

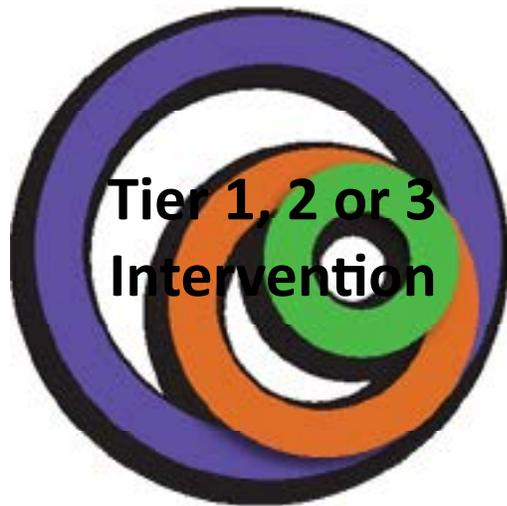
Suicide Prevention

Tier 1, 2 & 3

Strategy Brief, February, 2016

Shir Palmon, Amber Olson, Elisabeth Kane & Reece Peterson, University of Nebraska-Lincoln

Suicide is the eighth leading cause of death among all ages in the United States (Mental Health America, n.d.). It is the second leading cause of death among youth aged 15-24 (American Association of Suicidology, 2015). Furthermore, suicide is the third leading cause of death for individuals between the ages of 10-19, preceded only by unintentional injury and homicide. Those who are 15-19 years old are six times more likely to complete suicide than their younger peers (Cooper, Clements, & Holt, 2011; Heron, 2007), making middle school and high school a crucial time to address suicide in adolescents and young adults.



In addition to causing tremendous emotional distress for the friends and family of those who attempt or complete suicide, suicide deaths cost the United States 16 billion dollars annually, and non-fatal attempts cost 4.7 billion dollars annually. These numbers are reached by adding direct costs (i.e., treatment, hospital services, funeral, police investigations), indirect costs (i.e., productivity losses due to disability, years of productive life lost, work losses by family and friends, lost investment in social capital), and intangible/human costs (i.e., pain, grief, and suffering; Centre for Suicide Prevention, 2010).

What is Suicide and Suicide Prevention?

According to the Centers for Disease Control and Prevention (2014) webpage, suicide is defined as “death caused by self-directed injurious behavior with any attempt to die as a result of the behavior.” A suicide attempt is defined as “a non-fatal self-directed potentially injurious behavior with any intent to die as a result of the behavior; a suicide attempt may or may not result in injury.” And, suicidal ideation is defined as “thinking about, considering, or planning for suicide” (Centers for Disease Control and Prevention, 2014). Suicidal behavior operates on a continuum, with suicidal ideation at one end, suicidal intent and suicide attempt in the middle, and suicide on the other end (Doll & Cummings, 2008). Non-suicidal self-injury occurs when an individual intends to harm him or herself without the goal of suicide. Cutting and burning are common examples of this are cutting and burning which are forms of self-harm in which an individual deliberately harms his or her own body in order to cope with intense emotional pain, anger, and/or frustration (Mayo Clinic, n.d.).

Suicide prevention programs are special efforts that can be used within schools to prevent suicide attempts. Additionally, these programs may attempt to prevent suicide ideation by

providing information, creating a safe space to talk, and providing students with an adult who can help, as well as other relevant resources. Many programs also attempt to prevent other activities that may be related to increased likelihood of suicide, such as drug and alcohol use, depression, and bullying (Dottinga, 2015; Gould, Greenberg, Velting, & Shaffer, 2003; Gutierrez & Osman, 2009).

A multi-tier systems approach utilizes universal suicide prevention programs (tier one) in order to reach all students and identify those students who need more intensive interventions (tiers two and three). Doll and Cummings (2008) explain that increasing awareness of suicide, recognizing warning signs and risk factors, dispelling myths, teaching appropriate responses to someone discussing suicide, and identifying students who have engaged in suicidal behavior are examples of school-wide preventive measures that apply to all students (tier one).

Students who are at higher risk of engaging in suicidal behaviors may benefit from interventions that identify existing resources within the community and school that provide alternative coping strategies (tier two). Students who

have already engaged in suicidal behaviors may benefit from interventions that focus on reducing the current crisis or conflict in order to reduce the risk of further suicidal behaviors (tier three). These programs may include teaching how to access emergency help, understanding psychological disorders and their connection to suicide, and identifying at least one adult in the school, community, and in the home for the student to seek help from (Doll & Cummings, 2008).

Who Attempts and Completes Suicide?

For every one completed suicide, there are between eight to 25 attempts that do not result in death, across all ages (Suicide Awareness Voices of Education, n.d.). Males are four times more likely to complete suicide than females. Additionally, males are more likely to use violent means (e.g., firearms, jumping off a building) than females (e.g., taking pills, cutting their wrists). Although females make more suicide attempts, male's suicide attempts are more successful because they tend to choose more lethal means (Centers for Disease Control and Prevention, 2014).



In the U.S., every 12.8 minutes, someone dies by suicide.

Make time to help a loved one.

Always stay with someone who is in crisis. If you or a friend is in danger, call the National Suicide Prevention Lifeline, 1-800-273-TALK (8255).

AMERICAN ASSOCIATION OF SUICIDOLOGY
WWW.SUICIDOLOGY.ORG

Several groups are particularly vulnerable to suicide and suicidal ideation, including military veterans, Native Americans, and adolescents. In 2008, military veterans exceeded the demographically matched civilian suicide rate (National Institute of Mental Health, 2014). Native Americans have more than double the suicide rate compared to the rest of the United States, and Native American teens have the highest rate of suicide of any population group within the United States (Center for Native American Youth at Aspen Institute, n.d.). Caucasians and Native Americans have the highest suicide rates; however, adolescent African American suicides have been steadily increasing (Reiss & Dombeck, n.d.). The Center for Disease Control and Prevention has found that Non-Hispanic White and Native American Males are the most at-risk populations for suicide, whereas, Non-Hispanic Black and Hispanic females are least at-risk (Centers for Disease Control and Prevention, 2014). Economic status has not been found to be a predictor of suicide (Reiss & Dombeck, n.d.). Being involved in any religion lessens the risk of suicide, however more research is needed in this area (Reiss & Dombeck, n.d.).

A recent study examined suicide trends among elementary school-aged children from 1993-2012 and found that there was no significant change in the overall suicide rates for children aged 5-11. For children, however, there was a significant increase in the suicide rates of young Black males and a significant decrease in the suicide rates of young White males (Bridge et al., 2015).

Students who are at-risk of dropping out and/or being expelled, being placed in detention facilities, running away and becoming homeless, and attending alternative schools may also be at increased risk for suicide (Berman, 2009). Additional risk factors for suicidal behavior include depression, substance abuse, previous suicide attempts, a history of disruptive behavior or abuse, and substance abuse (Gould et al., 2003), with depression serving as the strongest risk factor of these (save.org).

Suicide and Mental Health

A PsycINFO search of “suicide” and “mental health” yielded 6,608 peer-reviewed articles. Many of these articles are from around the world, from places such as China, Slovenia, and Uganda, showing that mental health and suicide are world-wide issues. Of the U.S. population that attempted suicide in the last 12 months, 40% did not receive mental health treatment (Han, Compton, Gfroerer, & McKeon, 2014). One study examined the risk and protective factors of adolescents who had attempted suicide six months prior. Consoli and her colleagues (2015) found that adolescents who remain highly depressed or hopeless six months after attempting suicide are at higher risk for suicidality and would benefit from increased supports and interventions. Additionally, a study by Randall and colleagues (2014) found that people who suffer from schizophrenia, anxiety, depression, and/or substance abuse are at an increased risk for suicide. It is important that





adults working in the schools are aware of these risk factors and have the training to deal with these situations.

Racial and ethnic disparities are also factors that affect access to and utilization of mental health services. African American and Latino children have the greatest unmet mental health needs (Ringel & Sturm, 2001).

Students who identify as LGBTQ may be at an elevated risk for suicide (cdc.gov), with students in grades 7-12 being twice as likely as heterosexual peers to have attempted suicide (Russell & Joyner, 2001). The Center for Disease Control website (cdc.gov) has a page devoted to LGBT youth and suicide (<http://www.cdc.gov/lgbthealth/youth.htm>), which has numerous resources for schools and parents. Schools should ensure that they remain a "safe space" for all students and encourage respect and tolerance. Student-led clubs, such as a gay-straight alliance are also recommended. Trainings should be provided to staff members on how to create safe and supportive school environments.

Prevalence of suicide. A recent survey conducted by the National Association of School Psychologists found that 86% of school psychologists had counseled a student who reported or threatened suicide, 35% reported a student in their school had completed suicide, and 62% reported they knew of a student who had made a nonfatal suicide attempt (Berman, 2009). Because these numbers are so high, it is of the

utmost importance that every adult within a school be trained in suicide prevention interventions.

Although 15% of those who are clinically depressed complete suicide, 80% of those who seek treatment from depression are treated successfully (save.org). A survey conducted by Miller and Eckert (2009) found that approximately 1 in 14 students had attempted suicide in the past year.

Screening. Gutierrez and Ostman (2009) studied a mix of self-report measures of depression and suicide ideation which are associated with suicide risk. A cost effective way to ensure students receive necessary services is to screen for risk factors using these brief self-report measures. Self-report measures of depression and suicidal ideation (i.e., considering or planning suicide) are effective means to identifying students who may be in need of more intensive (tier two or tier three) interventions, because they are so closely linked to suicidal behavior (Gutierrez & Ostman, 2009).

Furthermore, identifying students involved in bullying can be an effective way to identify students at-risk for suicide behaviors. Both perpetrators and victims of bullying report higher levels of suicidal thoughts, and may be at a higher risk for completing suicide (Dotinga, 2015).

How to Prevent Suicide?

Suicide prevention is a very challenging task, and no program or prevention plan can be



relied upon to prevent 100% of suicide attempts. However, efforts can be made to prevent suicide at the universal, selected, and targeted levels (tiers one, two, and three, respectively).

Most suicide prevention interventions operate under the assumption that reaching all students will increase the chance of effectively reaching the small number of students who are at high risk and should receive further services.

Actions to take when suicide discussion comes up. At school, if an individual mentions or is overheard discussing suicidal ideation or completing suicide the approach is to stop that student from leaving the premises. When this occurs, immediately contact the student's parents/guardians and the school psychologist. If it is suspected that the student may complete suicide if left alone, he or she should be taken to the nearest hospital and be put on suicide watch. A meeting between the student, his/her family and the school psychologist, social worker or

nurse is strongly recommended upon returning to school. Every student's needs are unique and should be handled according to physician and family requests with the ultimate goal of doing what is most beneficial for the student.

Talking about suicide. A common myth is that discussing suicide in general will put suicidal thoughts into a student's head (Society for the Prevention of Teen Suicide, n.d.). When talking to a student about suicide attempts, or risk to a student, be straightforward so that the student understands your point.

Interventions. A variety of suicide prevention programs exist to help schools lower suicide rates. The programs vary in time to implement, who leads the program (expert or teacher), who is involved in the program (in the school and home), age/grade levels that are appropriate with the program, and requirements to be trained in the program.

Figure 1 – Youth Suicide Warning Signs & How to Respond

A new list of warning signs (September, 2015), and additional resources for how to respond to recognized risk can be found at: www.youthsuicidewarningsigns.org.

Warning Signs Include:

- Talking about or making plans for suicide.
- Expressing hopelessness about the future.
- Displaying severe/overwhelming emotional pain or distress.
- Showing worrisome behavioral cues or marked changes in behavior, particularly in the presence of the warning signs above.

Specifically, this includes significant:

- Withdrawal from or changing in social connections/situations.
- Changes in sleep (increased or decreased).
- Anger or hostility that seems out of character or out of context.
- Recent increased agitation or irritability.

How to Respond? If you notice any of these warning signs in anyone, you can help!

- Ask if they are ok or if they are having thoughts of suicide.
- Express your concern about what you are observing in their behavior.
- Listen attentively and non-judgmentally.
- Reflect what they share and let them know they have been heard.
- Let them know they are not alone.
- Let them know there are treatments available that can help.

If you are or they are concerned, guide them to additional professional help.

Figure 2 – Steps for Suicide Prevention Intervention

- Develop a districtwide school policy concerning student suicide.
- Educate school professionals about suicide warning signs and risk factors.
- Encourage collaboration among teachers, nurses, counselors & school psychologists .
- Include suicide prevention education in the teaching curriculum.
- Develop a peer assistance program.
- Implement activities aimed at increasing school connectedness.
- Develop supportive school-family partnerships.
- Develop supportive school-community partnerships.
- Establish a school crisis intervention team.

Classroom approaches. A curriculum-based approach to suicide prevention has been successful when taught within the classroom consistently over the course of the school year (Cooper et al., 2011).

Capuzzi (2009) suggests the following learning objectives for presenting the topic of suicide in the classroom.

- Provide students with a clear, realistic understanding of what suicide involves, including consequences for their family and friends.
- Provide students with the knowledge to recognize signs and symptoms in themselves and their friends.
- Familiarize students with school and community resources for accessing help for themselves and their peers.
- Bring the discussion of suicide out in the open by legitimizing it as a topic of discussion and a problem that must be addressed.
- Dispel myths and misconceptions about suicide and encourage youth to seek immediate assistance for themselves and their friends.

Suicide contracts. Suicide contracts are when the student is made to sign a document promising they will not complete suicide. Suicide contracts have not been found to work. A better approach is saying, “I hope to see you next week”, which shows the student that they have someone who is aware of their issue and is waiting to see him or her again.

School suicide prevention. A variety of information about how suicide prevention in school settings can be found in the SAMHSA Toolkit for School Suicide Prevention (Substance Abuse and Mental Health Services Administration, 2012).

Postvention (After a suicide crisis)

Additionally, there are “postvention” programs often in the form of trained crisis intervention teams which come to the schools after suicides have occurred. They offer counseling to help all children and adults in the school to deal with the loss. These same teams may also address a variety of other school crisis situations in addition to suicide. It is also important to connect the family with postvention resources such as the Local Outreach to Suicide Survivors Team (LOSS) or suicide survivor support group (LOSSteam, n.d.).



Crisis teams. Crisis teams may be employed by school districts or can be accessed when needed. The Mental Health Association recommends crisis response teams consist of 5-10 participants, with one as team leader, and another as the backup team leader. The participant duties at the time of a crisis include controlling rumors, responding to the media, contacting community resources, providing first aid, contacting parents, and providing training to school staff. The National Association for School Psychologists has many resources regarding what to do in a crisis, including culturally competent responses and how to handle memorials or activities after a suicide (http://www.nasponline.org/resources/crisis_safety/#cq).

Programs for Adults Working With Youth

Providing training for adults in how to talk with students about suicide can play an important role in suicide prevention. A study by Walsh, Hooven, and Kronick (2012) showed that adults who complete suicide prevention

training and are taught the warning signs went from being 83% comfortable in the appropriateness of talking to a young person about suicide to 96%. Additionally, the likeliness of asking the student about suicide risk increased from 77% to 96%, and confidence in their abilities went from 82% before training to 96% after training (Walsh et al., 2012). Berman (2009) notes that many of the available interventions are universal interventions (tier one). Some of these interventions take as little as one hour. However, education about suicide prevention, including warning signs takes significantly more time.

Effectiveness. Unfortunately suicide prevention interventions have little evidence of effectiveness, likely due to the complexity of the interventions, variations in programs, and variations in human intent (Balagru, Sharma, & Waheed, 2013). Human intent means that if a student has already made up his or her mind to die, staff must do everything in their power to prevent them from completing suicide (i.e., contacting parents, take them to the nearest hospital), which sometimes may not be enough. The many theories as to why suicide prevention



programs are not more successful include: failure to engage parents and foster peer support, failure to address confidentiality when seeking help, the duration of intervention is too short, lack of support from mental health services, and interventions not addressing previous suicide attempts (Balagru et al., 2013). However, a European study by Wasserman and colleagues (2015) found that completing the Youth Aware of Mental Health Programme, a short intervention, was significantly more effective at decreasing suicide attempts and serious suicidal ideation, than no intervention. The reduction in suicide attempts was more than 50% for the intervention than for the control group. The evidence for this type of training appears mixed.

Required training for adults. Currently, five states require annual suicide prevention training for school staff, while 16 states require some

training but not annually. Further, 16 states encourage training but do not require it (American Foundation for Suicide Prevention, 2014).

Conclusion

School-age students (10-19) are most at-risk for suicidal behaviors, and are most accessible for suicide prevention interventions while they are in school. Therefore, suicide prevention interventions are recommended for implementation in school. Universal suicide prevention interventions will be helpful for a majority of the student population, although some students may need more intensive interventions. Providing training to adults in school settings about how to prevent suicide will likely assist educators in recognizing and preventing youth suicide.



Resource Brief on Suicide Prevention

For a more detailed explanation of several examples of suicide reduction programs and links to related information and organizations, see the Suicide Prevention Resource Brief at <http://k12engagement.unl.edu/resources-suicide-prevention>.

For information about legal requirements for suicide training in schools see the Suicide Prevention Policy Q & A available at: <http://k12engagement.unl.edu/suicide-prevention-policies>.

Recommended citation:

Palmon, S., Olson, A., Kane, E., & Peterson, R. L. (2016, February). *Suicide Prevention. Strategy Brief*. Lincoln, NE: Student Engagement Project, University of Nebraska-Lincoln and the Nebraska Department of Education. <http://k12engagement.unl.edu/suicide-prevention>.

Suicide Prevention References

- American Association of Suicidology. (2015). Infographic #2. Obtained from <http://www.suicidology.org/resources/infographics>.
- American Foundation for Suicide Prevention. (2014). State laws on suicide prevention training for school personnel. <http://www.afsp.org/>.
- Balagru, V., Sharma, J., & Waheed, W. (2013). Review: Understanding the effectiveness of school based interventions to prevent suicide: A realist review. *Child and Adolescent Mental Health, 18*, 131-139. doi:10.1111/j.1475-3588.2012.00668.x
- Berman, A. (2009). School-based suicide prevention: Research advances and practice implications. *School Psychology Review, 38*, 233-238.
- Bridge, J. A., Asti, L., Horowitz, L. M., Greenhouse, J. B., Fontanella, C. A., Sheftall, A. H., . . . Campo, J. V. (2015). Suicide trends among elementary school-aged children in the United States from 1993-2012. *Journal of American Medical Association Pediatrics, 169*(7), 673-677. doi:10.1001/jamapediatrics.2015.0465.
- Capuzzi, D. (2009). *Suicide prevention in the schools: Guidelines for middle and high school settings (2nd ed.)*. Alexandria, VA: American Counseling Association.
- Center for Native American Youth at the Aspen Institute. (n.d.). Fast facts on Native American youth and Indian country. Retrieved from <http://www.aspeninstitute.org/sites/default/files/content/images/Fast%20Facts.pdf>.
- Centers for Disease Control and Prevention. (2014). National suicide statistics at a glance. Retrieved from <http://www.cdc.gov/violenceprevention/suicide/statistics/rates02.html>.
- Centre for Suicide Prevention. (2010). The cost of suicide. Retrieved from https://suicideinfo.ca/LinkClick.aspx?fileticket=Jz_OfDJ9HUc%3D&tabid=538.
- Consoli, A., Cohen, D., Bodeau, N., Guilé, J., Mirkovic, B., Knafo, A., . . . Gérardin, P. (2015). Risk and protective factors for suicidality at 6-month follow-up in adolescent inpatients who attempted suicide: An exploratory model. *Canadian Journal of Psychiatry, 60*, S27-S36.
- Cooper, G. D., Clements, P. T., & Holt, K. (2011). A review and application of suicide prevention programs in high school settings. *Issues in Mental Health Nursing, 32*, 696-702. doi:10.3109/01612840.2011.597911
- Doll, B., & Cummings, J. A. (2008). *Transforming school mental health services: Population-based approaches to promoting the competency and wellness of children*. Thousand Oaks, CA: Corwin Press.
- Dotinga, R. (2015). Bullies and their victims may be at higher risk of suicide. Retrieved from http://www.philly.com/philly/health/kidshealth/HealthDay695167_20150107_Bullies_and_Their_Victims_May_Be_at_Higher_Risk_of_Suicide.html.
- Gould, M. S., Greenberg, T., Velting, D. M., & Shaffer, D. (2003). Youth suicide risk and preventive interventions: A review of the past 10 years. *Journal of American Academy of Child Adolescent Psychiatry, 42*(4), 386-405.
- Gutierrez, P. M., & Osman, A. (2009). Getting the best return on your screening investment: An analysis of the Suicidal Ideation Questionnaire and Reynolds Adolescent Depression Scale. *School Psychology Review, 38*, 200-217.

- Han, B., Compton, W. M., Gfroerer, J., & McKeon, R. (2014). Mental health treatment patterns among adults with recent suicide attempts in the United States. *American Journal of Public Health, 104*, 2359-2368. doi:10.2105/AJPH.2014.302163.
- Heron, M. (2007). Deaths: Leading causes for 2004. *National Vital Statistics Reports, 56*(5), 1-96.
- King, K. A. (2001). Developing a comprehensive school suicide prevention program. *Journal of School Health, 71*, 132-137.
- LOSSteam. (n.d.). What is loss team? Retrieved from <http://lossteam.com/About-LOSSteam-2010.shtml>.
- Mayo Clinic. (n.d.). Self-injury/cutting. Retrieved from <http://www.mayoclinic.org/diseases-conditions/self-injury/basics/definition/con-20025897>.
- Mental Health America. (n.d.) Suicide. Retrieved from <http://www.mentalhealthamerica.net/suicide>.
- Miller, D. N., & Eckert, T. L. (2009). Youth suicidal behavior: An introduction and overview. *School Psychology Review, 38*, 153-167.
- National Institute of Mental Health. (2014, March 3) Suicide in the military: Army-NIH funded study points to risk and protective factors. Retrieved from <http://www.nimh.nih.gov/news/science-news/2014/suicide-in-the-military-army-nih-funded-study-points-to-risk-and-protective-factors.shtml>.
- Randall, J. R., Walld, R., Finlayson, G., Sareen, J., Martens, P. J., & Bolton, J. M. (2014). Acute risk of suicide and suicide attempts associated with recent diagnosis of mental disorders: A population-based, propensity score-matched analysis. *Canadian Journal of Psychiatry, 59*, 531-538.
- Reiss, N. S., & Dombeck, M. (n.d.). Suicide. Retrieved from http://www.hsccs.org/poc/view_doc.php?type=doc&id=13737.
- Ringel, J. S., & Sturm, R. (2001). National estimates of mental health utilization for children in 1998. *Journal of Behavioral Health Services and Research, 28*(3), 319-333.
- Russell, S. T., & Joyner, K. (2001). Adolescent sexual orientation and suicide risk: Evidence from a national study. *American Journal of Public Health, 91*, 1276-1281.
- Society for the Prevention of Teen Suicide. (n.d.). Frequently asked questions. Retrieved from <http://www.sptsusa.org/faq.html#talkthink>.
- Substance Abuse and Mental Health Services Administration. (2012). *Preventing suicide: A toolkit for high schools [HHS Publication No. SMA-12-4669]*. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration. Retrieved from <http://store.samhsa.gov/shin/content/SMA12-4669/SMA12-4669.pdf>.
- Suicide Awareness Voices of Education. (n.d.) Suicide facts. Retrieved from http://www.save.org/index.cfm?fuseaction=home.viewPage&page_id=705D5DF4-055B-F1EC-3F66462866FCB4E6
- Walsh, E., Hooven, C., & Kronick, B. (2012). School-wide staff and faculty training in suicide risk awareness: Successes and challenges. *Journal of Child and Adolescent Psychiatric Nursing, 26*, 53-61. doi: 10.1111/jcap.12011.
- Wasserman, D., Hoven, C. W., Wasserman, C., Wall, M. I., Eisenberg, R., Hadlaczky, G., . . . Carli, V. (2015). School-based suicide prevention programmes: The SEYLE cluster-randomised, controlled trial. *The Lancet, 385*, 1536-1544.