

Public Health Perspective and Epidemiology of Suicide Prevention

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Epidemiology of Suicide

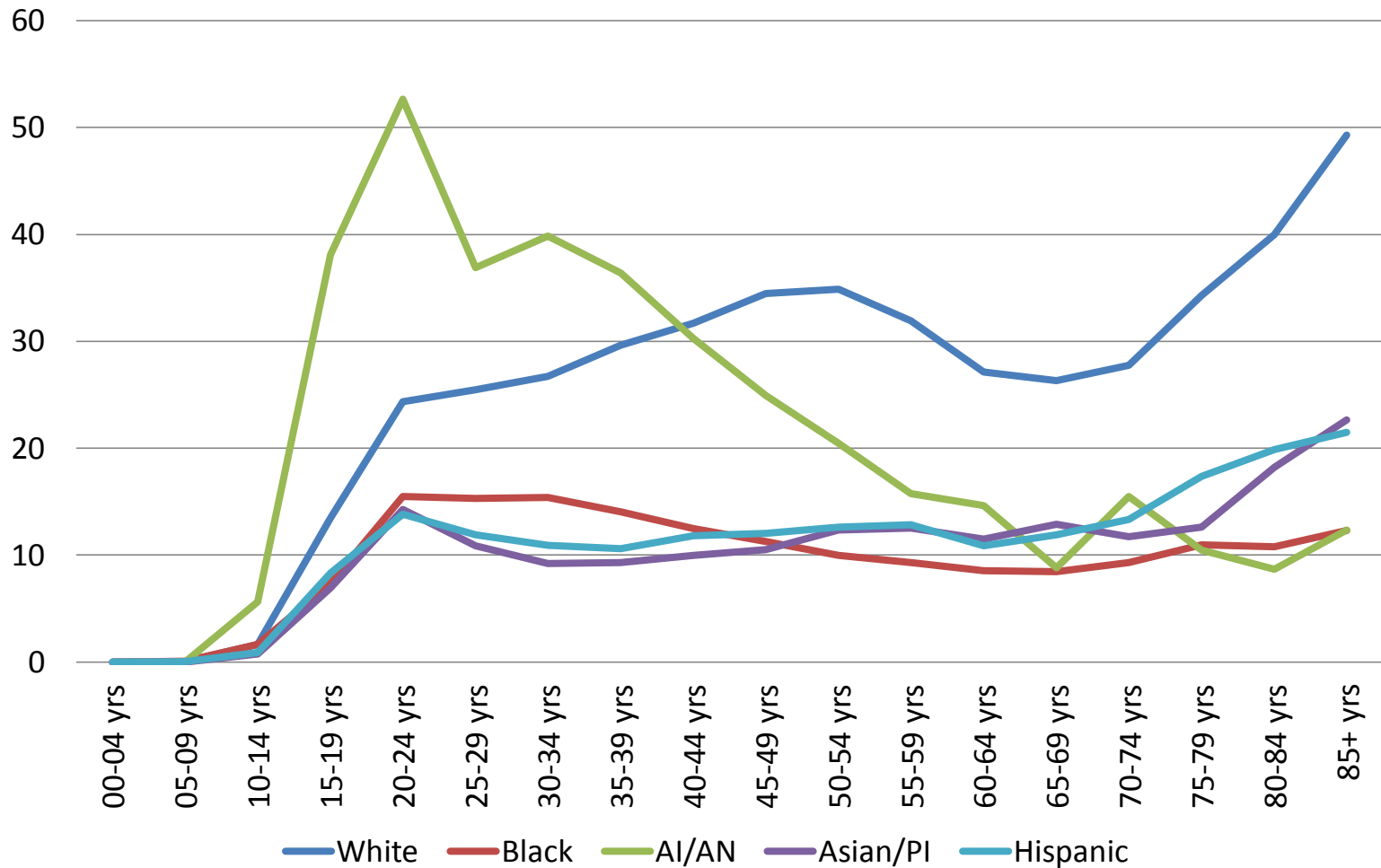
Suicide Mortality Data Sources

- Death data from National Vital Statistics System
 - Compiled from death certificates from state Vital Statistics Office
 - Cause of death reported by physician, medical examiner, and coroners
- Population data from Bureau of Census
- Data/Reports available at:
 - <http://www.cdc.gov/injury/wisqars/index.html>
 - <http://okvdrs.health.ok.gov>
 - <http://www.ok.gov/health/pub/wrapper/ok2share.html>

Epidemiology (2010 data, CDC/WISQARS)

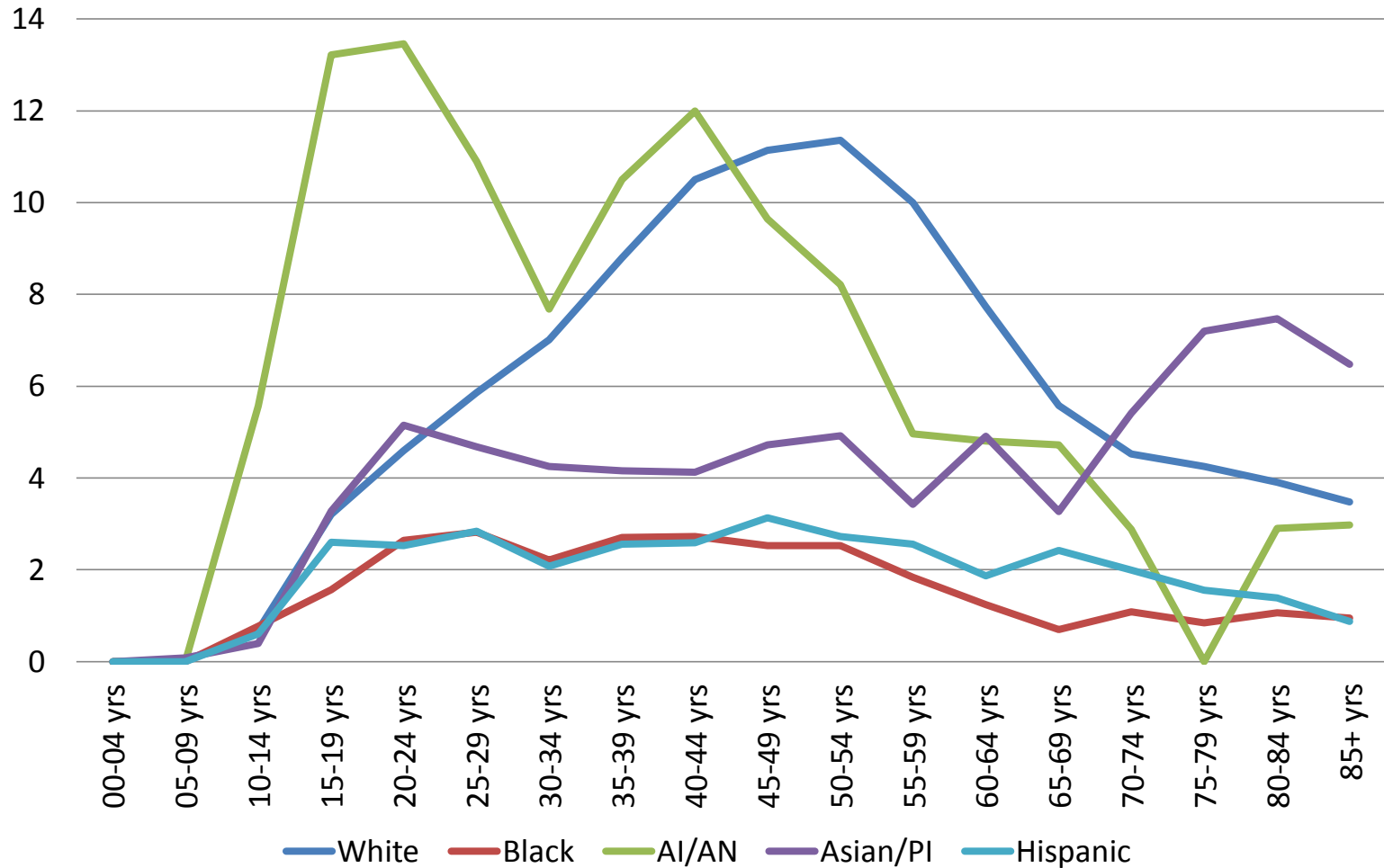
- Suicide #10 Leading cause of death in US
- Suicide deaths: 38,364
 - 12.4 per 100,000
- Motor vehicle deaths: 35,332
- Homicide deaths: 16,259
- Oklahoma
 - #13 in the nation
 - 635 suicides in 2010, 16.9 per 100,000 (Anwar, 2014)
 - The suicide rate in OK increased 20% from 2004 to 2010 (Anwar, 2014)

Male U.S. suicide rates (per 100,000) by age and race/ethnicity, 2006-2010



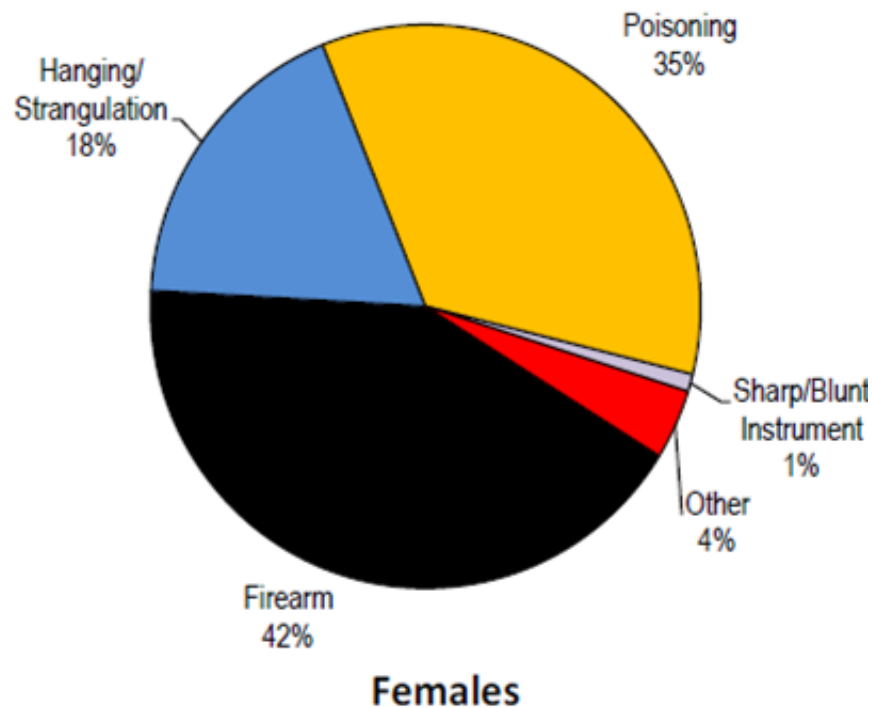
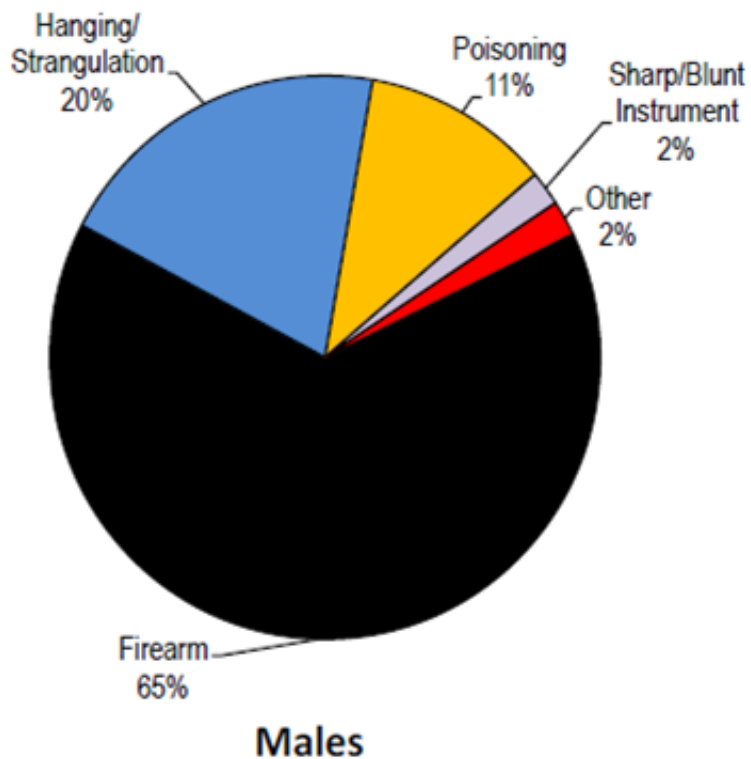
Data source: CDC/WISQARS

Female U.S. suicide rates (per 100,000) by age and race/ethnicity, 2006-2010



Data source: CDC/WISQARS

Suicide Methods by Gender in Oklahoma 2004-2010 (Anwar et al., 2014)



Top 3 Circumstances Associated with Suicides in OK (2004-2010) (Anwar et al., 2014)

Rank	10-24 Years	25-44 Years	45-64 Years	65+ Years
1	Intimate partner problem (37%)	Intimate partner problem (48%)	Current depressed mood (42%)	Physical health problem (73%)
2	Current depressed mood (36%)	Current depressed mood (36%)	Current mental health problem (38%)	Current depressed mood (44%)
3	Current mental health problem (27%)	Current mental health problem (34%)	Physical health problem (30%)	Current mental health problem (23%)

Presence of MH conditions in suicides in OK 2004-2010 (Anwar et al., 2014)

	Number	Percent
Current depressed mood	1509	39
Mental health problem	1260	33
Depression/dysthymia	848	22
Bipolar disorder	169	4
Schizophrenia	64	2
Anxiety disorder	65	2
Post-traumatic stress disorder	16	<1
ADD or hyperactivity disorder	12	<1
Other/unknown	237	6

Suicide as a Public Health Problem

- Suicide rates vary considerably from one cultural/subcultural group to another (race/ethnicity, age, gender, geographic region), highlighting that suicide is not simply an individual problem.
- Most people who have killed themselves were not in the care of a mental health provider, so interventions must be broadly directed to the general public.

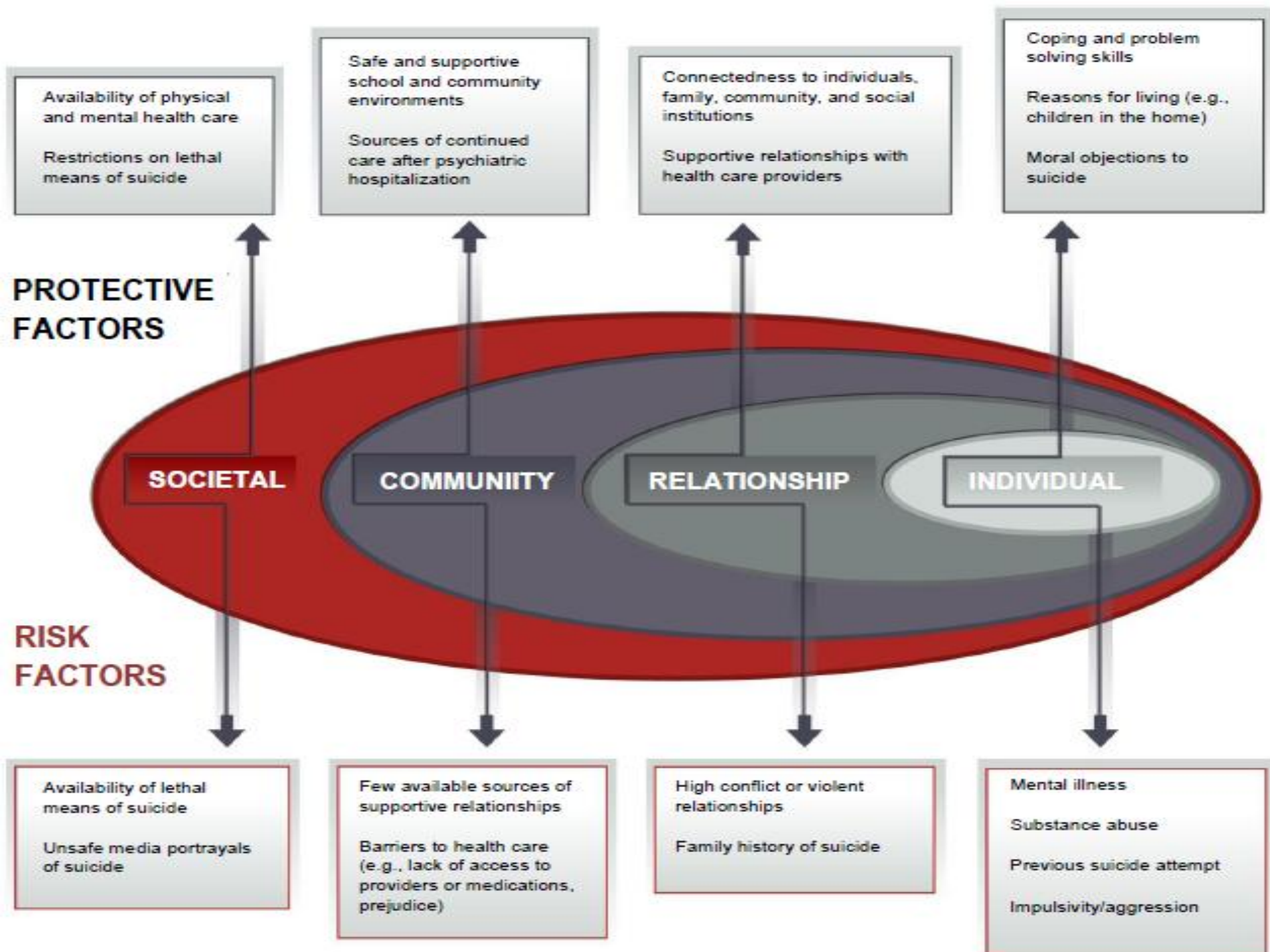
Strategies for Suicide Prevention

- The Surgeon General's Call to Action To Prevent Suicide (1999).
- National Strategy for Suicide Prevention (2001)
- Oklahoma Strategy for Suicide Prevention (2011)
- National Strategy for Suicide Prevention (2012)



Social Ecological Model of Suicidal Behavior (Dahlberg & Krug, 2002)

Graphic from *2012 National Strategy for Suicide Prevention* (p. 15)



3-tier Model of Suicide Prevention

- **Universal** (Targeting everyone)
 - Promotion of crisis lines
 - Community Outreach and Education
 - Restrictions to accessing means of suicide (e.g., barriers to jumping from bridge/building, conversion from coal to natural gas ovens in the UK)

Billboards in OK



NATIONAL
SUICIDE
PREVENTION
LIFELINE™

1-800-273-TALK
1-800-273-8 2 5 5
www.suicidepreventionlifeline.org

OKLAHOMA CITY-COUNTY
HEALTH
DEPARTMENT

Wellness
Now

This billboard was produced by the Oklahoma City-County Health Department with support from the Oklahoma Department of Mental Health and Substance Abuse Services and developed in part under a grant number 5850413 from the Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services (HHS). The views, policies, and opinions expressed are those of the authors and do not necessarily reflect those of SAMHSA or HHS. 5 copies of this billboard were produced at a total cost of \$17,000.00. June, 2012.



R U OK?
800-273-TALK (8255)

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Suicide Prevention Lifeline

Oklahomans Helping Oklahomans

Oklahoma Department of Mental Health
and Substance Abuse Services

This billboard was developed in part using federal funds awarded under a grant number 5857334 from the Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services (HHS). No state appropriated funds were utilized for production. The views, policies, and opinions expressed are those of the authors and do not necessarily reflect those of SAMHSA or HHS.

3-tier Model of Suicide Prevention

- **Selective (Targeting those with risk factors)**
 - E.g., Mental health evaluations/referrals for those with known risk factors (e.g., depression, substance use disorders, chronic pain)
 - Surveillance helps us to know what the risk factors are
 - Importance of training staff/community to identify those with risk factors
 - Importance of having processes for screening in place

3-tier Model of Suicide Prevention

- Indicated (Targeting those at highest risk)
 - Training clinicians in assessment and intervention with suicidal patients
 - Training law enforcement officers in managing a suicidal individual
 - Procedures for how to ensure the safety of a suicidal person in environment where evaluated/treated
 - Extremely high risk during transitions of care (e.g., inpatient to outpatient); in VA assign suicide prevention case manager during this period
 - See *Suicide Care in Systems Framework* (2012)

3-tier Model of Suicide Prevention

- **Indicated (Targeting those at highest risk)**
 - Clinical interventions for treatment of suicidality
 - More research and evidence-based interventions needed
 - Be aware of possibility of suicide contagion if unaddressed (especially in settings where information can spread quickly, like in a school)
 - Postvention = prevention

Examples of Population-targeted suicide prevention programs

- USAF Suicide Prevention Program (Knox et al., 2010)
- Department of Veterans Affairs
- School-based prevention programs (Lifelines)
- Tribal suicide prevention programs
- Promoting Emotional Health and Preventing Suicide: A Toolkit for Senior Living Communities (2011)

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