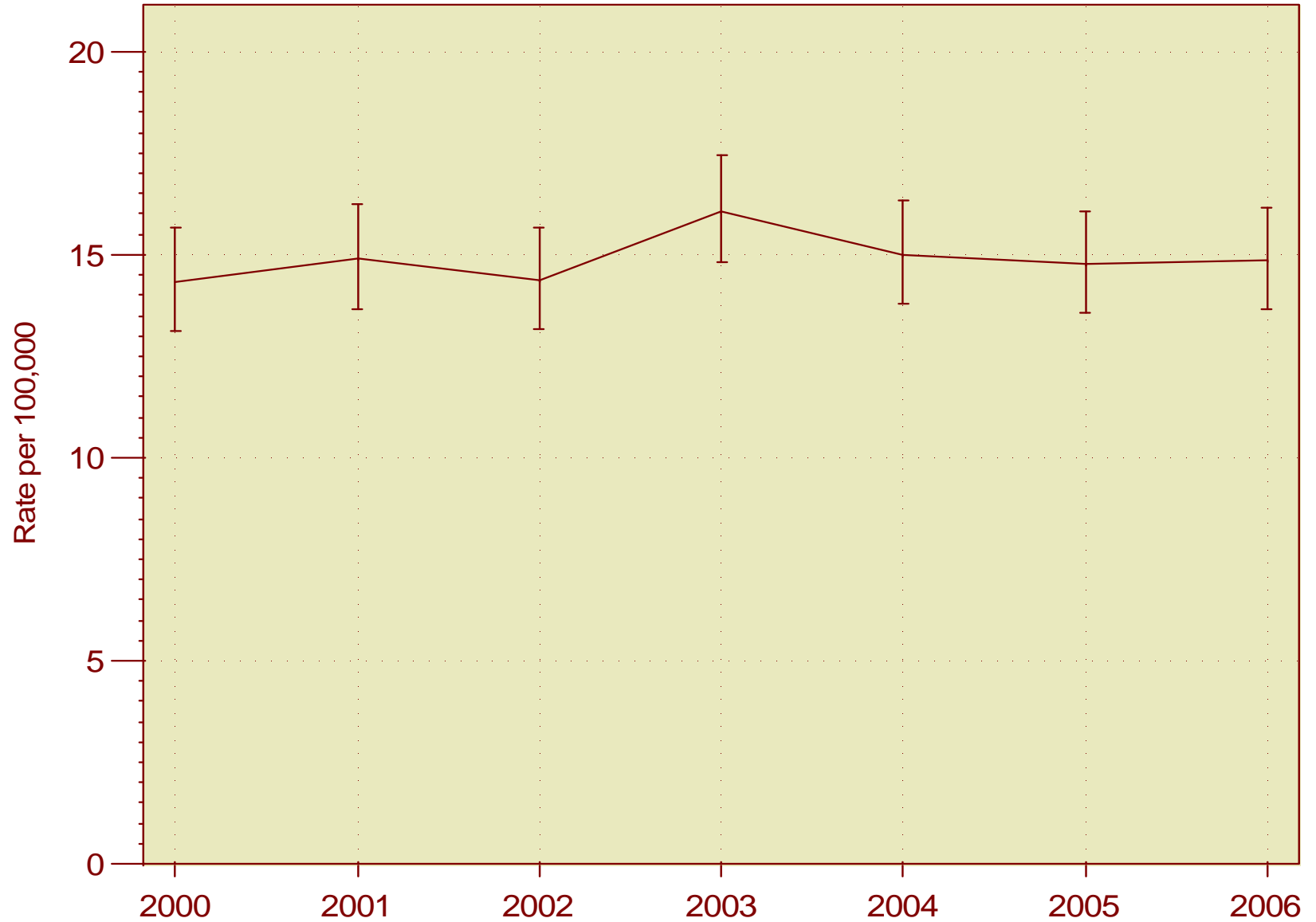
# Suicide data: a measure of community health

- The 9th leading cause of death in Oregon.
- A leading cause of years of potential life lost (YPLL).
- For persons aged 15-34, suicide is the second leading cause of death.
- 590 deaths in 2007.



# Suicide Mortality

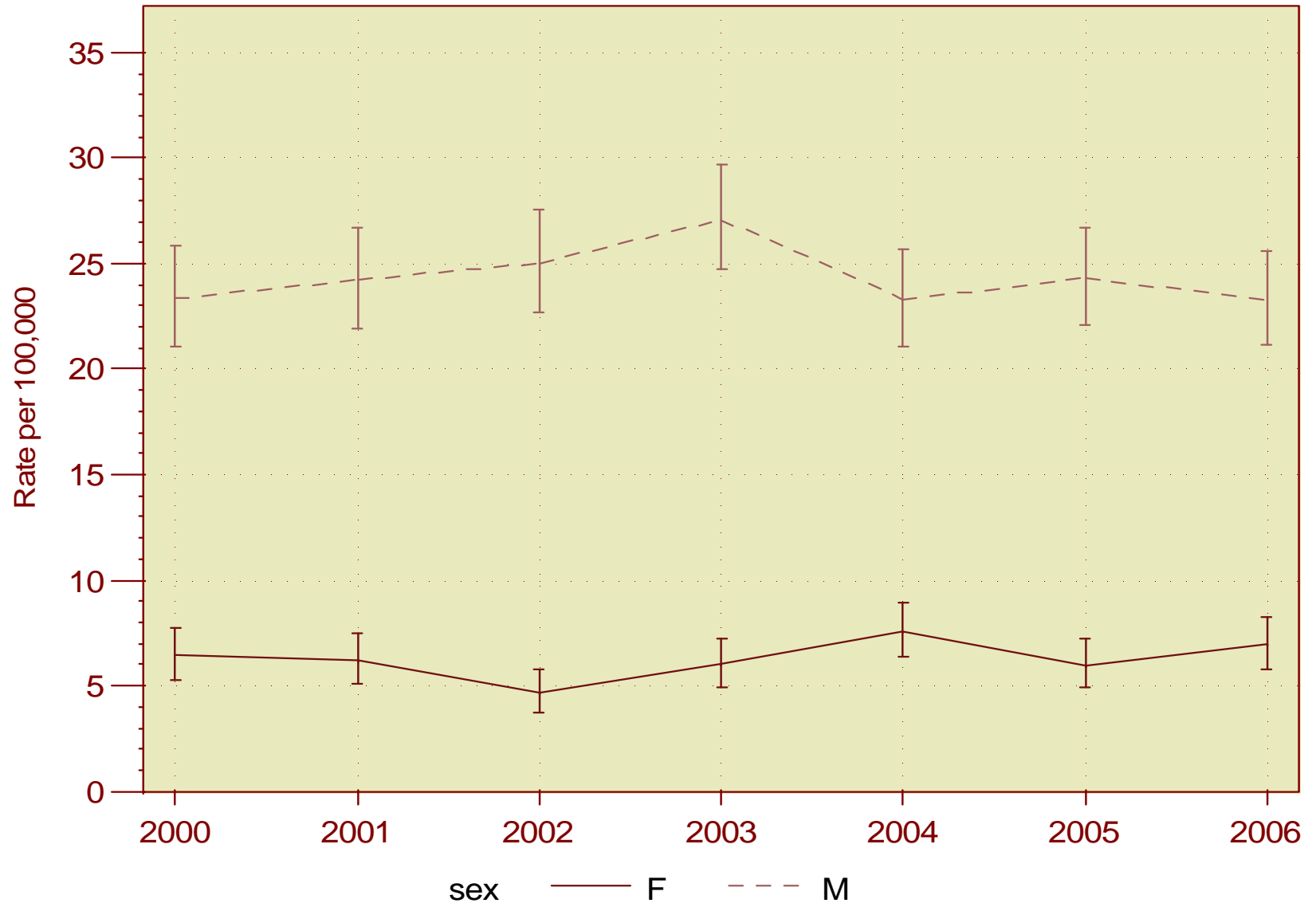
## Age-adjusted Rate, 2000-2006



\*Vertical bars indicate 95% confidence intervals for age-adjusted rate.

# Suicide Mortality

## Age-adjusted rate by sex, 2000-2006



\*Vertical bars indicate 95% confidence intervals for age-adjusted rate.

# Data resources

Oregon Public Health Division  
2006

## Suicide and Suicide Attempts in Oregon



Oregon Injury Prevention and Epidemiology Program Suicide Fact Sheet

### BASIC FACTS

- There were 568 suicides in Oregon in 2006.
- Men are more likely to die from suicide than women.
- The rate of suicide tends to increase with age—rates are highest in males 75 years of age and older.
- 2% of suicide attempt hospitalizations were due to firearms; 54% of suicides involved a firearm.
- 25% of suicides (142) in 2006 occurred among veterans—135 of them were male.

### Suicides, 2006

#### Rate

- The 2006 adjusted rate of suicide in Oregon was 14.9 per 100,000 persons.
- In 2005, Oregon ranked 14th among all US states in suicide incidence.

#### Sex

- Among males, the rate of suicide was 23.8 per 100,000 in 2006.
- The rate among females was 7.2 per 100,000 in 2006.
- 61% of suicides among men involved firearms.
- For women, the majority of suicides—51%—involved poison.

#### Age

- Men 75-84 year old had the highest suicide rate—59.8 per 100,000.
- Both men and women experienced a peak in suicide risk between 45 and 54 years of age (although not the highest peak for men).

#### Race

- Caucasians have the highest suicide rate—16 per 100,000 in 2006.
- The second highest rate is among American Indians/Native Alaskans at 10 per 100,000.



**Method**

- 54% of suicides in 2006 involved a firearm.

**Risks**

- More than 50% of people who died by suicide in 2006 were reported to have recently experienced a depressed mood.

### Number and percent of suicide attempt hospitalizations by mechanism, 2006

Mechanism	%	No.
Poisoning	93.4	1682
Cut/pierce	3.2	65
Firearm	1.4	28
Not elsewhere classifiable	0.6	12
Falls	0.4	9
Suffocation	0.4	8
Motor vehicle traffic	0.1	3
Not specified	0.1	3
Other specified	0.1	3
Fire/burn	0.0	1

### Hospitalized Attempts, 2006

#### Rate

- There were 54.7 suicide hospitalizations (adjusted) per 100,000 persons in 2006.
- The rate of hospitalization for suicide attempt increased significantly between 2000 and 2006.

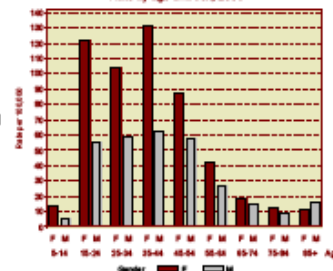
#### Sex

- The rate among females was 71.5 per 100,000 compared to 38.5 for men.

#### Age

- The highest rates occur among those 35-44 years of age—for both men and women.
- The second highest rates are among females 15-24.

Self-harm/suicide Attempt Hospitalization Rate by age and sex, 2006



#### Method

- 93% of suicide attempt

hospitalizations involved poison.

Matt Laidler, M.P.H.,  
Injury Epidemiologist

## Deaths and Hospitalizations

Top priorities:

1. Suicide,
2. MVC,
3. Unintentional poisoning,
4. Falls among elderly



OREGON DEPARTMENT OF HUMAN SERVICES

Public Health Division



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## Injury in Oregon

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Injury Prevention and Epidemiology Program

2008 Annual Report

Xun Shen, M.D.,  
M.P.H.,  
Epidemiologist

Lee Anna  
Bennett-Ashworth  
Data Abstractionist

Oregon State  
Police

Oregon Medical  
Examiners

Sheriff's and  
Police

## Violent Deaths in Oregon: *2007*

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Oregon Violent Death Reporting System  
Oregon Injury Prevention and Epidemiology Program  
Office of Disease Prevention and Epidemiology

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# Adolescent Suicide Attempt Data System Unique in the U.S.

Matt Laidler,  
Epidemiologist

## Youth suicide attempts

The risk of suicide increases dramatically during the teen years. During 2005, 773 adolescent suicide attempts were reported by Oregon hospitals, about 16 percent fewer than during each of the previous two years. This decrease is a reporting artifact reflecting the change in priorities at the Oregon Center for Health Statistics, not a true decline in the number of suicide attempts (see data caveats on page 8-3). At the same time, the number of attempts ending in death increased to 21, up from 18 in 2004 and 16 in 2003.

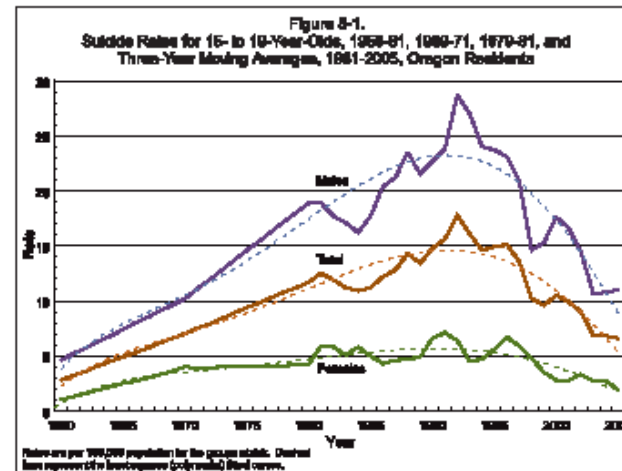
The Oregon reporting system identifies only attempts by youth with injuries severe enough to require emergency care at a hospital; consequently, the number of attempts reported must be considered a minimum. The proportion of youth described with a specific characteristic is based only on those cases with known values; that is, attempts in the not stated categories are excluded before the percentages are calculated. The Technical Notes section in Appendix B describes the methodology and limitations of the data.

*During the past decade, the suicide rate for Oregonians ages 15-19 has fallen to a level not seen since the 1970s.*

## Suicide deaths

### Temporal trends

During 2005, 21 Oregonians 19 or younger died by suicide, three more than during the previous year, but still one of the lowest counts during the past dozen years. (Table 8-1 and Table 8-2). In 1995, by comparison, 43 attempts resulted in death. Because the number of events in any one year is small and subject to considerable random statistical variation, a



# Oregon Healthy Teen Survey



# Resources

- Columbia Care
- RESPONSE
- Gatekeeper Training
- Bereavement Support
- Crisis Line at Oregon Partnership
- VA prevention specialists
- National Guard Reintegration Team
- College & University programs
- Local Coalitions

# Yamhill Suicide Prevention Coalition Video: “Breaking the Silence” and Community Discussion Guide





# A Call to Action

THE OREGON PLAN FOR

YOUTH SUICIDE PREVENTION



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# Oregon Older Adult Suicide *Prevention Plan*

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**A Call to Action**

During the past decade, the suicide rate among youth aged 15-19 has fallen to a level not seen since the 1970's

8.4 per 100,000 in 2007



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