The Opportunities and Challenges of Suicide Prevention: A Public Health Perspective

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(Dr. Silverman's participation is sponsored by LivingWorks Education)

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SUICIDE RISK FACTORS

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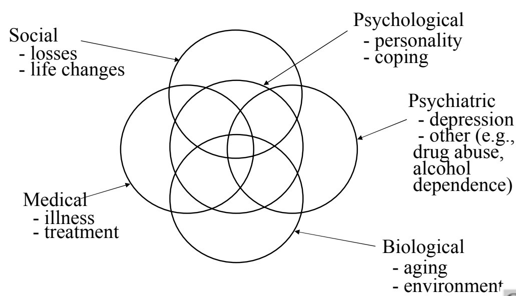
Domains of Suicide Risk



Adapted from Blumenthal SJ, Kupfer DJ. *Ann NY Acad Sci* 487:327-340, 1986

Empirically-Based Risk Factors

- Previous history of psychiatric diagnoses
- Family history of suicide
- History of abuse (including physical, sexual, and emotional)
- Previous suicide attempts, esp. if multiple
- Current ideation, intent, plan, access to means
- Recent discharge from an inpatient unit
- Same-sex sexual orientation
- Impulsivity and Self-Control
- Hopelessness – presence, duration, severity
- Recent losses – physical, financial, personal
- Co-morbid health problems
- Age, gender, race

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SUICIDE IS A BEHAVIOR ……

and all behavior is multi-determined

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Suicide Risk varies over time throughout the life of the individual

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SUICIDE PROTECTIVE FACTORS

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"…focusing on protective factors such as emotional well-being and connectedness with family and friends was as effective or more effective than trying to reduce risk factors in the prevention of suicide."

Borowsky IW, et al. Suicide attempts among American Indian and Alaska Native youth risk and protective factors. Archives of Pediatrics and Adolescent Medicine, 1999, 153: 543-547.

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INTEGRATING RISK and PROTECTIVE FACTORS in an ECOLOGICAL FRAMEWORK

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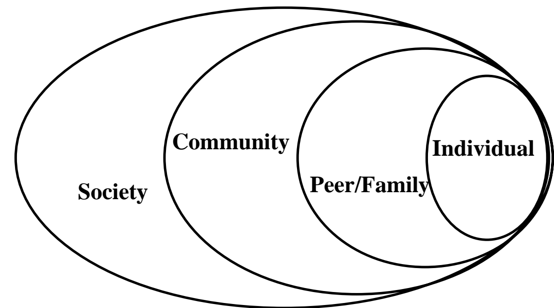
Ecological Model



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

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Individual Factors

Risk

- Mental illness – depression, anxiety, bipolar disorder, schizophrenia, etc.
- Substance abuse
- Personality traits – impulsivity
- Personality Disorders - borderline
- Losses
- Age/Sex
- Previous suicide attempt
- Access to means (e.g., firearms)
- Failures
- academic problems

Protective

- 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)
- Cultural and religious beliefs that discourage suicide and support self-preservation
- Reasons for living

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Peer/Family Factors

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

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Community Factors

Risk

- Isolation/social withdrawal
- 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

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Societal Factors

Risk

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

Protective

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

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THE EVIDENCE THAT SUICIDE is a PUBLIC HEALTH PROBLEM

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More Americans Die by Suicide Each Year Than by Homicide (2005)

Suicide 32,637 — 11th ranking cause, 10.8 per 100,000

Homicide 18,124 — 15th ranking cause, 6.1 per 100,000

80% more people killed themselves than were murdered by others

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More Californians Die by Suicide Each Year Than by Homicide (2005)

Suicide 3,206 — 10th ranking cause, 9.0 per 100,000

Homicide 2,540 — 12th ranking cause, 7.0 per 100,000

26% more people killed themselves than were murdered by others

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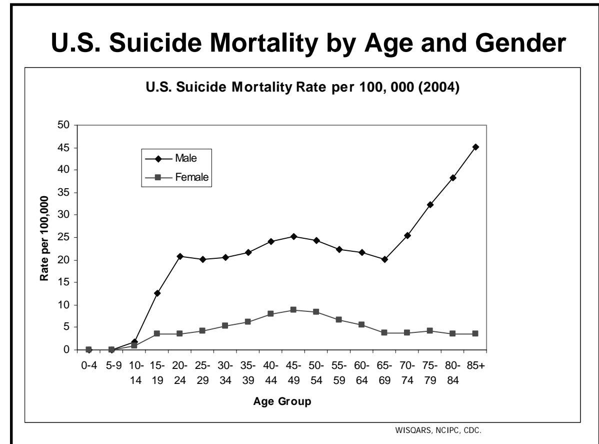
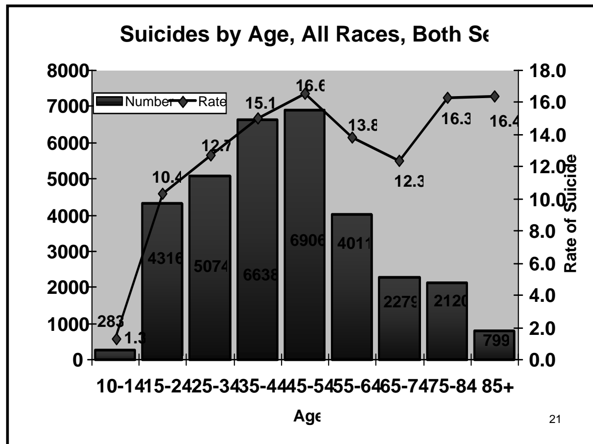
11 Leading Causes of Death, United States
2005, All Races, Both Sexes

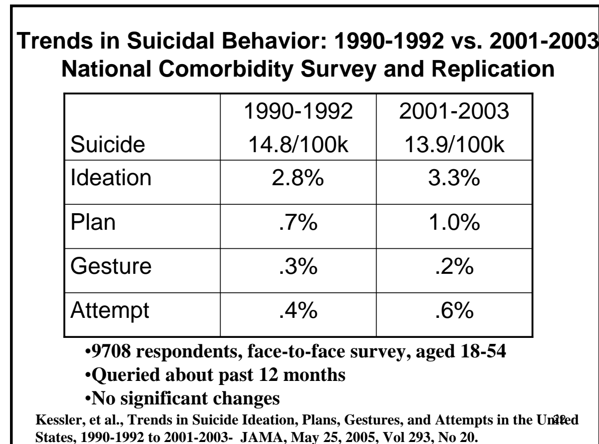
Rank	Age Groups										
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Congenital Anomalies 5,552	Unintentional Injury 1,664	Unintentional Injury 1,072	Unintentional Injury 1,343	Unintentional Injury 15,753	Unintentional Injury 13,997	Unintentional Injury 16,919	Malignant Neoplasms 50,405	Malignant Neoplasms 99,240	Heart Disease 530,926	Heart Disease 652,091
2	Short Gestation 4,714	Congenital Anomalies 522	Malignant Neoplasms 485	Malignant Neoplasms 515	Homicide 5,466	Suicide 4,990	Malignant Neoplasms 14,566	Heart Disease 38,103	Heart Disease 65,208	Malignant Neoplasms 388,322	Malignant Neoplasms 559,312
3	SIDS 2,230	Malignant Neoplasms 377	Congenital Anomalies 196	Suicide 270	Suicide 4,212	Homicide 4,752	Heart Disease 12,688	Unintentional Injury 18,339	Chronic Low. Respiratory Disease 12,747	Cerebro-vascular 123,881	Cerebro-vascular 143,579
4	Maternal Pregnancy Comp. 1,776	Homicide 375	Homicide 121	Homicide 220	Malignant Neoplasms 1,717	Malignant Neoplasms 3,601	Suicide 6,550	Liver Disease 7,517	Diabetes Mellitus 11,301	Chronic Low. Respiratory Disease 112,716	Chronic Low. Respiratory Disease 130,933
5	Placenta Cord Membranes 1,110	Heart Disease 151	Heart Disease 106	Congenital Anomalies 200	Heart Disease 1,119	Heart Disease 3,249	HIV 4,363	Suicide 6,991	Unintentional Injury 10,853	Alzheimer's Disease 70,858	Unintentional Injury 117,809
6	Unintentional Injury 1,083	Influenza & Pneumonia 110	Cerebro-vascular 52	Heart Disease 146	Congenital Anomalies 504	HIV 1,318	Homicide 3,109	Cerebro-vascular 6,381	Cerebro-vascular 10,028	Influenza & Pneumonia 55,453	Diabetes Mellitus 75,119
7	Respiratory Distress 860	Septicemia 85	Influenza & Pneumonia 51	Chronic Low. Respiratory Disease 55	Diabetes Mellitus 202	Diabetes Mellitus 617	Liver Disease 2,688	Diabetes Mellitus 5,691	Liver Disease 7,126	Diabetes Mellitus 55,222	Alzheimer's Disease 71,599
8	Bacterial Sepsis 834	Cerebro-vascular 62	Chronic Low. Respiratory Disease 49	Influenza & Pneumonia 55	Cerebro-vascular 196	Cerebro-vascular 546	Cerebro-vascular 2,260	HIV 4,516	Suicide 4,210	Unintentional Injury 36,729	Influenza & Pneumonia 63,001
9	Neonatal Hemorrhage 665	Perinatal Period 58	Benign Neoplasms 40	Septicemia 45	Complicated Pregnancy 183	Congenital Anomalies 436	Diabetes Mellitus 2,045	Chronic Low. Respiratory Disease 3,977	Nephritis 4,141	Nephritis 36,416	Nephritis 43,901
10	Necrotizing Enterocolitis 546	Chronic Low. Respiratory Disease 56	Septicemia 36	Cerebro-vascular 43	Influenza & Pneumonia 172	Influenza & Pneumonia 354	Influenza & Pneumonia 934	Viral Hepatitis 2,314	Septicemia 3,912	Septicemia 26,243	Septicemia 34,136
11	Two Tied 529	Benign Neoplasms 52	Perinatal Period 14	Benign Neoplasms 36	HIV 159	Complicated Pregnancy 312	Chronic Low. Respiratory Disease	Septicemia 2,211	Influenza & Pneumonia 3,422	Hypertension 21,265	Suicide 32,637

11 Leading Causes of Death, California
2005, All Races, Both Sexes

Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
	Age Groups										
1	Congenital Anomalies 683	Unintentional Injury 206	Unintentional Injury 110	Unintentional Injury 139	Unintentional Injury 1,511	Unintentional Injury 1,375	Unintentional Injury 1,779	Malignant Neoplasms 4,945	Malignant Neoplasms 9,341	Heart Disease 53,515	Heart Disease 64,916
2	Short Gestation 453	Congenital Anomalies 68	Malignant Neoplasms 57	Malignant Neoplasms 58	Homicide 933	Homicide 681	Malignant Neoplasms 1,569	Heart Disease 3,518	Heart Disease 6,233	Malignant Neoplasms 37,984	Malignant Neoplasms 54,732
3	Maternal Pregnancy Comp. 180	Malignant Neoplasms 52	Congenital Anomalies 24	Congenital Anomalies 30	Suicide 370	Malignant Neoplasms 443	Heart Disease 1,173	Unintentional Injury 2,052	Unintentional Injury 1,217	Cerebro-vascular 13,458	Cerebro-vascular 15,585
4	SIDS 153	Homicide 38	Heart Disease 10	Homicide 28	Malignant Neoplasms 268	Suicide 431	Suicide 606	Liver Disease 1,117	Diabetes Mellitus 1,179	Chronic Low. Respiratory Disease 11,502	Chronic Low. Respiratory Disease 13,188
5	Placenta Cord Membranes 94	Influenza & Pneumonia 17	Influenza & Pneumonia 8	Suicide 18	Heart Disease 97	Heart Disease 305	HIV 470	Cerebro-vascular 707	Chronic Low. Respiratory Disease 1,141	Alzheimer's Disease 7,640	Unintentional Injury 11,129
6	Neonatal Hemorrhage 92	Heart Disease 16	Chronic Low. Respiratory Disease 7	Heart Disease 17	Congenital Anomalies 60	HIV 98	Liver Disease 420	Suicide 703	Cerebro-vascular 1,051	Influenza & Pneumonia 6,754	Alzheimer's Disease 7,706
7	Respiratory Distress 89	Cerebro-vascular 7	Homicide 7	Chronic Low. Respiratory Disease 7	Diabetes Mellitus 27	Liver Disease 59	Homicide 387	Diabetes Mellitus 661	Liver Disease 1,040	Diabetes Mellitus 5,548	Diabetes Mellitus 7,697
8	Bacterial Sepsis 68	Chronic Low. Respiratory Disease 6	Benign Neoplasms 4	Influenza & Pneumonia 7	Complicated Pregnancy 24	Congenital Anomalies 57	Cerebro-vascular 269	HIV 452	Suicide 442	Unintentional Injury 2,662	Influenza & Pneumonia 7,553
9	Unintentional Injury 66	Perinatal Period 6	Cerebro-vascular 4	Benign Neoplasms 5	Cerebro-vascular 23	Cerebro-vascular 54	Diabetes Mellitus 220	Chronic Low. Respiratory Disease 392	Influenza & Pneumonia 372	Hypertension 2,625	Liver Disease 3,822
10	Intrauterine Hypoxia 62	Meningitis 5	Septicemia 2	Diabetes Mellitus 5	HIV 14	Diabetes Mellitus 54	Influenza & Pneumonia 107	Viral Hepatitis 255	Nephritis 309	Nephritis 1,910	Suicide 3,208
11	Circulatory System Disease	Septicemia 4	Six Tied 1	Anemias 4	Chronic Low. Respiratory Disease	Complicated Pregnancy 53	Chronic Low. Respiratory Disease	Homicide 252	Hypertension 218	Parkinson's Disease 1,849	Hypertension 3,034







Trends in Suicidal Behavior: 1990-1992 vs. 2001-2003
National Comorbidity Survey and Replication

Suicide	1990-1992 14.8/100k	2001-2003 13.9/100k
Ideation	2.8%	3.3%
Plan	.7%	1.0%
Gesture	.3%	.2%
Attempt	.4%	.6%

- **9708 respondents, face-to-face survey, aged 18-54**
- **Queried about past 12 months**
- **No significant changes**

Kessler, et al., Trends in Suicide Ideation, Plans, Gestures, and Attempts in the United States, 1990-1992 to 2001-2003- JAMA, May 25, 2005, Vol 293, No 20.

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YOUTH SUICIDE

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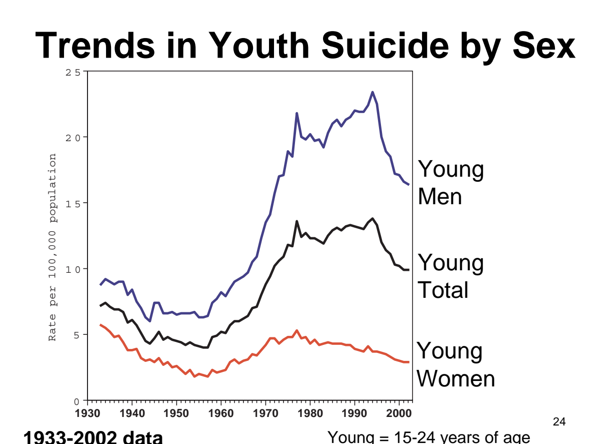

YRBSS

National Youth Risk Behavior Survey: 1991-2005

Trends in the Prevalence of Suicide Ideation and Attempts

What Is the National Youth Risk Behavior Survey (YRBS)?
The national YRBS monitors priority health risk behaviors that contribute to the leading causes of death, disability, and social problems among youth and adults in the United States. The national YRBS is conducted every two years during the spring semester and provides data representative of 9th through 12th grade students in public and private schools throughout the United States.

1991	1993	1995	1997	1999	2001	2003	2005	Changes from 1991 – 2005[1]	Change from 2003 – 2005[2]
Seriously considered attempting suicide (During the 12 months preceding the survey.)									
29.0 (±1.5)[3]	24.1 (±0.9)	24.1 (±1.1)	20.5 (±2.3)	19.3 (±1.2)	19.0 (±1.4)	16.9 (±0.7)	16.9 (±0.9)	Decreased, 1991 – 2003 No change, 2003 – 2005	No change
Made a suicide plan (During the 12 months preceding the survey.)									
18.6 (±1.5)	19.0 (±1.1)	17.7 (±1.4)	15.7 (±1.3)	14.5 (±1.4)	14.8 (±1.1)	16.5 (±3.5)	13.0 (±0.9)	Decreased, 1991 – 2005	No change
Attempted suicide (One or more times during the 12 months preceding the survey.)									
7.3 (±0.9)	8.6 (±0.8)	8.7 (±0.8)	7.7 (±0.9)	8.3 (±1.0)	8.8 (±0.8)	8.5 (±1.1)	8.4 (±0.9)	No change, 1991 – 2005	No change

[1] Based on linear and quadratic trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade.
[2] Based on t-test analyses.
[3] 95% confidence interval.

ELDER SUICIDE

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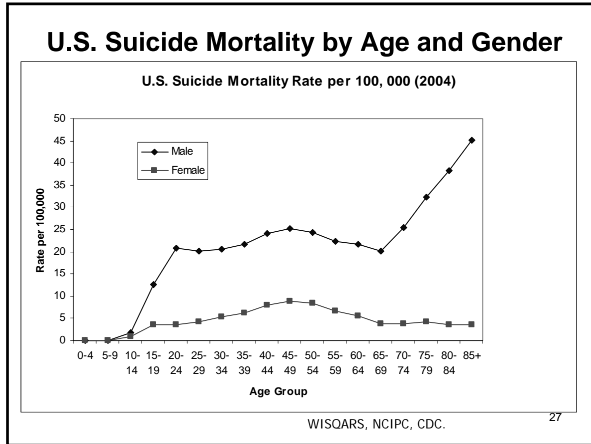
U.S. Suicide Mortality by Age and Gender



WISQARS, NCIPC, CDC.

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SUICIDE by RACE/ETHNICITY

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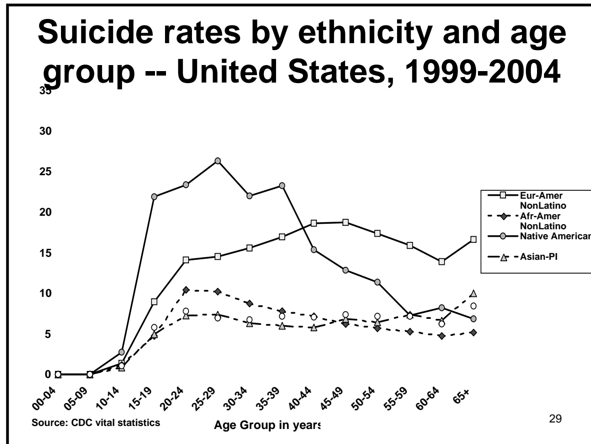
Suicide rates by ethnicity and age group -- United States, 1999-2004



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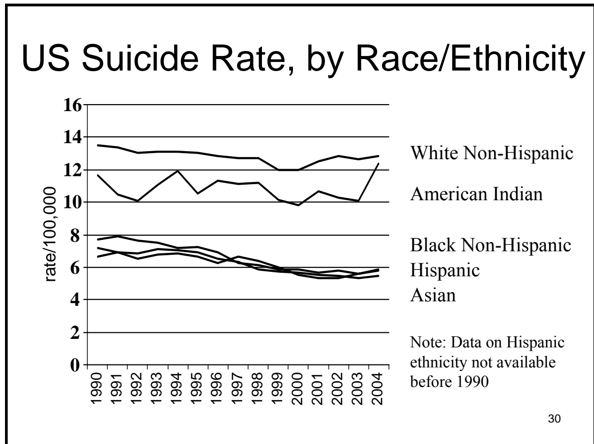
US Suicide Rate, by Race/Ethnicity



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California vs. USA: Race/Ethnicity (2005)

- White Non-Hispanic: 10.09 vs. 11.96
- American Indian: 3.99 vs. 11.65
- Black Non-Hispanic: 5.50 vs. 5.23
- Asian: 5.15 vs. 5.18
- Other: 5.03 vs. 6.40

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SUICIDE and PSYCHIATRIC ILLNESSES

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Suicide Rates in Psychiatric Disorders

Table 1

Suicide risks in selected psychiatric disorders*

Condition	Relative risk	Incidence (%/year)	Lifetime risk (%)
Prior suicide attempt	38.4	0.549	27.5
Bipolar disorder	21.7	0.310	15.5
Major depression	20.4	0.292	14.6
Mixed drug abuse	19.2	0.275	14.7
Dysthymia	12.1	0.173	8.65
Obsessive-compulsive disorder	11.5	0.143	8.15
Panic disorder	10.0	0.160	7.15
Schizophrenia	8.45	0.121	6.05
Personality disorders	7.08	0.101	5.05
Alcohol abuse	5.86	0.084	4.20
Cancer	1.80	0.026	1.30
General population	1.00	0.014	0.72

* Estimated relative risks compared with the general population,[] with recently updated information about bipolar disorders.[] Annual rates are based on international general population average (14.3/100,000/year) × standardized mortality ratio; lifetime estimates are based on annual rates × 50 years as an estimate of lifetime exposure, or years at major risk.

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Homeless People with Mental Illness

- 30-day prevalence:
  - Suicidal Ideation: 37.5%
  - Recent Suicide Attempt: 7.9%
- Risk is highest among 30-39 y/o group
- Co-morbid alcohol and drug abuse increases risk in elderly

Prigerson, et al., Soc. Psych. Psych. Epid. (2003), 38: 213-219.

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SUICIDE and MEDICAL ILLNESSES

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Suicide and Medical Illnesses

- Central Nervous System Disorders
  - tumors
  - spinal cord injury
  - multiple sclerosis
  - Huntington's disease
  - epilepsy (TLE)
- Other System Disorders
  - Malignant neoplasms
  - HIV/AIDS
  - Peptic ulcer
  - Renal disease
  - SLE

Harris EC, Barraclough BM. Medicine 73:281-296, 1994

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SUICIDE by GEOGRAPHICAL LOCATION

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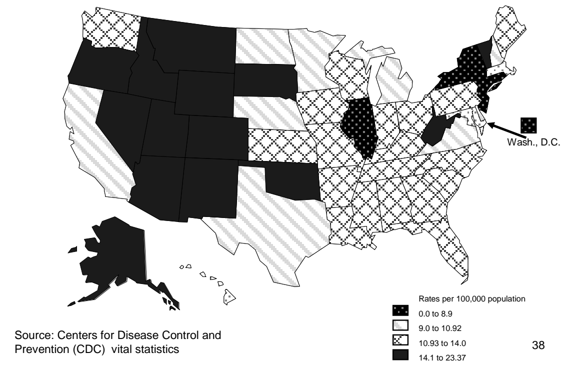
Age-adjusted suicide rates among all persons by state -- United States, 2004



Source: Centers for Disease Control and Prevention (CDC) vital statistics

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SUICIDE by METHOD

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Methods in USA Suicides

Method	% of Total	Number
Firearms	54.0%	17,108
Hanging, strangulation, suffocation	20.4%	6,462
Solid & Liquid Poisons	12.7%	4,016
Gas Poisons	4.6%	1,470
All Other Methods	8.2%	2,599

Firearms are the leading method

31,655 total suicides Note: Totals may not equal 100% due to rounding

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SUICIDE ATTEMPTS

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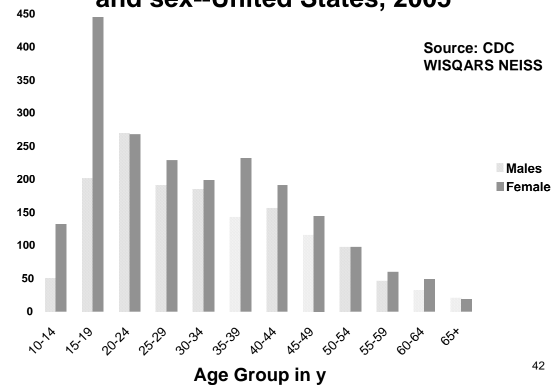
Self-inflicted injury among all persons by age and sex--United States, 2005



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National Comorbidity Study

(1990-92; 15-54 yrs; 5877 respondents)

Cumulative Probabilities for Transition:

- Ideation → Plan 34%
- Plan → Attempt 72%
- Ideation → Unplanned Attempt 26%

Within 1 Year of Onset of IDEATION:

- 60% of all planned 1st attempts
- 90% of all unplanned first attempts

Kessler et al; AGP 56: 617-626, 1999

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National Comorbidity Study

(1990-92; 15-54 yrs; 5877 respondents)

ATTEMPTERS

39.3% made a "serious" life-threatening attempt

13.3% made a "serious," but "not fool-proof" method

47.3% made a "cry for help," and did not want to die

Kessler et al; AGP 56: 617-626, 1999

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WHY FOCUS on SUICIDE ATTEMPTS?

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Repetition of Suicide Attempts

Risk of repeated Suicide Attempt

- 16% (12-22%) repetition within one year of an attempt
- 21% (12-30%) within 1-4 years
- 23% (11-32%) within 4 or more years

Risk of Suicide

- 1.8 % (0.8 - 2.6%) within 1 yr. of an attempt
- 3.0 % (2.0 - 4.4%) within 1- 4 years
- 3.4 % (2.5 - 6.0%) within 5-10 years
- 6.7 % (5.0 -11.0%) within 9 or more years

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Owens et al., 2002 (review of 90 studies)

A NATIONAL RESPONSE

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Emphasizing The Public Health Approach

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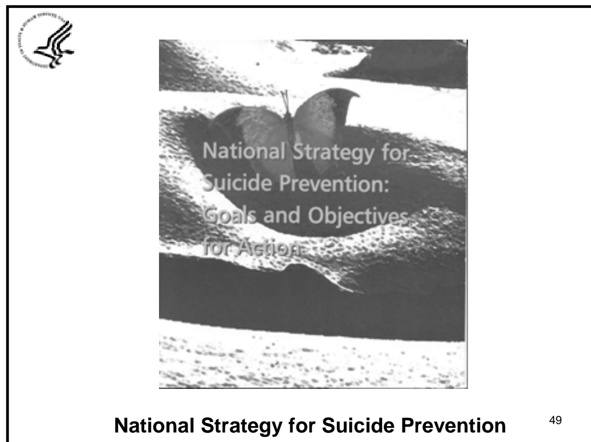


National Strategy for Suicide Prevention

NSSP Goals

Goal 1: Promote Awareness that Suicide is a Public Health Problem that is Preventable

Goal 2: Develop Broad-based Support for Suicide Prevention

Goal 3: Develop and Implement Strategies to Reduce the Stigma Associated with Being a Consumer of Mental Health, Substance Abuse, and Suicide Prevention Services

Goal 4: Develop and Implement Suicide Prevention Programs

Goal 5: Promote Efforts to Reduce Access to Lethal Means and Methods of Self-Harm

NSSP Goals

Goal 6: Implement Training For Recognition of At-Risk Behavior and Delivery of Effective Treatment

Goal 7: Develop and Promote Effective Clinical and Professional Practices

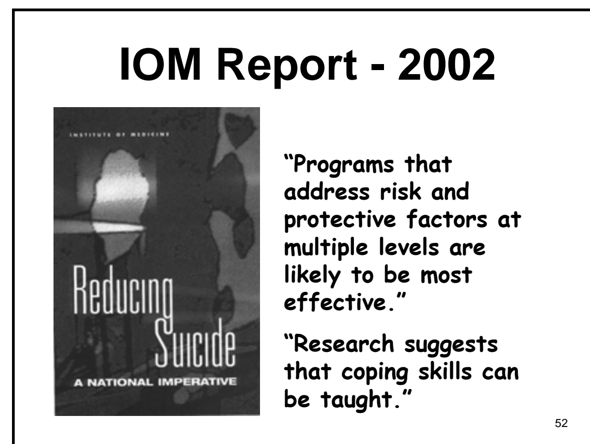
Goal 8: Improve Access to and Community Linkages with Mental Health and Substance Abuse Services

Goal 9: Improve Reporting and Portrayals of Suicidal Behavior, Mental Illness, and Substance Abuse in the Entertainment and News Media

Goal 10: Promote and Support Research on Suicide and Suicide Prevention

Goal 11: Improve and Expand Surveillance Systems

IOM Report - 2002



"Programs that address risk and protective factors at multiple levels are likely to be most effective."

"Research suggests that coping skills can be taught."

PEI Priority Populations

- Underserved cultural populations
- Individuals experiencing onset of serious psychiatric illness
- Children/Youth in stressed families
- Trauma-exposed
- Children/Youth at risk of school failure
- Children/Youth at risk of or experiencing juvenile justice involvement

PEI Key Concepts to Transformation

- Community Collaboration
- Cultural Competence
- Individual/Family-driven Programs and Interventions, with Special Attention to Individuals from Underserved Communities
- Wellness Focus, which Includes the Concepts of Resilience and Recovery
- Integrated Service Experience for Individuals and their Families
- Outcomes-based Program Design

PARTNERS for PEI PLANNING

- Underserved communities
- Education
- Individuals with SMI and/or their families
- Providers of mental health services
- Health/public health sectors
- Social services
- Law enforcement
- Community family resource centers
- Employment
- Media

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A PUBLIC HEALTH APPROACH to SUICIDE PREVENTION

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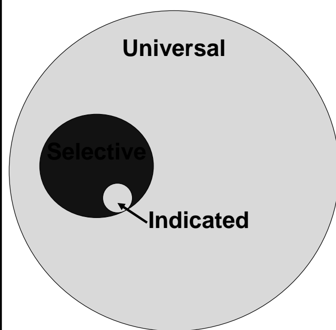
Populations Served by Prevention Programs can be Defined by Degrees of Risk



Universal: All members of a group

Selective: Members of a high risk group

Indicated: Individuals at highest risk

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Gordon's Terminology to Describe Prevention Programs

"Universal" – focused on the entire population as the target → prevention through reducing risk and enhancing health – aimed broadly, but can affect individuals as well

"Selective" – high-risk groups where not all of the members bear risks → prevention through reducing specific risks among groups

"Indicated" – symptomatic and 'marked' high-risk individuals → interventions to prevent full-blown disorders or adverse outcomes in each one

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Sites for Broad Population-Oriented Interventions

- **Community-based, chosen irrespective of risk**
- **Wide dispersion of information and education – use of media**
- **"Gatekeeper" identification and education**
- **Examples: Worksites, religious and faith-based organizations, community NGOs, governmental agencies (e.g., social services, unemployment)**

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Universal Preventive Strategies

- Reduce the stigma of mental illness and treatment
- Education of the healthcare workforce
- Increase access to effective treatment
- Education for school-aged children and youth on mental illnesses
- Screen for mental disorders and suicidal risk in primary care settings
- Gatekeeper training on warning signs for suicide and how to intervene

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Selective Preventive Strategies

- Screening women for postpartum depression and targeting children of parents with depression for intervention
- Monitor for increased risk in mental health care
- Teach life skills: social problem solving; conflict resolution; cognitive; stress management
- Mental health consultation to:
  - support groups for older adults who have lost a spouse
  - child care centers a family child care homes

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Early Intervention Strategies

- Mental health consultation/with interventions in child care environments
- Parent-child interaction training for children with behavioral problems
- Anger management guidance
- Socialization programs with a mental health emphasis for home-bound older adults with signs of depression

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Indicated Preventive Strategies

- Identification of attempts
- Cognitive Behavioral Therapy for the prevention of further suicide attempts

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MODELS and FRAMEWORKS for ACTION

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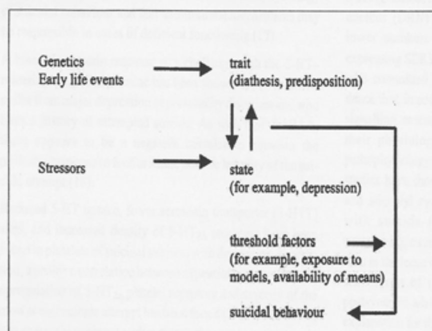
Stress-Diathesis Hypothesis



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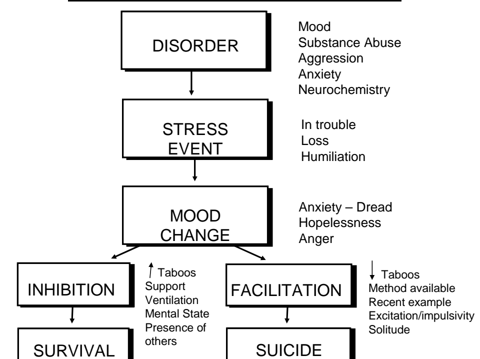
SUICIDE – A MODEL



David Shaffer, M.D., Columbia U.

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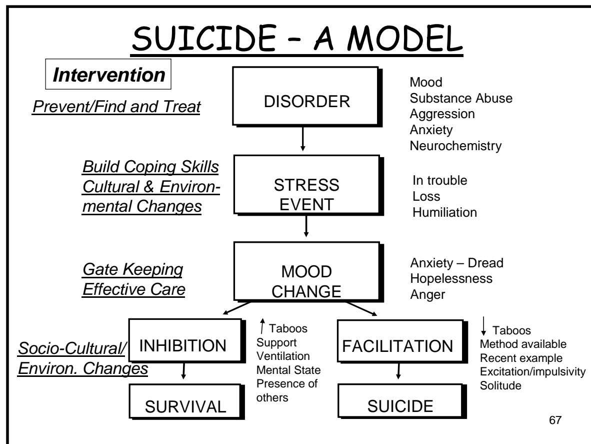

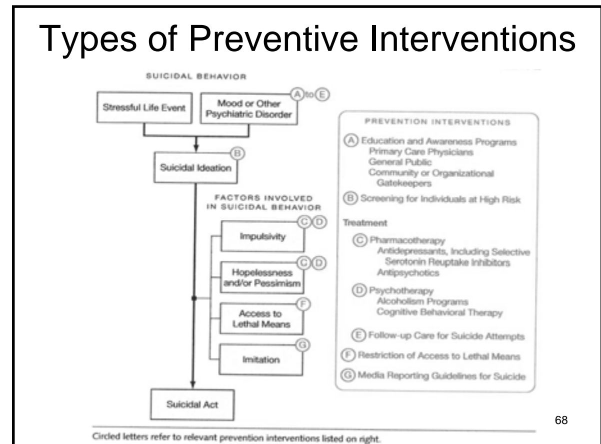

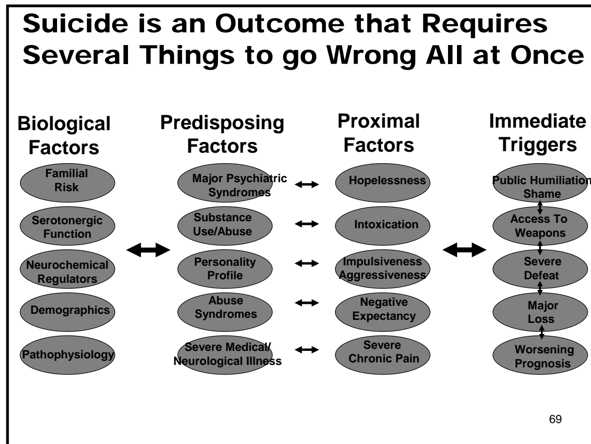

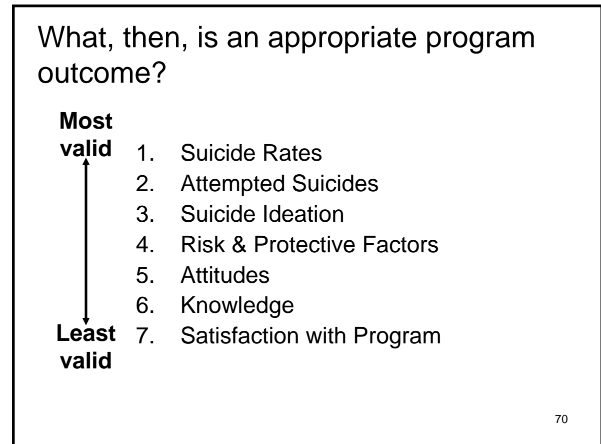

Q & A

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PART II

IMPLEMENTING SUICIDE PREVENTION STRATEGIES

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Prevention Principles

#1 The goals of prevention must be based on an analysis of what beneficial outcome is most meaningful to the individual and society.

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Public Health Principles

Effective prevention is *comprehensive*

- Addresses multiple contributors
- At both individual and environmental levels
- Using multiple initiatives

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Prevention Principles

#2 The potential benefit of a preventive measure is proportional both to the *prevalence of the disease* and to the *severity of the morbidity* associated with it.

75

Prevention Principles

#3 To be effective, preventive care must take into account the multiple dimensions that impact on an individual's health:

biological
psychological
social

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Prevention Principles

#4 The effectiveness of a prevention measure depends on:

- *identification* of the risk and protective factors characteristic of the individual or group
- the *strength* of the causal relationship between the risk and protective factors and the disease
- the *alterability* of the causal (risk/protective) factor

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Public Health Principles

Effective prevention is *strategic*

- Based on understanding of problems
- Specifies behavior change goals
- Chooses strategies likely to produce the desired outcomes
  - Based on evidence, or, in the absence of research…
  - Theory or logic

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Public Health Principles

Effective prevention work is *planned*

– Uses a systematic process to design, implement, and evaluate the program
– Builds in evaluation from the beginning

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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)

80

"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.

81

Community

"...not just the sum of its citizens, but rather the web of relationship between people and institutions that hold communities together."

Wallack L and Dorfman L: Media advocacy: a strategy for advancing policy and promoting health. Health Education Quarterly; 1996, 23:293-317.

82

Resources

"The best and most effective prevention programs are ones that are directed toward using resources which are indigenous to a particular community….external programs generally don't work as well, as they don't recognize the values of the culture.

--Sherry Davis Molock, M.Div., Ph.D.

Preventing Suicide: The National Journal, Vol. 2, No. 3, p. 9, July 2003.

83

Building Community Readiness

- Leadership
  - Government/Community/Grassroots
  - Authority
    - Moral, political, economic, social, scientific
  - Continuity
    - Policy

84

Leadership Roles

- Formulate and articulate a broad, collective vision
- Ensure a process for data-driven planning
  - Promote broad and active participation
  - Ensure broad-based influence and control
  - Facilitate productive group dynamics
  - Extend the scope of the process

Lasker R., Weiss E., Broadening Participation in Community Problem Solving: A Muiltidisciplinary Model to Support Collaborative Practice and Research. Journal of Urban Health: Bulletin of the New York Academy of Medicine. Vol 80, No 1. March 2003.

85

Coalition Leadership & Management

- May be shared among several people
- Values diversity of perspective
- Able to bridge diverse cultures
- Comfortable sharing
  - Ideas
  - Resources
  - Power

Lasker R., Weiss E., Broadening Participation in Community Problem Solving: A Muiltidisciplinary Model to Support Collaborative Practice and Research. Journal of Urban Health: Bulletin of the New York Academy of Medicine. Vol 80, No 1. March 2003.

86

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

Lasker R., Weiss E., Broadening Participation in Community Problem Solving: A Muiltidisciplinary Model to Support Collaborative Practice and Research. Journal of Urban Health: Bulletin of the New York Academy of Medicine. Vol 80, No 1. March 2003. p.5.

87

Coalition Members

- Not just good-hearted people
- Key stakeholders: Public health, mental health, education, faith-based and community groups, alcohol and other substance abuse, domestic violence, crisis prevention, aging, law enforcement, coroner/medical examiner, juvenile justice, citizen advocates, survivors of the suicide of a loved one

88

Coalition

"A community-based coalition is a group of individuals representing diverse organization, factions, or constituencies within the community who agree to work together to achieve a common goal."

Butterfoss, F, Goodman R, Wandersman A. Community Coalitions for Prevention and Health Promotions: Factors Predicting Satisfaction, Participation, and Planning. Health Education Quarterly, Vol. 23(1): 65-79, Feb 1996.

89

Cooperation/Coalition Building

Turning Competitors into Collaborators

- Leadership
- Burying generational hatchets
- Good will
- Incentives
- Crisis-driven
  - Sustenance after the crisis?

90

Successful Coalitions

- Shared decision making
  - Member influence in decision making from the *start* produces satisfaction and commitment
- Positive organizational environment
  - Emphasize benefits of membership to the members
  - Each member must participate, not just attend

Butterfoss,F, et.al., Community Coalitions for Prevention and Health Promotion; Factors Predicting Satisfaction Participation, and Planning. Health Education Quarterly, Vol 23(1) 65-69 (Feb 1996).

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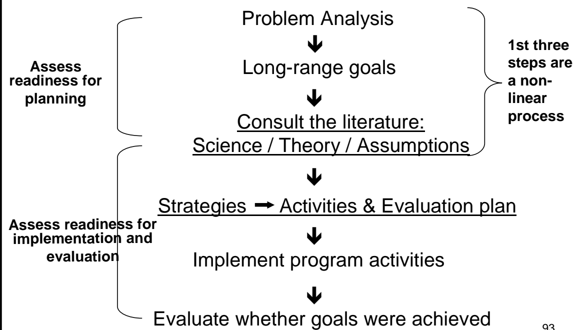
CHOOSING STRATEGIES and MAKING a PLAN

92

Strategic Planning/ Evaluation Process



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Start with: Problem Analysis

(sometimes, "needs assessment")

- Gather and analyze data to understand the problem locally
- Questions to Answer:
  1. What are the problems? (Extent, patterns, effects)
  2. What factors cause or contribute to the problems?
     - Look at research literature
  3. What is the current situation: Existing initiatives & resources? Political climate?

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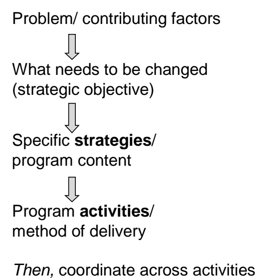
Key Point

Strategies & activities flow from problem analysis



Then, coordinate across activities

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Looking at Current Efforts, Program Planners Should Be Able to Articulate…..

- What contributing factor is each program/policy element intended to change?
- What do these change goals imply about the problem?
- Does research and/or local data:
  - Support that view of the problem?
  - Suggest changing the targeted factor will affect suicidal behaviors?
- Focus is on critical thinking and checking against research
- Must be *specific* – get beyond goals like "raise awareness"

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Challenge:
Balance between strategies & tactics

Strategies are not the same as tactics:

- *Strategies* will create changes in people or in the environment;
- *Tactics* are used in service of achieving strategies, but will not in themselves lead to desired outcomes;

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Considering Strategies

1. What has been done in the past to address problems, and to what effect?
   - Include programs, policies, services
   - What *specific* factors were targeted?
   - Did the interventions work?
     - How well? Time frame? For everyone?
     - Quality of study, measurement
     - Did actual behavior change occur?

Goal: Examine what's been tried

Data: Evaluation studies

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Considering Strategies

2. What other interventions might be tried?
   - Based on:
     - risk and protective factors
     - interventions for other behaviors
     - theory
     - logical assumptions

Goals: Improve upon past interventions; address problems unique to your setting

Data: Theory, all studies

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What strategies are available?

- The strategies must reflect the problem analysis and goals
- Be specific enough to clarify what you're really trying to change
  - increase knowledge (about...) by... (strategy)
  - change (what) policy through…. (strategy)
  - change (what) norm by... (strategy)

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Strategies vs. Activities: Example

- ***Problem:*** Students who are depressed are not in treatment.
- ***General Goal:*** Get depressed students to treatment.
- ***General Strategy:*** Increase identification of students who are depressed.
- ***Activities:*** Collect health info from incoming students & invite them to counseling; gatekeeper training; online screening.

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What if science is lacking?

1. Base interventions on Theory

Examples:
- Social learning theory
- Health Belief model
- Diffusion of innovations

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What if science is lacking?

2. Use Logical Assumptions

Example: Creation of interventions to increase help-seeking
- Research found that perceptions about mental illness and the "mentally ill" affect attitudes toward mental health treatment
- Logic suggests that interventions to change perceptions about people with mental illness might increase help-seeking behaviors
- Activity: Media campaign would be an efficient method to change attitudes towards mental illness

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"The impulse to invest only in proven approaches should not be an obstacle to supporting promising ones. Promising approaches are those that have been evaluated but require more testing in a range of settings and with different populations."

"Violence is far too pressing a problem to delay public health action while waiting to gain perfect knowledge."

***Violence – A global public health problem*, World Health Organization, 2002, p. 16.**

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Summarizing Problem Analysis, Goals, Strategy

- Nature and extent of problem
- List contributing factors
- Focus in on factors to target
  - *describe* in detail
  - document *why* you'll target them
- Describe strategy
  - describe *how* it will impact factors identified above
  - *evidence* that this strategy will have an impact on behavior/outcomes

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Rest of Planning Process

- Once you have strategy
  - Refine target audiences
  - Choose program activities
- Begin to assess readiness to implement this strategy

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Summary

- Problems must be addressed by *entire community*
- Problems must be addressed *at multiple levels*
- Think/plan *strategically*
  - Understand problems
  - Set goals
  - Choose evidence-, theory-, or logic-based strategies

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ARE THERE EVIDENCE-BASED PRACTICES IN PREVENTING SUICIDE?

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Evidence-based Interventions

- Community education/awareness
  - Safety is an issue
- Community collaboration around suicide prevention
- Social marketing
  - Destigmatizing help-seeking behavior 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.

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Evidence-based Interventions

- Gatekeeper training
- Peer helper programs
- Alcohol and substance abuse programs
- Resiliency/coping/problem solving skill building programs
  - Juvenile justice
  - Homeless youth

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.

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Evidence-based Interventions

- Restricting availability of means
- Improved surveillance
- Postvention for the bereaved
- 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 Sheps Center For Health Services Research. University of North Carolina at Chapel Hill. 2004.

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The SPRC/AFSP Registry of Evidence-Based Suicide Prevention Programs

www.sprc.org

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School-Based Programs

- **Columbia University TeenScreen**
  - (Shaffer et al., 2004; McGuire & Flynn, 2003)
- **C-Care/CAST***
  - (Thompson et al., 2001)
- **LifeLines**
  - (Kalafat & Elias, 1994)
- **Reconnecting Youth**
  - (Thompson et al., 2000)
- **Signs of Suicide**
  - (SOS; Aseltine & DeMartino, 2004)
- **Zuni Life Skills**
  - (LaFromboise & Howard-Pitney, 1995)

* Indicates an *Effective* programs; all others were *Promising.*

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Psychotherapy

- **Brief At-Home Psychotherapy for Adult Self-Poisoning**
  - (Guthrie et al., 2001)

Treatment Guidelines/Case Management

- **PROSPECT***
  - (Bruce et al. 2004)

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Means Restriction

- **Reduced Analgesic Packaging***
  - (Hawton et al., 2002)
- (See Also Kruesi [1999])

Systems/Public Health Approach

- **Air Force**
  - (Knox et al., 2003)

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Emergency Room

- **Emergency Room Means Restriction Education for Parents***
  - (Kruesi et al.,1999)
- **Emergency Room Intervention for Teen Females**
  - (Rotheram-Borus et al., 2000)

- **Other Programs**
  - ASIST
  - Yellow Ribbon

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The SPRC/AFSP Best Practices Registry

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What is the purpose of the Best Practices Registry (BPR)?

The purpose of the BPR is to identify, review, and disseminate information about best practices that address specific objectives of the *National Strategy for Suicide Prevention*.

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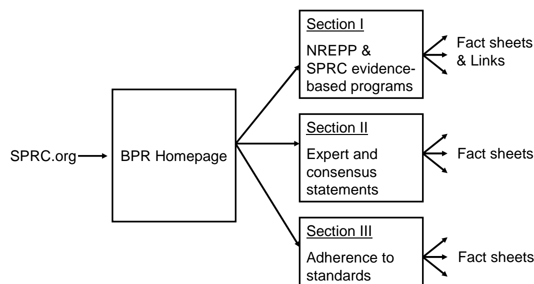
How is the BPR organized?



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Conclusions

- There are a limited, but growing, number of evidence-based programs in suicide prevention
- However, suicide prevention requires multiple contributions, on multiple levels, through multiple initiatives
- The BPR will support a wide-range of prevention activities that address goals of the NSSP

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The USAF Suicide Prevention Program: A Multi-Layered Approach

- **Public health-community orientation**: **"The Air Force Family"**
- **Broad involvement of key leaders**: **Medics-Mental Health, Public Health, Personnel, Command, Law Enforcement, Legal, Family Advocacy, Child & Youth, Chaplains, CIS; Walter-Reed Army Inst. Of Research; CDC**
- **Consistent leadership involvement**
- **11 initiatives clustering in four areas**
  - **Increase awareness and knowledge**
  - **Increase early help seeking**
  - **Change social norms**
  - **Change selected policies**
- ***Common Risk Model***

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USAF Community Prevention Partners

- 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

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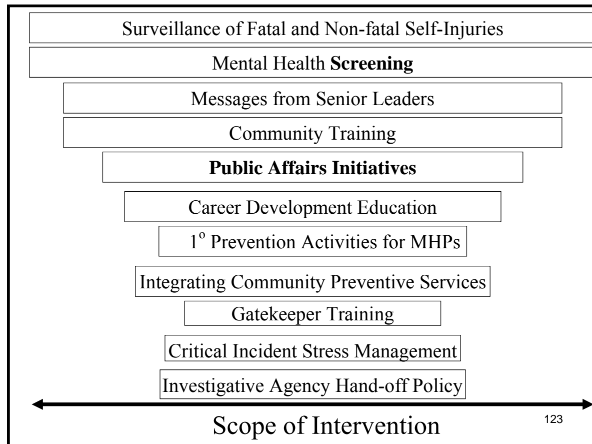

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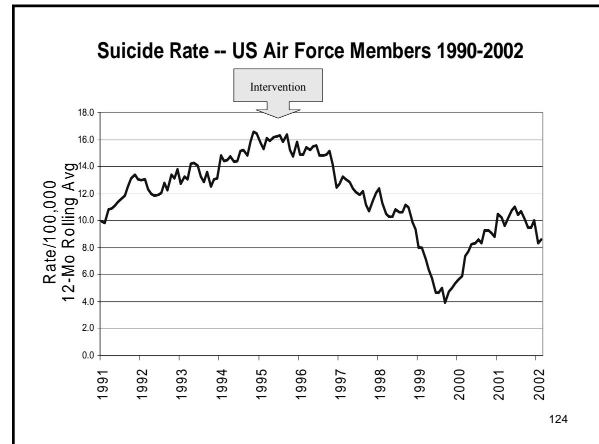

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Results

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%**

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.

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Common Youth Suicide Prevention Strategies Utilized in Prevention of Other Forms of Violence

	Youth Violence	Sexual Assault	Intimate Partner	Child Abuse
Gatekeeper Training	✔		✔	✔
Education	✔	✔		
Screening		✔	✔	✔
Peer support	✔	✔	✔	
Crisis centers		✔	✔	
Restrict lethal means	✔		✔	
Post-event intervention	✔	✔	✔	✔

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Summary

- Suicide and its antecedent risk factors are leading contributors to human resources costs
  - Affect large proportion of workforce
- Comprehensive suicide prevention programs can:
  - Substantially decrease leading causes of death and disability
  - Improve employee health
  - Improve productivity
  - Contribute to reductions in multiple adverse outcomes in addition to suicidal behavior
- Suicide prevention is the *right thing* to do

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Another Example

GATEKEEPER TRAINING

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Contact With Primary Care Provider Before Suicidal Death

	Overall	<35 y/o	>55 y/o
Within 1 Year	77% (57-90) F: 100% M: 78% (69-87)	62% (42-82)	77% (58-90)
Within 1 Month	45% (20-76)	23% (10-36)	58% (43-70)

Luoma, Martin, Pearson AJP 159:909-916, 2002

129

Trends in Emergency Department Treatment of Mental Disorders

- 100 million total ED visits in 1992-2001
- 20% increase in number of visits over prior decade, 40% increase for psych
- 15% decrease in number of ED's over prior decade
- 6.3% of presentations were for MH
- 7% of these were for suicide attempts = 441K visits

Larkin GL et al. Trends in U.S. Emergency Department visits for mental health conditions, 1992-2001. Psychiatric Services. 56(6):June 2005.

130

Trends in Emergency Department Treatment of Mental Disorders

- Suicidal ideation common in ED patients who present for medical disorders
- Study of 1590 ED patients showed 11.6% with SI, 2% (n=31) with definite plans
- 4 of those 31 attempted suicide within 45 days of ED presentation

Claassen CA, Larkin GL. Occult suicidality in an emergency department Population. British J Psychiatry. V186, 352-353, 2005.

131

The Gotland Study, 1983-84

- Education program (2 sessions) for all 18 PCPs re: depression recognition and management
- Demonstrated temporal effects on…
  - Hospitalization (↓ inpatient days for depression)
  - Med prescriptions (↑ antidepressants, ↓ sed/hypnotics)
  - Disability/sick-leave (↓ days)
  - Suicide rate (↓)
- But..
  - Effect time limited
  - Suicide ↓ only among younger women

Rutz et al., Acta Psy Scand 80:151-154, 1989; 85:83-88, 1992; 85:457-464, 1992

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National Organizations

- American Association of Suicidology (AAS) www.suicidology.org
- American Foundation for Suicide Prevention (AFSP) www.afsp.org
- Suicide Prevention Advocacy Network (SPAN USA) www.spanusa.org
- National Mental Health Association (NMHA) www.nmha.org
- National Alliance for the Mentally Ill (NAMI) www.nami.org
- Depression and Bipolar Support Alliance (DBSA) www.dbsalliance.org

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Information Resources

- Suicide Prevention Resource Center
  www.sprc.org
- National Institute for Mental Health
  www.nimh.nih.gov
- National Center for Injury Control and Prevention
  www.cdc.gov/ncipc
- CDC WISQARS http://webappa.cdc.gov
- National Suicide Prevention Lifeline:
  1-800-273- TALK (8255)
  www.suicidepreventionlifeline.org

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Current Textbooks

- The Harvard Medical School Guide to Suicide Assessment and Intervention (1999) – Jacobs
- The International Handbook of Suicide and Attempted Suicide (2000) – Hawton & van Heeringen
- Comprehensive Textbook of Suicidology (2000) - Maris, Berman, Silverman
- Adolescent Suicide: Assessment and Intervention (2006) – Berman, Jobes, Silverman

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Additional Reading

- National Strategy for Suicide Prevention: Goals and Objectives for Action (2001) – USDHHS/PHS
- Reducing Suicide: A National Imperative (2002) – Goldsmith, Pellmar, Kleinman, Bunney
- Autopsy of a Suicidal Mind (2004) – Shneidman
- Risk Management with Suicidal Patients (1998) – Bongar, et al
- Assessing and Managing Suicide Risk (2004) – Simon
- Clinical Manual for Assessment and Treatment of Suicidal Patients (2005) – Chiles & Strosahl
- Treating Suicidal Behavior (2001) - Rudd, Joiner, Rajab
- Psychotherapy with Suicidal People (2004) - Leenaars

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Additional Resources

- California Department of Mental Health – Prevention and Early Intervention www.dmh.cahwnet.gov/Prop_63/MHSA/Prevention_and_Early_Intervention
- Suicide Prevention Advocacy Network – California
  www.span-california.org
- LivingWorks Education
  www.livingworks.net

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Thank You

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