

The Institute of Medicine Report on Prevention and What it Means to Campus Suicide Prevention

C Hendricks Brown
Epidemiology &
Public Health
U Miami

Preventing Mental, Emotional,
and Behavioral Disorders
Among Young People

Progress and Possibilities



GLS Campus
Suicide Prevention
Grantee Meeting
February 2, 2010

THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

Committee on the Prevention of Mental Disorders and Substance Abuse Among Children, Youth and Young Adults

- **KENNETH WARNER (Chair)**, School of Public Health, University of Michigan
- **THOMAS BOAT (Vice Chair)**, Cincinnati Children's Hospital Medical Center
- **WILLIAM R. BEARDSLEE**, Department of Psychiatry, Children's Hospital Boston
- **CARL C. BELL**, University of Illinois at Chicago, Community Mental Health Council
- **ANTHONY BIGLAN**, Center on Early Adolescence, Oregon Research Institute
- **C. HENDRICKS BROWN**, College of Public Health, University of South Florida
- **E. JANE COSTELLO**, Department of Psychiatry and Behavioral Sciences, Duke University Medical Center
- **TERESA D. LaFROMBOISE**, School of Education, Stanford University
- **RICARDO F. MUNOZ**, Department of Psychiatry, University of California, San Francisco
- **PETER J. PECORA**, Casey Family Programs and School of Social Work, University of Washington
- **BRADLEY S. PETERSON**, Pediatric Neuropsychiatry, Columbia University
- **LINDA A. RANDOLPH**, Developing Families Center, Washington, DC
- **IRWIN SANDLER**, Prevention Research Center, Arizona State University

- **MARY ELLEN O'CONNELL**, Study Director

THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

2

Committee Charge

- Review promising areas of research
- Highlight areas of key advances and persistent challenges for prevention
 - Extended to mental health promotion
- Examine the research base within a *developmental framework context as well*
- Review the current scope of federal efforts
- Recommend areas of emphasis for future federal policies and programs of research

Other Acknowledgements

- R34MH071189-01 (Wyman, Brown) NIMH
- RCT of Gatekeeper Training for Suicide Prevention
- SM57405-01 (Wyman, Brown) SAMHSA
- Evaluating Success of a Gatekeeper Program in Linking Suicidal Students to Treatment
- P20MH071897-01 (Caine, Brown, Conwell, Knox) NIMH
- Developing Center On Public Health and Population Interventions For The Prevention Of Suicide
- R01-MH40859 (Brown) NIMH NIDA CDC
- Methodology for Mental Health/Substance Abuse Prevention & Early Intervention
- SPAN-GA Developmental Support from the State of Georgia
- Cobb County School District, Georgia
- JDS Foundation (Brown, Wyman) Development of an Integrated Suicide Prevention Program for Rural and Underserved Youth
- R56MH078580 Antidepressant Treatment and Suicidality: Biostatistical/Methodological Solutions (Gibbons & Brown) NIMH

Three Themes

1. There are effective prevention programs for many mental health/drug abuse outcomes

Little we can definitively say about preventing suicide itself, but clear evidence for preventing attempts and ideation.

There are clear implications from this and the previous IOM report on preventing suicide (Goldsmith, 2002)

Three Themes

2. Effective prevention programs (and principles) are not often being implemented

How to use what science is available to develop and refine the practice of prevention programs aimed at suicide

Three Themes

3. What is required for this next stage?

Federal, state, institutional, and
community leadership

Public Health Approach to Prevention

- Epidemiology:
 - who, when, where
 - Antecedent risk and protective factors
- Studying the full Population rather than clinic samples
- Preventive Interventions designed to target risk and protective factors
 - May be in the individual
 - Often in the social environment
 - Low base rate outcomes, including suicide, cannot be accurately predicted at the individual level.

Epidemiology of Mental Disorders and Drug Abuse (and Suicide)

- Where in the population do disorders occur

- Person – Place (Context) – Time

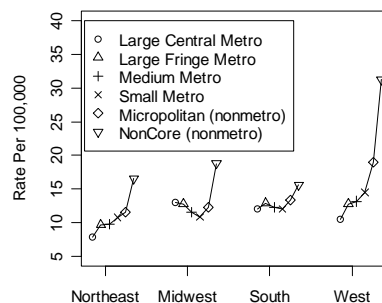
Example: Alcohol related violence

Example: Times of transition

Suicide risk: Transitions from home to dorm and from dorm to off-campus

Rates of Suicide by Region and Rurality (20-24 Years Old)

Suicide Rate for 20-24 Year Olds
from 1999-2003 by Region and Rurality



Epidemiology of Mental Disorders and Drug Abuse (and Suicide)

- Population derived findings can dramatically differ from clinic samples
 - While most people who commit suicide or attempt suicide have mental disorders, the vast majority have only limited involvement with treatment or services
- **Working only with those who come through the mental health clinic will only have small effects on overall reduction of suicide.**

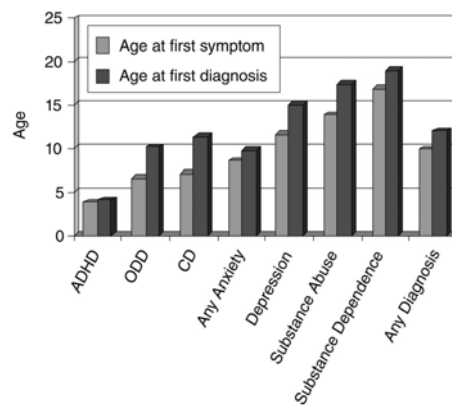
Successes in reducing suicide in a high-risk population

Motto & Bostrom 2001 – continued
personal letters
3000 depr/suicidal
hospitalizations
Reduced suicides for 2 years,
not 5 years

Preventive Opportunities Early in Life

- Early onset ($\frac{3}{4}$ of adult disorders had onset by age 24; $\frac{1}{2}$ by age 14)
- First symptoms occur 2-4 years prior to diagnosable disorder
- Common risk factors for multiple problems and disorders

Prevention Window



How early do risk factors for suicide occur?

- 4th Grade Ideation Predicts Age 19 attempts (Ialongo et al. 2004)
- Depression, stress, substance abuse, child trauma predict later attempts
- 8-9 year old's thoughts of death and suicide co-occur with depressive symptoms, conduct problems, and aggressive-disruptive behavior in school (Wyman et al., in press)

Clear Evidence that Some Disorders Can be Prevented

- Interventions tied to modify antecedent risk factors and enhance protective factors
- Multi-year effects on substance abuse, conduct disorder, antisocial behavior, aggression and child maltreatment

Evidence that Some Disorders Can be Prevented (cont'd)

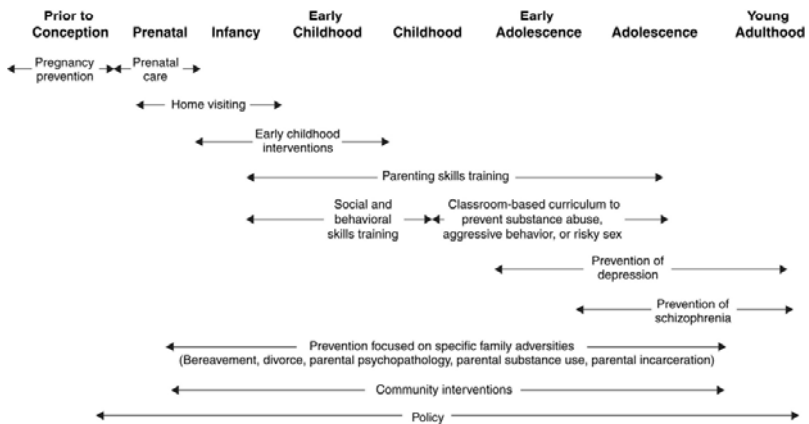
- Indications that incidence of adolescent depression can be reduced
- Interventions that target family adversity reduce depression risk and increase effective parenting
- Emerging evidence for schizophrenia

Evidence of Secondary School-related Effects

- School-based violence prevention can reduce aggressive problems by one-quarter to one-third
- Social and emotional learning programs may improve academic outcomes
- Promising but limited benefit-cost information

Preventive Intervention Opportunities

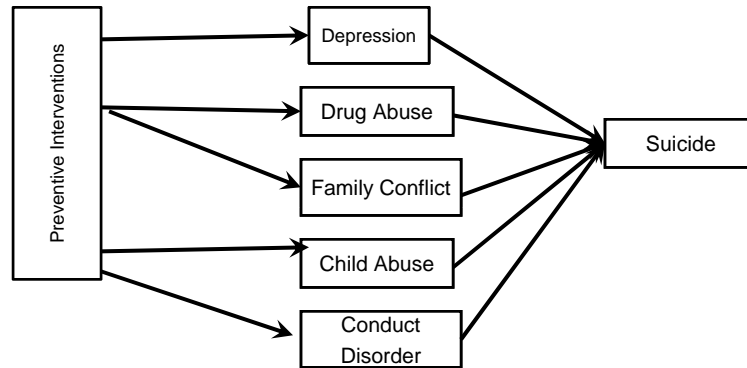
Interventions by Developmental Phase



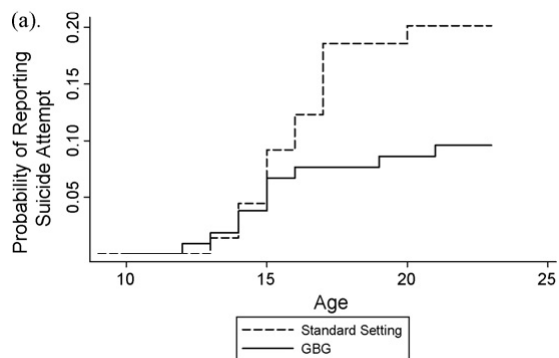
Relevance to Suicide Prevention

- Interventions that Target the Risk Factors for Suicide, are also likely to Prevent Suicide
 - Heart Disease: Primordial Prevention
 - Mental Health: Developmental Epidemiology Approach to Prevention of Distal Outcomes

Targeting Risk Factors for Suicide



Good Behavior Game: A First-Grade Intervention that Prevents Suicide Attempts and Ideation into Young Adulthood (Wilcox et al 2008)



School-Based Program Examples

- Good Behavior Game
- PATHS
- Life Skills Training
- Linking Interests of Families and Teachers
- Fast Track
- Adolescent Transitions Program

Defining Prevention and Promotion

- Prevention should not include the preventive aspects of treatment
- Prevention and promotion overlap, but promotion has important distinct role
- Mental health not just the absence of disorder

Population Targets for Prevention (Gordon)

Universal – apply to all in population

require face-to-face meeting with advisor

Selective – groups having high risk

special attention to those with academic problems

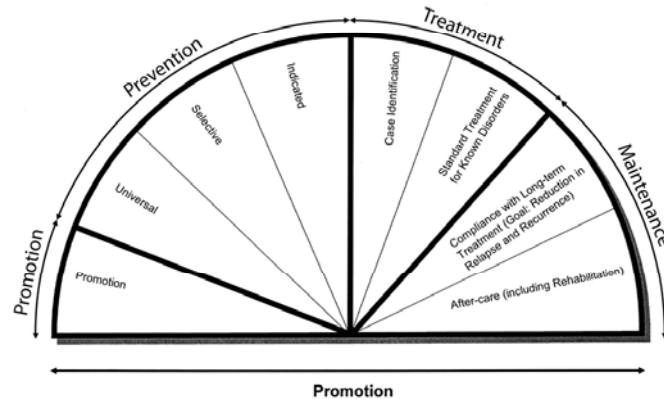
Indicated – those already exhibiting early symptoms or behaviors

provide continuity of mental health services for incoming students

Mental Health Promotion Aims to:

- Enhance individuals'
 - ability to achieve developmentally appropriate tasks (developmental competence)
 - positive sense of self-esteem, mastery, well-being, and social inclusion
- Strengthen their ability to cope with adversity
- Directly related to goals of colleges and universities

Prevention AND Promotion



THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

27

What we know about Gatekeeper Training in High Schools (Brown et al., 2006; Wyman et al, 2008)

- Randomized trial in a GA public school district w/ 32 middle & high schools, 48,000 youth for over 2 years
- Training of all adults increases their knowledge & attitudes toward gatekeeper role
- Increase in referral behavior limited to those adults already connected with kids
- Modest increase in referrals for suicidal kids in middle school
- No increase in referrals for suicidal kids in high school

THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

28

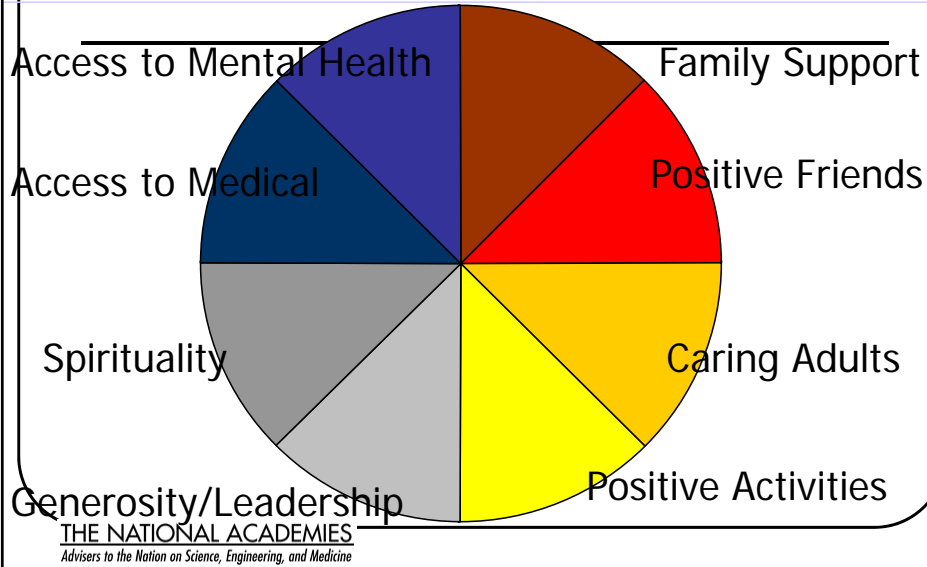
Youth who attempt suicide are harder to reach

- They are much less likely to have trusting relations with adults
- They have fewer friends
- Those friends they have are likely to feel positive towards suicide

Sources of Strength (LoMurray, North Dakota, 2005)

- Uses peer leaders, from diverse social cliques, to change school-level norms about suicide and codes of silence
- Enhances connection with trusted adults who then refer or support youth
- Enhances coping with stress through protective factors

Sources of Strength



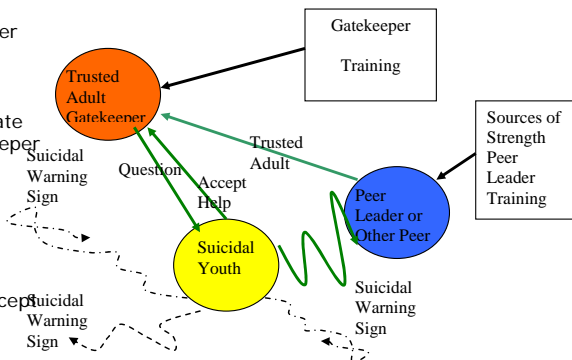
Increasing Social Connectedness through Peer Leaders

Warning signs more likely to be detected by peer leaders or other peers

Youth more likely to communicate concern to trusted adult gatekeeper

Adult more likely to question suicidal youth

Suicidal youth more likely to accept help



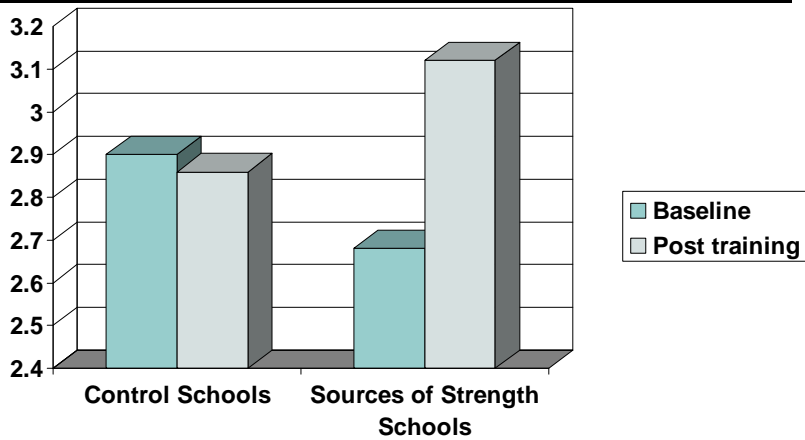
THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

32



As part of Action Step 2 all students at **Perry HS, NY** are naming their Trusted Adults and forming a growing circle of trust

Help-Seeking Norms of Peer Leaders increased by training ($p < .05$) in Cobb County, North Dakota and NY (N =18 Schools, Wyman et al., under review)



THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

Significant Positive Changes in Norms of Student Population

Size of Impact of Sources of Strength on Students	Low	Med
SUICIDE NORMS		
Help for Suicidal Peers		0.63 (p< .05)
Reject Codes of Silence	0.41	
CONNECTEDNESS		
Help Seeking from Adults		0.58 (p<.05)
Sources of Strength Coping	0.11	

THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

Putting Knowledge Into Practice: Overarching Recommendations

- Make healthy mental, emotional, and behavioral development a national priority
 - Establish public prevention goals
- White House should establish ongoing multi-agency strategic planning mechanism
 - Align federal resources with strategy
- States and communities should develop networked systems

THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

36

Putting Knowledge Into Practice: Funding (Cont'd)

- Target resources to communities with elevated risk factors
- Facilitate researcher-community partnerships
- Prioritize use of evidence-based programs and promote rigorous evaluation across range of settings

Continuing a Course of Rigorous Research: Overarching Recommendations

- NIH should develop comprehensive 10-year prevention and promotion research plan
- Research funders should establish parity between research on preventive interventions and treatment interventions

Continuing a Course of Rigorous Research: 10-Year Priorities

- Prevention (specific disorders and common risk factors) and promotion
- Replication, long-term outcomes, and multiple groups
- Collaborations across institutes and agencies for developmentally related outcomes
- Further improve current interventions
- Enhance community implementation

Enhance Community Implementation: an Example of Sources of Strength

Home Page

- Coordinators will be able to register their schools and keep useful info
- Coordinators will receive update e-mails each time a school completes a report/Action Step
- Coordinators will be able to print out reports and monitor schools' progress
- Document accomplishments

THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

Tracking Main Events

- Coordinators, advisors and trainer work on establishing timelines
- Target dates can be modified according to the progress of the school
- Guides Adult Advisors through the SoS program
- Keeps coordinators updated about the progress of each school
- Redirects Adult Advisors to useful resources and important forms

THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

Peer Leaders Nomination Process

- Adult Advisors record the process of Peer Leader nomination
- Adult Advisors evaluate how representative the Peer Leader groups is

THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

Sources of Strength Community Research Project

Home | Tracking Main Events | Peer Leaders | Action Step 1 | Resources | Contact Info | Log Out

Nomination | **PL Roster**

Peer Leader Nomination Process

The success of the Sources of Strength Program depends on the recruitment of a diverse group of teens – not just the “overachievers” or highly engaged students, but youth from all cliques and social groups in the school.

Number of adults invited to fill out a Nomination Form.....

Alternative/Additional nomination process

Number of adults who returned Nomination Form.....

Total number of students nominated by adults.....

Number of students invited to participate.....

Number of students who provided signed Parent Permissions.....

Does the final group of Peer Leaders include students...

	Not at all	Somewhat	A lot
From all school grades	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From both genders equally	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From groups less connected to school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Who spend time with students who are at risk for drop-out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From as many known cliques as possible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This website serves as the password protected repository for private documents and data relating to the Sources of Strength Program. The material posted here are not for general public use, but for the use of SOI Faculty and Staff only.

Peer Leaders Peer Leader Roster

- Adult Advisors can track their Peer Leaders' participation and status and reengage Peer Leaders
- Register new Peer Leaders

THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

Sources of Strength Community Research Project

Home | Tracking Main Events | Peer Leaders | Action Step 1 | Resources | Contact Info | Log Out

Nomination | **PL Roster**

Peer Leader Roster

[Register a New Peer Leader](#)

View Only Active Peer Leaders			
All Peer Leaders	Activity	Training Attendance	Action Step 1 Attendance
Mariya Petrova	View/Edit Activity	✓	
Peter Wyman	View/Edit Activity	✓	✓
Erin Walsh	View/Edit Activity	✓	✓
Mark LoMurray	View/Edit Activity	✓	

This website serves as the password protected repository for private documents and data relating to the Sources of Strength Program. The material posted here are not for general public use, but for the use of SOI Faculty and Staff only.

Action Steps

- Overview of the Action Steps
- Document Progress
- Adult Advisors fill out reports each time they meet with Peer Leaders and complete an Action Step
- The completion date is recorded in the Tracking Main Events page
- PL attendance at each PL meeting is added to the PL Roster page

THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

Sources of Strength Community Research Project

Home
Tracking Main Events
Peer Leaders
Action Steps
Resources
Contact Info
Log Out

Complete Action Step Report

An Action Step Report should be completed for every meeting with PLs. If PLs meet more than once to plan for an Action Step, simply complete two reports for the same Action Step. If meetings cover multiple goals, complete the most applicable report, and indicate additional goals within that report.

Action Step 6
▼
Go

Past Action Step Reports

Action Step	Completion Date

A successful Sources of Strength program fits the school community. As needed, please work with your trainers to fit the Action Steps to your school.

STEP 1: Trusted Adult Contacts

Some schools find it helpful to have PLs make individual contacts with school staff

- PL approach Trusted Adult
 - PLs tell Trusted Adult about the SoS Training
 - PLs tell adult they are a Trusted Adult – someone they can go to for help for themselves or others
- PLs give Trusted Adult a Natural Helper pamphlet and review the L.E.A.D.E.R. page with them
- PLs begin accumulating pictures with local faces (adults and students) to use for Action Step 4

STEP 2: Peer-to-Friend Contacts

- PL talk to 5-10 friends about the SoS training
- PLs give their friends SoS trifold and connect them with the Adult Advisors
- Adult Advisors give treats to the students and ask them to name their Trusted Adults
- PLs and AAs make a collage with the names of contacted students and their Trusted Adults

STEP 3: Classroom Presentations

- AAs review safe suicide prevention messaging with PLs
- PLs make 5-10 minute presentations in classrooms about
 - Help available to students, including Trusted Adults
 - Importance of involving adults with peers in crisis – *Breaking the Codes of Silence*
- PLs ask students to write down their names and the names of their Trusted Adults for collage

IMPORTANT: NO shock stories! NO trauma!

STEP 4: Media Messaging

- PLs create media messages based on stories of resiliency
- **Poster** – “bathroom flyer campaign” ▪ **Audio** – school or radio announcements
- **Videos** – PL create short videos and use MySpace, Facebook, YouTube to spread them.

IMPORTANT: NO shock stories! NO trauma!

STEP 5: PL Honoring Event

- PLs invite their Trusted Adults and parents
- PLs present what they have learned and accomplished
- PLs receive awards of certificates
- Invite local media, enlist talented PLs to provide entertainment, have food and celebrate accomplishments

Summary

- Prevention science as a guide
 - Selection of evidence-based programs
 - Principles of prevention – decrease negative impact
 - Adoption of programs by communities
 - Improved implementation of programs
 - Sustainability of programs

THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

46

23

Additional Information

- Report available at: <http://www.nap.edu>
- Summary available as free download

References

- National Research Council and Institute of Medicine (2009). *Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities*. Committee on Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults. Research Advances and Promising Interventions. Mary Ellen O'Connell, Thomas Boat, and Kenneth E. Warner, Editors. Board on Children, Youth, and Families, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.
- LoMurray M. Sources of Strength Facilitators Guide: Suicide prevention peer gatekeeper training. Bismarck, ND: The North Dakota Suicide Prevention Project; 2005.
- Brown C.H., Wyman P. A., Guo J, and Peña J. (2006) Dynamic wait-listed designs for randomized trials: New designs for prevention of youth suicide. *Clinical Trials*, 3, 259-271
- Brown CH, Wyman PA, Brinales JM, and Gibbons RD (2007). The role of randomized trials in testing interventions for the prevention of youth suicide. *International Review of Psychiatry*.19(6): 617-631.
- Wyman PA, Brown CH, Inman J, Cross W, Schmeelk-Cone K, Guo J, Peña J (2008). Randomized Trial of a Gatekeeper Training Program for Suicide Prevention: Impact on School Staff after One Year. *J Consulting and Clinical Psychology*, 76(1), 104-115.
- Brown CH, Wang W, Kellam SG, Muthén BO, Petras H, Toyinbo P, Poduska J, Ialongo N, Wyman PA, Chamberlain P, Stoboda Z, MacKinnon DP, Windham A & Prevention Science and Methodology Group., (2008). Methods for Testing Theory and Evaluating Impact in Randomized Field Trials: Intent-to-Treat Analyses for Integrating the Perspectives of Person, Place, and Time. *Drug and Alcohol Dependence*, S95: S74-S104.
- Brown, CH, Ten Have TR, Jo B, Dagne G, Wyman PA, Muthén BO, Gibbons RD. (2009). Adaptive Designs in Public Health. *Annual Review Public Health*, 30: 17.1-17.25. Downloaded from 10.1146/annurev.publhealth.031308.100223.
- Wilcox HC, Kellam SG, Brown CH, Poduska J Ialongo NS, Wang W, and Anthony JC (2008). The Impact of two Universal Randomized First and Second Grade Classroom-Based Interventions on Young Adult Suicide-Related Behaviors. *Drug and Alcohol Dependence*: S95: S60-S73.
- Wyman, PA, Gaudieri, PA, Schmeelk-Cone, K, Cross W, Brown, CH, Sworts L, Nathan, J (accepted for publication with revisions). Emotional triggers and psychopathology associated with suicidal ideation in urban children with elevated aggressive-disruptive behavior. To appear in *J Abn Child Psychol*.
- Wyman PA, Brown CH et al. (under review). An Outcome Evaluation of the Sources of Strength Suicide Prevention Program Delivered by Adolescent Peer Leaders in High Schools