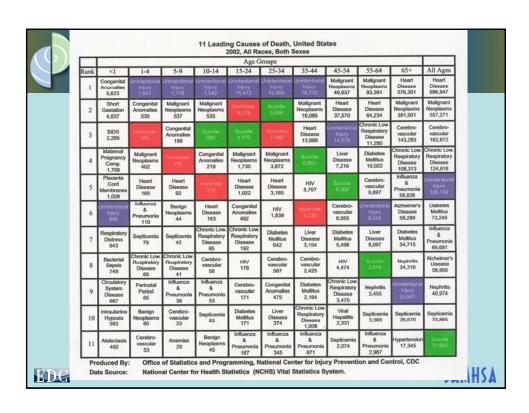


CLINICAL and EMPIRICAL FINDINGS ABOUT COLLEGE STUDENT SUICIDE

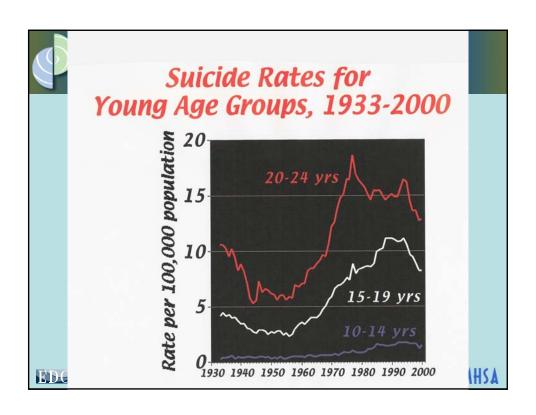
Morton M. Silverman, M.D.
Senior Advisor, SPRC
Medical Consultant, The Jed Foundation
Columbia University/NYSPI/AFSP Conference
New York, NY

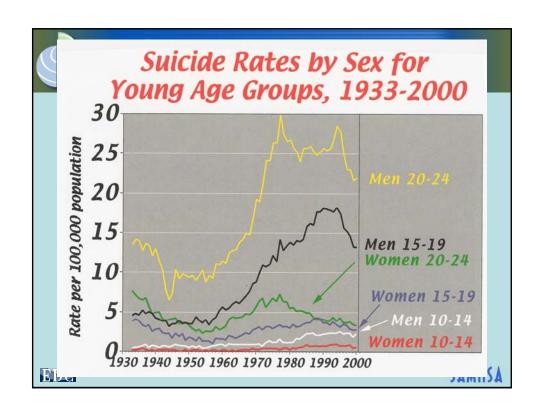
April 21, 2005

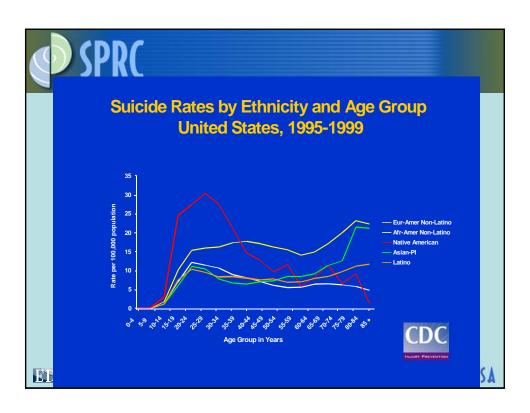
EDC



	DLKC.	Juiciae Pin	nong Leadi United Sta	tes - 2002	
		Αg	ge Groups		
	5 - 14	15-24	25-34	35-44	45-64
1	Unintentional Injuries	Unintentional Injuries	Unintentional Injury	Unintentional Injury	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	Cerebrovascular
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









The U.S. College and University Population

- More teenagers and young adults die from suicide than from all medical illnesses combined
- Approx. 14 million students currently attend over 4,500 American colleges and universities.
- An estimated 8 million college/university students are between ages 18-24 (representing over one-quarter of all 18-24 year-old in the U.S.)
- Students' health-risk behaviors, including suicidal behavior, have been only partially documented.
- College and university students constitute an important, but in many respects underserved, population for public health interventions.

EDG SAMHSA



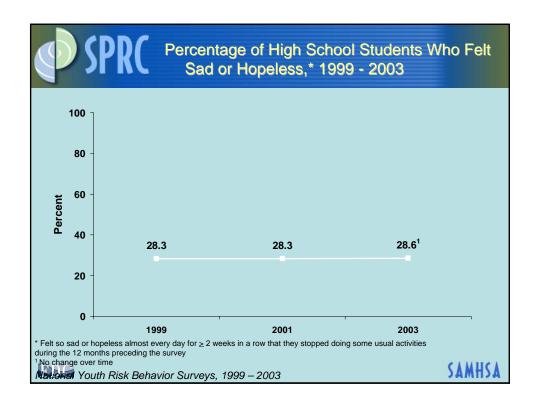
Why the Rise?

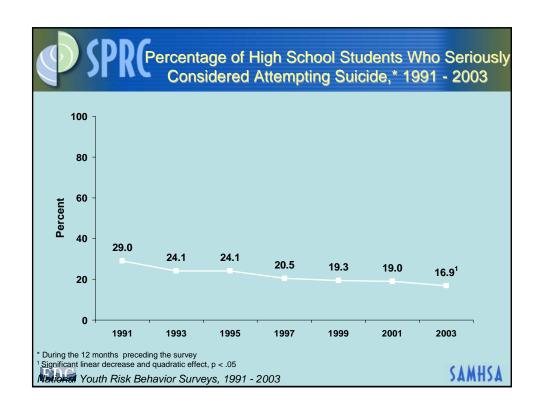
- Earlier identification and referral (high school)
- Improved treatment options
- Decreased stigma (high school & college)
- Increased accessibility/availability
- Greater parity with physical health
- Decreased 3rd party coverage & reimbursement
- Increased perturbation and uncertainty in world
- Cohort effect?

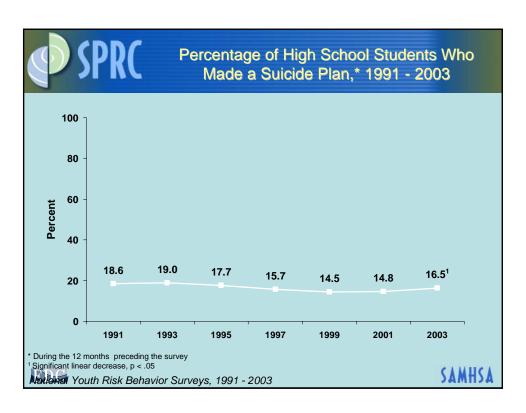
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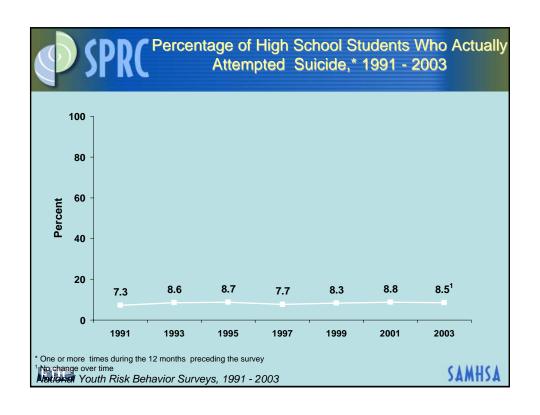


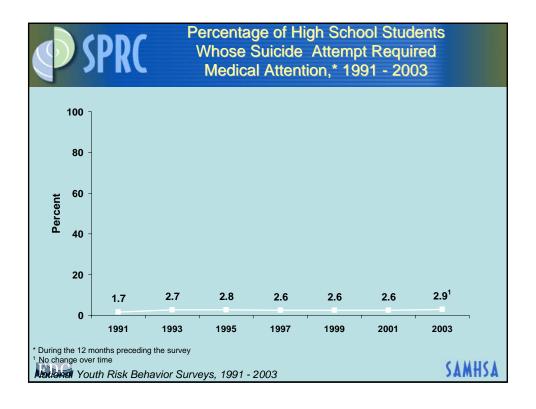
- **❖Big 10 Universities Student Suicide Study** (1980-1990)
- **♦ CDC's YRBS (2001; 2003)**
- **♦ CDC's NCHRBS (1995)**
- ***ACHA Spring 2000 NCHA**
- ***AUCCCD's Annual Surveys**
- **❖** Published literature
- **♦ Chickering Insurance Company figures**

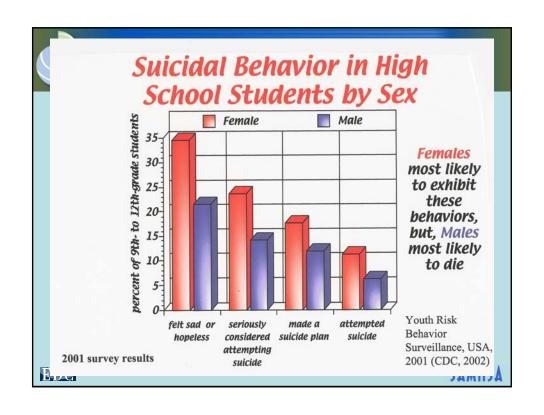


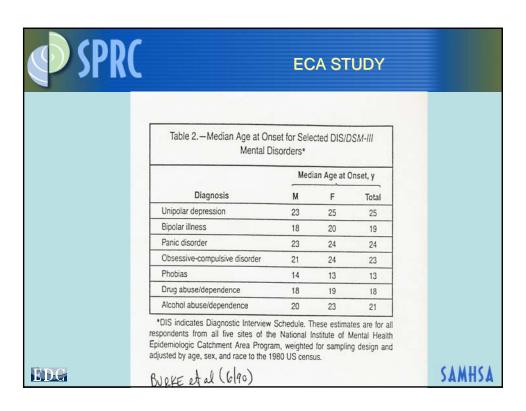














One Year Prevalence Rates of Mental Disorders (United States, 18-54 year olds)

- Any mental disorder = 16.5%
- Any mental or substance use disorder = 20.9%
- Any mood disorder = 5.7%
 - Unipolar = 4.5%
 - Bipolar = 0.9%
- Schizophrenia = 1.2%

in.

AGP, 59(2): 115-123 (2002)

One Year Disorders with Clinical Significance (18-54 year olds)

Lifetime History of Suicidal Ideation

Any anxiety disorder = 33.3% (ECA)

47.4% (NCS)

Unipolar major depression = 58.5% (ECA)

57.8% (NCS)

Any substance abuse/dependence = 28.3% (ECA)

37.1% (NCS)

EI



One Year Disorders with Clinical Significance (18-54 year olds)

Lifetime History of Suicide Attempt

Any anxiety disorder = 12.4% (ECA)

19.5% (NCS)

Unipolar major depression = 21.2% (ECA)

21.1% (NCS)

Any substance abuse/dependence = 9.6% (ECA)

15.3% (NCS)

AGP 59(2): 115-123, 2002

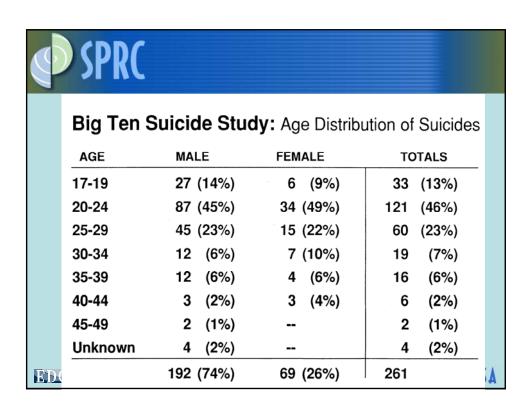


BIG 10 UNIVERSITIES STUDENT SUICIDE

BIG 10 UNIVERSITIES STUDENT SUICIDE STUDY

1980 - 1990

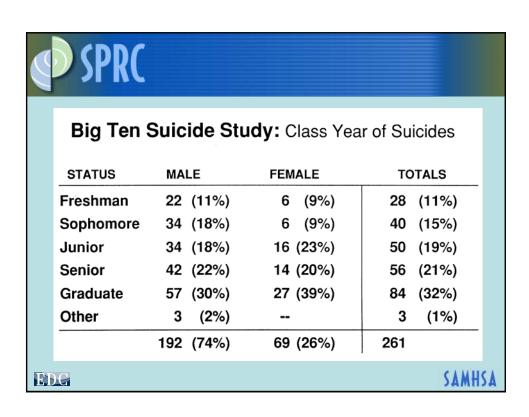
EDC





Big Ten Suicide Study: Age Distribution of Suicides

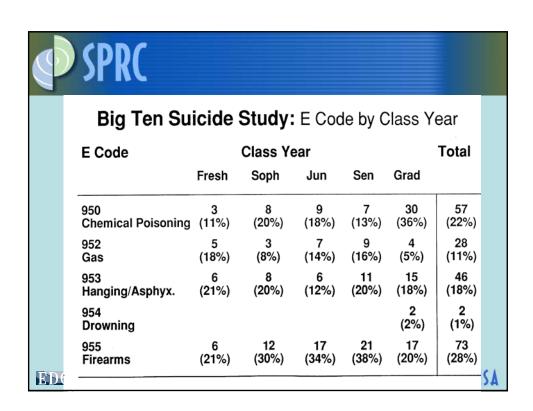
AGE	MALE	FEMALE	то	TALS
Caucasian	166 (86%)	61 (88%)	227	(87%)
Afro-American	6 (3%)	1	7	(2.7%)
Asian/Pacific Isl.	4 (2%)	1	5	(2%)
Foreign	11 (5.7%)	4 (5.7%)	15	(5.7%)
[African]	[1]	[1]	[2]	
[Asian]	[3]	[3]	[6	(2%)]
[Indian]	[5(2.6%)]		[5	(2%)]
[Spanish]	[2]		[2]	
Unknown	5 (2.6%)	2	7	(2.7%)
	192 (74%)	69 (26%)	261	



•	Big Ten Suicide Study: Age by Class Year of Suicides									
	AGE	Fresh	Soph	Jun	Sen	Grad	Total			
	17	2					2	-		
	18	10	1				11			
	19	6	12	2			20			
	20	5	7	12			24			
	21	3	9	12	11	1	36			
	22		3	11	13	1	28			
	23		2	2	8	6	18			
	24	1		2	4	8	15			
	25		2	4	4	9	19			
	26		1		1	9	11			
	27		2	1	3	3	9			
	28			1	3	7	11			
	29			1	1	7	9			
TND (Total	1 27	39	48	48	51	213	пст		
ED(%	12.7%	18.3%	22.5%	22.5%	6 24%		П)А		

	CDD	<u> </u>								
Big Ten Suicide Study:										
	Suicid	le Rate	s By A	ge an	d Clas	s Year				
	AGE	Fresh	Soph	Jun	Sen	Grad				
	17	4.3								
	18	2.6	2.9							
	19	2.9	4.6	5.8						
	20	10.4	3.3	5						
	21	22.2	13.3	6	5.3	8.1				
	22		13.9	14.5	7.2	1.7				
	23		16.1	7.3	10.1	7.6				
	24	23.8		12.4	11.6	9.9				
	25		32	36.1	18.3	12				
	26		21		6.4	13.6				
	27		58.7	16.4	25.5	5.2				
	28			20.7	31.5	14				
ED	29			25.1	13.1	16.2	A			

P	SPR					l e S t	t udy: ear	
	Mon	F	s	J	s	G	Total	
	Jan	3	4	4	3	8	22 (9%)	
	Feb	1	2	7	6	9	25 (10%)	
	Mar	3	1	5	9	8	26 (10%)	
	Apr	2	1	4	3	9	19 (7%)	
	May	2	3	2	4	6	17 (7%)	
	June	4	4	3	3	3	17 (7%)	
	July	1	5	1	2	3	12 (5%)	
	Aug	2	1	6	3	11	23 (9%)	
	Sept	1	4	4	2	8	19 (7%)	
	Oct	4	3	12	6	11	36 (14%)	
	Nov	3	8	1	6	1	19 (7%)	
	Dec	2	3	o	8	5	18 (7%)	
	Unk	o	1	1	1	2	5 (2%)	
LIANTO C	Total :	28	40	50	56	84	258	
EDC	%	10.8%	6 15.5°	% 19.4°	% 21.7	%32.6	%) A



9	SPRC						
	Big Ten S	Suicide	Study	: E Co	de by	Class `	Year
	E Code		Class '	Year			Total
		Fresh	Soph	Jun	Sen	Grad	
	956 Knife	1 (4%)	1 (3%)		1 (2%)	1 (1%)	4 (2%)
	957 Jumping	4 (14%)	6 (15%)	3 (6%)	3 (5%)	6 (7%)	22 (9%)
	958 Vehicle/Elect.	1 (4%)		1 (2%)	2 (4%)	3 (4%)	7 (3%)
	Unknown	2 (7%)	2 (5%)	7 (14%)	2 (4%)	6 (7%)	19 (7%)
:DC	Total	28	40	50	56	84	258

Big Ten Suicide Study: Suicide Rates Compared to the U.S. Population 1980-1990

		Unive	University Students			onal Ra	tes	
	Age	F	М	Т	, F	М	Т	
	17-19	1.2	5.7	3.4	4.0	19.1	11.7	
	20-24	4.5	9.0	7.1	4.8	25.5	15.2	
	25-29	10.0	16.3	14.1	5.9	25.7	15.8	
	30-34	9.6	9.9	9.8	6.6	24.4	15.4	
	35-39	9.0	24.1	17.0	7.2	23.3	15.1	
	40-44	12.5	17.0	14.4	7.9	22.2	14.9	
	45-49	0.0	32.4	11.8	8.6	22.7	15.5	
EDI	Total	4.5	10.0	7.5	6.4	23.7	15.0	S

PKC			
NATIONAL COLL	EGE HEALTH F 1995	ISK BEHAVIOR	SURVEY
During the past 12 months	Male	Female	Tota
1. Thought seriously about attempting suicide	9.7%	10.8%	10.3%
2. Made a suicide plan	7.2%	6.3%	6.7%
3. Attempted suicide (≯1)	1.7%	1.3%	1.5%
4. Suicide attempt requiring medical attention	0.5%	0.3%	0.4%
Current frequent alcohol use 20 of last 30 days)	6.6%	2.2%	4.2%
Current episodic heavy drinking (> 5 PRINKS / EPISONE)	43.8%	27.0%	34.5%
Current marijuana use(>> 1 in last 30 days)	17.1%	11.6%	14.0%
Lifetime cocaine use (ever	14.8%	14.1%	14.4%

		_	n of YRBS Fin	_	
	Seriously considered suicide (≥1x/yr)	Female 9.9%	Male 9.7%	Total 9.5%	
	Attempted suicide $(\ge 1x/yr)$	1.4%	1.6%	1.5%	
ED	Diagnosed with depression	4.8%	2.3%		A

		Replication of A (2000) 16		_	
	Very Sad (≥3x/yr)	Female 55.5%	Male 41.9%	Total 50.3%	
	Hopeless $(\ge 3x/yr)$	36.5	28.3	33.4	
line V	So depressed could not function $(\ge 3x/yr)$	24.0	19.0	22.1	CA

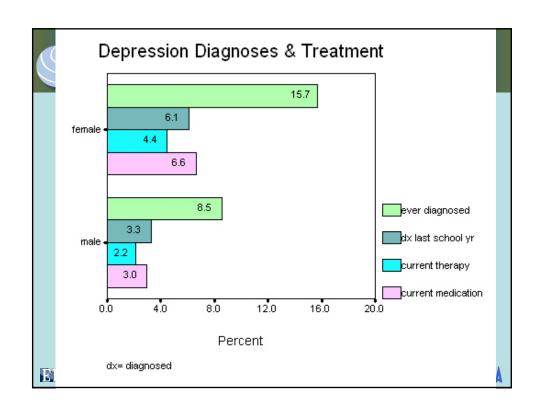
SPRC NCHA vs.	NCHRB	S Findin	js
NCHA Spring 2000 (N=15,977)	Male	Female	Total
Seriously Considered Attempting Suicide	481	893	1,374
	(8.7%)	(9.9%)	(9.5%)
Attempted Suicide	88	126	214
	(1.6%)	(1.4%)	(1.5%)
NCHRBS 1995 (N=4,609)			
Seriously Considered Attempting Suicide	167	302	469
	(9.3%)	(10.4%)	(10.0%)
Attempted Suicide	29	39	68
	(1.7%)	(1.4%)	(1.5%)
DE			SAMHSA

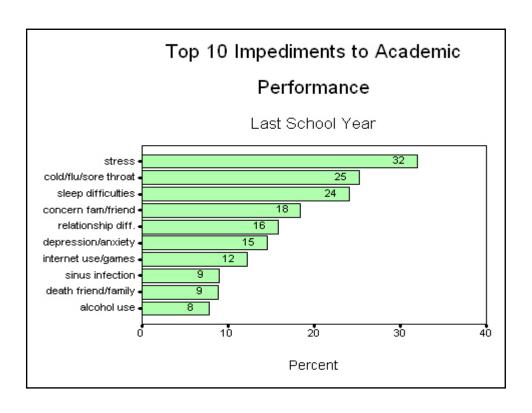
SPRC

AUCCCD 2003 Survey

- ❖ 81.4% report seeing more students with serious psychological problems than 5 years ago. This is the #1 service provision concern (772%) and the #1 administrative concern (49.5%)
- **❖** 40.7% of clients have severe psychological problems
- Utilization of services: 9.8% is average (goes up to 40%) for entire campus per year
- 160 suicides in 2002-03, but only 31 were current or former counseling center clients

EDG







Student Use of Prescription Drugs Frequency of Claims (N= 187,413) (1/1/00 - 12/31/00)

- SSRIs = 11.3%
- Combinations OTC = 11.2%
- Acne Products = 8.5%
- Antihistamines = 7.8%
- Cough/Allergy Combination = 6.6%
- Tetracyclines = 4.5%

FDC

• NSAIAs = 4.2%

HSA



Student Health Insurance Claims
% of Total Services
Two Years (4/1/99 - 3/31/01) (N=1,069,000)
191,000 Students/5,200 Dependents

- Neurotic Disorders = 7.5
- Normal Pregnancy = 6.4
- Adjustment Reaction = 3.71
- Affective Psychoses = 3.3
- Unspecified Disorder of Joint = 3.0
- Special Investigations and Exams = 2.9
- Unspecified Disorder of Back = 2.9
- Symptoms of Abdomen and Pelvis = 2.6

PSYCHIATRIC DISORDERS = 14.5%

F:M = 2.1

VE PAVI

JAMIIJA



FACTS AND FIGURES

- Upwards of 20% of students use antidepressants at some point in their college years
- AUCCCD reports 18% of students seeking help at counseling centers received psychotropic meds – up from only 7% in 1992
 - 1.6 million incoming freshmen experience episodes of depression

Jed Foundation/NMHA estimate 1088 suicides/year on college campuses

EDC

SAMHSA



Co-Morbidity

- ❖ 7-10% with MDD die from suicide
- *60% completed suicides have an MDD diagnosis
- **❖ 8-10%** with bipolar disorder die from suicide
- over 50% of suicides have alcohol or other drugs in their system

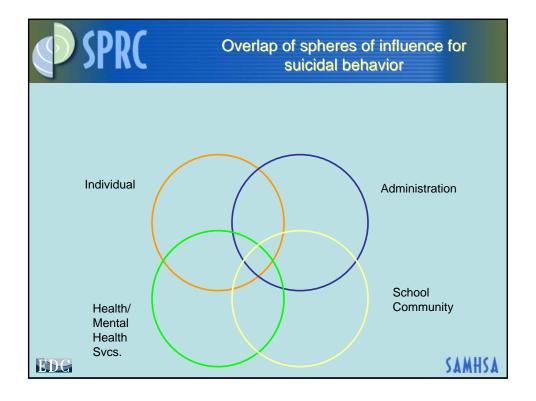
EDC



Co-Morbidity

- a sleep disturbance is a symptom of depression, anxiety, and/or stress
- perceived stress can be a symptom of depression
- alcohol is often used to self-medicate for anxiety, stress, or depression
- impulsivity, aggressive behavior, and irritability are associated with suicidal behavior

EDG

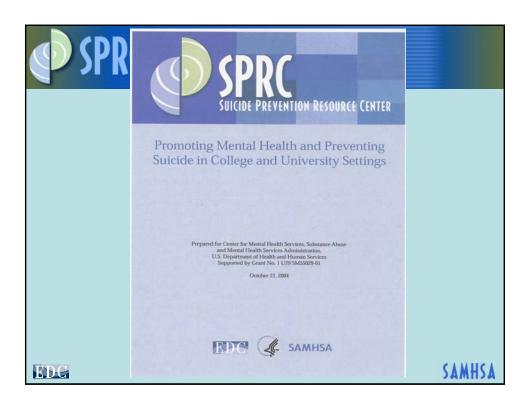


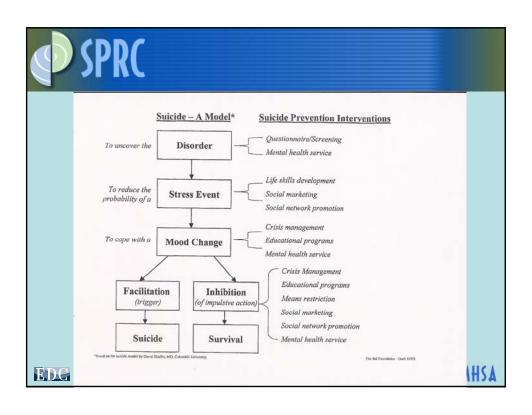


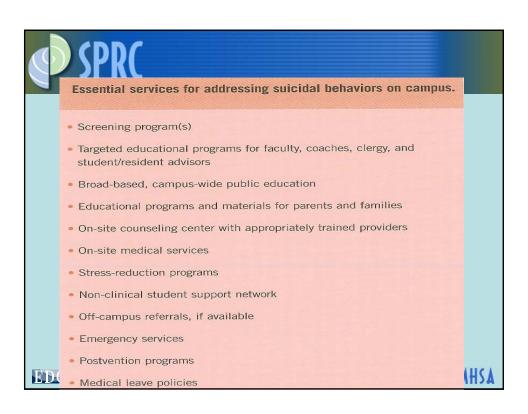
WHY NOW?

Changes in:

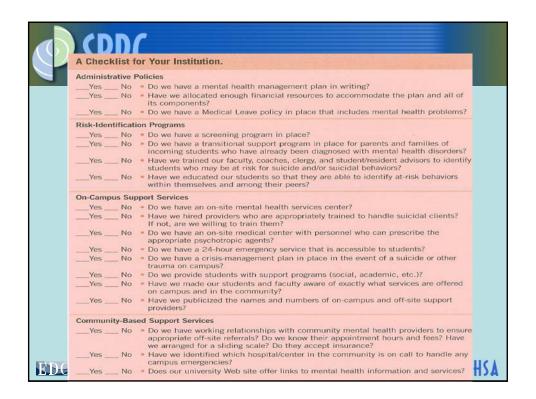
- Medication
- Psychiatric Symptoms Violence Potential
- Social Support
- Perceptions (Delirium; Sense of Stability Psychosis)
- Impulsivity Controls
- Physical Symptoms
 Professional Support
 - Sense of Hope/Future

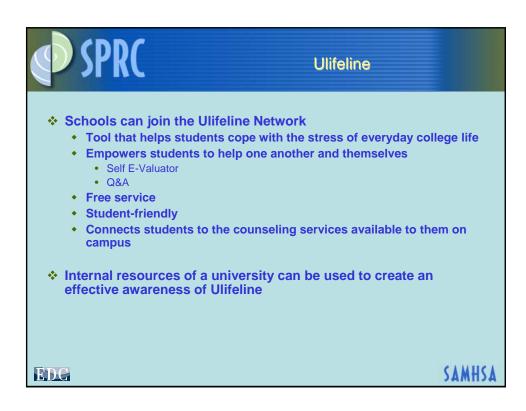






Pre-Enrollment Survey to: Training of Mental Health Service Means Restriction to: · Identify high-risk and potentially (MHS) Providers to: · Limit access to lethal means high-risk students Identify and treat depression, threats • Lead: Buildings & Grounds, Public · Provide snapshot of incoming class of suicide, and other emotional Safety, Residential Life, Chemistry Dept., · Proactively work (programs, disorders Athletic Dept. treatment) with identified students · Refer cases as appropriate · Target: Entire campus community · Lead: Admission Office or Freshman · Lead: Suicide prevention experts Dean with MHS and the Health Service Target: Incoming first-year students $\bullet \ Target: MHS, \ community \ resources,$ local hospitals Life Skills Development (Protective Factors) to: Crisis Management to: Improve students' management of Establish policies and implement the rigors of college life programs (including medical leave Equip students with tools to Prevent Suicide and and re-entry) that respond to suicide attempts and high-risk behavior **Promote Mental Health** recognize and manage triggers and stressors Awareness & Well-Being · Respond with comprehensive Lead: VP of Student Affairs, Deans of Students, MHS, Faculty & Staff, postvention program Lead: VP Student Affairs, MHS Leadership: President's Office Advisors, Residential Life • Target: Students; gatekeepers (with Target: Students implementation responsibility) Social Marketing to: Social Network Promotion to: Educational Programs to: Stimulate campus-wide cultural change that de-stigmatizes mental • Train gatekeepers and students to: · Reduce student isolation and (1) identify signs of individuals in promote feeling of belonging health, removes barriers, and distress; (2) take the steps that get · Encourage the development of encourages help-seeking behavior them help smaller groups within the larger Target both high-risk students and Lead: Provost, VP Student Affairs campus community • Target: Students and gatekeepers (Deans of Students, Faculty & Staff, general campus community · Lead: Deans of Students, Faculty & Lead: VP Student Affairs, Deans of Students, MHS, Marketing Department, Staff, Residential Life, Student Gov't, Advisors, Residential Life, Student Student & Greek Orgs., Chaplainry Gov't, Student & Greek Orgs., Athletic Campus Media Target: Students Target: Entire campus community Dept., Dining Services, Public Safety,









SUICIDE PREVENTION RESOURCE CENTER

For more information:

See: www.jedfoundation.org

See: www.ulifeline.org

E-mail: jkonvisser@jedfoundation.org

EDC

SAMHSA



Contact SPRC

❖ Phone: 877-GET-SPRC (438-7772)

* TTY: 617-964-5448

❖ Web: www.sprc.org

Email: info@sprc.org

❖ Mail: Suicide Prevention Research Center

55 Chapel Street

Newton, MA 02158-1060

EDC