

Risk Factors

Risk and Protective Factors, and Warning Signs

Suicide is the result of an extremely complex interaction involving a number of factors that all contribute to the expression of suicidal behaviors. This Issue Brief discusses how knowledge of risk factors, protective factors, and warning signs plays a key role in youth suicide prevention. Risk factors are characteristics that make it more likely that someone will consider, attempt, or die by suicide. Protective factors are those that make it less likely that someone will consider, attempt, or die by suicide. Warning signs are behaviors and characteristics that someone may harm him or herself in the near future.

There are numerous risk factors for suicide, any one of which may be present or absent in an adolescent at-risk for suicide. Researchers have identified a number of factors associated with a higher risk for youth suicide, as well as protective factors that may reduce the likelihood of youth suicidal behavior. Given the amount of time children and adolescents spend in school, it is imperative that school faculty and staff are educated about youth suicide risk factors, warning signs, and protective factors of suicidal behavior (3, 15).

Suicide does not lend itself easily to an identifiable period of symptoms that occur before the disease; however, research does show that suicidal youth tend to give evidence about their distress both verbally and through changing behavior (5, 14). Being able to recognize these clues and knowing the risk factors associated with adolescent suicide may help school staff prevent a student at-risk for suicide from attempting and/or dying by suicide. The importance of risk and protective factors can vary by age, gender, and ethnicity (13).

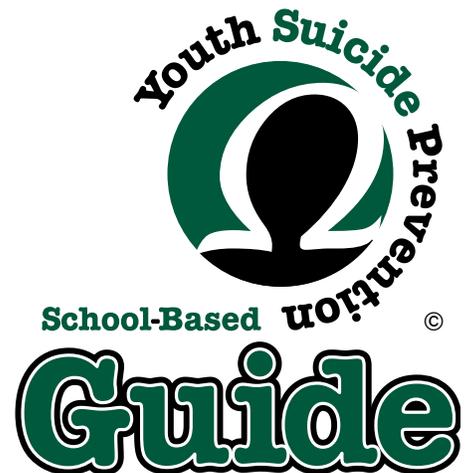
There is no tangible, all encompassing method for determining if an adolescent will attempt or die by suicide. Many students will present some of the factors mentioned in the list of risk factors that follow, however, not all will feel, act, or have ideas about suicide. By using this list, school administrators, faculty, and staff may be able to recognize a student at-risk for suicide and who may need help. By recognizing a teen that is potentially at-risk for suicide, faculty, staff, and administration take the first and the most important step for alleviating and reducing the risk for suicide. After a student has been identified as at risk, he or she can get help and intervention, which is of paramount importance for preventing a student from attempting or dying by suicide.

Risk Factors (for non-fatal suicide attempts and deaths by Suicide)

Risk factors are characteristics that increase the possibility that an individual will attempt to end his or her life, although it is important to note that risk factors are not necessarily causes of self-injury or death (17). Risk factors can be thought of as indicators to a child's potential for self-harm, and much research has gone into identifying specific risk factors for youth (4, 15, 17, 18). Research has shown that the following are risk factors for suicide attempts and death by suicide in adolescents: previous suicide attempt (2, 4, 6, 7, 9, 10, 15, 20); mood disorder (particularly depression) or psychopathology (2, 4, 7, 8, 9, 10, 15, 20, 35); substance abuse disorder (2, 4, 7, 8, 9, 10, 20, 35); family history of

Issue Brief

3a



Prepared By:

Justin Doan
Amanda LeBlanc
Stephen Roggenbaum
Katherine J. Lazear



Department of Child & Family Studies

Suggested Citation: Doan, J., LeBlanc, A., Roggenbaum, S., & Lazear, K.J. (2012). *Youth suicide prevention school-based guide: —Issue brief 3a: Risk Factors: Risk and protective factors, and warning signs*. Tampa, FL: University of South Florida, College of Behavioral and Community Sciences, Louis de la Parte Florida Mental Health Institute, Department of Child & Family Studies (FMHI Series Publication #218-3a-Rev 2012).

This publication is also available on-line as an Adobe Acrobat PDF file: <http://theguide.fmhi.usf.edu>

suicidal behavior or mental illness (2, 4, 8, 10, 20); relationship, social, work, or financial loss (3, 4, 8, 10, 20); access to lethal agents (such as firearms or medications) (3, 4, 8, 10, 20, 33); contagion or exposure to individuals who have attempted or died by suicide with exposure through media, television, and direct contact (8, 10, 11); history of physical or sexual abuse (6, 7, 10, 23); conduct disorder (7, 10, 20, 35); juvenile delinquency (7, 10); gay, lesbian, or bisexual sexual orientation, or identification as transgendered (2, 4, 8, 10, 16, 24); stressful life events (7, 10); chronic physical illness (2, 4, 8, 20); impulsive or aggressive tendencies (3, 4, 20); being homeless/runaway (7, 10, 20); and school problems (2).

The impact of some risk factors can be reduced by interventions such as providing treatment for depression or substance abuse, and removing access to firearms (3, 20, 33). Those risk factors that cannot be changed (such as a previous suicide attempt) can alert others to the heightened risk of suicide during periods of the recurrence of a mental or substance abuse disorder, or following a significant stressful life event (11). The following list of risk factors that have been found to be associated with adolescent suicide is intended for use by school staff in order to help identify a student who may be at-risk for attempting or dying by suicide.

Protective Factors

Measures that enhance resilience or protective factors are essential for preventing suicide as reducing the factors that increase risk for suicide. Resilience refers to the process by which individuals build their coping skills, gain competencies, and increase their resistance to stress (36).

Protective factors are characteristics believed to reduce the likelihood that someone will harm or kill him/herself by counterbalancing risk factors, and vary according to age, gender, ethnicity, and religion (11, 17). Leading researchers in the field of youth suicide have noted that much research still needs to be conducted regarding specific protective factors for children and teens (4) although the following have shown to be protective factors for preventing youth suicide: parental/family support and connectedness (2, 4, 7, 11, 12, 20, 34), good social/coping skills (11, 12), religious/cultural beliefs (2, 4, 11, 12), good relationships with other school youth/best friends (7, 12), reduced access to means (10, 11), support from relevant adults/teachers/professionals (7, 11, 12), help-seeking behavior/advice seeking (12), impulse control (7), adaptive problem solving/conflict resolution abilities (11), social integration/opportunities to participate (7, 12), positive sense of worth/confidence (7, 12), stable living environment (7), access to and care for mental/physical/substance disorders (11), responsibility for others/pets (7), and their perceived connectedness to school (2). Additionally, involvement on sports teams (high school and community teams) is associated with reduced suicide ideation and non-fatal suicide attempts (27, 29, 30), reduced hopelessness and self-reported

Risk Factors

- Previous suicide attempt
- Physical abuse
- Sexual abuse
- Feelings of hopelessness or isolation
- Psychopathology (especially mood disorders)
- Parental psychopathology
- Substance abuse disorder (especially with comorbid mental health disorder)
- Conduct disorders or disruptive behaviors
- Juvenile delinquency
- School problems
- Exposure to suicidal behavior of friends or acquaintances, or in the media
- Chronic physical illness
- Being homeless/or having run away from home
- Aggressive-impulsive behaviors
- Life stressors such as interpersonal losses (relationship, social, work) and legal or disciplinary problems
- Access to firearms or other means

Demographic Risk Factors

- Being male (for death by suicide)
- Being female (for suicide attempt)
- Homosexual or bisexual orientation, or trans-gendered identity
- Family history of suicidal behavior

Protective Factors

- Family cohesion (family with mutual involvement, shared interests, and emotional support)
- Good coping skills
- Support from teachers and other relevant adults
- Perceived connectedness to the school
- Positive relationships with other school youth
- Reduced access to means for suicidal behavior
- Help-seeking behavior/advice seeking
- Impulse control
- Problem solving/conflict resolution abilities
- Social integration/opportunities to participate
- Sense of worth/confidence
- Stable living environment
- Access to and delivery of effective care for mental/physical/substance disorders
- Responsibilities for others/pets
- Religious or cultural beliefs that discourage self-harm
- Sports team participation

plans of suicide (28), and decreased risks for depression (30). Higher involvement (usually 3 or more teams per year) often showed more pronounced protection (28, 30, 32). However, one study revealed male high school athletes who made non-fatal suicide attempts reported serious injury more often than non-athlete counterparts (31, 32). The following checklist presents these protective factors in an easy-to-read format.

Warning Signs

While risk factors suggest long-term risk (i.e., a year to lifetime), warning signs are the earliest detectable signals that someone may harm themselves in the near-term (i.e., within minutes, hours, days, or months) (19). If risk factors can be compared to “clues,” then warning signs might be thought of as “red flags.” Emotional ups and downs are inherent in adolescence, and it can be hard to determine what behavior is normal and what may be harmful, therefore research has been done on suicide warning signs specifically for youth (1, 19). Again, it must be noted that these factors and warning signs do not provide a definitive method for determining if a student is or is not suicidal, but rather present a method to help identify potentially suicidal adolescents.

In 1997 the American Academy of Child & Adolescent Psychiatry adopted a list of symptoms and warning signs specifically for adolescents who may try to kill themselves, which was updated in May 2008 (14). The Suicide Prevention Resource Center [SPRC] has also compiled a list of youth-specific suicide warning signs (26). Three state suicide prevention program guideline manuals also offer youth suicide warning signs: Maine Youth Suicide Prevention Program (7), Washington State’s Youth Suicide Prevention Program (YSPP) (21), and the Virginia Guidelines for Suicide Prevention manual (22). Additionally, researchers in Utah conducted 49 psychological autopsies of adolescents and young adults who died by suicide in the mid-1990s in an effort to examine risk factors and warning signs of the descendents (25). Warning signs for youth suicidal behavior from these resources are combined and appear in this section.

References

Risk Factors: Risk and Protective Factors, and Warning Signs

1. Van Orden, K., Witte, T., Selby, E., Bender, T., & Joiner, T. (2008). Suicidal behavior in youth. In J. R. Z. Abela, & B. L. Hankin (Eds.), *Handbook of depression in children and adolescents* (pp. 441–465). New York: Guilford Press.
2. Borowsky, I.W., Ireland, M., & Resnick, M.D. (2001) Adolescent suicide attempts: Risks and protectors. *Pediatrics*, 107(3), 485–493.
3. Gould, M.S., & Kramer, R.A. (2001). Youth suicide prevention. *Suicide and Life-Threatening Behavior*, 31(Suppl), 6-31.
4. Gould, M., Greenberg, T., Velting, D., & Shaffer, D. (2003). Youth Suicide Risk and Preventive Interventions: A Review of the Past 10 Years. *Journal of the American Academy of Child and Adolescent Psychiatry*, 42(4), 386-405.
5. Taliaferro, L. A., & Borowsky, I. W. (2011). Physician education: A promising strategy to prevent adolescent suicide. *Academic Medicine*, 86(3), 342-347.
6. Kaplan, S., Pelcovitz, D., Salzinger, S., Mandel, F., & Weiner, M. (1997). Adolescent physical abuse and suicide attempts. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36(6), 799-809.
7. Maine Center for Disease Control and Prevention. (2007). *Maine Youth Suicide Prevention Implementation Plan*. Retrieved from <http://www.state.me.us/suicide/myspp/program/plan.htm>
8. Moscicki, E. (1999). Epidemiology of suicide. In DG Jacobs (Ed), *The Harvard Medical School Guide to Suicide Assessment and Intervention*. San Francisco: Jossey-Bass Publishing, 40–51.

One key to preventing suicide in children and teens is to know these warning signs and know what to do when faced with a student who presents them so that they may get the help they need. Some of these signs are similar to those for depression, a risk factor for suicidal behavior (15, 20). The following lists present warning signs that have been found to be associated with adolescent suicide.

Warning Signs

- **Actually talking about suicide or a plan***
- **Seeking out ways to harm or kill oneself***
- **Saying other things like: “I’m going to kill myself,” “I wish I were dead,” or “I shouldn’t have been born”***
- Withdrawal from friends and family
- Change in eating and sleeping habits
- Loss of interest in pleasurable activities
- Frequent complaints about physical symptoms, often related to emotions, such as stomachaches, headaches, fatigue, etc.
- Loss of interest in things one cares about
- Preoccupation with death
- Exhibiting impulsivity such as violent actions, rebellious behavior, or running away
- Complaining of being a bad person or feeling “rotten inside”
- Making statements about hopelessness, helplessness, worthlessness, or being “beyond help”
- Marked personality change and serious mood changes
- Giving verbal hints with statements such as: “I won’t be a problem for you much longer;” “Nothing matters;” “It’s no use;” and “I won’t see you again”
- Becoming suddenly cheerful after a period of depression-this may mean that the student has already made the decision to escape all problems by ending his/her life
- Giving away favorite possessions
- Difficulty concentrating and a decline in quality of school work

* *These signs and behaviors indicate an individual needs immediate professional attention or 9-1-1 should be called (19).*

References continued

9. Shaffer D., Gould, M., & Fisher, P. (1996). Psychiatric diagnosis in child and adolescent suicide. *Archives of General Psychiatry*, 53, 339–348.
10. Shaffer, D., Pfeffer, C.R., & Work Group on Quality Issues. (2001). Practice parameter for the assessment and treatment of children and adolescents with suicidal behavior. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40(1) supp, 24–51.
11. U.S. Public Health Service. (1999). *The Surgeon General's Call to Action to Prevent Suicide*. Washington, DC. Retrieved from <http://www.surgeongeneral.gov/library/calltoaction/>
12. World Health Organization. (2000). *Preventing Suicide: A Resource for Teachers and Other School Staff*. Mental and Behavioral Disorders, Department of Mental Health, Geneva.
13. Centers for Disease Control and Prevention. (2010). *Suicide: Risk and protective factors*. Retrieved from <http://www.cdc.gov/ViolencePrevention/suicide/riskprotectivefactors.html>
14. American Academy of Pediatrics. (2008). Teen suicide. *Facts for Families, No. 10*. Retrieved from http://www.aacap.org/galleries/FactsForFamilies/10_teen_suicide.pdf
15. Miller, D.N., & Eckert, T.L. (2009). Youth suicidal behavior: An introduction and overview. *School Psychology Review*, 38(2), 153–167.
16. Russell, S. T., & Joyner, K. (2001). Adolescent sexual orientation and suicide risk: Evidence from a national study. *American Public Health Association*, 91(8), 1276–1281.
17. Silverman, M. M. (2008). Suicide assessment, intervention and prevention. *The doctor will see you now*. Retrieved from <http://www.thedoctorwillseeyounow.com/content/depression/art1955.html>
18. Mazza, J. J., Fleming, C. B., Abbott, R. D., Haggerty, K. P., & Catalano, R. F. (2008). Identifying trajectories of adolescents' depressive phenomena: An examination of early risk factors. *Journal of Youth and Adolescence*, 39(6), 579–593.
19. Rudd, M. D., Berman, A. L., Joiner, T. E., Nock, M. K., Silverman, M. M., Mandrusiak, M., . . . Witte, T. (2006). Warning signs for suicide: Theory, research, and clinical applications. *Suicide and Life-Threatening Behavior*, 36(3), 255–262.
20. Bridge, J.A., Goldstein, T.R., & Brent, D.A. (2006) Adolescent suicide and suicidal behavior. *Journal of Child Psychology and Psychiatry*, 47(3), 372–394.
21. Washington State Youth Suicide Prevention Program. *Know the Warning Signs*. Retrieved from http://www.yspp.org/about_suicide/warning_signs.htm
22. Commonwealth of Virginia Board of Education. (2003). *Suicide Prevention Guidelines*. Retrieved from <http://youthviolence.edschool.virginia.edu/prevention/pdf/Suicide%20Prevention%20Guidelines%20for%20Virginia%20schools.pdf>
23. Dube, S. R., Anda, R. F., Felitti, V. J., Chapman, D. P., Williamson, D., & Giles, W. H. (2001). Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the lifespan: Findings from the Adverse Childhood Experiences Study. *JAMA*, 286(24), 3089–3096.
24. Haas, A.P., Eliason, M., Mays, V.M., Mathym R.M., Cochran, S.D., D'Augelli, A.R. . . Clayton, P.J. (2001). Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: Review and recommendations. *Journal of Homosexuality*, 58(1), 10–51.
25. Moskos, M., Olson, L., Halber, S., Keller, T., & Gray, D. (2005). Utah youth suicide study: Psychological autopsy. *Suicide and Life-Threatening Behavior*, 35(5), 536–546.
26. Suicide Prevention Resource Center (2010). *Featured Resources: Teens*. Retrieved from http://www.sprc.org/featured_resources/customized/teens.asp#warningsigns
27. Taliaferro, L.A., Rienzo, B.A., & Donovan, D.A. (2010). Relationships between youth sport participation and selected health risk behaviors from 1999 to 2007. *Journal of School Health*, 80(8), 399–410. doi:10.1111/j.1746-1561.2010.00520.x
28. Taliaferro, L.A., Rienzo, B.A., Miller, M.D., Pigg, R.M., & Dodd, V.J. (2008). High school youth and suicide risk: Exploring protection afforded through physical activity and sport participation. *Journal of School Health*, 78(10), 545–553. doi:10.1111/j.1746-1561.2008.00342.x
29. Harrison, P.A., & Narayan, G. (2003). Difference in behavior, psychological factors, and environmental factors associated with participation in school sports and other activities in adolescence. *Journal of School Health*, 73(3), 113–120. doi:10.1111/j.1746-1561.2003.tb03585.x
30. Babiss, L.A., & Gangwisch, J.E. (2009). Sports participation as a protective factor against depression and suicidal ideation in adolescents as mediated by self-esteem and social support. *Journal of Developmental and Behavioral Pediatrics*, 30(5), 376–384. doi:10.1097/DBR.0b013e3181b33659
31. Sabo, D., Melnick, M.J., Miller, K.E., Farrell, M.P., & Barnes, G.M. (2002). Athletic participation and the health risks of adolescent males: A national study. *International Journal of Men's Health*, 1(2), 173–194. doi:10.3149/jmh.0102.173
32. Sabo, D., Miller, K.E., Melnick, M.J., Farrell, M.P., & Barnes, G.M. (2005). High school athletic participation and adolescent suicide: A nationwide US study. *International Review for the Sociology of Sport*, 40(5), 5–23. doi:10.1177/1012690205052160
33. Grossman, D.C., Mueller, B.A., Reidy, C., Dowd, M.D., Villaveces, A. . . Harruff, R. (2005). Gun storage practices and risk factors of youth suicide and unintentional firearms injuries. *Journal of the American Medical Association*, 293(6), 707–714.
34. Flouri, E., & Buchanan, A. (2002). The protective role of parental involvement in adolescent suicide. *Crisis*, 23(1), 17–22.
35. Fleischmann, A., Bertolote, J., M., Belfer, M., & Beautrais, A. (2005). Completed suicide and psychiatric diagnosis in young people: A critical examination of the evidence. *American Journal of Orthopsychiatry*, 75(4), 676–683.
36. Friesen, B. J. (2005) *Frequently asked questions about resilience and recovery*. Portland, OR: Research & Training Center on Family Support and Children's Mental Health, Portland State University.

Prepared By:

Justin Doan
Amanda LeBlanc
Stephen Roggenbaum
Katherine J. Lazear

Developed by

The Department of Child & Family Studies, Louis de la Parte Florida Mental Health Institute in the USF College of Behavioral and Community Sciences. Originally funded by the Institute for Child Health Policy at Nova Southeastern University through a Florida Drug Free Communities Program Award.

Design & Page Layout by

Dawn Khalil

Contact: Stephen Roggenbaum
roggenba@usf.edu
813-974-6149 (voice)



Events, activities, programs and facilities of the University of South Florida are available to all without regard to race, color, marital status, gender, sexual orientation, religion, national origin, disability, age, Vietnam or disabled veteran status as provided by law and in accordance with the university's respect for personal dignity.