


Maine Youth Suicide Prevention Enhanced Evaluation

SAMHSA 2009 Grantee Meeting
Phoenix, Arizona



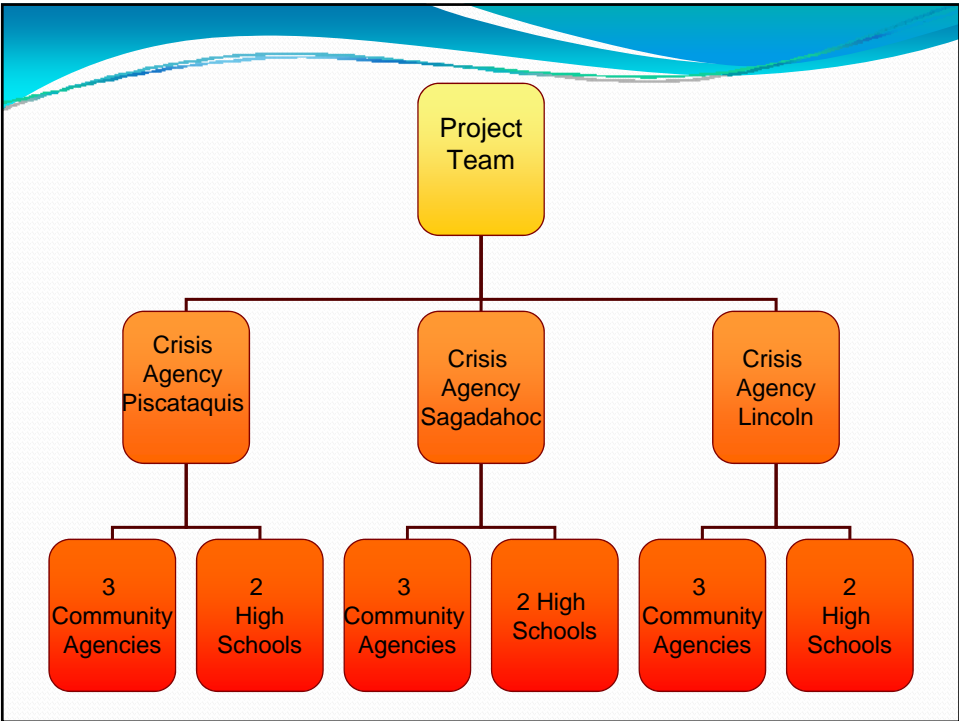
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GLSMA Grant Goal

- Build competent communities that identify and appropriately respond to youth at risk for suicide.

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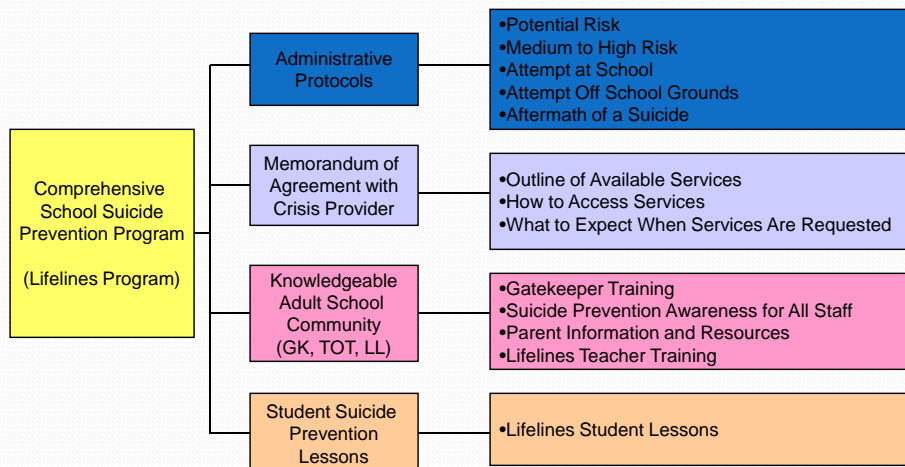


Enhanced Evaluation

- Evaluate the Lifelines approach to youth suicide prevention using a quasi-experimental design.
 - Cohort A – 6 school communities previously funded by CDC
 - Cohort B – 6 school communities funded by GLSMA
 - Cohort C – 6 non-intervention school communities
- Further explore the usefulness of public health databases for evaluation of youth suicide prevention efforts

Components of a Comprehensive School Suicide Prevention Program

Lifelines Program



Enhanced with the addition of Student Assistance Teams and use of a Student Risk Identification (Data Tickler) System

Description of Groups

Characteristic	Cohort A	Cohort B	Non-Intervention
Number of Schools	6	6	6
Number of Counties	6	5	4
Number of Towns with students attending cohort schools (2005-2006)	50	41	26
Population of 14-19 year olds (2005)	6,660	6,238	6,370
Mean school size (number of students, 2003-2004)	619	608	643
Mean population density of counties (persons per square mile)	57.4	107.9	92.1
Total student enrollment (2003-2004)	3715	3649	3855

Methods

- Data from schools on identification & referral of students (EIRF data)
- Data from crisis agencies on youth served for concern of suicide risk
- Interview key person(s) at each school and agency
- Analyze public health databases including: hospitalization data, YRBS, MYDAUS, All Claims data base

Event Reports

Cohort A – School Only	71
Cohort B – School & Community	97
Cohort C – Non-Intervention	48

First to Express Concern

Role	Cohort A School Only	Cohort B School & Community	Non- Intervention
Teacher	12	18	3
School Nurse	11	1	5
Guidance	6	9	10
Other Staff	11	18	6
Peer	12	21	4
Self Report	3	10	9

Peer Identifications

- Peer reported friend's ideation to a parent who reported it to school
- Peers recognized statements in instant messaging, text messaging and blogs
- Student called peer to tell about overdose. Peer reported it to school social worker.

Event Report Data Tell Us

- Staff training is enabling staff to identify and refer students who are potentially at risk.
- Students are self reporting and breaking the code of silence about peers at risk in schools with a comprehensive approach.
- Most parents and student are following through with referrals.

Event Report Data Tell Us

- When students are referred they are being assessed quickly.
- School-based mental health providers provide the same day assessments.
- Links between schools and crisis agencies are resulting in referrals and timely assessments.
- Schools without a comprehensive program identify and/or report fewer students at risk

Crisis Agency Clients

Cohort	# 13-24 yr. Old Clients
A – School Only	362
B – School and Community	638
C – Non-Intervention	630

Client Demographics

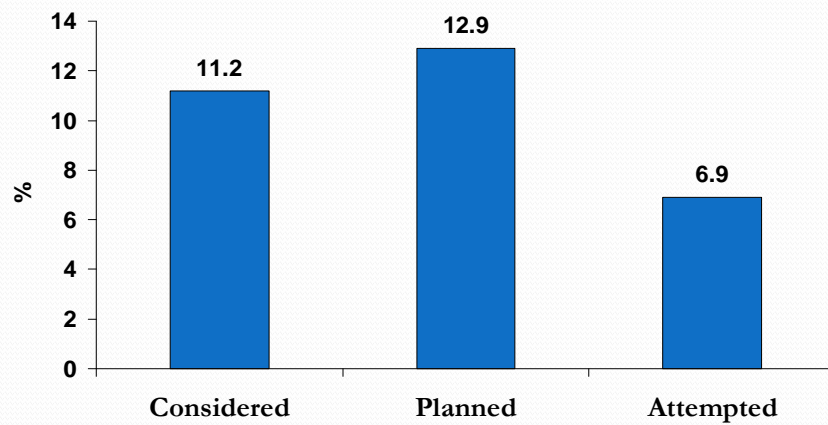
Gender	Percent
Male	51%
Female	49%

We Hope to Learn

- Is there a difference between cohorts in the number of clients referred by schools?
- Is there a difference between cohorts in the number of clients referred by community agencies?
- Do the disposition of the case differ based on the cohort?

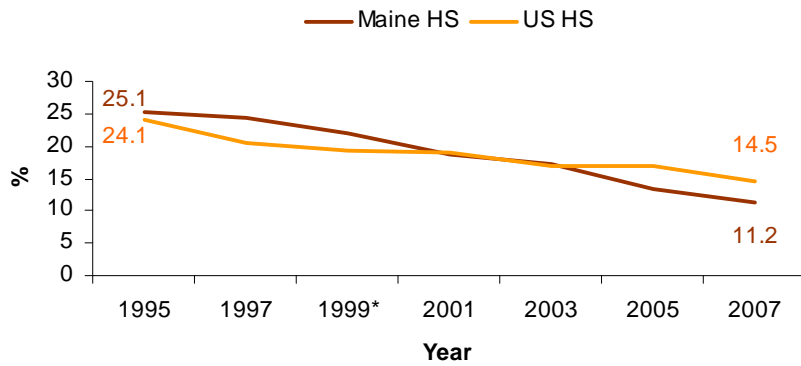
Learnings from State Databases

Self-reported Suicidal Behavior and Ideation among Maine High School Students, 2007



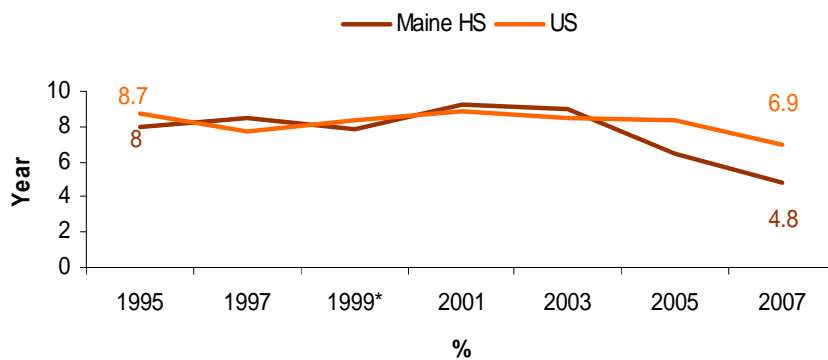
Source: Youth Risk Behavior Survey, 2007

Percent of Maine & US high school students who considered suicide in past year, 1995-2007



*1999 Maine YRBS data are unweighted and may not be representative of the population

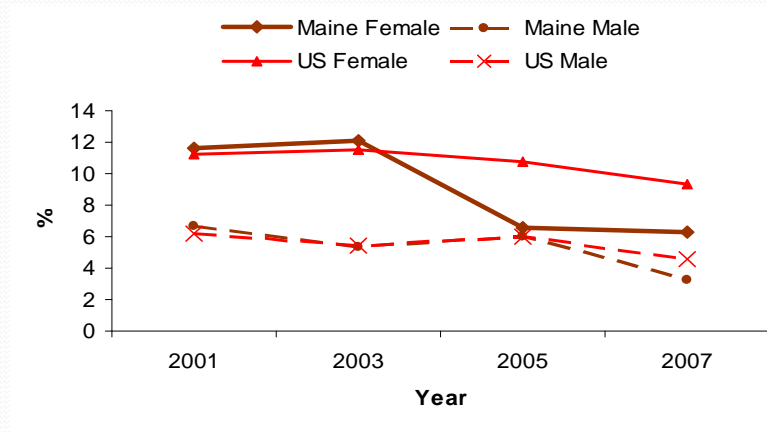
Percent of Maine high school students who attempted suicide in past year, 1995-2007



Source: Youth Risk Behavior Survey, High School

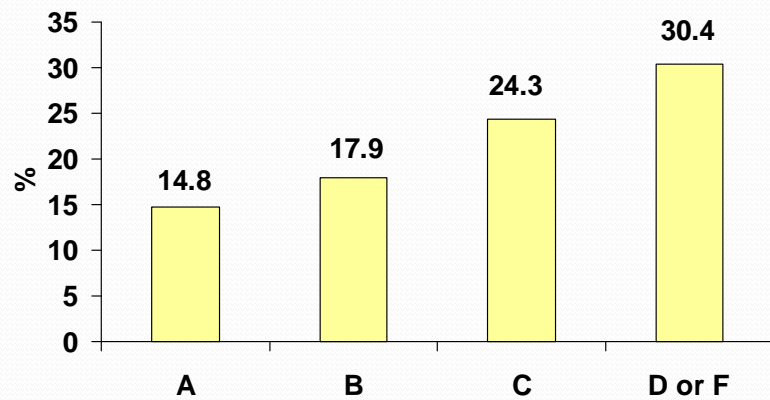
*1999 Maine YRBS data are unweighted and may not be representative of the population

Self-reported suicide attempts among Maine and U.S. high school students by sex, 2001-2007



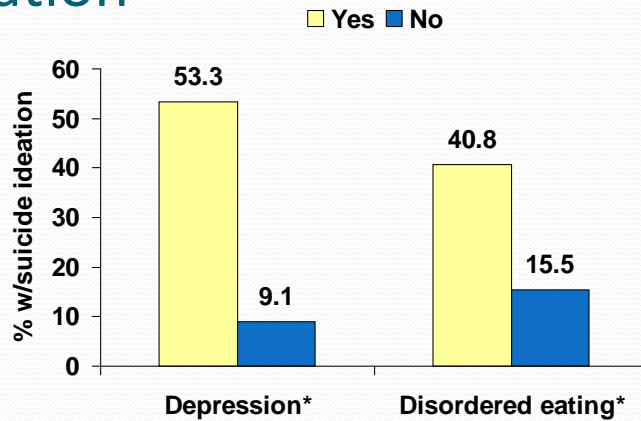
Source: Youth Risk Behavior Survey, High School

Grades by Suicide Ideation



$p < .05$; A & B vs. C & D
Maine HS YRBS, 2001-2005

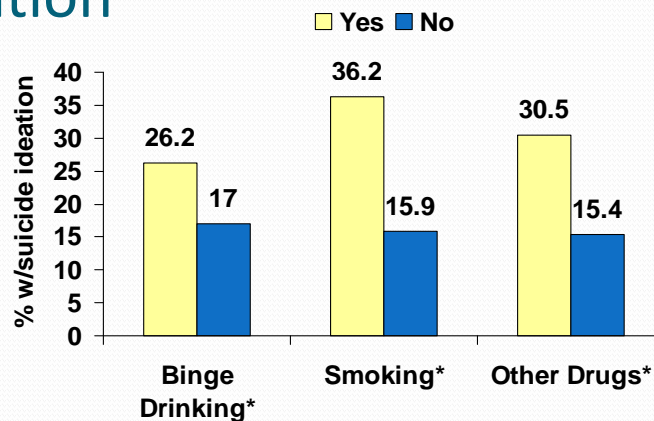
Mental Health by Suicide Ideation



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Maine HS YRBS, 2001-2005

Substance Use and Suicide Ideation



Binge drinking= 5 or more drinks in a row at least once in past month

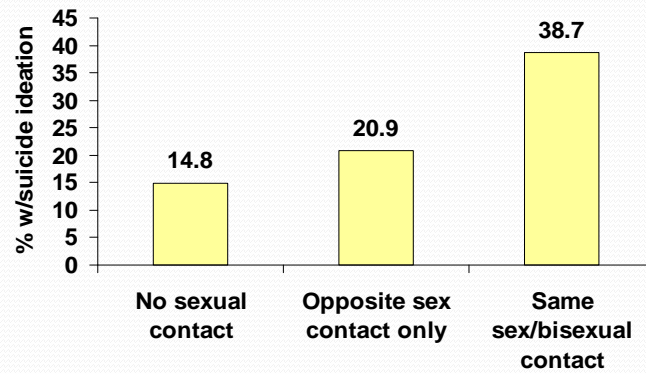
Smoking = >20 or more cigarettes in past month vs. none

Other drugs = Marijuana/cocaine in past month, lifetime heroin, inhalants, prescription drugs

*p<.05

Maine HS YRBS, 2001-2005

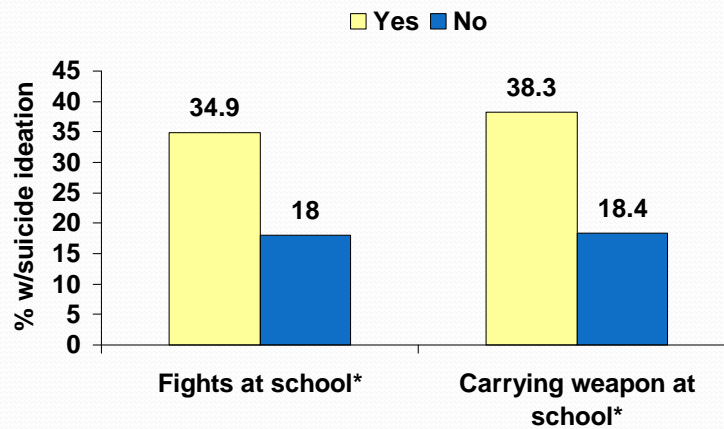
Sexual Contact and Suicide Ideation



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Maine HS YRBS, 2001-2005

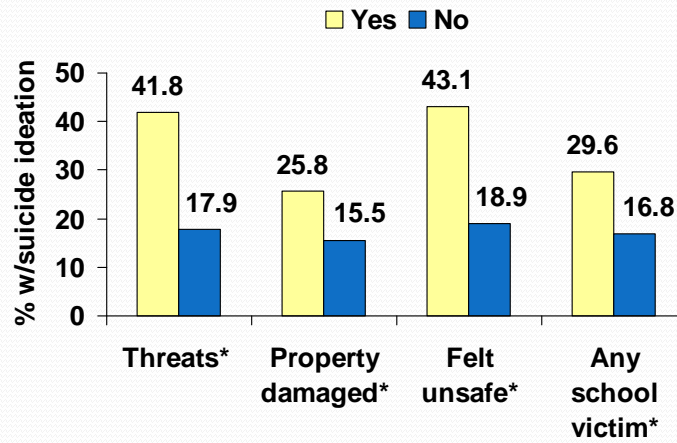
Aggressive Behavior and Suicide Ideation



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Maine HS YRBS, 2001-2005

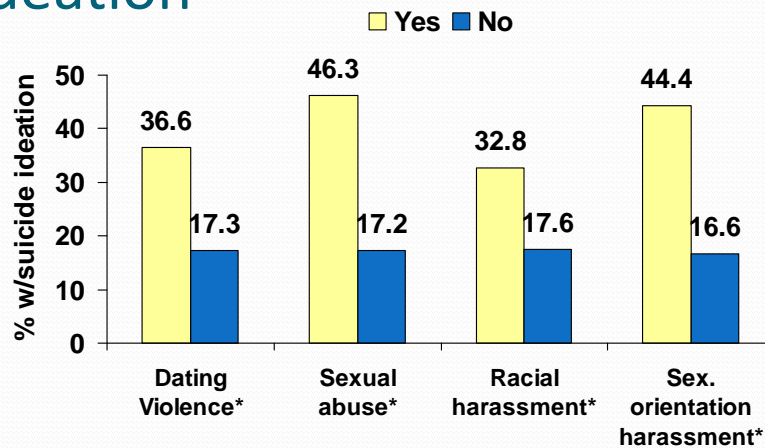
Peer Victimization and Suicide Ideation



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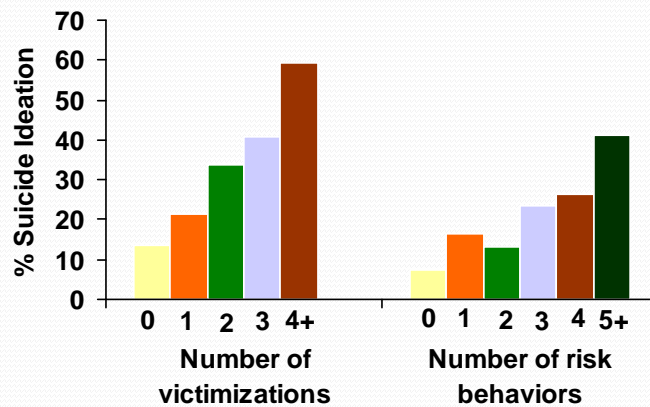
Maine HS YRBS, 2001-2005

Victimization and Suicide Ideation



Maine HS YRBS, 2001-2005

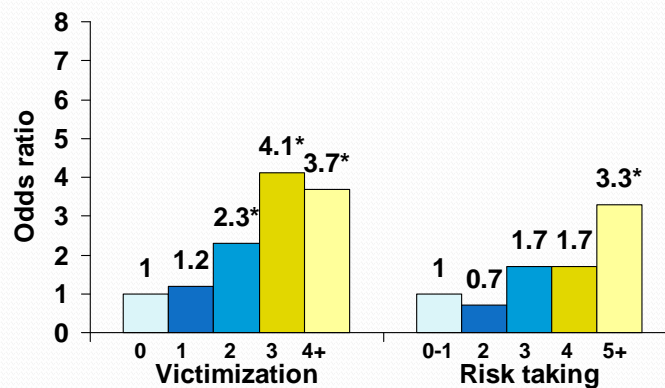
Multiple risks and suicide ideation



Victimization=Dating violence, sexual assault, threatened at school, property damaged at school, unsafe at school, racial harassment, sexual orientation harassment

Risk behaviors=low grades, multiple sexual partners, substance use, smoking, binge drinking, fighting at school, weapon to school, eating disorder

Odds of Suicide Attempt by Number of Victimization/Risk Experiences

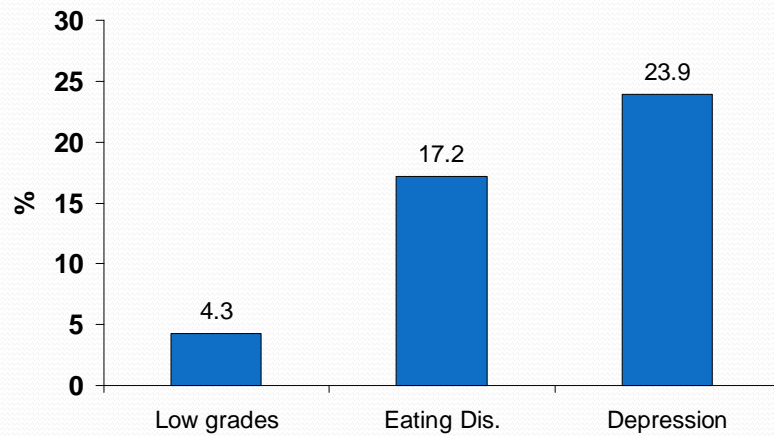


Adjusted for sex, grade, race, same sex sexual contact

*p<.01

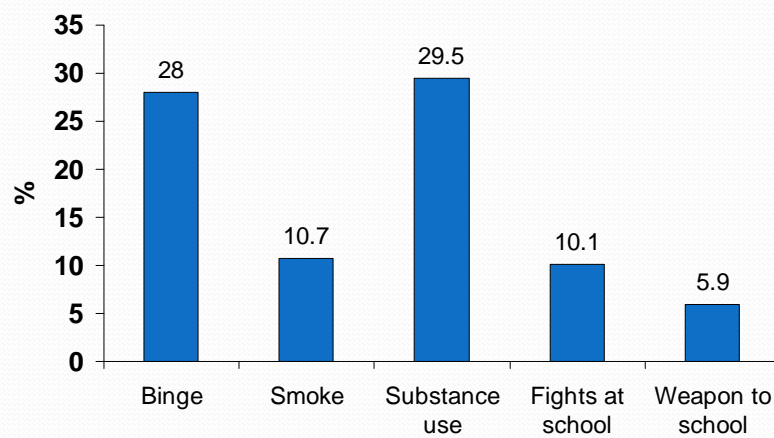
Maine HS YRBS, 2001-2005

Maine High School Students: Prevalence of Select Risk Factors



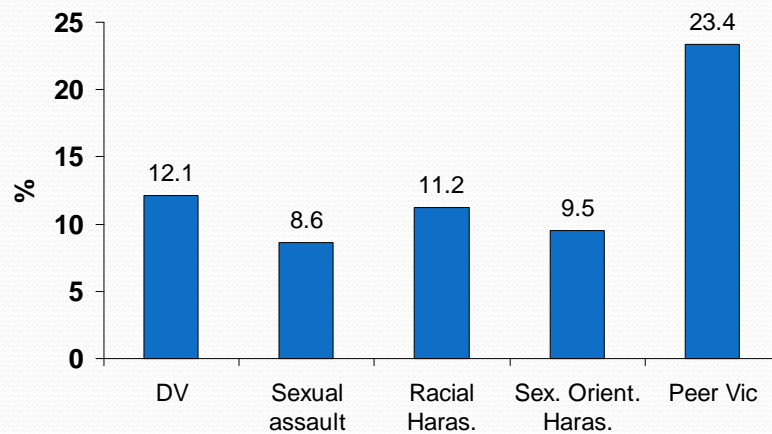
Maine YRBS, 2001-2005

Maine High School Students: Prevalence of Select Risk Factors



Maine YRBS, 2001-2005

Maine High School Students: Prevalence of Select Risk Factors



Maine YRBS, 2001-2005

Summary

- 1 in 10 high school students every year considers committing suicide in Maine
- Correlates of suicide ideation and attempts in Maine are similar to those found in the literature
 - Female, low grades, younger, substance use, eating disorders, depression, aggressive behaviors, victimization
- Multiple victimization experiences and multiple risk factors are associated with increased odds of suicide ideation and attempts.

Hospitalization rates (per 10,000) for self-inflicted injury among youth age 14-19 years, Maine 2001-2006

	Cohort A School Only	Cohort B School & Community	Non- Intervention
2001-2002	20.4	11.4	24.4
2003-2004	21.6	25.7	29.0
2005-2006	14.3	8.8	22.8
2007	TBD	TBD	TBD

Preliminary Results

- School-based mental health providers provide the same day assessments.
- Links between schools and crisis agencies are resulting in referrals and timely assessments
- Day-long Gatekeeper training prepares adults to identify and respond to youth at risk.
- Schools that have a comprehensive approach to suicide prevention identify and refer more students at risk than schools with no coordinated approach.



Preliminary Results

- Students are self reporting and breaking the code of silence about peers at risk.
- The majority of parents and student are following through with referrals.
- When students are referred they are being assessed quickly.
- Based on preliminary analyses, hospitalization rates in intervention groups appear to be declining at a faster rate than the comparison group, but additional analyses are needed to take clustering into consideration and the small numbers make detection of statistically significant differences difficult.