

COMMENT

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# Youth suicide crisis: identifying at-risk individuals and prevention strategies

Victor Ajluni<sup>1\*</sup> and Daniel Amarasinghe<sup>1</sup>

## Introduction

In the United States, recent data has shown a disturbing increase in suicide rates among children and adolescents. Recent data has shown a disturbing increase in suicide rates among this demographic. According to the Centers for Disease Control and Prevention (CDC), suicide is now the second leading cause of death for people ages 10–24 years in the United States [1]. The suicide rate for this age group has increased by 56% over the past decade, with Black youth having the largest increase in suicide rate of 78% [2].

The AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health is a joint statement by the American Academy of Pediatrics, the American Academy of Child and Adolescent Psychiatry, and the Children's Hospital Association regarding this ongoing crisis [3]. The joint statement highlights the importance of recognizing suicide risk and the need for increased funding to address the issue. In addition, it emphasizes that teachers, physicians, and other professionals who work with children and adolescents have a crucial role to play in suicide prevention. There is a great need for these professionals to be able to recognize the warning signs and risk factors for suicide and take appropriate action to intervene and connect young people with mental health resources. In addition to raising awareness about suicide risk, the declaration also calls for increased access to mental health care services and investment in research and public health initiatives aimed at preventing

and treating mental health disorders in children and adolescents.

## Risk factors and warning signs

Access to firearms increases the likelihood of death by suicide for children and adolescents more than fourfold due to its increased lethality, with 90% of child and adolescent suicides by gun involving firearms from the victim's own home or that of a relative [4]. When controlling differences in the rate of youth suicide attempts across states, it was found that household gun ownership was positively associated with the overall youth suicide rate. For 10% increase in household gun ownership, the youth suicide rate increased by 26.9% [5].

Across age groups, a past suicide attempt is the strongest predictor of subsequent attempts, with up to a 12-fold increase in children, a 4.3-fold increase in adolescent and 5.4-fold increase in young adults [6]. Although some studies suggest that suicidal ideation is associated with a higher risk of suicide and is far more prevalent than attempted suicides, a considerable percentage of children and adolescents that commit suicide have no prior suicide attempts [7, 8]. In fact, a meta-analysis found that 3% of high-risk patients discharged from a psychiatric hospital could be expected to commit suicide within a year, and that 60% of the patients that do commit suicide would have likely been categorized as low risk. The study also found that there was no single risk factor or combination of risk factors that was strongly associated with risk of suicide in the year after discharge [9]. Although the United States Preventive Services Task Force (USPSTF) recommends screening children 12 and older for depression, and ages 8 and older for anxiety, they state that there is insufficient data to recommend for or against screening for suicidal risk in all youth, which brings into

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question the utility of screening for suicidal ideation [10]. One study found that 66% of people that committed suicide within 30 days of seeing a healthcare professional denied suicidal ideation, and that 50% of this group committed suicide within 2 days after being seen [11].

On the contrary, some argue that screening for suicidal risk in clinical settings such as primary care and emergency departments can identify people at elevated risk for suicide who would otherwise be missed if they did not present primarily for behavioral health concerns [12]. Proponents of universal screening of youth for suicidal risk also state that the risks associated with screening are minimal, and people that screen positive for suicidal ideation or behavior would benefit from a mental health referral. However, it is important to note that suicidal ideation may be less frequent in Black youth prior to a suicide attempt, which highlights the importance of developing complementary methods to self-reporting tools for the assessment of suicide risk [12].

Substance use, particularly marijuana use, has been associated with increased suicide-related mortality in both adolescents and adults. One study found that states with medical marijuana legalization or recreational marijuana legalization had increased suicide-related mortality in 14–16-year-old people, with higher rates of suicide in states with recreational marijuana legalization compared to states with medical marijuana legalization (IRR=1.14, 95% CI: 1.00-1.30) and states without marijuana laws (IRR=1.09, 95% CI: 1.00-1.20) [13].

Some factors that contribute to suicidal ideation and self-injurious behavior but not necessarily completed suicides are socioeconomic stressors, trauma, adverse childhood events, social media use and bullying. Pre-adolescent children that have safety concerns are more likely to attempt suicide, which highlights the impact of socioeconomic stressors such as low-income and poor social support on increased suicide risk. A history of mental illness is also associated with a higher likelihood of a suicide attempt across all age groups [14].

People with exposure to traumatic experiences or adverse childhood experiences are at an increased risk of attempting suicide, with up to a 2 to 5-fold increase. Adverse childhood experiences include childhood abuse, witnessing domestic violence, parent separation or divorce, cohabitation with household members with mental illness, and cohabitation with household members that engage in substance use or criminal activity [14]. A growing concern is the use of social media to bully or harass peers, with 57% of bullied persons reaching the clinical threshold for PTSD on a reporting scale [15]. It was also found that in children and adolescents that reported using social media had significantly greater predicted odds of self-injurious behaviors at the time of admission to the emergency department [16].

Some warning signs for suicide include [17]:

1. Showing signs of depression, anxiety, or other mental health issues.
2. Talking or writing about suicide, death, or dying.
3. Withdrawing from friends and family.
4. Showing signs of extreme mood swings or sudden personality changes.
5. Displaying reckless or risky behavior.
6. Engaging in self-harm or self-destructive behavior.
7. Losing interest in activities they used to enjoy.
8. Having difficulty sleeping or sleeping too much.
9. Feeling hopeless or trapped in a situation.
10. Giving away prized possessions.

### Prevention and intervention

Numerous studies globally have shown that school-based, community-based and primary-care centered interventions across a range of settings and populations lead to a significant reduction in both suicide risk and suicide attempts in adolescents [18].

Regarding school-based prevention programs, a meta-analysis of 12 studies showed that post-primary school-based suicide prevention programs had a significant decrease on the adolescent suicidal thoughts and behaviors, with a number needed to treat of 55 for suicidal ideations, and 20 for suicide attempts. Overall, that post-primary school-based suicide prevention programs led to a 13–15% reduction in suicidal ideation and a 28–34% reduction in suicide attempts among 33,155 adolescents attending 329 schools [19].

Primary care providers are the front-line for community intervention, which involve identifying and screening for people at risk for suicide. One such community-based intervention program involved the following: primary care provider training on identifying and appropriately referring people with depression, a media and public relations campaign, funding for community facilitators, and additional support for both the patients and their families. The cost-effective program included training in suicide risk assessment and management and access to resources like crisis hotlines and mental health services. The study found that the 2-year intervention was associated with a 32.4% decrease in attempted and completed suicides [20].

Aside from group-based interventions, some individual interventions to reduce the risk of suicide include dialectical behavioral therapy, psychoeducation for parents regarding suicide risk and lethal means restriction. Pharmacological treatment such as lithium and clozapine has been found to reduce the risk of suicide in adults, but additional studies in children and adolescents are needed [21].

## Conclusion

The AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health is a critical call to action for addressing the mental health crisis facing young people in the United States, particularly in considering the alarming rise in suicide rates. The declaration emphasizes the importance of recognizing suicide risk and taking appropriate action to intervene and connect young people with mental health resources. It also calls for increased access to mental health care services and investment in research and public health initiatives aimed at preventing and treating mental health disorders in children and adolescents. With the right interventions and resources in place, it has been shown that we can work towards reducing suicide rates among young people and providing them with the support they need to thrive. As a society, it is our responsibility to prioritize the mental health of our youth and address this urgent issue.

## Bottom line

Access to firearms is one of the biggest risk factors for youth suicide. Suicidal ideation is not a reliable predictor of future suicide attempts or completed suicide, although it may be useful in identifying those that would be otherwise missed if they did not present originally for mental health concerns. Marijuana use has been associated with an increased rate of suicide in states with recreational marijuana legalization or medical marijuana legalization. In addition to previous self-injurious thoughts and behavior, adverse childhood experiences, bullying and excessive social media usage are associated with an increase in suicidal ideation but not necessarily an increase in suicide risk. School-based, community-based and primary-care centered interventions are associated with a significant reduction in both suicide risk and suicide attempts in adolescents.

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## Author contributions

D.A. was primarily responsible for the writing of the manuscript, ensuring comprehensive coverage and articulation of the topic. V.A. contributed significantly to the conceptualization and direction of the research, offering critical insights into psychiatric aspects. Both D.A. and V.A. collaborated in the research phase, analyzing data and literature to build a robust foundation for the study. Additionally, both authors participated in the review and editing process of the manuscript, ensuring accuracy and coherence in the final submission.

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## References

1. Center for Disease Control and Prevention. Facts About Suicide. Published April 6, 2023. Accessed May 5, 2023. <https://www.cdc.gov/suicide/facts/index.html>.
2. Stone DM, Mack KA, Qualters J. Notes from the field: recent changes in suicide rates, by race and ethnicity and Age Group — United States, 2021. *MMWR Morb Mortal Wkly Rep*. 2023;72:160–2. <https://doi.org/10.15585/mmwr.mm7206a4>.
3. AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health. Accessed May 5, 2023. <https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/>.
4. John A, Azrael D, Miller M. Access to firearms and adolescent suicide. *Soc Res Child Dev*. 2020;7. <https://www.srcd.org/research/access-firearms-increases-child-and-adolescent-suicide>.
5. Knopov A, Sherman RJ, Raifman JR, Larson E, Siegel MB. Household Gun ownership and youth suicide rates at the State Level, 2005–2015. *Am J Prev Med*. 2019;56(3):335–42. <https://doi.org/10.1016/j.amepre.2018.10.027>.
6. Ong MS, Lakoma M, Gees Bhosrekar S, et al. Risk factors for suicide attempt in children, adolescents, and young adults hospitalized for mental health disorders. *Child Adolesc Mental Health*. 2021;26(2):134–42. <https://doi.org/10.1111/camh.12400>.
7. Bridge JA, Goldstein TR, Brent DA. Adolescent suicide and suicidal behavior. *J Child Psychol Psychiatry Allied Discip*. 2006;47(3–4):372–94. <https://doi.org/10.1111/j.1469-7610.2006.01615.x>.
8. Rodway C, Tham SG, Turnbull P, Kapur N, Appleby L. Suicide in children and young people: can it happen without warning? *J Affect Disord*. 2020;275:307–10. <https://doi.org/10.1016/j.jad.2020.06.069>.
9. Large M, Sharma S, Cannon E, Ryan C, Nielsens O. Risk factors for suicide within a year of discharge from Psychiatric Hospital: a systematic Meta-analysis. *Australian New Z J Psychiatry*. 2011;45(8):619–28. <https://doi.org/10.3109/00048674.2011.590465>.
10. Mangione CM, Barry MJ, Nicholson WK, et al. Screening for depression and suicide risk in children and adolescents. *JAMA*. 2022;328(15):1534. <https://doi.org/10.1001/jama.2022.16946>.
11. Berman AL. Risk factors proximate to suicide and suicide risk Assessment in the context of denied suicide ideation. *Suicide Life-Threatening Behav*. 2017;48(3):340–52. <https://doi.org/10.1111/sltb.12351>.
12. Bridge JA, Birmaher B, Brent DA. The case for Universal Screening for suicidal risk in adolescents. *Pediatrics*. 2023;151(6). <https://doi.org/10.1542/peds.2022-061093>.
13. Hammond CJ, Hyer JM, Boustead AE et al. Association between marijuana laws and suicide among 12- to 25-year-olds in the united states from 2000 to 2019. *J Am Acad Child Adolesc Psychiatry*. Published online June 27, 2023:S0890-8567(23)00341-6.
14. Dube SR, Anda RF, Felitti VJ, Chapman DP, Williamson DF, Giles WH. Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the life span: findings from the adverse childhood experiences Study. *JAMA*. 2001;286(24):3089–96. <https://doi.org/10.1001/jama.286.24.3089>.
15. Nielsen MB, Tangen T, Idsoe T, Matthiesen SB, Magerøy N. Post-traumatic stress disorder as a consequence of bullying at work and at school. A literature review and meta-analysis. *Aggress Violent Beh*. 2015;21:17–24.
16. Shafi RMA, Nakonezny PA, Romanowicz M, Nandakumar AL, Suarez L, Croarkin PE. Suicidality and self-injurious behavior among adolescent social media

- users at psychiatric hospitalization. *CNS Spectr*. 2021;26(3):275–81. <https://doi.org/10.1017/S1092852920001108>.
17. Shain BN, American Academy of Pediatrics Committee on Adolescence. Suicide and suicide attempts in adolescents. *Pediatrics*. 2007;120(3):669–76. <https://doi.org/10.1542/peds.2007-1908>.
  18. Hofstra E, van Nieuwenhuizen C, Bakker M, et al. Effectiveness of suicide prevention interventions: a systematic review and meta-analysis. *Gen Hosp Psychiatry*. 2020;63:127–40. <https://doi.org/10.1016/j.genhosppsych.2019.04.011>.
  19. Walsh EH, McMahon J, Herring MP, Research, Review. The effect of school-based suicide prevention on suicidal ideation and suicide attempts and the role of intervention and contextual factors among adolescents: a meta-analysis and meta-regression. *J Child Psychol Psychiatry Allied Discip*. 2022;63(8):836–45. <https://doi.org/10.1111/jcpp.13598>.
  20. Hegerl U, Mergl R, Havers I, et al. Sustainable effects on suicidality were found for the Nuremberg alliance against depression. *Eur Arch Psychiatry Clin NeuroSci*. 2010;260(5):401–6. <https://doi.org/10.1007/s00406-009-0088-z>.
  21. Hughes JL, Horowitz LM, Ackerman JP, Adrian MC, Campo JV, Bridge JA. Suicide in young people: screening, risk assessment, and intervention. *BMJ*. 2023;381. <https://doi.org/10.1136/bmj-2022-070630>.

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# Suicide and Suicide Risk in Adolescents

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Suicide is the second leading cause of death for 10- to 24-year-olds in the United States and is a global public health issue, with a recent declaration of a National State of Emergency in Children's Mental Health by the American Academy of Pediatrics, American Academy of Child and Adolescent Psychiatry, and Children's Hospital Association. This clinical report is an update to the previous American Academy of Pediatrics clinical report, "Suicide and Suicide Attempts in Adolescents." Because pediatricians and pediatric health care providers are at the front line of care for adolescents amid a child and adolescent mental health crisis, and because of the chronic and severe shortage of mental health specialists, it is important that pediatric health care providers become facile with recognizing risk factors associated with suicidality and at-risk populations, screening and further assessment of suicidality as indicated, and evidence-based interventions for patients with suicidal ideation and associated behaviors. Suicide risk can be mitigated by appropriate screening, bolstering of protective factors, indicated treatment, community resources, and referrals to mental health providers when available.

## abstract

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**Important note:** If you or someone you know may be considering suicide, contact the 988 Suicide and Crisis Lifeline by dialing 9-8-8 or texting HOME to 741741. Additional resources can be found at the end of this report.

## DEFINITIONS OF TERMS USED IN THIS REPORT

**Suicide:** Refers to death by suicide.

**Suicidality:** Refers to suicidal ideations (SIs) (thoughts) and suicide attempts (acts to try to die by suicide).

## INTRODUCTION

Addressing adolescent suicide risk involves multiple stakeholders, including adolescents and young adults, their families, schools, communities, primary

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care physicians and other health care providers (HCPs), and mental health professionals. In 2021, the American Academy of Pediatrics (AAP), in partnership with the American Foundation for Suicide Prevention and in collaboration with subject matter experts from the National Institute of Mental Health (NIMH), convened a Virtual Summit on Youth Suicide Prevention, which consisted of multidisciplinary collaborators (health care provider groups, public health organizations, parent organizations, federal agencies, mental health organizations, families and adolescents, and young adults with lived experiences) to share insights, experiences, and strategies on this public health concern. The information shared during the summit was used to develop an online Blueprint for Youth Suicide Prevention<sup>1</sup> that serves as a resource for health care providers to support adolescent patients who may be at risk for suicide. The blueprint outlines a 3-tiered pathway that includes the following: (1) brief screen with a validated measure, (2) brief suicide safety assessment for anyone who screens positive, and (3) disposition determined by the brief suicide safety assessment. It also provides strategies that can be implemented in practice, as well as a list of resources for patients and their families. This clinical report updates the guidance from the previously published report and explains the framework for the blueprint.

### Background and Suicide Trends

Over the period between 2007 and 2019, there was a significant increase in suicides among youth 10 to 24 years of age.<sup>2</sup> During the beginning of the coronavirus disease 2019 pandemic (2020–2021), emergency department (ED) visits for suicide attempts further increased among adolescents 12 to 17 years of age: 50.6% higher in girls and 3.7% higher for boys.<sup>3</sup>

Suicide is a major cause of mortality in youth. From 2011 to 2020, suicide was the second leading cause of death for 10- to 24-year-olds ( $n = 59\,827$ ), with homicides third (50\,087) and malignant neoplasms a distant fourth (18\,904).<sup>4</sup> In 2020, suicide was the 10th leading cause of death for 5- to 9-year-olds, the second leading cause of death for 10- to 14-year-olds, and the third leading cause of death for 15- to 24-year-olds.

Suicide rates for 10- to 24-year-olds by race, ethnicity, and sex are summarized in Table 1.<sup>4</sup> Like suicide deaths,

suicide attempt rates also increased in the past decade,<sup>5</sup> particularly among female, non-Hispanic white, and non-Hispanic Black students. In 2021, 22% of high school students reported SI, with highest prevalence among female (30%), American Indian or Alaskan Native (27.3%), and lesbian, gay, or bisexual youth (48.1%).

Suicide attempts are more common in female adolescents,<sup>6</sup> but deaths are more common in male adolescents,<sup>2</sup> because male youth often use more lethal means. The leading methods of suicide in 2020 for 10- to 24-year-olds of all genders were firearms (51%), suffocation (33.5%), and overdose/poisoning (5.9%)<sup>4</sup>; see Table 2 for age group and mechanism. Most common methods of suicide differ for individuals of minoritized sexual orientation or gender identity, which may be helpful to consider when safety planning.<sup>7</sup> In a 2019 study of suicides in individuals 15 years of age and older, suffocation was the most common method of death for gay male adolescents (38.2%), lesbian female adolescents (35.6%), bisexual individuals (46.8%), and transgender individuals (41.5%, data not broken down by gender identity).

Of note, terminology used within this report reflects categories used within studies, which often do not reflect the full spectrum of gender identity, sexual orientation, and other identities or experiences. In discussing disparities or inequities, risk does not come from personal identification but from discrimination and differential treatment within society, as a result of racism, homophobia, transphobia, oppression of immigrants, and adversity faced by people with disabilities.

### Factors Contributing to Increased Risk

#### Individual Factors

Most youth with SI, plans, or suicide attempts have preexisting mental health disorder(s),<sup>8</sup> with depression having the strongest association. Other psychiatric disorders, including bipolar, psychotic, conduct, anxiety, personality, substance use, and trauma-related disorders, as well as organic mental health disorders, also carry increased risk.<sup>9–11</sup> Past suicide attempts, current SI,<sup>12</sup> nonsuicidal self-injury (NSSI), and family history of suicide are also risk factors for suicidal behavior.<sup>13</sup>

Adolescents with previous self-injurious thoughts and behaviors, which include suicidal behaviors (suicidal thoughts

**TABLE 1** Suicide Rates Per 100 000 for 10- to 24-Year-Olds in 2020 by Race/Ethnicity/Sex<sup>4</sup>

Race	Overall	Male	Female
White	10.14	16.19	4.4
Black	9.1	14.15	3.9
American Indian	18.04	26.31	9.5
Asian American/Pacific Islander	7.61	10.14	5.03
Ethnicity			
Hispanic	7.86	11.81	3.73
Not Hispanic	10.85	16.79	4.66

**TABLE 2** Suicides by Age and Mechanism (2020)<sup>4</sup>

	All Youth	10–14	15–19	20–24
<i>N</i>	6643	581	2216	3846
Rates per 100 000	10.49	2.8	10.57	17.81
Mechanism	% total	% total	% total	% total
Firearms	51.1	38.6	48.2	54.7
Suffocation	33.5	53.7	35.3	29.4
Drug poisoning	5.9	5.7	6.2	5.7
Falls	2.7	0	3	2.8

and attempts) and NSSI,<sup>12</sup> are at a much higher risk of dying by suicide.<sup>14,15</sup> NSSI is defined as a direct, deliberate destruction of body tissues in the absence of lethal intent<sup>16</sup>; for example, cutting, scratching, burning, biting, hitting, or picking. NSSI often serves to regulate negative emotions. NSSI is included in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision* as a condition requiring further study before consideration as an official diagnosis.<sup>17</sup>

Rates of suicidality have been found to be as high as 42% in children and adolescents with intellectual disability.<sup>18</sup> Adolescents with physical, intellectual, and learning disabilities have higher risk of suicide compared with unaffected adolescents.<sup>19</sup> They are also at higher risk for depression and anxiety, but often, in part because of difficulty with social communication, it can be easy to miss these diagnoses. Symptoms can manifest as changes in behavior, including increased irritability and aggression, or regression of functional skill level. Gathering information from guardians is especially important in this population. Individuals with neurodevelopmental disorders, including attention-deficit/hyperactivity disorder, learning disabilities, and autism spectrum disorder, are at higher risk for suicide attempts.<sup>18</sup> Youth who report a disability disclosed 3 to 9 times higher rates of suicide attempts compared with youth without a disability. Two or more disabilities further increased the likelihood of suicide attempt within the past 12 months.<sup>20</sup>

Adolescent substance use significantly increases the risk for suicidal behaviors.<sup>15</sup> Adolescent substance use may increase the risk for suicidal behavior as a result of both acute effects, including impaired judgement and lower inhibitions, and long-term effects, including negative chronic neurocognitive/behavioral effects.<sup>21</sup> Substance overdose, especially in substances tainted with fentanyl, can increase the risk for death and can potentially cause challenges when deciphering cause of death.<sup>22</sup> The cooccurrence of substance use and suicidal behaviors may reflect both conditions and can be related to psychosocial trauma history and mental health conditions.<sup>23</sup> Parsing out the root cause of death can become challenging in these situations.

### *Relationship Factors*

Children and adolescents with a history of adverse childhood experiences (ACEs), including those in foster care,<sup>24</sup> experience more mental health problems, including SI and attempts.<sup>25</sup> Additionally, adults exposed to ACEs (ie, physical, sexual, and emotional abuse; neglect; witnessing domestic violence; incarceration of parents; a family history of suicidal behaviors; and ACEs external to the family, including racism, discrimination, and poverty<sup>26</sup>) had a higher likelihood of increased SI and attempts during adulthood compared with those who were not exposed to ACEs.<sup>27</sup> A higher number of ACEs experienced was associated with younger age at first suicide attempt.<sup>27</sup> In addition, exposure to ACEs can also be associated

with posttraumatic stress disorder, depression, and substance use disorders,<sup>28,29</sup> all of which are associated with increased risk of suicide.

Social media is a significant part of many teenagers' lives, because 97% of adolescents are using at least 1 social media platform.<sup>30,31</sup> Social media has benefits to teenagers, because it provides outlets for young people to gain support, express themselves, and connect with others (see "Protective Factors" section).<sup>31</sup> There are also significant potential harms of social media usage, especially with regard to freely accessible and unfiltered social media. Social media use in teenagers can cause negative impacts by distracting them, disrupting sleep, allowing oversharing of personal information, and exposing them to harmful or inappropriate content, peer pressure, and predators.<sup>32,33</sup> Increased exposure to social media has been associated with poor mental health in teenagers.<sup>34,35</sup>

Teenagers who post content on social media are at risk for sharing intimate images or stories, which can lead to bullying or harassment.<sup>31,32</sup> A recent meta-analysis found that victims of cyberbullying were at increased risk of attempting suicide, harming themselves, and having suicidal thoughts. Those who perpetrated cyberbullying were also at increased risk, although not as high as victims.<sup>36</sup> High school students experiencing both bullying and cyberbullying have reported more sadness and suicidality.<sup>37</sup> It is important to note that, overall, the risk for having suicidal thoughts is elevated for adolescents with any involvement in bullying (perpetrator or victim) and even more so for those who are both the perpetrator and victim of bullying.<sup>13,38</sup>

### *Community, Societal, Structural, and Cultural Factors*

A suicide cluster, or the occurrence of more suicides or suicide attempts than would be expected in a certain time or location (or both), is a special factor that warrants consideration in youth suicide.<sup>39</sup> Suicide clusters occur more commonly in youth and young adults (<25 years old, with a child 10 years old being the youngest documented case) and can occur at a specific location or be spread geographically.<sup>40</sup> For instance, in the wake of actor Robin Williams' death by suicide in August 2014, there was an increase of about 10% in the number of deaths by suicide than would have been expected for the period between August and December 2014. This was presumed to be correlated with the increase in news and media reports of his suicide during that time period.<sup>41</sup> Additionally, in the month after the release of the Netflix series "13 Reasons Why" in 2017, which depicts a teenager's death by suicide, suicide rates among adolescents 10 to 17 years of age increased by 29%.<sup>42</sup> One limitation of this study was that there was only an association of more suicides in the month after the release; data did not indicate whether youth who died by suicide had watched the series. Media depiction of suicide, social media, and Internet sites may impact the clustering of suicides.<sup>43</sup>

Structural racism, defined as racism that disadvantages people of color at the level of societal systems, underpins the complex interactions between systems and individuals, and can contribute to an individual's ACEs.<sup>27,44</sup> Structural racism produces adverse conditions that can worsen group-level differences.<sup>44</sup> Though there has been increasing attention to structural determinants of mental health, structural racism has not yet been comprehensively targeted for suicide prevention strategies. Structural racism can contribute to inequities in service pathways, such as accessing mental health professionals, but can also influence the likelihood of screening for mental health concern in certain populations.<sup>44</sup>

Culture, broadly defined as the set of attitudes, values, beliefs, and behaviors shared by a group of people, can also include culture-related experiences such as those related to acculturation and being an ethnic minority.<sup>45</sup> Culture can have an important impact on mental health, including one's expression of distress, help-seeking behavior, diagnoses, and relation to psychiatric treatment.<sup>45</sup> Culture not only influences the etiology and development of potential mental illnesses, but can also contribute to an individual's perception of mental illness, including stigma.<sup>45</sup>

Immigrants may face acculturative stress, defined as the stress related to transitioning and adapting to a new environment.<sup>45</sup> Different acculturation experiences between immigrant parents and their children may contribute to intergenerational conflict,<sup>45</sup> leading to an increase in psychological distress, especially during adolescence. Experiences with racism and discrimination can also have a negative impact on the mental health of all youth.<sup>46</sup>

Youth living in rural areas have double the rates of suicide compared with their urban peers, and this disparity has widened with suicide rates among rural youth rising faster than youth in urban settings.<sup>47,48</sup> Suicide prevention services tend to be less prevalent in rural settings,<sup>49</sup> and access to firearms may also contribute to these differential rates by area, with suicide deaths related to firearms being disproportionately higher among rural youth compared with urban youth.<sup>47</sup>

Youth in foster care are more likely to have considered and attempted suicide,<sup>50</sup> with data showing youth in the child welfare system having a higher likelihood of experiencing SI (24.7% vs 11.4%) or suicide attempt (3.6% vs 0.8%) compared with those not involved with the system.<sup>51</sup> This may also be related to the fact that children in the foster care system have a disproportionate exposure to ACEs.<sup>52</sup> Another study found that youth in the welfare system who died by suicide were twice as likely to have visited an HCP within 1 to 6 months before death, providing an opportunity in which to screen more carefully for SI.<sup>53</sup>

Youth 15 to 19 years of age involved in the juvenile justice system have 3 times the rate of suicide fatalities compared with the general population and higher rates of suicidal thoughts and behavior.<sup>54,55</sup> History of depression, sexual

abuse, trauma, and substance use/substance use disorders may also predict suicidality in youth involved in the juvenile justice system.<sup>54</sup>

In 2019, SI and attempts were higher among lesbian, gay, or bisexual and gender nonconforming youth (46.8%) compared with their heterosexual peers (14.5%), especially for those within unsupportive environments who experience victimization.<sup>13</sup> Additionally, transgender adolescents have higher rates of suicidal thoughts and behaviors compared with cisgender adolescents.<sup>56</sup>

American Indian/Alaska Native youth have the highest rates of suicide compared with other racial groups in the United States, with twice the rate of suicide among indigenous adolescents 15 to 19 years of age compared with white peers and 3 times the rate compared with Black peers.<sup>4</sup> From 1991 to 2017, Black high school students had a consistent increase in suicide attempts; furthermore, Black male adolescents had significant increases in injuries resulting from an attempt.<sup>57</sup> Among Black youth, males have the highest rates of suicide, although suicide rates among Black females are increasing more rapidly.<sup>58</sup>

Intersectionality of multiple risk factors contributing to a further increased risk in suicidal behavior is particularly important to address; for example, Black lesbian, gay, bisexual, transgender, or queer/questioning (LGBTQ) youth have increased risk of suicide compared with white LGBTQ youth, and LGBTQ youth who had been in foster care had a 3 times greater odds of a suicide attempt in the past year than LGBTQ youth never in foster care.<sup>59,60</sup> Structural racism and societal inequities may also contribute to racial/ethnic disparities in suicidal behaviors and outcomes, with under- and overdiagnosis of certain mental health conditions, poverty, access to lethal means, generational trauma, and loss of cultural identity being major contributors, in addition to overrepresentation of youth of minoritized sexual, gender, and racial/ethnic groups within the foster care and juvenile justice settings.<sup>13,61–63</sup>

### **Role of the Pediatrician and Other Health Care Providers in Addressing Suicide Risk: Promoting Protective Factors and Minimizing Risk Factors**

It is important for pediatric HCPs not only to screen for SI and risk factors for suicide, but also to ask about protective factors, which many pediatricians may already inquire about during general well-child visits. See Table 3 for potential questions to consider asking adolescents about protective factors/strengths. Although protective factors have not been as well studied in adolescents as in adults, research has shown that factors that are protective against suicide risk in adults are similar in adolescents.<sup>64</sup> Both internal factors, consisting of higher self-esteem, "zest for life," cultural and religious beliefs that discourage suicide, and positive coping skills, and external factors, including strong social supports and feeling of inclusion, contribute

**TABLE 3** Questions to Ask to Screen for Protective Factors/Strengths<sup>66</sup>

Do you feel connected to your family?
Do you feel supported by your family?
Do you have a supportive friend group?
How would your good friends describe you?
Are you religious or spiritual?
What do you think you're good at?
What are you proud of?
Are you part of any school groups?
For parents: What are your child's strengths?

to resilience, which can protect youth from suicide attempts.<sup>65</sup> Building resilience in youth, helping to build healthy relationships between youth and family/peers, and improving parental mental health can also help to protect against SI/attempt.<sup>66–68</sup>

Social support is one of the most widely reported protective factors against suicide in Black adolescents.<sup>69</sup> Supportive environments are associated with decreased rates of suicide for Black and LGBTQ youth.<sup>13</sup> In addition, protective factors against suicide among Indigenous populations include community, family, and cultural connectedness.<sup>70</sup>

Connectedness among individuals and within communities may have a protective impact against suicidality.<sup>71</sup> Community engagement, which may involve participation in a range of activities, including religious activities and group exercise, can enhance overall physical health, reduce stress, promote emotional wellness, and potentially reduce suicide risk. Teaching coping and problem-solving skills can prepare individuals to adapt to stress and build resilience, which can also reduce suicide risk.

Although the negative impacts of social media were previously discussed, social media platforms can serve as places where individuals can connect with other peers. Social media can be a place where adolescents feel that they can express themselves, including when they are having suicidal thoughts. Platforms, including Instagram and its parent company Meta, have employed machine learning-informed strategies to flag suicide-related content to deploy resources to those in need. Users can refer their “friends” to receive assistance via the platform, as well.<sup>72</sup>

Data indicate that suicide attempts in US high school students were associated with poor eating habits, excessive screen use, and decreased aerobic activity.<sup>73</sup> As such, increased physical activity, improved dietary habits, and decreased screen time can be helpful lifestyle interventions that pediatricians generally already incorporate into their preventive screening. Sleep disturbance (insomnia/hypersomnia) has been associated with deaths by suicide.<sup>74,75</sup> In young adults, self-reported insomnia, nightmares, and sleep variability (as assessed by actigraphy) were found to be acute warning signs for SI.<sup>76</sup> These and other studies indicate that sleep can also be a target for prevention/intervention.

Querying and counseling on healthy lifestyle choices can occur during health supervision visits and are also recommended when mental health concerns arise.<sup>77</sup>

### Interviewing and Screening the Adolescent

A comprehensive approach to suicide prevention is important and includes identification of youth at risk for suicide, intervention to prevent attempts in those at risk, addressing access to lethal means, and decreasing lethality of the means used if there is an attempt. Contact with some type of health care setting before a suicide attempt or death by suicide is common. These contacts provide a key opportunity for suicide prevention efforts.<sup>78</sup>

The primary care medical home, EDs,<sup>79</sup> and hospitals are ideal places to screen for suicide risk, to further assess adolescents and young adults at risk, and to provide prevention measures, intervention, and mental health care referrals, as deemed appropriate. Given that primary care providers have a limited amount of time during the adolescent visit, integration of behavioral/mental health into primary care, with adequate resources and payment for providing mental health care in the primary care setting, is important for the delivery of this care. More advocacy work is needed in this area, including payment for telehealth models of care, because telehealth allows for increased access to care.

There is evolving evidence in terms of how and when to address suicide risk in adolescents and young adults. The AAP now recommends pediatricians screen *all* youth aged 12 years and older for suicide risk at least annually.<sup>80</sup> In 2022, the US Preventive Services Task Force found insufficient evidence to recommend screening for suicide risk in primary care.<sup>81</sup> It is important to note that insufficient evidence does not equate to evidence *against* screening, but rather indicates that current data fall short of the US Preventive Services Task Force standards. In 2020, the Joint Commission required hospitals designated as accredited critical access hospitals to screen all individuals aged 12 years and older for SI with a validated screening tool when they present primarily for a behavioral health concern.<sup>82</sup> Multiple hospital organizations have also implemented a *universal* screening approach for any adolescent or young adult aged 12 years and older.

It is important that HCPs screen youth in a confidential manner, without caregivers present, because youth may be reluctant to report SI in the company of caregivers. Discussion of the importance of confidentiality and limitations of confidentiality should be discussed with patients and their families before seeing the patient alone. Confidentiality is considered a key tenet of effective clinical treatment of adolescents. However, confidentiality has its limits, especially in cases such as protecting patient and/or public safety, mandated reporting, or when court ordered. HCPs should be aware of exceptions to the privacy laws in their

states regarding disclosure of protected health information. Although challenging, it is the HCP's role to exercise clinical judgment on where the balance of patient and/or public safety and confidentiality lies.<sup>83</sup> If minor youth disclose recent/active SI, the HCP is obligated to breach confidentiality to protect the minor and involve the caregiver in necessary treatment. When at all possible, this would preferably be done with the consent of the patient. If there is a question about whether breaching confidentiality is necessary, an ethics or risk management consult can be helpful. Besides breaching confidentiality, another ethical consideration is infringement on the patient's autonomy (in the case of involuntary psychiatric hospitalization); these ethical challenges could negatively affect therapeutic alliance and potentially result in a patient disengaging from necessary services.<sup>83,84</sup>

### Higher-Risk Situations

Health care systems may employ an annual, universal approach to suicide risk screening and should screen during higher-risk situations such as any presentation of a behavioral or mental health concern or youth with additional risk factors as discussed previously. These conditions may present outside of a routine visit, so youth should be screened in these higher-risk situations, regardless of previous screening. Clinicians may proactively recognize these higher-risk situations and engage youth through verbal assessment or use screening tools.<sup>85</sup>

### Suicide Risk Screening

Although the AAP does not recommend one specific screening tool to use, the Blueprint for Youth Suicide Prevention provides detailed information about the validated, evidence-based screening tools for suicide risk. Pediatric HCPs should decide which screen is most appropriate for their practice and can be consistently implemented. Screening increases recognition of suicide risk. Strong evidence indicates that suicide risk screening does not cause people to have suicidal thoughts.<sup>86</sup> Decision support tools (such as templated notes) can be effective prompts to identify suicidal risk factors. One study showed that embedding 2 suicide questions in the subjective section of an electronic health record well-visit template prompted the HCP to ask adolescents directly about suicidal thinking. This approach led to a fourfold increased recognition of SI in adolescents from 0.8% (before questions were embedded) to 3.6% (after questions were embedded).<sup>87</sup>

HCPs may consider multiple factors when choosing an approach to suicide risk screening, including practice setting (ED/primary care/inpatient), screening tool, and frequency of screening. Pediatricians who see higher-risk populations may choose to screen at every visit, whereas others may screen only at well visits. EDs and inpatient settings may elect to screen at every visit. Evidence suggests that children

and adolescents presenting with psychiatric versus medical/surgical chief complaints have higher suicide screening positivity rates.<sup>88,89</sup> Current guidance suggests HCPs screen adolescents at least annually.

HCPs also need to decide *how* to screen. It is ideal that the adolescent be in person in the office, to ensure that the patients themselves are answering the questionnaire and that an immediate safety assessment can be conducted in the event of a positive screen. There are a variety of possibilities, including verbal screening of the adolescent by medical professionals (nurses, medical assistants) during triage; verbal screening by primary care providers during the visit; or self-report by the adolescent (written or electronic) at the beginning of the visit. Adolescents typically respond well to digital/electronic screening. Positive screening responses can then lead to an alert within the electronic health record, so the HCP or support staff can more easily recognize the concern. In the case of a telehealth visit, it is important to start off the visit by asking where the patient is and what number the patient can be reached at, should the visit be disconnected.

### Patient Health Questionnaire-9

Many HCPs routinely screen adolescents for depression using the Patient Health Questionnaire-9 (PHQ-9). Although validated to screen for major depressive disorder, the PHQ-9 does not screen for suicide risk. Question 9 on the PHQ-9 may be misinterpreted as a suicide risk screen, because it asks, "*In the last two weeks, have you had thoughts that you would be better off dead, or of hurting yourself in some way?*" This question is broad, includes NSSI, and does not screen for suicide risk. There is an expanded PHQ-9 Modified for Adolescents<sup>90</sup> that has 4 additional questions, the last 2 of which are: "*Has there been a time in the past month when you have had serious thoughts about ending your life?*" and "*Have you ever, in your whole life, tried to kill yourself or made a suicide attempt?*" The PHQ-9 Modified for Adolescents has not been validated as a suicide risk screening tool, and we discourage pediatricians to use it as such; however, the PHQ-9 can be used in combination with the Ask Suicide Screening Questions (ASQ) screening tool described below to screen for both depression and suicide risk.

### Ask Suicide Screening Questions

The ASQ is the most studied screen and is a widely used screening tool targeted specifically to identify suicide risk and validated in multiple health care settings, including pediatric primary care and the ED.<sup>88,89,91</sup> The NIMH lists the ASQ as a resource to use, and the AAP Blueprint for Youth Suicide Prevention suggests its use as a screen. Validation of the ASQ has primarily been conducted in the pediatric ED setting, including 97% sensitivity and 88% specificity. The ASQ has now been implemented in multiple health care settings, including pediatric primary care.<sup>88</sup> The ASQ consists of 4 questions with yes/no responses (see Table 4).

**TABLE 4** ASQ Suicide Screening Tool<sup>89</sup>

1. In the past few weeks, have you wished you were dead?	Y/N
2. In the past few weeks, have you felt that you or your family would be better off if you were dead?	Y/N
3. In the past weeks, have you been having thoughts of killing yourself?	Y/N
4. Have you ever tried to kill yourself?	Y/N
If yes to any of the questions 1–4, then ask question 5.	
5. Are you having thoughts of killing yourself now?	Y/N
Interpreting the ASQ: If the patient answers no to the first 4 questions, this is considered a negative screen, and no intervention is necessary. Any yes answer or refusals to answer are considered a positive screen. Any yes answer to any of the questions 1 to 4 requires a brief suicide assessment. If the answer to question #5 is yes, then that is considered an acute positive screen necessitating a safety/mental health evaluation immediately. N, no; Y, yes.	

The strength of the ASQ is that it helps the HCP assess current SI, as well as lifetime history of a suicide attempt; however, the first 3 questions only include the past few weeks, so the ASQ may miss previous SI.

The ASQ is the first step of a 3-tiered clinical pathway that helps with feasible screening and management of those who screen positive.<sup>92</sup> The ASQ has been designed for a primary care provider, a nurse/medical assistant, or another office staff member to ask the suicide risk screening questions verbally during triage. Some practices that work with adolescents have developed a comprehensive adolescent intake form. The suicide risk screening questions can be answered on paper or electronically by the adolescents, although these approaches have not been validated.

#### *Managing Positive Suicide Risk Screens: Using a Brief Suicide Safety Assessment*

Brief suicide assessment is essential in determining patient disposition and managing positive screens. Patients who screen positive for suicide risk should receive a *brief* suicide safety assessment (BSSA) conducted by a trained clinician (eg, social worker, nurse practitioner, physician assistant, physician, or other mental health clinician) to determine the need for a more comprehensive mental health evaluation; the BSSA is essential in determining patient disposition and managing positive screens. This screening process may cause additional clinical burden for providers and health systems alike. Ideally, practices have access to a behavioral health specialist who can conduct the BSSA. However, this approach is also feasible in smaller practices that do not have a readily available behavioral health specialist. Approximately 3% of adolescents screen positive and need a BSSA, so depending on practice size, this may equate to developing a BSSA once every 1 to 2 weeks.

Although assessments can involve structured questionnaires, they also can include a more open-ended conversation with a patient and/or friends and family to gain insight into the patient's thoughts and behaviors, risk factors (eg, access to lethal means or a history of suicide attempts), protective factors (eg, immediate family support), and medical and mental health history.

There are 2 freely available BSSAs listed and available on the NIMH Web site; these are described below. Additional evidence-based suicide risk assessment tools are available on the Joint Commission's Web site ([https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/suicide-prevention/pages-from-suicide\\_prevention\\_compendum\\_5\\_11\\_20\\_updated-july2020\\_ep3\\_4.pdf](https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/suicide-prevention/pages-from-suicide_prevention_compendum_5_11_20_updated-july2020_ep3_4.pdf)).

#### *ASQ BSSA*

The ASQ has an additional brief suicide assessment component to be used by clinicians. In the ASQ Assess the Patient, categories include (1) frequency of suicidal thoughts, (2) if there is a suicide plan, (3) past suicidal behavior, (4) current symptoms, including depression, anxiety, substance use, impulsivity, irritability, sleep, and appetite concerns, and (5) social support and stressors. After the assessment, it is suggested to interview patient and caregiver together, share concerns, and make a safety plan with the patient and caregiver. Finally, the ASQ recommends determining disposition. If the patient responds 'yes' to Q #5: Are you having thoughts of killing yourself now, then the patient is considered at imminent risk, necessitating an immediate safety/mental health evaluation. Other dispositions based on risk level include:

1. further evaluation of risk by referring to a mental health professional as soon as possible;
2. some level of mental health follow-up, but not urgent; and
3. no follow-up necessary at this time.<sup>93</sup>

#### *Columbia Suicide Severity Rating Scale Risk Assessment*

The Columbia Suicide Severity Rating Scale (C-SSRS)<sup>94</sup> has both a screening component to assess the severity of suicidal risk and a risk assessment component. The severity scale has not been validated as a screening tool for pediatric primary care; the *risk assessment* component is recommended as an assessment tool by several organizations, including the Joint Commission,<sup>95</sup> Substance Abuse and Mental Health Services Administration (SAMHSA), Zero Suicide, and the National Suicide Prevention Lifeline. The C-SSRS covers suicidal and self-injurious behaviors (SIBs)

(past 3 months), SI (past month), activating events, treatment history, clinical status, and protective factors.

### **Safety Planning**

Safety planning alone can be effective as a brief intervention for reduction of suicide risk but can also be used in strategies to reduce suicide risk. Safety planning generally consists of creating a list of coping strategies that are personalized and made in collaboration with an HCP,<sup>96</sup> often a therapist or a care manager. This list includes warning signs of impending SI or behavior, reliable coping strategies that one can engage in oneself, people and places that can provide distractions if internal coping strategies are not sufficient, trusted people who can help when necessary, professional support resources, and information on limiting access to lethal means of suicide. This can also include information on not engaging in activities that can promote disinhibition or impulsivity, such as using alcohol or other substances.

Safety planning is different from no-harm or no-suicide contracts. Suicide prevention experts do not recommend these contracts because of lack of data indicating that they are effective; patients may also feel they are coercive and subsequently may not want to tell their providers that they are having SI for fear of disappointing them or to avoid any interference with a suicide plan.<sup>96</sup> In addition, no-suicide contracts do not include personalized coping mechanisms and a list of people the patient can contact in the event of a suicidal crisis.<sup>96</sup> The following is an example of a useful template for a safety plan: <https://bgg.11b.myftpupload.com/wp-content/uploads/2021/08/Stanley-Brown-Safety-Plan-8-6-21.pdf>. In addition, the following is a helpful guide for clinicians when preparing a safety plan with patients: <https://www.sprc.org/sites/default/files/SafetyPlanningGuide%20Quick%20Guide%20for%20Clinicians.pdf>.

The Safety Planning Initiative is a cognitive behavioral intervention that can be used in the ED to conduct brief, one-session intervention for patients who present with SI and offers a “roadmap” to help manage feelings of distress until urges to self-harm or SI has passed. It has been adapted to adolescents to be more developmentally appropriate with expectation of caregiver involvement and is included in the Best Practices Registry of the Suicide Prevention Resource Center.<sup>97,98</sup> In combination with follow-up telephone contacts, the Safety Planning Initiative is associated with reduction in suicidality.

If the patient is not hospitalized and is deemed safe for discharge home, the Joint Commission recommends arranging follow-up care in the outpatient setting; safety planning; lethal means restriction counseling, including gun safety<sup>99</sup>; and providing contact information for the national 3-digit dialing code 988 Suicide and Crisis Lifeline to prevent later suicide attempt.<sup>95</sup> Follow-up telephone calls to adolescents after discharge from the ED have been shown to decrease suicidal

behavior (aborted, interrupted, actual, or completed suicide attempts), as well.<sup>100</sup> A recent systematic review and meta-analysis indicates that brief suicide prevention interventions provided in one in-person encounter are associated with decreased subsequent suicide attempt and increase in follow-up care.<sup>101</sup> The brief suicide prevention interventions mostly consisted of brief contact interventions (like phone calls, texts, and postcards), care coordination (communication between referring and receiving clinical teams), safety planning, and other brief, evidence-based interventions.

If a patient is hospitalized for medical/surgical reasons and is found to be experiencing SI after a screen is administered, it is recommended that a referral be made to a psychologist or psychiatrist on staff. Many states have child and adolescent psychiatric access lines that provide consultation (phone, telepsychiatry, or sometimes in person) with a child and adolescent psychiatrist.<sup>102,103</sup> The psychologist/psychiatrist can assist with a safety plan, brief therapies, and assessment of readiness for discharge, and can also help with referrals for follow-up care (inpatient psychiatric care, intensive outpatient program, outpatient psychiatry and psychotherapy).

### **Assessment for Access to Lethal Means**

Although more extensive safety planning may occur with the assistance of a mental health professional, all HCPs can assess adolescents and parents for access to lethal means, particularly firearms (AAP,<sup>99</sup> American Academy of Child and Adolescent Psychiatry,<sup>104</sup> and SAMHSA<sup>105</sup>) during preventive care visits and provide counseling to decrease or eliminate access to those firearms by implementing removal or safe firearm storage practices (firearms stored unloaded and locked, with ammunition locked and stored separately, as well).

In any higher-risk situation in which SI or plan is revealed (ie, positive screening on the ASQ and/or the C-SSRS), it is imperative that the HCP screen for youth access to firearms, medicines, illicit substances, and other lethal means (eg, knives, ropes), and counsel on ways to restrict access to those lethal means, including safe storage. Additionally, if firearms are present, it is recommended that HCPs discuss ways in which parents can temporarily store firearms outside the home (a friend/relative’s house, local gun ranges, self-storage facilities, or a local police department). Detailed education and demonstration on how to engage in lethal means restriction is available through both the AAP and the Harvard School of Public Health’s “Means Matter” program.<sup>99,106</sup>

### **Psychotherapy and Engaging Families**

Many interventions in suicide prevention use aspects of cognitive behavioral therapy (challenging negative thoughts to change behaviors) and dialectical behavioral therapy (a type of cognitive behavioral therapy that focuses on mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness). Motivational interviewing has not been shown

to significantly reduce SI in adolescents in randomized controlled trials.<sup>107</sup>

A study from 2019 indicates that there is a high prevalence of parental unawareness of SI in their adolescent children.<sup>108</sup> This underscores the importance of family therapy/engagement in the treatment of adolescents with SI. The inclusion of family in treatment, when appropriate, is a powerful tool in the strengthening of positive family supports and communication. The Family Intervention for Suicide Prevention, a cognitive behavioral intervention for families, has been used in the ED and other care settings, including primary care and school.<sup>66</sup> Family-based crisis intervention can be used in the ED with the intention of stabilizing adolescents with SI during the ED visit so they can return home that day. Compared with treatment as usual, there were fewer psychiatric admissions and an increased sense of family empowerment and satisfaction with this intervention.<sup>109</sup>

Family-centered treatment modalities within the behavioral health setting include Safe Alternatives for Teens and Youth and attachment-based family therapy (ABFT). Safe Alternatives for Teens and Youth is an effective brief intervention to prevent suicide attempts.<sup>98</sup> It is a cognitive behavioral, dialectical behavioral therapy-informed family treatment that is aimed at decreasing risk of suicide attempts in youth who self-harm.

ABFT uses an interpersonal approach to individual and family therapy and consists of individual and family sessions aimed at identifying and repairing ruptured attachment(s) that has/have occurred during the adolescent's development. By repairing these ruptures, adolescents may feel more assured of parents' availability to support them and help them to manage suicidal thoughts.<sup>110</sup> ABFT also employs parent skills training. In a randomized controlled trial of 341 adolescents, 70% of whom were Black, there was a significantly greater reduction of SI and symptoms of depression in adolescents, which was maintained at 6 months' follow-up.<sup>110</sup> In a small trial of ABFT used in the LGBTQ population, this intervention was also found to be effective for reduction of SI; a larger trial is necessary.<sup>111</sup>

### School-based Interventions

School-based programs, including Signs of Suicide and Sources of Strength, have been shown to be helpful in suicide prevention. Signs of Suicide is for middle and high school students and educates students and staff on recognizing signs of depression, getting help for friends who manifest symptoms, and self-referring for depression/SI. Randomized controlled studies found that it decreased suicide attempts in students.<sup>112</sup> Sources of Strength uses peer leaders (with adult mentoring) to bolster protective factors that are effective in decreasing suicide.<sup>113</sup> These factors included asking for help, feeling connected to safe adults, and remaining engaged in school.

### Referral

Referral for an acute evaluation by a mental health specialist may be indicated if a patient reports SI or attempts suicide. It is often helpful to call ahead to the ED or walk-in mental health clinic to let them know about the patient and why the referral was felt to be necessary. The AAP Blueprint for Youth Suicide Prevention recommends HCPs familiarize themselves with resources and providers of mental health care in the community to have better knowledge of whom to refer to in the community should the need arise.

Acute SI is often self-limited in duration, and attempts/death by suicide can be reduced through short-term, higher-intensity interventions (inpatient care) followed by longer-term treatment (outpatient care). HCPs have an important role in counseling their patients and families about the process of referrals to higher levels of care, including 911 and 988 calls, calls to mobile crisis units, and evaluation in an ED or walk-in crisis center, to prepare them for the experience. If a patient is deemed by the HCP to require inpatient psychiatric hospitalization for safety reasons, the hope is that the families understand why this is necessary and are amenable to the plan. In cases in which guardians are not amenable to the plan, it may sometimes be necessary to contact child protective services to assist in hospitalizing the patient. Child protective services is used as a last resort, because it is likely to have negative effects on the therapeutic relationship. These negative effects on the therapeutic relationship are also possible if the patient is legally the age of majority and needs to be hospitalized involuntarily. It is important to be aware that there is a crisis in psychiatric inpatient bed availability for youth, sometimes resulting in long boarding times in the ED or patients being sent home to be monitored by their guardians, with recommendations to find an outpatient mental health provider on their own.<sup>114</sup>

Brief interventions during periods of high risk (crisis management or safety planning), psychoeducation for youth and parent, and establishment of follow-up care are important acute interventions.<sup>13,98</sup> Safety planning can assist patients in identifying coping strategies, trusted contacts in the event of SI, and ways to reduce access to lethal means.

If a patient hospitalized on a medical unit is found to be having suicidal thoughts on screening, a one-to-one sitter would be recommended. Care should be taken to ensure that no objects with which patients could harm themselves are left in the room, including plastic bags in garbage bins. A child and adolescent psychiatry and/or psychology consult would also be recommended. These mental health providers can help with safety planning and brief therapy. If SI with possible plan or intent persists, the child and adolescent psychiatrist can assist with transfer to an inpatient psychiatric unit when the patient is medically stable. It is recommended that follow-up outpatient care with a therapist and child and adolescent psychiatrist (if necessary) be made before discharge, because the period immediately

after discharge from psychiatric hospitalization is the period when patients are at highest risk of suicide attempts and death.<sup>115</sup> A recent study found that outpatient mental health follow-up within 7 days of discharge is associated with decreased risk of suicide in children and adolescents.<sup>116</sup>

Patients who are at lower risk may benefit from treatment with an outpatient psychiatric care provider. Although there is a shortage of child and adolescent psychiatrists, especially in rural and underresourced areas, most states have access lines to provide telephonic consultation, telepsychiatric visits, and/or acute in-person appointments, which can be useful to HCPs when child and adolescent psychiatrists are not immediately available.<sup>102,103</sup> Some of these access programs also provide online mental health care trainings for HCPs to feel more comfortable managing their patients with psychiatric diagnoses, as well as suicidal thoughts and SIB. Some primary care practices have integrated/colocated behavioral health services available. A meta-analysis of integrated care versus usual care in primary care settings on the treatment of mental health in youth demonstrated that behavioral health outcomes were improved in integrated care settings; the study reported a 66% probability that a randomly selected youth would have a better mental health outcome with an integrated behavioral health intervention than a randomly selected youth who received the usual primary care.<sup>117</sup>

Referral to community-involved management is also an option for acute care. Community-based mobile crisis services consist of response teams that offer acute assessment and intervention in place of the ED. State and local jurisdictions often have their own mobile crisis services that have an important role in supporting youth experiencing SI.<sup>118</sup> Pediatricians are encouraged to familiarize themselves with their local mobile crisis services and link their adolescent patients as needed. In some areas, mobile crisis teams can respond to any setting, including homes, schools, workplace, juvenile detention centers, ambulatory clinics, and even to the ED.<sup>119,120</sup> These crisis team services can also provide warm handoffs to higher levels of care as needed and assist in transport to other facilities.

### **Psychopharmacotherapy and Other Treatment Modalities**

As the United States continues to experience a crisis in child and adolescent mental health, it is imperative for HCPs, particularly primary care providers, to become comfortable treating common psychiatric issues, including mild to moderate major depressive disorder and anxiety, and using psychopharmacotherapy when indicated.<sup>121</sup> Treatment of any underlying disorder that may be contributing to SI is important, whether with psychotherapy, psychopharmacotherapy, or a combination of these treatment modalities.

Selective serotonin reuptake inhibitors (SSRIs) remain the first-line pharmacologic treatment of depression and anxiety; they have been found to decrease SI in adults aged 25 years and older. SSRIs decrease depressive symptoms in individuals younger than 25 years, although they do not

necessarily decrease SI in adolescents and young adults.<sup>122</sup> In 2004, the US Food and Drug Administration issued a black box warning on all antidepressant medications used in children, adolescents, and young adults younger than 25 years because of a finding of increased suicidality (suicidal thoughts and behaviors) in youth. This warning is not meant to discourage use of antidepressants in youth, but rather to encourage close follow-up/monitoring of youth who are prescribed this class of medications, especially within the first few months of use and after dose changes.<sup>123</sup> Patients and families should be informed of the black box warning in addition to other side effects, including but not limited to gastrointestinal discomfort, headaches, changes in sleep/activation, changes in appetite, and sexual side effects. They may also be informed that more youth experience benefit from treatment with antidepressants than adverse effects.<sup>124</sup> Other antidepressants, such as the serotonin and norepinephrine reuptake inhibitors, which include duloxetine and venlafaxine, and atypical antidepressants, which include mirtazapine and bupropion, are also sometimes used if first-line SSRIs are not helpful or cause adverse effects; however, there is less evidence of the benefit of these medications in youth, and they can potentially cause more side effects.<sup>125</sup>

Other medications, typically prescribed by psychiatrists, like lithium, ketamine, and clozapine, can decrease SI/suicidal behavior; the use of ketamine has not been well studied in adolescents.<sup>126–132</sup>

Neuromodulatory treatments, including electroconvulsive therapy and transcranial magnetic stimulation, have shown some promise in decreasing suicidal behavior/SI in adolescents. In small, retrospective studies, electroconvulsive therapy has been shown to reduce SI and SIBs.<sup>133,134</sup> A preliminary open-label small study of high-frequency repetitive transcranial magnetic stimulation in adolescents with depression who had SI demonstrated decreased SI after 6 weeks of treatment.<sup>135</sup> Larger studies are needed.

### **Discussing Suicide in the Media and Other Settings**

The way suicide is depicted in the media can have a major impact on deaths by suicide. For HCPs who post on social media, work with journalists, or speak with legislators about youth suicide, it can be helpful to review suicide reporting recommendations. The Action Alliance, SAMHSA, and the Entertainment Industries Council collaborated in the development of the National Recommendations for Depicting Suicide (in media and/or entertainment). These recommendations include: Demonstrating that many factors contribute to the act of suicide, not one single event; avoiding details about suicide method; portraying characters who have suicidal thoughts but do not ultimately die by suicide; and placing emphasis on help and hope. The Web site [www.reportingonsuicide.org](http://www.reportingonsuicide.org) has similar recommendations. These recommendations further state that the term “committed

suicide” should not be used, because it indicates judgment and perpetuates stigma, such as if one “committed a sin/crime.” The recommended terms include “died by suicide” (<https://reportingsuicide.org/wp-content/themes/ros2015/assets/images/Recommendations-eng.pdf>).

In addition, The National Suicide Prevention Lifeline has worked with social media sites to establish best practices for suicide prevention on social media. Its Web site (<https://suicidepreventionlifeline.org/help-someone-else/safety-and-support-on-social-media/>) contains links to ways to report safety concerns for Facebook, Twitter, Snapchat, Instagram, YouTube, Discord, and TikTok. In 2019, Instagram also removed likes from public view to “depressurize Instagram” for youth, including decreasing “competition” for numbers of likes on a post.

### **Supporting Families Who Experience an Attempt or Death**

The American Foundation for Suicide Prevention has resources to support families after a suicide attempt (<https://afsp.org/when-a-loved-one-has-made-an-attempt>) or death (<https://afsp.org/ive-lost-someone>) and schools after a suicide (<https://afsp.org/after-a-suicide-a-toolkit-for-schools>). Special attention can be shared with siblings impacted, who also may be at higher risk of suicide themselves; see the “Helping Children” section of Books for Loss Survivors Web site (<https://afsp.org/books-for-loss-survivors>), and the Children, Teens, and Suicide Loss booklet (<https://aws-fetch.s3.amazonaws.com/flipbooks/childrenteenssuicidellloss/index.html?page=1>).

### **Supporting Health Care Providers Who Have Lost a Patient to Suicide**

As HCPs begin to see and treat more and more patients presenting with psychiatric symptoms in the current mental health crisis, this can mean increased likelihood of one day experiencing the loss of a patient to suicide. Providers may experience a combination of feelings of sadness, worry, and guilt that can negatively affect sleep, appetite, and overall functioning. Losing a patient to suicide can also have a negative impact on confidence in one’s ability to treat patients with mental health concerns and lead to hypervigilance for patients with possible suicide risk. Debriefing with the clinical team, supporting staff, and obtaining supports for oneself are all important actions to take after death by suicide of a patient ([https://omh.ny.gov/omhweb/suicide\\_prevention/omh\\_postventionguide.pdf](https://omh.ny.gov/omhweb/suicide_prevention/omh_postventionguide.pdf)).

### **SUMMARY**

The reality about suicide is that, even with the best intentions from an HCP, an individual could contemplate and die by suicide without letting anyone know or asking for help. Although this level of uncertainty can be overwhelming and disconcerting, pediatricians and pediatric providers can open the door to discuss suicidality through screening and have

an important role in the care of adolescents who present with these thoughts or associated changes in behavior/functioning. The pediatric provider’s role is to screen for safety concerns in a developmentally appropriate manner, provide a safe place where youth can feel free to discuss those concerns, recognize risk factors that may increase risk of suicide, assess for access to lethal means, offer psychoeducation to both youth and guardian, and treat and/or refer to mental health specialists and/or higher level(s) of care when appropriate.

### **Guidance for Pediatricians and Pediatric Health Care Providers**

- Be mindful of individual, relationship, and community/societal factors, including history of trauma or other adversity, when assessing suicide risk in patients.
- Screen for suicide risk as part of well-child visits starting at 12 years of age and during higher-risk situations, such as any presentation of a behavioral or mental health concern or for youth with additional risk factors. Be aware that screening only for depression is not sufficient to identify suicide risk.
- Screen for suicide risk during ED visits and medical hospitalizations.
- Screen for substance use disorders, because substance use is often associated with depression and self-treatment and is a risk factor for suicidal thoughts and behaviors.
- If suicide screen is positive, conduct a BSSA and subsequent safety planning and/or referrals as appropriate.
- For all adolescent health supervision visits, and especially visits with adolescents who have suicidal thoughts, assess for access to lethal means, with counseling on safe firearm and medication storage. Removal of firearms and medications from the home entirely should also be assessed, especially if an adolescent is having SI.
- Include the family in suicide prevention and treatment efforts, when possible, because family-based interventions have been shown to be effective in preventing future suicide attempts in youth.
- During health supervision visits and visits addressing mental health concerns, counsel families around sleep hygiene, community engagement, and connectedness, because these factors can help to promote emotional wellness and may be protective against suicidal thoughts.
- Treat depression with a referral to a psychotherapist and with antidepressant medication, when indicated, because depression increases the risk of suicide. When indicated and available, refer to a child and adolescent psychiatrist or other mental health provider.
- Be aware of use of language when speaking with youth and families about suicide. Attempt to replace questionable terminologies with sensitive terminologies as follows:
  - o Use “die by suicide” instead of “commit suicide.”
  - o Use “death by suicide” instead of “successful suicide.”
  - o Use “suicide attempt” instead of “failed suicide attempt.”

- Recognize the importance of setting aside one-on-one time during appointments with adolescents to discuss potential suicidal behavior, other mental health issues, and the teen's history of trauma and adversity.
- Advocate for increased research on prevention strategies for the high rates of suicide in youth in the child welfare and juvenile justice systems.
- Advocate for suicide prevention research for other high-risk groups, such as LGBTQ youth, American Indian/Alaska Native and Black youth, other youth in minoritized racial and ethnic groups, and youth living in rural areas.
- Advocate for increased access to youth mental and medical health care, including evidence-based, trauma-informed interventions and gender-affirming care, when indicated, and particularly for populations that have been historically discriminated against and underresourced.
- Advocate for adequate payment for providing suicide risk screening and assessment services, as well as payment for additional time, training, and care coordination services for HCPs who manage mental health conditions.
- Advocate for adequate payment for integrated behavioral/mental health care into primary care and for evidence-based trauma-informed mental health care when indicated.

## RESOURCES

- Blueprint for Youth Suicide Prevention
- 3-digit dialing code 988 (suicide prevention)
- 1-800-799-7233 (domestic violence)
- 1-866-488-7386 (Trevor Project: LGBTQ crisis support)
- 1-877-565-8860 (trans lifeline)
- Crisis Text Line: Text HOME to 741741
- Family Acceptance Project is an initiative to prevent health and mental health risks for LGBTQ youth and provides research-based resources for ethnically, racially, and religiously diverse families: <https://familyproject.sfsu.edu/>
- American Foundation for Suicide Prevention "Mental Health Resources for Underrepresented Communities" (<https://afsp.org/mental-health-resources-for-underrepresented-communities>)
- <https://theactionalliance.org/communities/american-indian-alaska-native/hope-life-day-toolkit#:~:text=The%20National%20Action%20Alliance%20for,suicide%20in%20AI%2FAN%20communities>
- <https://www.samhsa.gov/native-connections>
- <http://www.npaihb.org/thrive/>

## RESOURCES FOR FAMILIES

- AFSP: Teens and Suicide—What Parents Should Know: <https://afsp.org/teens-and-suicide-what-parents-should-know>
- Seize the Awkward: <https://seizetheawkward.org/>
- National Alliance on Mental Illness: Family Members and Caregivers: <https://www.nami.org/Your-Journey/Family-Members-and-Caregivers>

- AAP Healthy Children: 10 Things Parents Can Do to Prevent Suicide: <https://www.healthychildren.org/English/health-issues/conditions/emotional-problems/Pages/Ten-Things-Parents-Can-Do-to-Prevent-Suicide.aspx>
- Support after a suicide attempt: <https://afsp.org/when-a-loved-one-has-made-an-attempt>
- Support after a loss from suicide: <https://afsp.org/ive-lost-someone>

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## ABBREVIATIONS

AAP: American Academy of Pediatrics  
ABFT: attachment-based family therapy  
ACE: adverse childhood experience  
ASQ: Ask Suicide Screening Questions  
BSSA: brief suicide safety assessment  
C-SSRS: Columbia Suicide Severity Rating Scale  
ED: emergency department  
HCP: health care provider  
LGBTQ: lesbian, gay, bisexual, transgender, or queer/questioning  
NIMH: National Institute of Mental Health  
NSSI: nonsuicidal self-injury  
PHQ-9: Patient Health Questionnaire-9  
SAMHSA: Substance Abuse and Mental Health Services Administration  
SI: suicidal ideation  
SIB: self-injurious behavior  
SSRI: selective serotonin reuptake inhibitor

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## REFERENCES

1. American Academy of Pediatrics. Suicide: Blueprint for Youth Suicide Prevention. Available at: <https://www.aap.org/en/patient-care/blueprint-for-youth-suicide-prevention/>. Accessed January 19, 2023
2. Hedegaard H, Curtin SC, Warner M. Suicide mortality in the United States, 1999–2019. *NCHS Data Brief*. 2021;(398):1–8
3. Yard E, Radhakrishnan L, Ballesteros MF, et al. Emergency department visits for suspected suicide attempts among persons aged 12–25 years before and during the COVID-19 pandemic—United States, January 2019–May 2021. *MMWR Morb Mortal Wkly Rep*. 2021;70(24):888–894
4. Centers for Disease Control and Prevention Web-based Injury Statistics Query and Reporting System (WISQARS). Available at: <https://wisqars.cdc.gov/data/explore-data/home>. Accessed April 27, 2022
5. Centers for Disease Control and Prevention. 1991–2021 High School Youth Risk Behavior Survey. Available at: <https://www.cdc.gov/healthyyouth/data/yrbs/index.htm>. Accessed August 23, 2023
6. Ivey-Stephenson AZ, Demissie Z, Crosby AE, et al. Suicidal ideation and behaviors among high school students—Youth Risk Behavior Survey, United States, 2019. *MMWR Suppl*. 2020;69(1):47–55
7. Lyons BH, Walters ML, Jack SPD, Petrosky E, Blair JM, Ivey-Stephenson AZ. Suicides among lesbian and gay male individuals: findings from the National Violent Death Reporting System. *Am J Prev Med*. 2019;56(4):512–521
8. Nock MK, Green JG, Hwang I, et al. Prevalence, correlates, and treatment of lifetime suicidal behavior among adolescents: results from the National Comorbidity Survey Replication Adolescent Supplement. *JAMA Psychiatry*. 2013;70(3):300–310
9. Korczak DJ. Canadian Paediatric Society, Mental Health and Developmental Disabilities Committee. Suicidal ideation and behavior. *Paediatr Child Health*. 2015;20(5):257–264
10. Panagiotti M, Gooding PA, Triantafyllou K, Tarrrier N. Suicidality and posttraumatic stress disorder (PTSD) in adolescents: a systematic review and meta-analysis. *Soc Psychiatry Psychiatr Epidemiol*. 2015;50(4):525–537
11. Bachmann S. Epidemiology of suicide and the psychiatric perspective. *Int J Environ Res Public Health*. 2018;15(7):1425–1447
12. Horwitz AG, Czyz EK, King CA. Predicting future suicide attempts among adolescent and emerging adult psychiatric emergency patients. *J Clin Child Adolesc Psychol*. 2015;44(5):751–761

13. Cha CB, Franz PJ, M Guzmán E, Glenn CR, Kleiman EM, Nock MK. Annual research review: suicide among youth—epidemiology, (potential) etiology, and treatment. *J Child Psychol Psychiatry*. 2018;59(4):460–482
14. Castellví P, Lucas-Romero E, Miranda-Mendizábal A, et al. Longitudinal association between self-injurious thoughts and behaviors and suicidal behavior in adolescents and young adults: a systematic review with meta-analysis. *J Affect Disord*. 2017;215:37–48
15. Guan K, Fox KR, Prinstein MJ. Nonsuicidal self-injury as a time-invariant predictor of adolescent suicide ideation and attempts in a diverse community sample. *J Consult Clin Psychol*. 2012;80(5):842–849
16. Nock MK, Prinstein MJ, Sterba SK. Revealing the form and function of self-injurious thoughts and behaviors: A real-time ecological assessment study among adolescents and young adults. *J Abnorm Psychol*. 2009;118(4):816–827
17. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition, Text Revision. American Psychiatric Publishing; 2022
18. Ludi E, Ballard ED, Greenbaum R, et al. Suicide risk in youth with intellectual disabilities: the challenges of screening. *J Dev Behav Pediatr*. 2012;33(5):431–440
19. Nagraj D, Omar HA. Disability and suicide. In: Omar HA, ed. *Youth Suicide Prevention: Everybody's Business*. Nova Science Publishers, Inc; 2015:85–95
20. Moses T. Suicide attempts among adolescents with self-reported disabilities. *Child Psychiatry Hum Dev*. 2018;49(3):420–433
21. Dawes MA, Mathias CW, Richard DM, Hill-Kapturczak N, Dougherty DM. Adolescent suicidal behavior and substance use: developmental mechanisms. *Subst Abuse*. 2008;2:13–28
22. Stone DM, Holland KM, Bartholow B, et al. Deciphering suicide and other manners of death associated with drug intoxication: a Centers for Disease Control and Prevention consultation meeting summary. *Am J Public Health*. 2017;107(8):1233–1239
23. Carliner H, Keyes KM, McLaughlin KA, Meyers JL, Dunn EC, Martins SS. Childhood trauma and illicit drug use in adolescence: a population-based national comorbidity survey replication—adolescent supplement study. *J Am Acad Child Adolesc Psychiatry*. 2016;55(8):701–708
24. Liming KW, Akin B, Brook J. Adverse childhood experiences and foster care placement stability. *Pediatrics*. 2021;148(6):e2021052700
25. Meeker EC, O'Connor BC, Kelly LM, Hodgeman DD, Scheel-Jones AH, Berbary C. The impact of adverse childhood experiences on adolescent health risk indicators in a community sample. *Psychol Trauma*. 2021;13(3):302–312
26. Duffee J, Szilagyi M, Forkey H, Kelly ET. Council on Community Pediatrics; Council on Foster Care, Adoption, and Kinship Care; Council on Child Abuse and Neglect; Committee on Psychosocial Aspects of Child and Family Health. Trauma-informed care in child health systems. *Pediatrics*. 2021;148(2):e2021052579
27. Thompson MP, Kingree JB, Lamis D. Associations of adverse childhood experiences and suicidal behaviors in adulthood in a US nationally representative sample. *Child Care Health Dev*. 2019;45(1):121–128
28. Elmore AL, Crouch E. The association of adverse childhood experiences with anxiety and depression for children and youth 8-17 years of age. *Acad Pediatr*. 2020;20(5):600–608
29. Bomysoad RN, Francis LA. Adverse childhood experiences and mental health conditions among adolescents. *J Adolesc Health*. 2020;67(6):868–870
30. Pew Research Center. Teens, social media and technology 2022. Available at: <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>. Accessed January 19, 2023
31. Mayo Clinic. Teens and social media use: what's the impact? Available at: <https://www.mayoclinic.org/healthy-lifestyle/tween-and-teen-health/in-depth/teens-and-social-media-use/art-20474437>. Accessed January 19, 2023
32. Viner RM, Gireesh A, Stiglic N, et al. Roles of cyberbullying, sleep, and physical activity in mediating the effects of social media use on mental health and well-being among young people in England: a secondary analysis of longitudinal data. *Lancet Child Adolesc Health*. 2019;3(10):685–696
33. Nesi J, Prinstein MJ. Using social media for social comparison and feedback-seeking: gender and popularity moderate associations with depressive symptoms. *J Abnorm Child Psychol*. 2015;43(8):1427–1438
34. Woods HC, Scott H. #Sleepyteens: social media use in adolescence is associated with poor sleep quality, anxiety, depression and low self-esteem. *J Adolesc*. 2016;51:41–49
35. Riehm KE, Feder KA, Tormohlen KN, et al. Associations between time spent using social media and internalizing and externalizing problems among US youth. *JAMA Psychiatry*. 2019;76(12):1266–1273
36. John A, Glendenning AC, Marchant A, et al. Self-harm, suicidal behaviors, and cyberbullying in children and young people: systematic review. *J Med Internet Res*. 2018;20(4):e129
37. Messias E, Kindrick K, Castro J. School bullying, cyberbullying, or both: correlates of teen suicidality in the 2011 CDC Youth Risk Behavior Survey. *Compr Psychiatry*. 2014;55(5):1063–1068
38. Kim YS, Leventhal B. Bullying and suicide. A review. *Int J Adolesc Med Health*. 2008;20(2):133–154
39. Centers for Disease Control and Prevention. Suicide, suicide attempts, or self-harm clusters. Available at: <https://www.cdc.gov/suicide/resources/suicide-clusters.html>. Accessed January 19, 2023
40. Hawton K, Hill NTM, Gould M, John A, Lascelles K, Robinson J. Clustering of suicides in children and adolescents. *Lancet Child Adolesc Health*. 2020;4(1):58–67
41. Fink DS, Santaella-Tenorio J, Keyes KM. Increase in suicides the months after the death of Robin Williams in the United States. *PLoS One*. 2018;13(2):e0191405
42. Bridge JA, Greenhouse JB, Ruch D, et al. Association between the release of Netflix's 13 Reasons Why and suicide rates in the United States: an interrupted time series analysis. *J Am Acad Child Adolesc Psychiatry*. 2020;59(2):236–243
43. Niederkrotenthaler T, Stack S, Till B, et al. Association of increased youth suicides in the United States with the release of 13 Reasons Why. *JAMA Psychiatry*. 2019;76(9):933–940
44. Alvarez K, Polanco-Roman L, Breslow AS, Molock S. Structural racism and suicide prevention for ethnoracially minoritized youth: a conceptual framework and illustration across systems. Available at: <https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.21101001>. Accessed August 23, 2023

45. Hwang WC, Myers HF, Abe-Kim J, Ting JY. A conceptual paradigm for understanding culture's impact on mental health: the cultural influences on mental health (CIMH) model. *Clin Psychol Rev*. 2008;28(2):211–227
46. Pumariega AJ, Rothe E, Mian A, et al. American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). Practice parameter for cultural competence in child and adolescent psychiatric practice. *J Am Acad Child Adolesc Psychiatry*. 2013;52(10):1101–1115
47. Fontanella CA, Hiance-Steelesmith DL, Phillips GS, et al. Widening rural–urban disparities in youth suicides, United States, 1996–2010. *JAMA Pediatr*. 2015;169(5):466–473
48. Kegler SR, Stone DM, Holland KM. Trends in suicide by level of urbanization—United States, 1999–2015. *MMWR Morb Mortal Wkly Rep*. 2017;66(10):270–273
49. Graves JM, Abshire DA, Mackelprang JL, Amiri S, Beck A. Association of rurality with availability of youth mental health facilities with suicide prevention services in the United States. *JAMA Netw Open*. 2020;3(10):e2021471
50. Brown LA. Suicide in foster care: a high-priority safety concern. *Perspect Psychol Sci*. 2020;15(3):665–668
51. Evans R, White J, Turley R, et al. Comparison of suicidal ideation, suicide attempt, and suicide in children and young people in care and noncare populations: systematic review and meta-analysis of prevalence. *Child Youth Serv Rev*. 2017;82:122–129
52. Turney K, Wildeman C. Adverse childhood experiences among children placed in and adopted from foster care: evidence from a nationally representative survey. *Child Abuse Negl*. 2017;64:117–129
53. Ruch DA, Steelesmith DL, Warner LA, Bridge JA, Campo JV, Fontanella CA. Health services use by children in the welfare system who died by suicide. *Pediatrics*. 2021;147(4):e2020011585
54. Stokes ML, McCoy KP, Abram KM, Byck GR, Teplin LA. Suicidal ideation and behavior in youth in the juvenile justice system: a review of the literature. *J Correct Health Care*. 2015;21(3):222–242
55. Gallagher CA, Dobrin A. Deaths in juvenile justice residential facilities. *J Adolesc Health*. 2006;38(6):662–668
56. Thoma BC, Salk RH, Choukas-Bradley S, Goldstein TR, Levine MD, Marshal MP. Suicidality disparities between transgender and cisgender adolescents. *Pediatrics*. 2019;144(5):e20191183
57. Lindsey MA, Sheftall AH, Xiao Y, Joe S. Trends of suicidal behaviors among high school students in the United States: 1991–2017. *Pediatrics*. 2019;144(5):e20191187
58. Sheftall AH, Vakil F, Ruch DA, Boyd RC, Lindsey MA, Bridge JA. Black youth suicide: investigation of current trends and precipitating circumstances. *J Am Acad Child Adolesc Psychiatry*. 2022;61(5):662–675
59. Watson Coleman B. Ring the alarm: the crisis of Black youth suicide in America. A report to Congress from the Congressional Black Caucus, Emergency Task Force on Black Youth Suicide and Mental Health. Available at: [https://watsoncoleman.house.gov/imo/media/doc/full\\_taskforce\\_report.pdf](https://watsoncoleman.house.gov/imo/media/doc/full_taskforce_report.pdf). Accessed January 19, 2023
60. The Trevor Project. LGBTQ youth with a history of foster care. Available at: <https://www.thetrevorproject.org/research-briefs/lgbtq-youth-with-a-history-of-foster-care-2/>. Accessed January 19, 2023
61. Garb HN. Race bias and gender bias in the diagnosis of psychological disorders. *Clin Psychol Rev*. 2021;90:102087
62. Baams L, Wilson BDM, Russell ST. LGBTQ youth in unstable housing and foster care. *Pediatrics*. 2019;143(3):e20174211
63. Courtney ME, Terao S, Bost N. University of Chicago, Chapin Hall Center for Children. Midwest evaluation of the adult functioning of former foster youth: conditions of youth preparing to leave state care. Available at: <https://www.chapinhall.org/wp-content/uploads/Midwest-Study-Youth-Preparing-to-Leave-Care-Brief.pdf>. Accessed January 19, 2023
64. Ati NAL, Paraswati MD, Windarwati HD. What are the risk factors and protective factors of suicidal behavior in adolescents? A systematic review. *J Child Adolesc Psychiatr Nurs*. 2021;34(1):7–18
65. Shahram SZ, Smith ML, Ben-David S, Feddersen M, Kemp TE, Plamondon K. Promoting “zest for life”: a systematic literature review of resiliency factors to prevent youth suicide. *J Res Adolesc*. 2021;31(1):4–24
66. Horowitz L, Tipton MV, Pao M. Primary and secondary prevention of youth suicide. *Pediatrics*. 2020;145(Suppl 2):S195–S203
67. Brent DA, Hur K, Gibbons RD. Association between parental medical claims for opioid prescriptions and risk of suicide attempt by their children. *JAMA Psychiatry*. 2019;76(9):941–947
68. Ginsburg KR, Kinsman SB, eds. *Reaching Teens: Strength-Based Communication Strategies to Build Resilience and Support Healthy Adolescent Development*. American Academy of Pediatrics; 2014
69. Reed D, Adams RD. Risk and protective factor specific to African American youth and adolescents: a systematic review. *J Family Strengths*. 2020;20(2):1–31
70. Wexler LM, Gone JP. Culturally responsive suicide prevention in indigenous communities: unexamined assumptions and new possibilities. *Am J Public Health*. 2012;102(5):800–806
71. Stone DM, Holland KM, Bartholow B, Crosby AE, Davis S, Wilkins N. *Preventing Suicide: A Technical Package of Policies, Programs, and Practices*. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2017
72. Meta. Suicide prevention. Available at: <https://www.facebook.com/safety/wellbeing/suicideprevention>. Accessed January 19, 2023
73. Michael SL, Lowry R, Merlo C, Cooper AC, Hyde ET, McKeon R. Physical activity, sedentary, and dietary behaviors associated with indicators of mental health and suicide risk. *Prev Med Rep*. 2020;19:101153
74. Fernandes SN, Zuckerman E, Miranda R, Baroni A. When night falls fast: sleep and suicidal behavior among adolescents and young adults. *Child Adolesc Psychiatr Clin N Am*. 2021;30(1):269–282
75. Goldstein TR, Bridge JA, Brent DA. Sleep disturbance preceding completed suicide in adolescents. *J Consult Clin Psychol*. 2008;76(1):84–91
76. Bernert RA, Hom MA, Iwata NG, Joiner TE. Objective assessed sleep variability as an acute warning sign of suicidal ideation in a longitudinal evaluation of young adults at high suicide risk. *J Clin Psychiatry*. 2017;78(6):e678–e687

77. Hagan JF Jr, Shaw JS, Duncan PM, eds. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*, 4th ed. American Academy of Pediatrics; 2017
78. Cwik MF, O'Keefe VM, Haroz EE. Suicide in the pediatric population: screening, risk assessment and treatment. *Int Rev Psychiatry*. 2020;32(3):254–264
79. DeVlyder JE, Ryan TC, Cwik M, et al. Assessment of selective and universal screening for suicide risk in a pediatric emergency department. *JAMA Netw Open*. 2019;2(10):e1914070
80. American Academy of Pediatrics; Committee on Practice and Ambulatory Medicine; Bright Futures Steering Committee. 2023 Recommendations for preventive pediatric health care. *Pediatrics*. 2023;151(4):e2023061451
81. US Preventive Services Task Force. Recommendation: depression and suicide risk in children and adolescents: screening. Available at: <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/screening-depression-suicide-risk-children-adolescents>. Accessed January 19, 2023
82. The Joint Commission. National Patient Safety Goal for suicide prevention. Available at: [https://www.jointcommission.org/-/media/tjc/documents/standards/r3-reports/r3\\_18\\_suicide\\_prevention\\_hap\\_bhc\\_cah\\_11\\_4\\_19\\_final1.pdf](https://www.jointcommission.org/-/media/tjc/documents/standards/r3-reports/r3_18_suicide_prevention_hap_bhc_cah_11_4_19_final1.pdf). Accessed August 3, 2021
83. Maslyanskaya S, Alderman EM. Confidentiality and consent in the care of the adolescent patient. *Pediatr Rev*. 2019;40(10):508–516
84. Pathak PR, Chou A. Confidential care for adolescents in the US health care system. *J Patient Cent Res Rev*. 2019;6(1):46–50
85. Centers for Disease Control and Prevention. Suicide prevention resource for action: a compilation of the best available evidence. Available at: <https://www.cdc.gov/suicide/pdf/preventionresource.pdf>. Accessed December 6, 2022
86. Dazzi T, Gribble R, Wessely S, Fear NT. Does asking about suicide and related behaviors induce suicidal ideation? What is the evidence? *Psychol Med*. 2014;44(16):3361–3363
87. Wintersteen MB. Standardized screening for suicidal adolescents in primary care. *Pediatrics*. 2010;125(5):938–944
88. Horowitz LM, Bridge JA, Teach SJ, et al. Ask Suicide-Screening Questions (ASQ): a brief instrument for the pediatric emergency department. *Arch Pediatr Adolesc Med*. 2012;166(12):1170–1176
89. Roaten K, Horowitz LM, Bridge JA, et al. Universal pediatric suicide risk screening in a health care system: 90,000 patient encounters. *J Acad Consult Liaison Psychiatry*. 2021;62(4):421–429
90. Zuckerbrot RA, Cheung AH, Jensen PS, Stein RE, Laraque D. GLAD-PC Steering Group Guidelines for Adolescent Depression in Primary Care (GLAD-PC): part I. Identification, assessment, and initial management. *Pediatrics*. 2018;141(3):e20174081
91. Aguinaldo LD, Sullivant S, Lanzillo EC, et al. Validation of the ask suicide-screening questions (ASQ) with youth in outpatient specialty and primary care clinics. *Gen Hosp Psychiatry*. 2021;68:52–58
92. Brahmabhatt K, Kurtz BP, Afzal KI, et al. PaCC Workgroup. Suicide risk screening in pediatric hospitals: clinical pathways to address a global health crisis. *Psychosomatics*. 2019;60(1):1–9
93. Pathway YSRS. Outpatient primary care and specialty clinics. Available at: [https://www.nimh.nih.gov/sites/default/files/documents/research/research-conducted-at-nimh/asq-toolkit-materials/youth-outpatient/Suicide\\_Risk\\_Screening\\_Pathway\\_Outpatient\\_Youth\\_Nov\\_10\\_2021.pdf](https://www.nimh.nih.gov/sites/default/files/documents/research/research-conducted-at-nimh/asq-toolkit-materials/youth-outpatient/Suicide_Risk_Screening_Pathway_Outpatient_Youth_Nov_10_2021.pdf). Accessed January 19, 2023
94. The Columbia Lighthouse Project. Identify risk, prevent suicide. Risk and protective factors page. Available at: <https://cssrs.columbia.edu/documents/risk-assessment-page/>. Accessed January 19, 2023
95. The Joint Commission. Suicide prevention resources to support Joint Commission-accredited organizations implementation of NPSG 15.01.01. Available at: [https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/suicide-prevention/pages-from-suicide\\_prevention\\_compendium\\_5\\_11\\_20\\_updated-july2020\\_ep6.pdf](https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/suicide-prevention/pages-from-suicide_prevention_compendium_5_11_20_updated-july2020_ep6.pdf). Accessed January 19, 2023
96. Cole-King A, Platt S. Suicide prevention for physicians: identification, intervention, and mitigation of risk. *Medicine (Baltimore)*. 2017;45(3):131–134
97. Bettis AH, Donise KR, MacPherson HA, Bagatelas P, Wolff JC. Safety planning intervention for adolescents: provider attitudes and response to training in the emergency services setting. *Psychiatr Serv*. 2020;71(11):1136–1142
98. Asarnow JR, Hughes JL, Babeva KN, Sugar CA. Cognitive behavioral family treatment for suicide attempt prevention: a randomized controlled trial. *J Am Acad Child Adolesc Psychiatry*. 2017;56(6):506–514
99. Lee LK, Fleegler EW, Goyal MK, Fraser Doh K, Laraque-Arena D, Hoffman BD. American Academy of Pediatrics, Council on Violence, Injury, and Poison Prevention. Policy statement. Firearm-related injuries and deaths in children and youth: injury prevention and harm reduction. *Pediatrics*. 2022;150(6):e2022060070
100. Rengasamy M, Sparks G. Reduction of postdischarge suicidal behavior among adolescents through a telephone-based intervention. *Psychiatr Serv*. 2019;70(7):545–552
101. Doupnik SK, Rudd B, Schmutte T, et al. Association of suicide prevention interventions with subsequent suicide attempts, linkage to follow-up care, and depression symptoms for acute care settings: a systematic review and meta-analysis. *JAMA Psychiatry*. 2020;77(10):1021–1030
102. Health Resources and Services Administration, Maternal and Child Health. Pediatric mental health care access. Available at: <https://mchb.hrsa.gov/programs-impact/programs/pediatric-mental-health-care-access>. Accessed January 19, 2023
103. National Network of Child Psychiatry Access Programs. Integrating physical and behavioral health care for every child. Available at: <https://www.nncpap.org>. Accessed January 19, 2023
104. American Academy of Child and Adolescent Psychiatry. Suicide resource center. Available at: [https://www.aacap.org/aacap/Families\\_and\\_Youth/Resource\\_Centers/Suicide\\_Resource\\_Center/Home.aspx](https://www.aacap.org/aacap/Families_and_Youth/Resource_Centers/Suicide_Resource_Center/Home.aspx). Accessed January 19, 2023
105. Substance Abuse and Mental Health Services Administration. Help prevent suicide. Available at: <https://www.samhsa.gov/suicide>. Accessed January 19, 2023

106. Harvard T.H. Chan School of Public Health. Lethal means counseling. Available at: <https://www.hsph.harvard.edu/means-matter/lethal-means-counseling/>. Accessed January 19, 2023
107. Grupp-Phelan J, Stevens J, Boyd S, et al. Effect of a motivational interviewing-based intervention on initiation of mental health treatment and mental health after an emergency department visit among suicidal adolescents: a randomized clinical trial. *JAMA Netw Open*. 2019;2(12):e1917941
108. Jones JD, Boyd RC, Calkins ME, et al. Parent-adolescent agreement about adolescents; suicidal thoughts. *Pediatrics*. 2019;143(2):e20181771
109. Wharff EA, Ginnis KB, Ross AM, White EM, White MT, Forbes PW. Family-based crisis intervention with suicidal adolescents: a randomized clinical trial. *Pediatr Emerg Care*. 2019;35(3):170-175
110. Diamond GS, Kobak RR, Krauthamer Ewing ES, et al. A randomized-controlled trial: attachment-based family and non-directive supportive treatments for suicidal youth. *J Am Acad Child Adolesc Psychiatry*. 2019;58(7):721-731
111. Russon J, Morrissey J, Dellinger J, Jin B, Diamond G. Implementing attachment-based family therapy for depressed and suicidal adolescents and young adults in LGBTQ+ services: feasibility, acceptability, and preliminary effectiveness. *Crisis*. 2022;43(6):500-507
112. Schilling EA, Asetline RH Jr, James A. The SOS Suicide Prevention Program: further evidence of efficacy and effectiveness. *Prev Sci*. 2016;17(2):157-166
113. Wyman PA, Brown CH, LoMurray M, et al. An outcome evaluation of the Sources of Strength suicide prevention program delivered by adolescent peer leaders in high schools. *Am J Public Health*. 2010;100(9):1653-1661
114. American Psychiatric Association. The psychiatric bed crisis in the United States: understanding the problem and moving toward solutions. Available at: <https://www.psychiatry.org/getmedia/81f685f1-036e-4311-8dfc-e13ac425380f/APA-Psychiatric-Bed-Crisis-Report-Full.pdf>. Accessed January 19, 2023
115. Chung DT, Ryan CJ, Hadzi-Pavlovic D, Singh SP, Stanton C, Large MM. Suicide rates after discharge from psychiatric facilities. *JAMA Psychiatry*. 2017;74(7):694-702
116. Fontanella CA, Warner LA, Steelesmith DL, Brock G, Bridge JA, Campo JV. Association of timely outpatient mental health services for youths after psychiatric hospitalization with risk of death by suicide. *JAMA Netw Open*. 2020;3(8):e2012887
117. Asarnow JR, Rozenman M, Wiblin J, Zeltzer L. Integrated medical-behavioral care compared with usual primary care for child and adolescent behavioral health: a meta-analysis. *JAMA Pediatr*. 2015;169(10):929-937
118. Scott RL. Evaluation of a mobile crisis program: effectiveness, efficiency, and consumer satisfaction. *Psychiatr Serv*. 2000;51(9):1153-1156
119. Sowar K, Thurber D, Vanderploeg JJ, Haldane EC. Psychiatric community crisis services for youth. *Child Adolesc Psychiatr Clin N Am*. 2018;27(3):479-490
120. Substance Abuse and Mental Health Services Administration. National guidelines for behavioral health crisis care—a best practice toolkit. Available at: <https://www.samhsa.gov/sites/default/files/national-guidelines-for-behavioral-health-crisis-care-02242020.pdf>. Accessed January 19, 2023
121. American Academy of Pediatrics, American Academy of Child and Adolescent Psychiatry and Children's Hospital Association. AAP-AACAP-CHA declaration of a national emergency in child and adolescent mental health. Available at: <https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/>. Accessed January 19, 2023
122. Gibbons RD, Hur K, Brown CH, Davis JM, Mann JJ. Benefits from antidepressants: synthesis of 6-week patient-level outcomes from double-blind placebo-controlled randomized trials of fluoxetine and venlafaxine. *Arch Gen Psychiatry*. 2012; 69(6):572-579
123. Shain B. Committee on Adolescence. Clinical report. Suicide and suicide attempts in adolescents. *Pediatrics*. 2016;138(1):e20161420
124. Brent DA. Antidepressants and suicidality. *Psychiatr Clin North Am*. 2016;39(3):503-512
125. Dwyer JB, Bloch MH. Antidepressants for pediatric patients. *Curr Psychiatry*. 2019;18(9):26F-42F
126. Turecki G, Brent DA. Suicide and suicidal behavior. *Lancet*. 2016; 387(10024):1227-1239
127. Cipriani A, Hawton K, Stockton S, Geddes JR. Lithium in the prevention of suicide in mood disorders: updated systematic review and meta-analysis. *BMJ*. 2013;346:f3646
128. Fu DJ, Ionescu DF, Li X, et al. Esketamine nasal spray for rapid reduction of major depressive disorder in patients with active suicidal ideation with intent: double-blind randomized study (ASPIRE I). *J Clin Psychiatry*. 2020;81(3):19m13191
129. Ballard ED, Fields J, Farmer CA, Zarate CA Jr. Clinical trials for rapid changes in suicidal ideation: lessons from ketamine. *Suicide Life Threat Behav*. 2021;51(1):27-35
130. Ionescu DF, Swee MB, Pavone KJ, et al. Rapid and sustained reductions in current suicidal ideation following repeated doses of intravenous ketamine: secondary analysis of an open-label study. *J Clin Psychiatry*. 2016;77(6):e719-e725
131. Kim S, Rush BS, Rice TR. A systematic review of therapeutic ketamine use in children and adolescents with treatment-resistant mood disorders. *Eur Child Adolesc Psychiatry*. 2021; 30(10):1485-1501
132. Meltzer HY, Alphas L, Green AI, et al. International Suicide Prevention Trial Study Group. Clozapine treatment for suicidality in schizophrenia: International Suicide Prevention Trial (InterSePT). *Arch Gen Psychiatry*. 2003;60(1):82-91
133. Ghaziuddin N, Shamseddeen W, Gettys G, Ghaziuddin M. Electroconvulsive therapy for the treatment of severe mood disorders during adolescence: a retrospective chart review. *J Child Adolesc Psychopharmacol*. 2020;30(4):235-243
134. Luccarelli J, McCoy TH Jr, Seiner SJ, Henry ME. Electroconvulsive therapy is associated with a reduction in self-reported suicidal ideation in adolescents. *Brain Stimul*. 2022;15(5):1181-1183
135. Croarkin PE, Nakonezny PA, Deng ZD, et al. High-frequency repetitive TMS for suicidal ideation in adolescents with depression. *J Affect Disord*. 2018;239:282-290