

**“An Ecological Approach to Preventing Suicide
Among Staff and Patients”**

**National Association of State Mental Health Program
Directors
Summit of State Psychiatric Hospital Superintendents**

**David A. Litts, OD, FAAO
Associate Director, Prevention Practice
Suicide Prevention Resource Center**

May 1, 2005

- ❖ **Suicide Prevention Policy Development**
- ❖ **Ecology of Suicide**
- ❖ **Approaches to Preventing Suicide**
- ❖ **USAF: A Model**

- ❖ **1997-8 Congressional Resolutions**
- ❖ **1998 – First National Suicide Prevention Conference**
- ❖ **1999 – SG’s Call to Action to Prevent Suicide**
- ❖ **2001 – National Strategy for Suicide Prevention**
- ❖ **2002 – IOM Report**
- ❖ **2003 – President’s NFC**

Prevention goes beyond changing individuals--it changes cultural norms

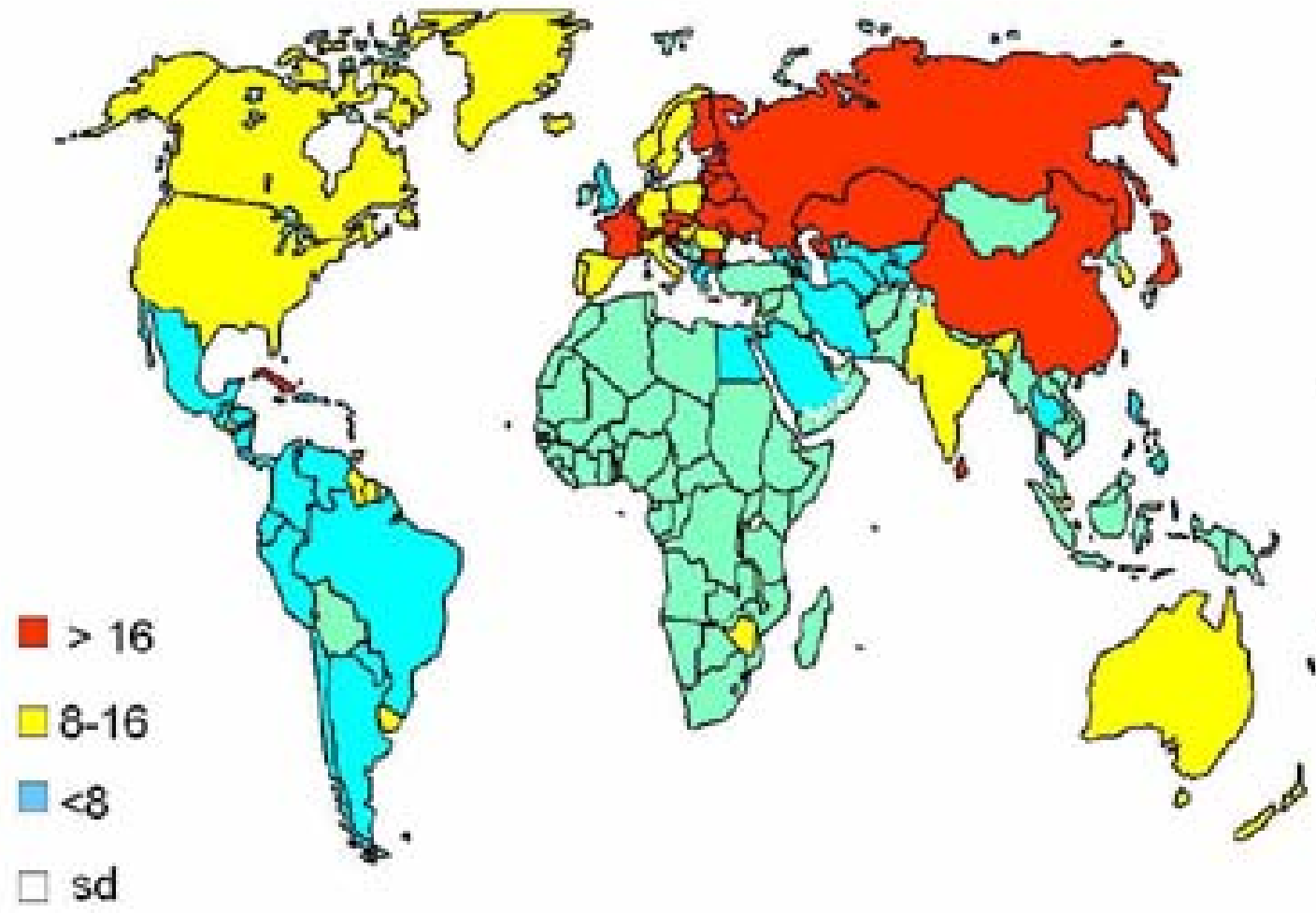
--Murray Levine (1998)

***The National Strategy for Suicide Prevention* is designed to be a catalyst for social change with the power to transform attitudes, policies and services.**

-- The National Strategy (2001)

Map of suicide rates

(per 100,000; most recent year available)



Suicide Among Leading Causes of Deaths

United States - 2002

Age Groups

5 - 14

15-24

25-34

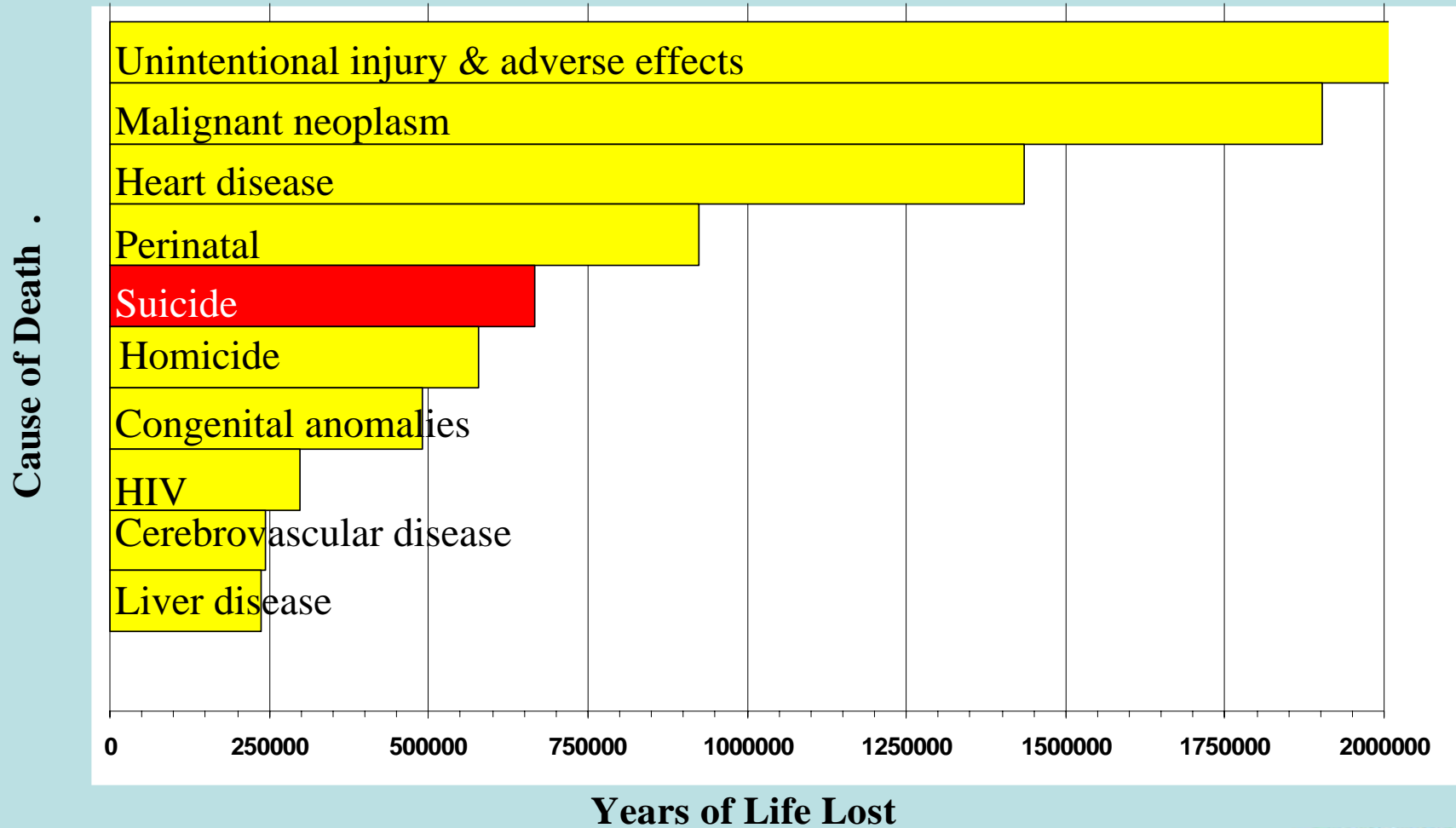
35-44

45-64

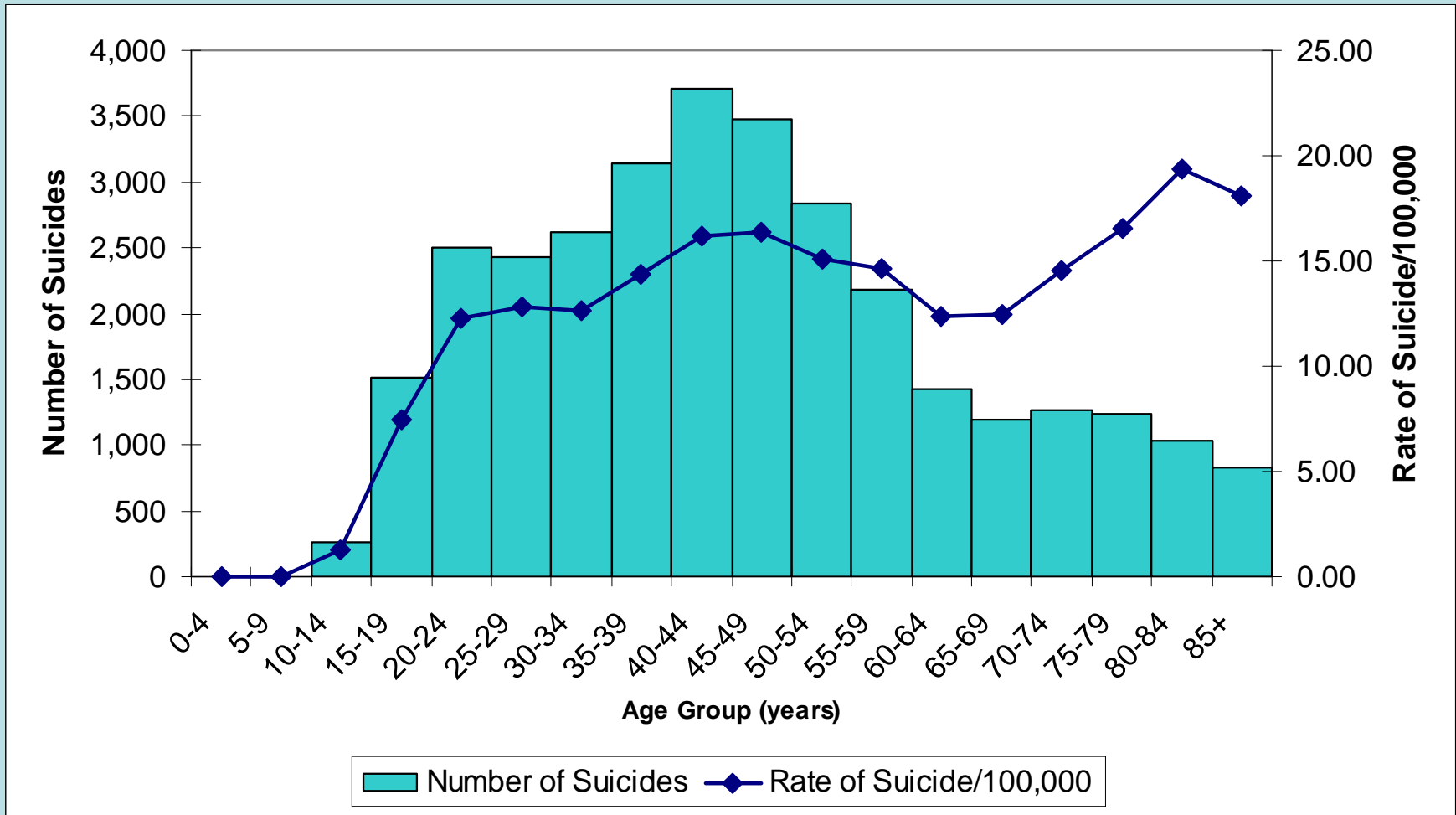
1	Unintentional Injuries	Unintentional Injuries	Unintentional Injuries	Unintentional Injuries	Malignant Neoplasms
2	Malignant Neoplasms	Homicide	Suicide	Malignant Neoplasms	Heart Disease
3	Congenital Anomalies	Suicide	Homicide	Heart Disease	Unintentional Injuries
4	Homicide	Malignant Neoplasms	Malignant Neoplasms	Suicide	Cerebrvvascular
5	Suicide	Heart Disease	Heart Disease	HIV	Diabetes Mellitus
6	Heart Disease	Congenital Anomalies	HIV	Homicide	Chronic Low. Respiratory Dis.
7	Chronic Low. Respiratory Dis.	Chronic Low. Respiratory Dis.	Diabetes Mellitus	Liver Disease	Liver Disease
8	Septicemia	HIV	Cerebrovascular	Cerebrovascular	Suicide
9	Cerebrovascular	Cerebrovascular	Congenital Anomalies	Diabetes Mellitus	HIV

Years of Potential Life Lost Before Age 65 Years by Cause of Death

United States -- 2002



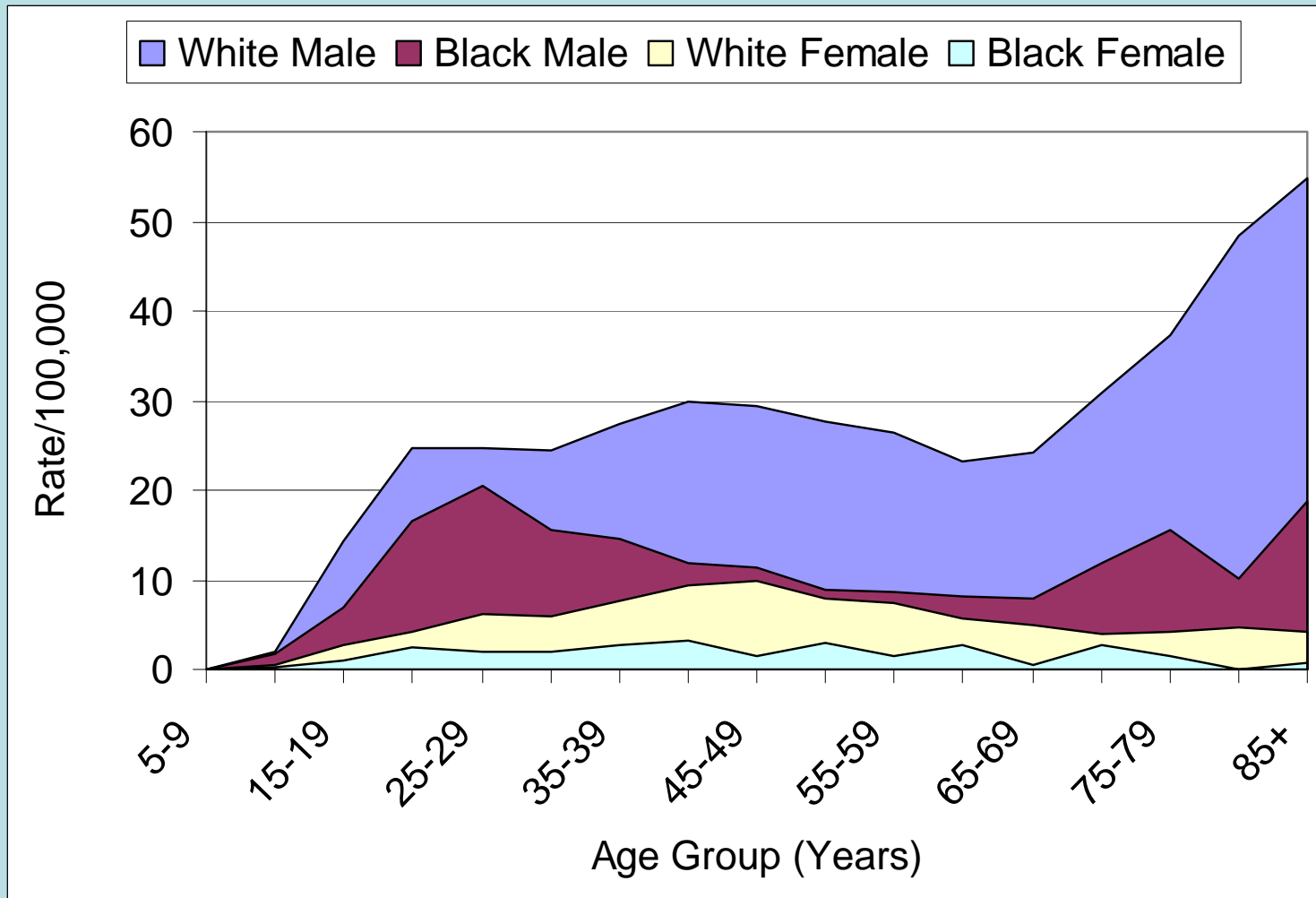
U.S. Suicides by Age – Rates & Numbers, 2002



* >80% between ages 20 and 64; 60% of those are employed.

Suicide Rates by Age, Race, and Gender

United States -- 2002

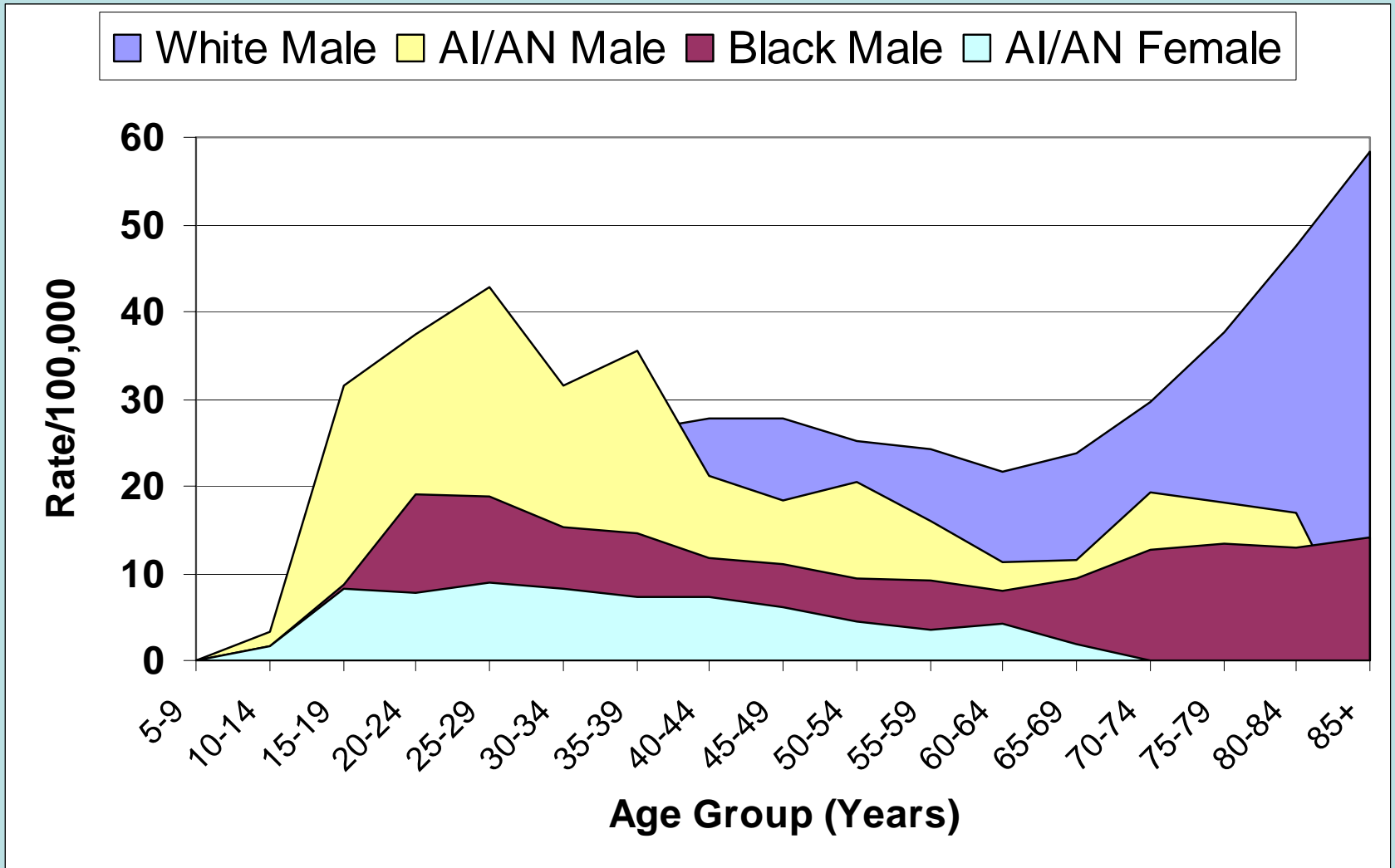


Source: National Center for Health Statistics

Note: non-Hispanic ethnicity

Suicide Rates by Age, Race, and Gender

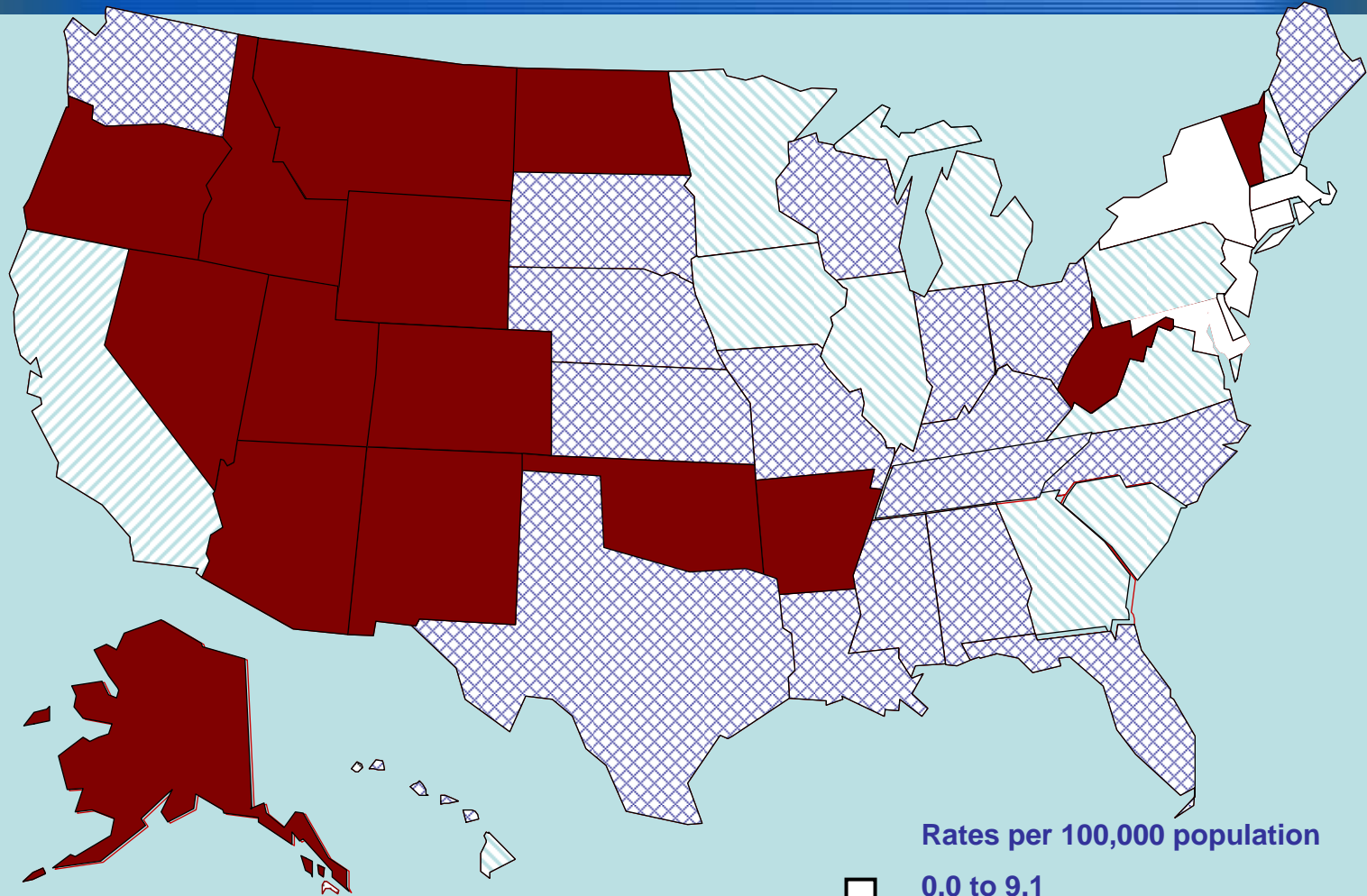
United States - 1999-2002



Source: National Center for Health Statistics

Note: non-Hispanic ethnicity

Age-adjusted suicide rates among all persons by state -- United States, 2002



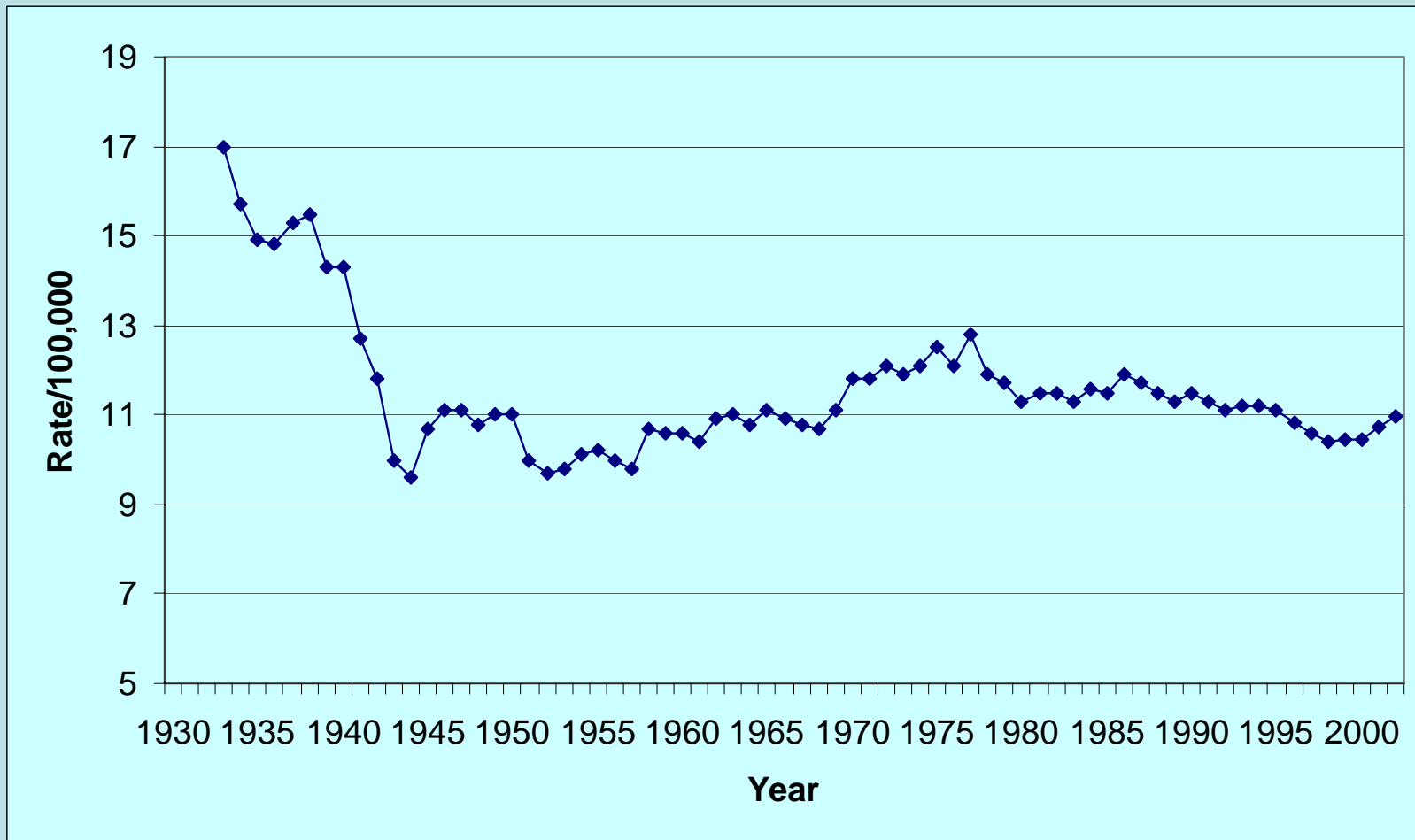
Rates per 100,000 population

-  0.0 to 9.1
-  9.2 to 11
-  11.1 to 13.4
-  13.5 to 21.1

Source: CDC vital statistics

Suicide Rates

United States, 1933-2002



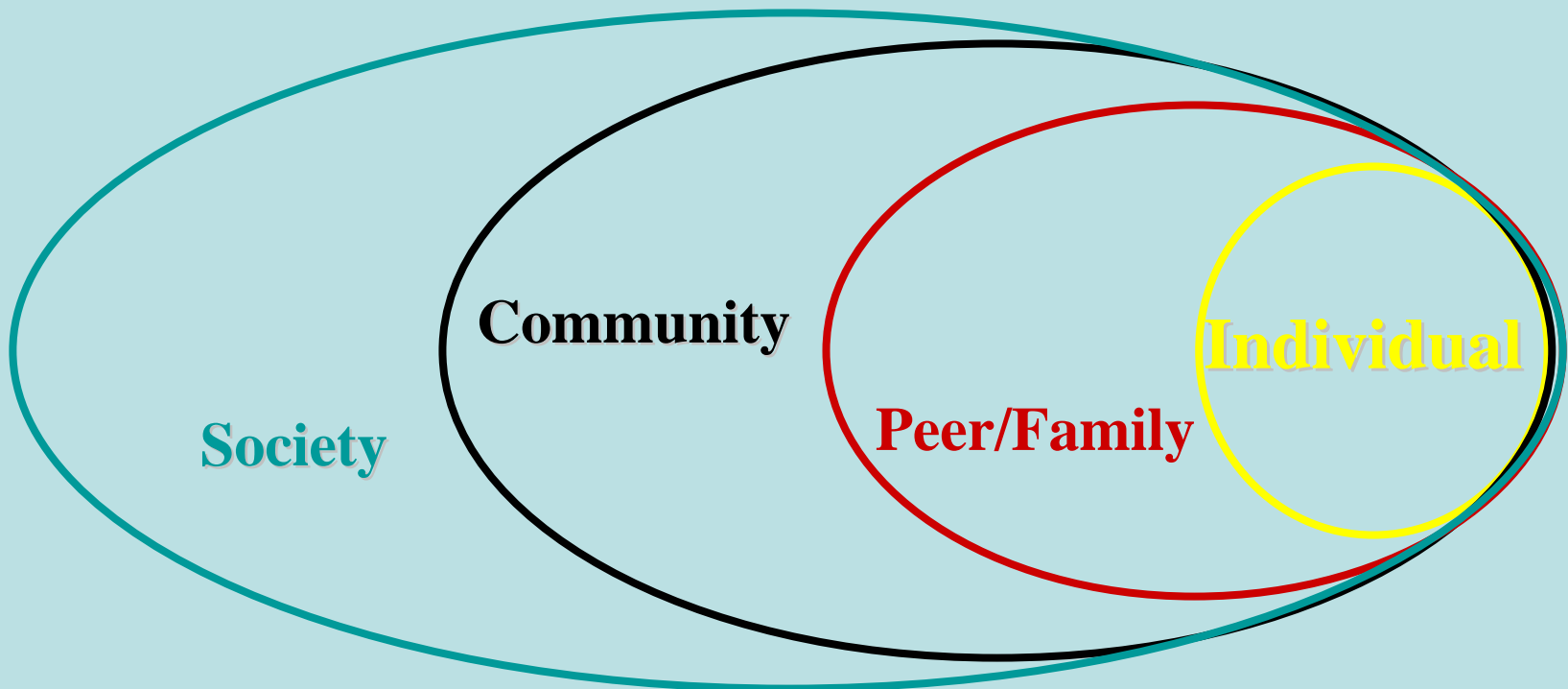
Source: Natl. Center for Health Statistics; Rates prior to 1999 Age-adjusted to 1940 U.S. population; 1999 and after adjusted to 2000.

- ❖ **Annual cost of workforce-related suicides is approximately \$11.8 billion in 1998 dollars.**
 - ◆ 12,000 employed persons 18-54 died from suicide 2000
 - ◆ Suicide is 4th leading cause of death among working persons 18-54
- ❖ **Deaths among employed persons 18-54 yrs are 2 times more likely to be due to suicide than non-employed (9% vs. 4%)**
- ❖ **Men account for 7 of 8 suicide deaths among workers.**

Source: "Pfizer Facts: The Impact of Mental Disorders on Work." An analysis of the National Mortality Followback Survey, 1993, U.S. Department of Health and Human Services, Centers for disease Control and Prevention, National center for Health Statistics. June 2002.

- ❖ **500,000 workers attempt suicide annually; 55% women**
 - ◆ 61% “serious” intent
- ❖ **86% of attempters had 1 or more psychiatric disorders**
- ❖ **Long-term costs of treating non-fatal suicide attempts, including lifelong disability, are unknown.**

Source: “*Pfizer Facts: The Impact of Mental Disorders on Work.*” An analysis of the National Mortality Followback Survey, 1993, U.S. Department of Health and Human Services, Centers for disease Control and Prevention, National center for Health Statistics. June 2002.



Risk

- Age/Sex
- Mental illness
- Substance abuse
- Loss
- Previous suicide attempt
- Personality traits or disorders
- Incarceration
- Access to means (e.g., firearms)
- Failure/academic problems

Protective

- Cultural and religious beliefs that discourage suicide and support self-preservation
- Coping/problem solving skills
- Support through ongoing health and mental health care relationships
- Resiliency, self esteem, direction, mission, determination, perseverance, optimism, empathy
- Intellectual competence (youth)
- Reasons for living

- ❖ **90% have diagnosable mental or substance abuse disorders or both**
- ❖ **60% have unipolar depression**
- ❖ **Other associated mental health problems:**
 - ◆ **Schizophrenia**
 - ◆ **Bipolar disorder**
 - ◆ **Personality disorders, e.g., borderline**
 - ◆ **Anxiety disorders**

Risk

- History of interpersonal violence/conflict/abuse/bullying
- Exposure to suicide
- No-longer married
- Barriers to health care/mental health care
- Access to means (e.g., firearms)

Protective

- Family cohesion (youth)
- Sense of social support
- Interconnectedness
- Married/parent
- Access to comprehensive health care

Risk

- **Isolation/social w/drawal**
- **Barriers to health care and mental health care**
- **Stigma**
- **Exposure to suicide**
- **Unemployment**

Protective

- **Access to healthcare and mental health care**
- **Social support, close relationships, caring adults, participation and bond with school**
- **Respect for help-seeking behavior**
- **Skills to recognize and respond to signs of risk**

Risk

- Western
- Rural/Remote
- Cultural values and attitudes
- Stigma
- Media influence
- Alcohol misuse and abuse
- Social disintegration
- Economic instability

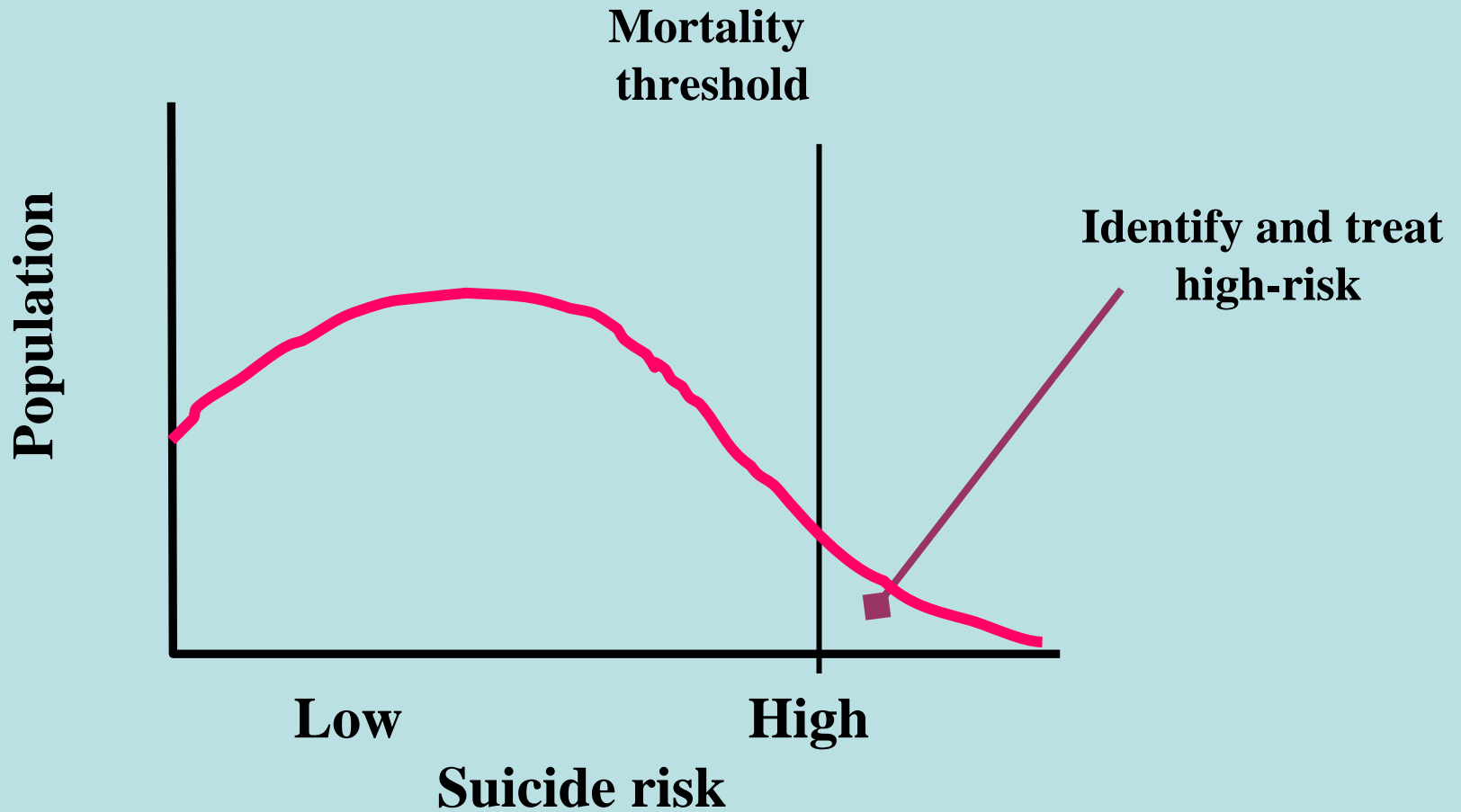
Protective

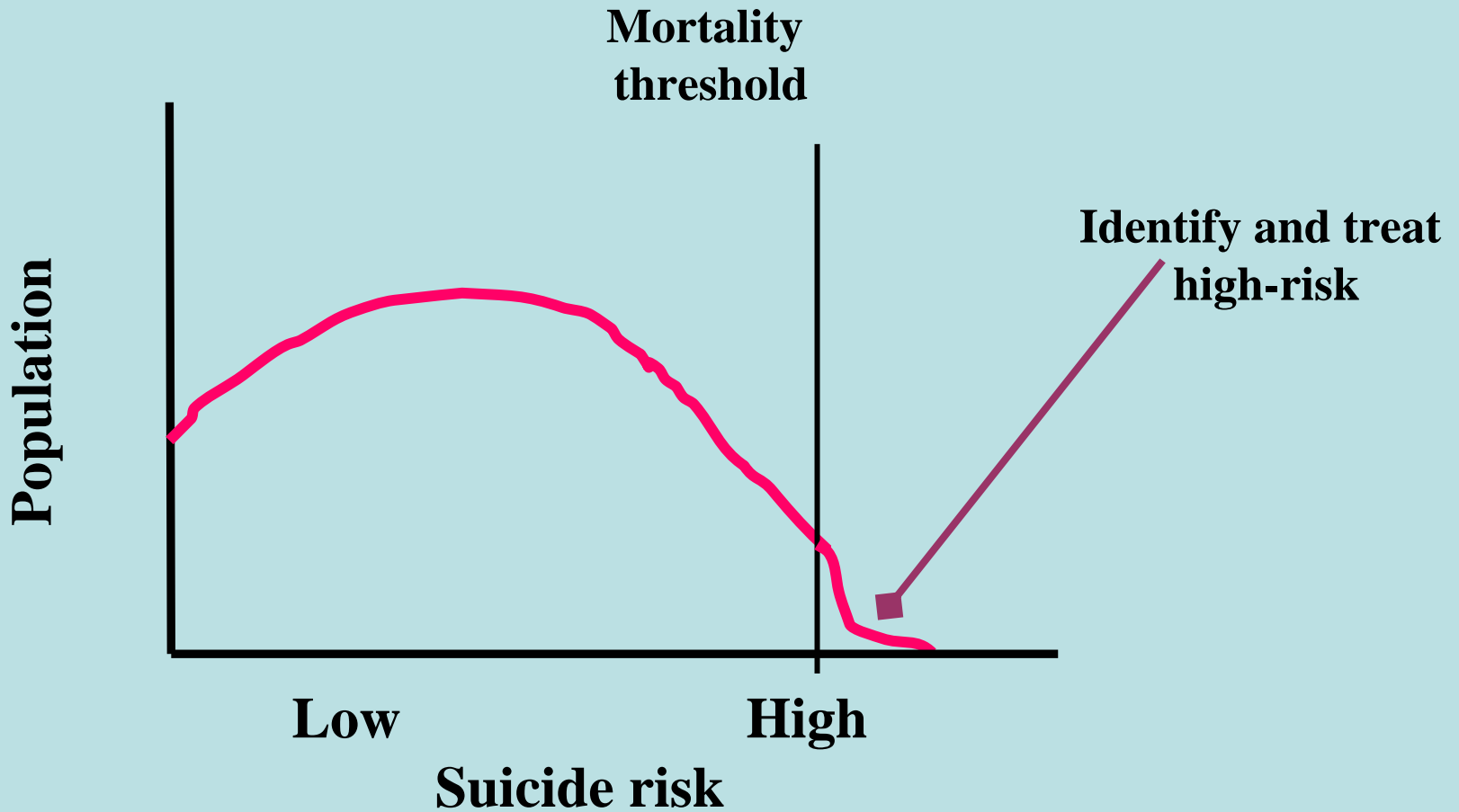
- Urban/Suburban
- Access to health care & mental health care
- Cultural values affirming life
- Media influence

“Problems are complex and go beyond the capacity, resources, or jurisdiction for any single person, program, organization, or sector to change or control.”

“The complexity of causes necessarily requires a multifaceted approach to prevention that takes into account cultural context. Cultural factors play a major role in suicidal behavior.”

Violence – A global public health problem, World Health Organization, 2002, p. 206. DeLeo, D. Cultural Issues in suicide and old age. *Crisis*, 1999, 20:53-55.



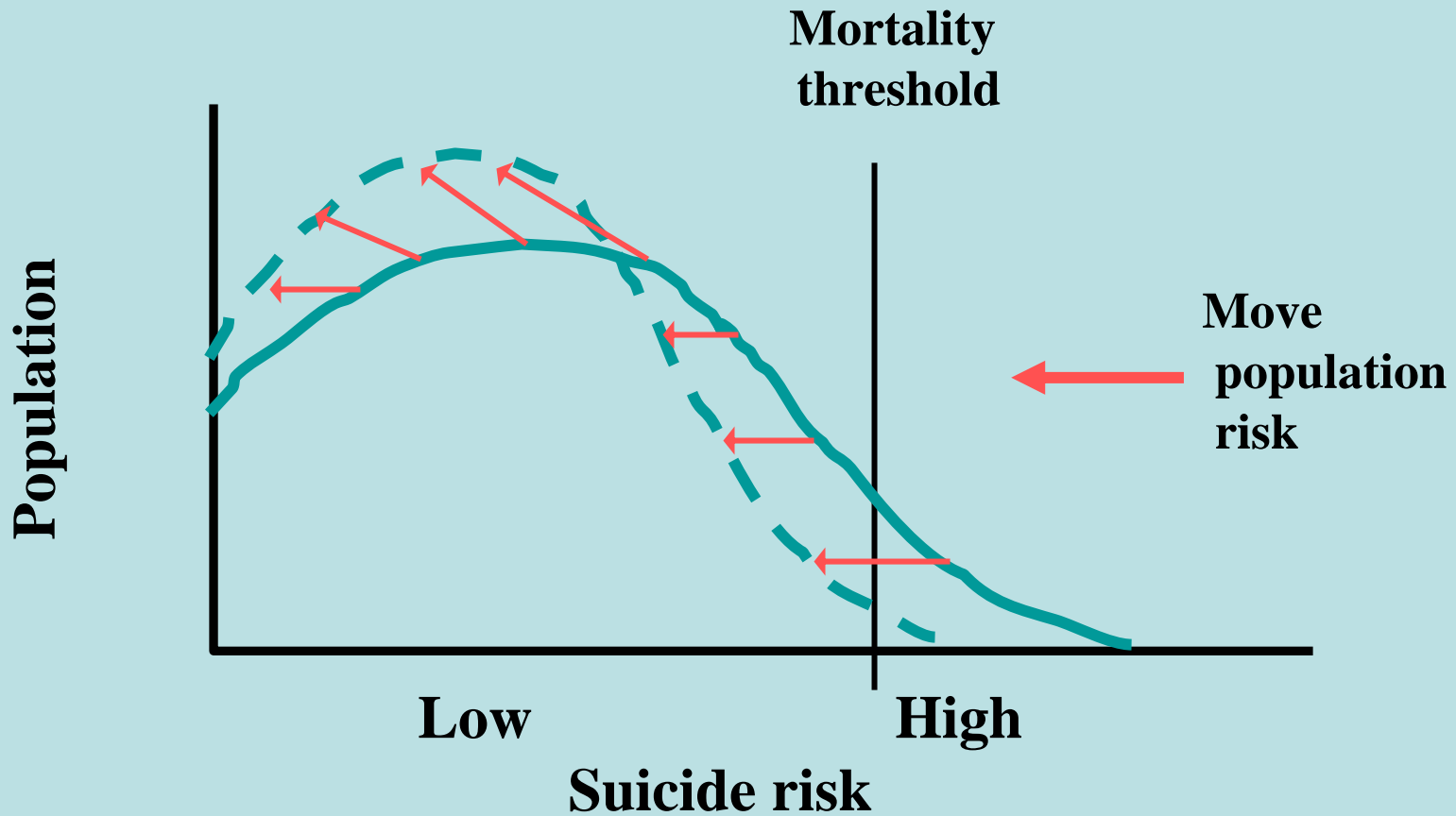


“A large number of people at small risk may give rise to more cases of a disease than a small number who are at high risk.”

— Rose, G. *The Strategy of Preventive Medicine*. Oxford University Press, 1991.

A population strategy of prevention is necessary where risk is widely diffused through the whole population.

Rose, Geoffrey, *The strategy of preventive medicine*. Oxford (Oxford University Press), 1992, 14



- ❖ **Community education/awareness**
 - ◆ **Safety is an issue**
- ❖ **Community collaboration around suicide prevention**
- ❖ **Social marketing**
 - ◆ **Destigmatizing helpseeking for mental health problems**
 - ◆ **Increasing social support**
 - ◆ **Strengthening social networks**
 - ◆ **Honor and support responsible help-seeking**

Guild PA, Freeman VA, Shanahan E. Promising Practices to Prevent Adolescent Suicide: What We Can Learn From New Jersey. Cecil G Sheps Center For Health Services Research. Univeristy of North Carolina at Chapel Hill. 2004.

Knox, K, et al., Risk of Suicide and related adverse outcomes after exposure to a suicide programme in the US Air Force:cohort study. British Medical Journal, December 13, 2003.

- ❖ Gatekeeper training
- ❖ Peer helper programs
- ❖ Resiliency/coping/problem solving skill building programs
 - ◆ Juvenile justice
 - ◆ Homeless youth
- ❖ Restricting availability of means
- ❖ Improved surveillance
- ❖ Postvention for the bereaved

Guild PA, Freeman VA, Shanahan E. Promising Practices to Prevent Adolescent Suicide: What We Can Learn From New Jersey. Cecil G Sheps Center For Health Services Research. University of North Carolina at Chapel Hill. 2004.

- ❖ Access to **effective** management of mental health problems **and suicidality**
 - ◆ Training for primary care providers
 - ◆ Training for mental health providers
 - ◆ Increase availability of mental health treatment
 - ◆ Increase affordability of mental health treatment
 - ◆ Linking suicide prevention programs with treatment services
 - ◆ Appropriate f/u after ED treatment
- ❖ Alcohol and substance abuse programs
- ❖ Domestic violence prevention

❖ **Training the media** Guild PA, Freeman VA, Shanahan E. Promising Practices to Prevent Adolescent Suicide: What We Can Learn From New Jersey. Cecil G. Byrd Center for Health Services Research. University of North Carolina at Chapel Hill. 2004.

Knox, K, et al., Risk of Suicide and related adverse outcomes after exposure to a suicide programme in the US Air Force: cohort study. British Medical Journal, December 13, 2003.

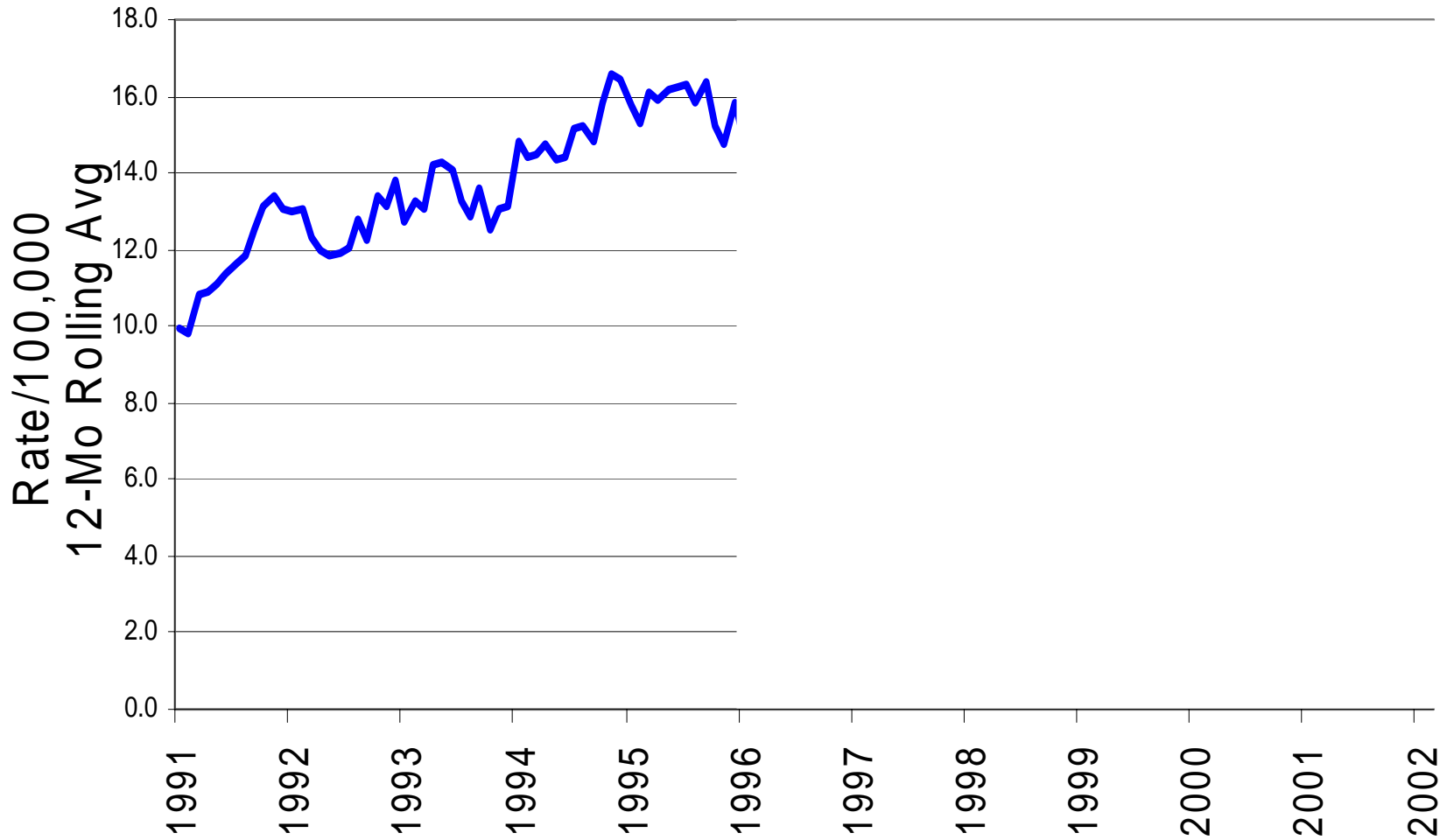
Roles for Policymakers in MH

Level of Spectrum	Definition of Level
1. Strengthening Individual Knowledge and Skills	Enhancing an individual's capability of preventing injury or illness and promoting safety
2. Promoting Community Education	Reaching groups of people with information and resources to promote health and safety
3. Educating Providers	Informing providers who will transmit skills and knowledge to others
4. Fostering Coalitions and Networks	Bringing together groups and individuals for broader goals and greater impact
5. Changing Organizational Practices	Adopting regulations and shaping norms to improve health and safety
6. Influencing Policy and Legislation	Developing strategies to change laws and policies to influence outcomes

**There are no easy solutions to complex problems;
but, there *are* complex solutions!**

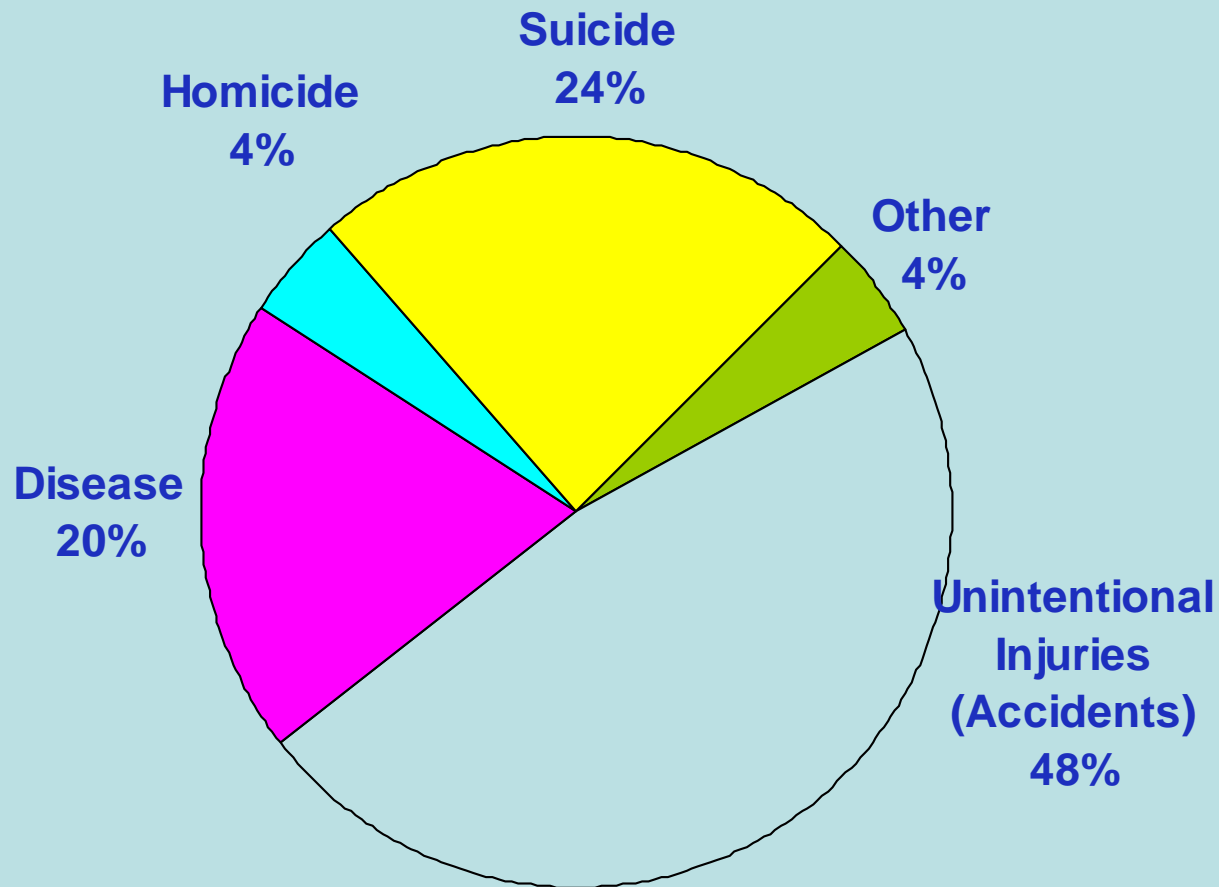
- ❖ **350,000 Service Members**
- ❖ **Educated, employed, housed, health care (including mental health care), one language**
- ❖ **Prescreened; low illicit drug use (~1%); discharge for mental illness**
- ❖ **Clearly identified community leaders**
- ❖ **Formal gatekeeper network**

Suicide Rate -- US Air Force Members 1990-2002



- ❖ Medics-Mental Health
- ❖ Public Health
- ❖ Personnel
- ❖ Command
- ❖ Law Enforcement
- ❖ Legal
- ❖ Family Advocacy
- ❖ Child & Youth
- ❖ Chaplains
- ❖ Criminal Investigative Svc.
- ❖ CDC
- ❖ Walter-Reed Army Inst. Of Research

- ❖ **Suicides are preventable**
 - ▲ **One is too many**
- ❖ **Tip of the iceberg**
 - ▲ **Address entire iceberg**
- ❖ **Not a medical problem**
 - ▲ **A *community* problem**
- ❖ **No proven approaches**
 - ▲ **Use CDC & WHO guidelines**
- ❖ **Partnerships key to success**
 - ▲ **All partners shared stake in outcome**
- ❖ **Cultural barriers to prevention**
 - ▲ **Leverage sr. leaders for cultural change**



Surveillance of Fatal and Non-fatal Self-Injuries

Mental Health Screening

Messages from Senior Leaders

Community Training

Public Affairs Initiatives

Career Development Education

1° Prevention Activities for MHPs

Integrating Community Preventive Services

Gatekeeper Training

Critical Incident Stress Management

Investigative Agency Hand-off Policy

Scope of Intervention



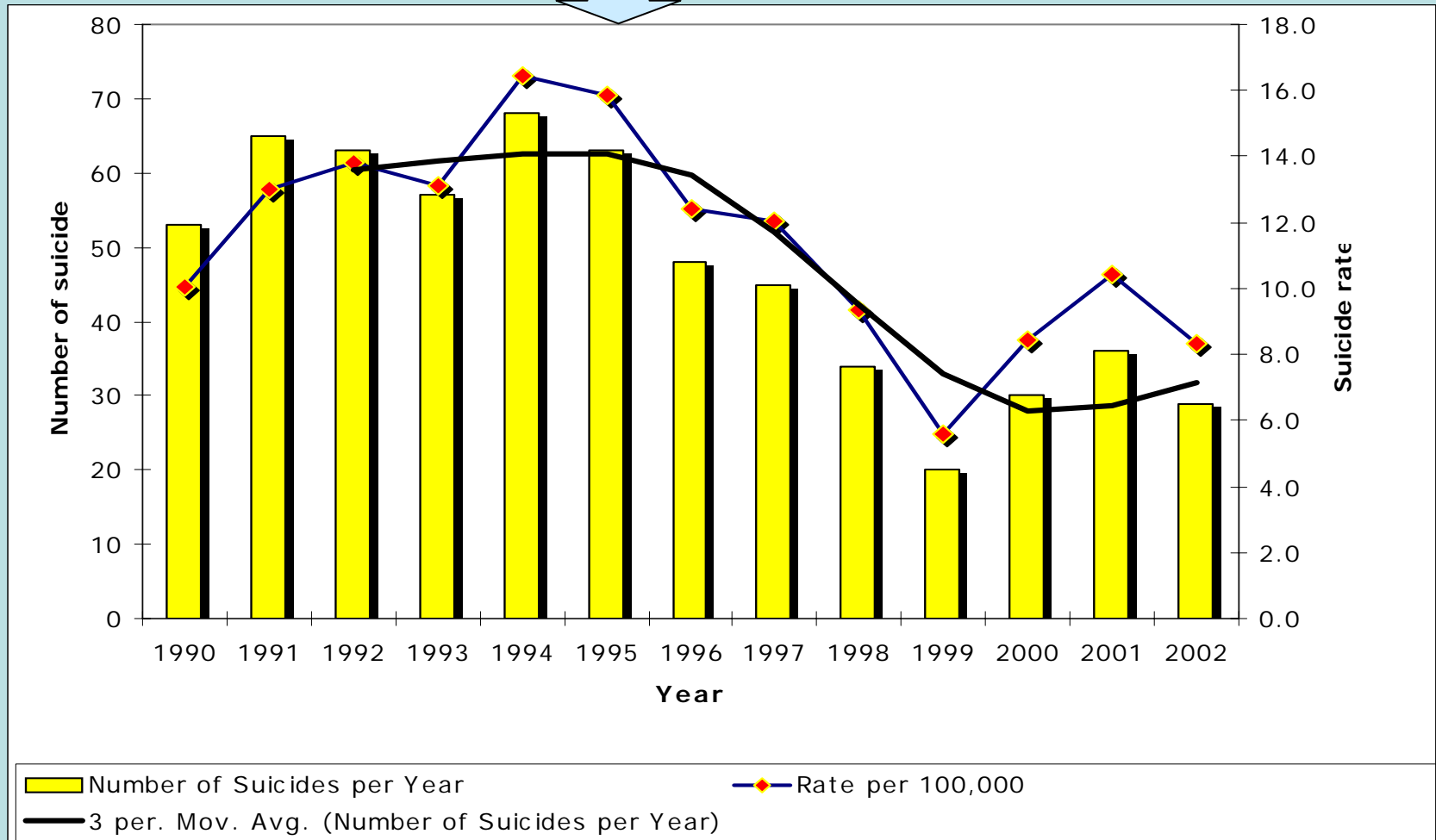
“Since relationship problems are a factor in over half of our suicides, be vigilant for risk signs and respond with help to fellow airmen having problems. Encourage your troops to get whatever assistance they need. ... We need to continually communicate that we value people who demonstrate good judgement by seeking help when they need it.”

**— General Michael E. Ryan
Air Force Chief of Staff, 19 Jul 99**

“Please go the extra mile to foster a sense of belonging. Make sure your people feel they are a member of the team at unit functions and other small gatherings. It has been repeatedly demonstrated that *social connections* save lives. ... Let’s ensure we take care of our own—our Air Force family.”

**— General Michael E. Ryan
Air Force Chief of Staff, 19 Jul 99**

Intervention



“Addressing risk factors across the various levels of the ecological model may contribute to decreases in more than one type of violence.”

Violence – A global public health problem, World Health Organization, 2002, p. 15.

Comparison of the effects of risk for suicide and related adverse outcomes in the USAF population prior to implementation of the program (1990-1996) and after implementation (1996-2002).

Outcome	Relative Risk (RR) and 95% CI	Risk Reduction (1-RR)	Excess Risk (RR-1)
Suicide	.67 [.5702, .8017]	↓ 33%	--
Homicide	.48 [.3260, .7357]	↓ 51%	
Accidental Death	.82 [.7328, .9311]	↓ 18%	--
Severe Family Violence	.46 [.4335, .5090]	↓ 54%	--
Moderate Family Violence	.70 [.6900, .7272]	↓ 30%	--
Mild Family Violence	1.18 [1.1636, 1.2040]	--	↑ 18%

**Suicide Prevention is much more than
treating mental illness**

**“Prevention goes beyond changing
individuals--it changes cultural norms”**

--Murray Levine (1998)



Suicide Prevention Resource Center

- ❖ **Building capacity in states and communities to implement the National Strategy for Suicide Prevention.**
- ❖ **Equipping and empowering prevention networks; developing communities of practice**

www.sprc.org

1-877- GET-SPRC

**Prevention Networks are coalitions of change-oriented organizations and individuals working together to promote suicide prevention. Prevention Networks might include statewide coalitions, community task forces, regional alliances, or professional groups.*

- ❖ **Expert Consultation and Technical Assistance**
- ❖ **On-line Library of evidence-based prevention information and tools**
- ❖ **Training support**
 - ◆ **Curricula**
 - Community core competencies
 - Clinical Care
- ❖ **Regional conferences for state SP program development**

Contact us at:

www.sprc.org

info@sprc.org

1-877-GET-SPRC

dlitts@edc.org