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February 2022

## Teen Suicide Prevention Strategies: Why the Current Model is Failing and a New Approach is Necessary

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### Recommended Citation

Swan, Angela (2022) "Teen Suicide Prevention Strategies: Why the Current Model is Failing and a New Approach is Necessary," *Liberty University Journal of Statesmanship & Public Policy*. Vol. 2 : Iss. 2 , Article 2.

Available at: <https://digitalcommons.liberty.edu/jspp/vol2/iss2/2>

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## Introduction

Suicide across the nation has risen fully 30% since 1999,<sup>1</sup> and Colorado's suicide rate is the ninth highest in the nation, with suicide being the leading cause of death among Coloradans 10-24 years old.<sup>2</sup> The rate for teen suicide in Colorado is twice the national average, with 17.6 out of every 100,000 teens committing suicide each year.<sup>3</sup> According to the Colorado Office of Suicide Prevention, a sharp rise in suicides across all demographic groups began in 2009 and has risen steadily since, prompting Colorado public health officials to take a closer look at prevention efforts.<sup>4</sup> In this evaluative review, the problem of teen suicide and teen suicide prevention strategies are looked at nationwide, and specific statistical and policy examples are cited from Colorado—a state with the ninth highest suicide rate in the nation.<sup>5</sup> As a state that has been struggling more than most under the weight of the teen suicide epidemic, Colorado's policy history illustrates some of the common problems that other states may soon be facing. Current prevention programs that are being used in Colorado schools and across the nation rely on outdated information, subjectively use the label “evidence-based,” and are rarely evaluated in an effective or rigorous manner.

In the fall of 2018, following a rash of suicides at Denver area high schools, Colorado state administrators scrambled to enact new suicide prevention programs specifically in schools. Calling teen suicide a “statewide crisis,” Attorney General Cynthia Coffman announced a new initiative that focuses on the pediatric healthcare system as a means to identify and prevent suicidal ideations. Non-profits, pediatric experts, and state agencies would partner in this collaborative effort being funded for \$2.8 million.<sup>6</sup> In her announcement of this program, Coffman drew attention primarily to suicide as a mental health crisis, characterized by vastly differing treatment availability across healthcare providers. Healthcare in Colorado has struggled greatly in this area, in that just 21% of some 226,000 kids who have been diagnosed with a mental illness are receiving treatment—giving Colorado the dismal ranking of 48<sup>th</sup> in the nation for number of children requiring mental health care but who cannot access it.<sup>7</sup> The stated goals of this suicide prevention initiative are simple: enhance inter-agency coordination, increase mental health screening, and add new assessments and training for healthcare and school officials. Such goals are common to suicide prevention strategies nationwide—even the National Strategy for Suicide Prevention from the U.S. Department of Health focuses primarily on these goals<sup>8</sup>—but do these goals *prevent* teen suicide in any meaningful way?

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<sup>1</sup> “Suicide Rising Across the U.S.: More Than a Mental Health Concern,” Centers for Disease Control and Prevention, June 7, 2018, <https://www.cdc.gov/vitalsigns/suicide/index.html>.

<sup>2</sup> Sarah Brummet, Emily Fine, Jarrod Hindman and Lindsey Myer, *Office of Suicide Prevention Annual Report 2016-2017* (Denver, CO: Colorado Department of Public Health and Environment, 2017), [https://www.colorado.gov/pacific/sites/default/files/PW\\_ISVP\\_OSP-2016-2017-Legislative-Report.pdf](https://www.colorado.gov/pacific/sites/default/files/PW_ISVP_OSP-2016-2017-Legislative-Report.pdf).

<sup>3</sup> “Suicide Rising Across the U.S.”

<sup>4</sup> Brummet, Fine, Hindman, and Myer, *Office of Suicide Prevention Annual Report 2016-2017*.

<sup>5</sup> “Suicide Rising Across the U.S.”

<sup>6</sup> Sam Trabachnik, “‘Our Kids are Suffering’: Colorado Attorney General Puts \$2.8M Toward New Effort to Address Youth Suicide,” *Denver Post*, October 16, 2018, <https://www.denverpost.com/2018/10/16/colorado-youth-suicide-crisis-mental-health/>.

<sup>7</sup> Ibid.

<sup>8</sup> United States Department of Health and Human Services Office of the Surgeon General and National Action Alliance for Suicide Prevention, *2012 National Strategy for Suicide Prevention: Goals and Objectives for Action* (Washington, DC: United States Department of Health and Human Services, 2012).

Suicide is a highly complex issue, and the impact of preventive factors can be difficult to measure, but if looking purely at the ever-rising suicide rates one could easily argue that the strategies in place today are missing the mark. A goal of the U.S. Department of Health is to reduce suicide across the nation by 20 percent,<sup>9</sup> yet the numbers show no hint of decline. In fact, the rate for suicide in teen girls is at a 40-year high.<sup>10</sup> To accomplish any reduction in suicides, prevention policies and programs that are in place must be carefully evaluated or reconsidered all together.

Mental illness among teens is clearly a rising issue and has been identified as a public health concern since 1999.<sup>11</sup> So it would seem natural to include better access to mental healthcare as part of suicide prevention strategies, but why have mental illness and suicide—specifically among teens—increased so significantly in the last 20 years? Anti-bullying campaigns were practically non-existent, and access to mental healthcare was certainly more limited 20 years ago, yet the rates of mental illness and suicide were considerably lower.<sup>12</sup> Studies of teen suicide over the past two decades have identified the primary antecedents as being feelings of “hopelessness” and depression, a recent crisis, peer victimization and bullying, and substance abuse.<sup>13</sup> The critical question then is why are teens today experiencing these issues at a significantly higher rate than was evident 20, or even just 10, years ago? Perhaps equally compelling is the question of why current teen suicide prevention strategies appear to have little effect or focus on the majority of these antecedents to suicidal ideation that have been identified in the current research.

In light of these concerning questions, it is the goal of this evaluative review to show that current teen suicide prevention strategies may be outdated and overly focused on objectives that have not been shown to effectively reduce teen suicide. This is certainly case for the status of teen suicide prevention in Colorado, which can be a helpful case study in identifying problems in both programs and policy that are likely endemic to other states facing rising rates of suicide as well. First, the epidemic of teen suicide as a public health and policy concern will be addressed. Second, the known causes and correlations of teen suicide will be reviewed. Third, conceptual problems among current teen suicide prevention strategies will be examined. Fourth, important potential policy steps will be identified to include limiting social media consumption, continuing to address the harms associated with bullying, and highlighting the importance of family involvement and

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<sup>9</sup> Ibid.

<sup>10</sup> “Suicide Rising Across the U.S.”

<sup>11</sup> United States Public Health Service, *The Surgeon General’s Call to Action to Prevent Suicide 1999* (Washington, DC: United States Public Health Service, 1999), <https://profiles.nlm.nih.gov/spotlight/nn/catalog/nlm.nlmuid-101584932X6-doc>.

<sup>12</sup> Ibid.

<sup>13</sup> Alexander L. Chapman and Katherine L. Dixon-Gordon, Emotional Antecedents and Consequences of Deliberate Self-Harm and Suicide Attempts, *Suicide and Life-Threatening Behavior* 37, no. 5 (October 2007): 543-552. <http://doi.org/10.1521/suli.2007.37.5.543>; Anne L. Glowinski, Kathleen K. Bucholz, Elliot C. Nelson, Qiang Fu, Pamela A. F. Madden, Wendy Reich, and Andrew C. Heath, “Suicide Attempts in an Adolescent Female Twin Sample,” *Journal of the American Academy of Child and Adolescent Psychiatry* 40, no. 11 (November 2001): 1300–1307. <https://doi.org/10.1097/00004583-200111000-00010>; Kristin M. Holland, Alana M. Vivolo-Kantor, Joseph E. Logan, and Ruth W. Leemis, “Antecedents of Suicide among Youth Aged 11–15: A Multistate Mixed Methods Analysis,” *Journal of Youth and Adolescence* 46, no. 7 (July 2017): 1598-1610, <http://doi.org/10.1007/s10964-016-0610-3>; Sameer Hinduja and Justin W. Patchin, “Cyberbullying: Identification, Prevention, and Response.” N.p.: Cyberbullying Research Center, 2014, <https://cyberbullying.org/Cyberbullying-Identification-Prevention-Response.pdf>; Monica H. Swahn and Robert M. Bossarte, “Gender, Early Alcohol Use, and Suicide Ideation and Attempts: Findings from the 2005 Youth Risk Behavior Survey,” *Journal of Adolescent Health* 41, no. 2 (August 2007): 175-181, <https://doi.org/10.1016/j.jadohealth.2007.03.003>.

relationships. Finally, it is concluded that prevention strategies must shift their focus to target the serious social problems associated with teen suicide today, such as peer victimization, depression, and substance abuse.

### Teen Suicide as a Public Health and Policy Concern

Suicide is the second leading cause of death for teens nationwide according to the Center for Disease Control and Prevention.<sup>14</sup> The suicide rate for teens has doubled over the last 10 years alone and has actually tripled for girls aged 10-14.<sup>15</sup> According to the national Youth Risk Behavior Survey, nearly 18% of students in high school report having seriously considered suicide in the past year, and 14.6% actually made plans to carry it out.<sup>16</sup> Perhaps more disturbing still is that for every completed suicide, it is estimated that there are 25 attempted suicides.<sup>17</sup>

In Colorado, a state with one of the highest suicide rates in the nation, the 2017 Healthy Kids Colorado survey showed 31.4% of high school students indicated feeling sad or hopeless almost every day for two weeks or more in a row during the previous year—a 2% increase from 2015.<sup>18</sup> Additionally, 26.1% reported considering suicide (up from 17.5% in 2015), and 7.8 percent reported making one or more suicide attempts in the previous twelve months. Specific populations show even more risk for suicidal ideation. Highest at risk are LGBTQ students, of which over two-thirds report feeling hopelessness and sadness, and more than one in four have actually attempted suicide at least once in the last 12 months. Suicide attempts in the last year climbed to 35% for transgender students, who are twice as likely to feel bullied, and three times as likely to feel unsafe at school compared to their non-transgender peers.<sup>19</sup>

### Evidence-Based Prevention Programs

Teen suicide hit the forefront of the collective consciousness in 1999, following incidents like the Columbine High School shooting. In response to the heightened concern over teen suicide, *The Surgeon General's Call to Action to Prevent Suicide* at that time encouraged communities nationwide to create and implement effective, “evidence based” school prevention programs. The result was the development of a number of various programs that were utilized in schools across the country.<sup>20</sup> Unfortunately, most of these programs have never been rigorously tested<sup>21</sup> and

<sup>14</sup> “Suicide Rising Across the U.S.”

<sup>15</sup> Sally C. Curtin, Margaret Warner, and Holly Hedegaard, *Increase in Suicide in the United States, 1999-2014* (Hyattsville, MD: National Center for Health Statistics Data Brief, 2016), [https://www.researchgate.net/profile/Sally\\_Curtin/publication/301564377\\_Increase\\_in\\_Suicide\\_in\\_the\\_United\\_States\\_1999-2014/links/571a31dc08ae408367bc84d6.pdf](https://www.researchgate.net/profile/Sally_Curtin/publication/301564377_Increase_in_Suicide_in_the_United_States_1999-2014/links/571a31dc08ae408367bc84d6.pdf).

<sup>16</sup> Laura Kann, Tim McManus, William A. Harris, Shari L. Shanklin, Katherine H. Flint, Joseph Hawkins, Barbara Queen, Richard Lowry, Emily O'Malley Olsen, David Chyen, Lisa Whittle, Jemekia Thornton, Connie Lim, Yoshimi Yamakawa, Nancy Brener, and Stephanie Zaza, “Youth Risk Behavior Surveillance—United States, 2015,” *MMWR Surveillance Summaries* 65, no. 6 (June 10, 2016): 1–174, <https://doi.org/10.15585/mmwr.ss6506a1>.

<sup>17</sup> “Suicide Rising Across the U.S.”

<sup>18</sup> Colorado Department of Public Health and Environment, *2017 Executive Summary: Healthy Kids Colorado Survey* (Denver, CO: Colorado Department of Public Health and Environment, 2017), [https://drive.google.com/file/d/1FlpA-UNBbkT4\\_1L2StvFNUigVs7exvJf/view](https://drive.google.com/file/d/1FlpA-UNBbkT4_1L2StvFNUigVs7exvJf/view).

<sup>19</sup> Colorado Department of Public Health and Environment, *2017 Executive Summary*.

<sup>20</sup> United States Public Health Service, *The Surgeon General's Call to Action to Prevent Suicide 1999*.

<sup>21</sup> Robert H. Aseltine, Amy James, Elizabeth A. Schilling, and Jaime Glanovsky, “Evaluating the SOS Suicide Prevention Program: A Replication and Extension,” *BMC Public Health* 7, no. 161 (July 2007),

neither have the more modern versions of these programs—specifically those implemented in the previous 10 years alone. Further, those that have been evaluated have shown little or only moderate effects on help-seeking behaviors, and virtually none have shown any connection to reducing actual suicides or suicidal ideation.<sup>22</sup> To date, only two from well over a dozen programs have been identified through recent and rigorous empirical research as having a significant effect on reducing actual suicide attempts: Signs of Suicide and The Good Behavior Game.<sup>23</sup>

Colorado’s Office of Suicide Prevention Annual Report for 2017 lists three “data-driven and evidence-based” primary factors for reducing youth suicide as (1) access to a trusted adult, (2) feeling safe at school, and (3) participating in extracurricular activities.<sup>24</sup> For schools specifically, the Suicide Prevention Commission’s recommendation is that all middle and high schools have an evidence-based prevention program in place. While the commission encourages schools to use any evidence-based program they like, they specifically recommend, and have prioritized, Sources of Strength, a program that promotes resilience and personal development as protective factors against suicide.

Listed in the Substance Abuse and Mental Health Services Administration’s (SAMHSA) National Registry of Evidence-based Programs and Practices, Sources of Strength is a “universal suicide prevention program designed to build socio-ecological protective influences among youth to reduce the likelihood that vulnerable students become suicidal.”<sup>25</sup> The primary tool of the Sources of Strength program is peer-to-peer intervention utilizing a social messaging campaign focused on positive information about help, hope and strength. The mission statement claims the goal of this program is to reduce suicide, violence, bullying, and substance abuse. As part of the program, adult advisors recruit and train peer leaders who then recruit and train other peer leaders to disseminate these messages. Peer leaders meet twice per month to problem solve and plan activities that will promote and spread positive information to others. Posters, banners, online videos, and webinars are provided by the organization. The peer leaders are also expected to present information at faculty or key stakeholder meetings as well as during all school assemblies. According to the program website, the standard cost (though it may vary) for one school to purchase this program is \$5,000 per year for a three-year rollout and an additional \$4,000 to train a trainer for that school.<sup>26</sup> At this time, over 120 schools across Colorado are initiating, or have already begun, use of this program. The Suicide Prevention Commission has officially “prioritized” Sources of Strength and committed grant funding to their organization through

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<https://doi.org/10.1186/1471-2458-7-161>; Catherine M. Strunk, Michael T. Sorter, Julianne Ossege, and Keith A. King, “Emotionally Troubled Teens’ Help-Seeking Behaviors: An Evaluation of Surviving the Teens® Suicide Prevention and Depression Awareness Program,” *The Journal of School Nursing* 30, no. 5 (October 2014): 366–375, <https://doi.org/10.1177/1059840513511494>.

<sup>22</sup> Strunk, Sorter, Ossege, and King, “Emotionally Troubled Teens’ Help-Seeking Behaviors.”

<sup>23</sup> Aseltine, James, Schilling, and Glanovsky. “Evaluating the SOS suicide prevention program;” Cara Katz, Shay-Lee Bolton, Laurence Y. Katz, Corinne Isaak, Toni Tilston-Jones, Jitender Sareen, and Swampy Cree Suicide Prevention Team, “A Systematic Review of School-Based Suicide Prevention Programs,” *Depression and Anxiety* 30, no. 10 (October 2013): 1030-1045, <https://doi.org/10.1002/da.22114>; Elizabeth A. Schilling, Robert H. Aseltine, and Amy James, “The SOS Suicide Prevention Program: Further Evidence of Efficacy and Effectiveness,” *Prevention Science* 17, no. 2 (February 2016): 157-166, <http://doi.org/10.1007/s11121-015-0594-3>.

<sup>24</sup> Brummet, Fine, Hindman, and Myer, *Office of Suicide Prevention Annual Report 2016-2017*.

<sup>25</sup> “Evidence,” Sources of Strength. <https://sourcesofstrength.org/discover/evidence/>.

<sup>26</sup> *Ibid.*

2020.<sup>27</sup> What is problematic, however, is that Sources of Strength has little to no empirical or evaluative research verifying that this program is accomplishing the objective of reducing suicide.

The program was initially founded upon a study showing modest but positive correlations between peer-to-peer intervention and help-seeking behaviors.<sup>28</sup> Evidence showed an increase in peer leaders' willingness to seek help from adults connected to the program. However, while promising in its results, the data used was collected 10 years ago between 2007 and 2009, sampled 18 schools (12 of which were rural), and showed help-seeking from students who are likely already more inclined to seek help than those at highest risk for suicide. (The students had chosen to be peer leaders in the program, which suggests they are likely not in the category of most vulnerable or at risk individuals for suicide to begin with). Two additional but equally limited studies found modest connections between peer delivered positive messaging and its impact on perceptions of adult support.<sup>29</sup> The sample sizes and composition for these studies were limited, as discussed by the authors regarding problems with generalizability of the study results. Also problematic is that these studies measure only knowledge and perceptions of adult support. Neither study attempted to measure this program's effect on suicidal ideation or attempts. While the initial study certainly showed potential for Sources of Strength's program model and positive messaging campaign, it is concerning that no additional formal evaluations or research has been done on the efficacy of this program regarding the specific impact on reducing suicidal ideation or attempted suicides—and especially so when being listed as “evidence-based” by national or state organizations.

The initial data for these findings certainly speaks to the importance of re-framing the discussion on suicide in a more positive strength-based light; however, these studies show little evidence that positive messaging and peer-intervention alone is having any measurable impact on actual suicides. In fact, this is just one example of many teen suicide prevention programs being used today that have shown no impact on reducing suicide attempts through empirical research.<sup>30</sup> Rather, the majority of studies conducted on these programs, like the two previously mentioned on Sources of Strength, are evaluating the program's ability to simply increase and improve student and staff knowledge and attitudes about suicide—*changing the conversation*, what has become a hallmark of current prevention strategies.<sup>31</sup>

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<sup>27</sup> Brummet, Fine, Hindman, and Myer, *Office of Suicide Prevention Annual Report 2016-2017*.

<sup>28</sup> Peter A. Wyman, C. Hendricks Brown, Mark LoMurray, Karen Schmeelk-Cone, Mariya Petrova, Qin Yu, Erin Walsh, Xin Tu, and Wei Wang, “An Outcome Evaluation of the Sources of Strength Suicide Prevention Program Delivered by Adolescent Peer Leaders in High Schools,” *American Journal of Public Health* 100, no. 9 (September 2010): 1653-1661, <http://doi.org/10.2105/AJPH.2009.190025>.

<sup>29</sup> Mariya Petrova, Peter A. Wyman, Karen Schmeelk-Cone, and Anthony R. Pisani, “Positive-Themed Suicide Prevention Messages Delivered by Adolescent Peer Leaders: Proximal Impact on Classmates' Coping Attitudes and Perceptions of Adult Support,” *Suicide and Life-Threatening Behavior* 45, no. 6 (February 2015): 651-663, <http://doi.org/10.1111/sltb.12156>; Trevor A. Pickering, Peter A. Wyman, Karen Schmeelk-Cone, Chelsey Hartley, Thomas W. Valente, Anthony R. Pisani, Kelly L. Rulison, Charles H. Brown, and Mark LoMurray, “Diffusion of a Peer-Led Suicide Preventive Intervention Through School-Based Student Peer and Adult Networks,” *Frontiers in Psychiatry* 9 (November 2018): 598, <https://doi.org/10.3389/fpsy.2018.00598>.

<sup>30</sup> Katz, Bolton, Katz, Isaak, Tilston-Jones, Sareen, and Swampy Cree Suicide Prevention Team, “A Systematic Review of School-Based Suicide Prevention Programs.”

<sup>31</sup> Katz, Bolton, Katz, Isaak, Tilston-Jones, Sareen, and Swampy Cree Suicide Prevention Team, “A Systematic Review of School-Based Suicide Prevention Programs;” Jo Robinson, Georgina Cox, Aisling Malone, Michelle Williamson, Gabriel Baldwin, Karen Fletcher, and Matt O'Brien, “A Systematic Review of School-Based Interventions Aimed at Preventing, Treating, and Responding to Suicide-Related Behavior in Young People,” *Crisis: The Journal of Crisis Intervention and Suicide Prevention* 34, no. 3 (2013): 164-182, <http://doi.org/10.1027/0227-5910/a000168>.

Problems like these are concerning when addressing what is, or is not, “evidence-based” programming. Certain programs proudly identify themselves as the “gold standard” of teen suicide prevention programming, when in reality no empirical evidence may exist suggesting they are having any effect on actual suicide attempts.<sup>32</sup> Perhaps adding to the controversy and ethical issues in this area is that some of these programs are for-profit businesses and *not* non-profits. Such is the case for Sources of Strength, which was given the label “evidence-based” in 2012 by SAMHSA but since that time has little additional evaluative research beyond the foundational study from nearly a decade ago and was conducted in part by the program and businesses’ founder and director.

### Conceptual Problems in Evaluating Teen Suicide Prevention Strategies

The U.S. Surgeon General’s *National Strategy for Suicide Prevention* lists four priority areas: (1) integrate suicide prevention into health care reform, (2) “transform” healthcare systems to significantly reduce suicide, (3) change the public conversation about suicide and suicide prevention, and (4) increase the usefulness of data regarding suicide behaviors. While it is unclear why this strategy has not been updated since 2012, concern surrounding the rising suicide rates suggests that updates should be considered.<sup>33</sup>

Colorado appears to have implemented measures aimed at addressing all four of the U.S. Surgeon General’s priority areas in recent years. However, the success of these measures is questionable. Healthcare policy in regard to how mental health is addressed and availability of mental health services has been prioritized and given additional state funding,<sup>34</sup> and Colorado State University maintains up-to-date suicide statistics on their website that are easily accessible to the public and extremely detailed.<sup>35</sup> As for “changing the public conversation about suicide,” the Office of Suicide Prevention was created in 2014 and has since created extensive web-based resources, held public events on suicide awareness, implemented awareness campaign messaging, and allocated grant funding to suicide prevention programs.<sup>36</sup> While Colorado has attempted to follow the guidance of the National Strategy to reduce suicides, it still recorded the highest number of suicides in state history in 2017.<sup>37</sup> Perhaps it is time to take a closer look at the U.S. Surgeon General’s priority number four: “increasing the usefulness of data regarding suicide behaviors” by using the current and emerging empirical research that is clearly identifying key factors that are driving teen suicide—and likewise how it might best be prevented.

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<sup>32</sup> Katz, Bolton, Katz, Isaak, Tilston-Jones, Sareen, and Swampy Cree Suicide Prevention Team, “A Systematic Review of School-Based Suicide Prevention Programs.”

<sup>33</sup> United States Department of Health and Human Services Office of the Surgeon General and National Action Alliance for Suicide Prevention, *2012 National Strategy for Suicide Prevention: Goals and Objectives for Action*.

<sup>34</sup> Sam Tabachnik, “‘Our Kids are Suffering’: Colorado Attorney General Puts \$2.8M Toward New Effort to Address Youth Suicide,” *Denver Post*, October 16, 2018, <https://www.denverpost.com/2018/10/16/colorado-youth-suicide-crisis-mental-health/>.

<sup>35</sup> R. J. Fetsch, C.L. Collins, and D. Whitney, *Preventing Youth and Adult Suicide* (Ft. Collins, CO: Colorado State University Extension, 2008), <https://extension.colostate.edu/topic-areas/family-home-consumer/preventing-youth-and-adult-suicide-10-213/>.

<sup>36</sup> Brummet, Fine, Hindman, and Myer, *Office of Suicide Prevention Annual Report 2016-2017*.

<sup>37</sup> Colorado Department of Public Health and Environment, *2017 Executive Summary*.

*Changing Times and the Impact of Technology*

The National Strategy on Suicide Prevention used data from 2001 to 2009 to inform its primary objectives and goals.<sup>38</sup> This is problematic because several key factors have been identified in more recent years as having a potentially huge impact on teen suicide that simply did not exist during 2001 to 2009, or at least not on the scale that they do today. Some of these factors include internet addiction and cyberbullying.<sup>39</sup> Teen smartphone use in 2018 is near universal with 99% of U.S. teens owning their own cell phone, and the majority are online for most of every day.<sup>40</sup> Unfortunately, the guidance on suicide prevention in the National Strategy does not consider the impact of these issues whatsoever, let alone offer suggestions as how to mitigate these issues as a preventive strategy to teen suicide. Likewise, states across the nation, such as Colorado, may have outdated “evidence-based” programs and policies that conform to these federal objectives and recommendations from the previous decade.

To present a clearer picture of exactly how significant the technological changes have been in the lifestyles of teens, consider that in 2008 just 71% of teens had a cell phone,<sup>41</sup> and that smartphones did not even exist in the consumer market until September of 2008. The latest Pew Research Center study showed that in 2017, nearly all teens (95%) had access to a smartphone and a growing share of them (45%) describe being online as “almost constant,” a significant increase from the 24% who reported such in the 2014-2015 survey.<sup>42</sup> Ten years ago, nearly 40% of teens still reported communicating with their friends every day via *talking on a landline telephone*—truly a sign of the times—with communication via texting trailing behind at just 27%.<sup>43</sup>

In 2007, 32% of kids claimed to be bullied or harassed online or via text in some capacity (“cyberbullying”),<sup>44</sup> compared to nearly 60% that reported being victims of cyberbullying in

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<sup>38</sup> United States Department of Health and Human Services Office of the Surgeon General and National Action Alliance for Suicide Prevention, *2012 National Strategy for Suicide Prevention: Goals and Objectives for Action*.

<sup>39</sup> Ann John, Alexander C. Glendenning, Amanda Marchant, Paul Montgomery, Anne Stewart, Sophie Wood, Keith Lloyd, and Keith Hawton, “Self-Harm, Suicidal Behaviours, and Cyberbullying in Children and Young People: Systematic Review,” *Journal of Medical Internet Research*, 20, no. 4 (April 2018): e129, <https://doi.org/10.2196/jmir.9044>; Hinduja and Patchin, “Cyberbullying: Identification, Prevention, and Response;” Erick Messias, Kristi Kindrick, and Juan Castro, “School Bullying, Cyberbullying, or Both: Correlates of Teen Suicidality in the 2011 CDC Youth Risk Behavior Survey,” *Comprehensive Psychiatry* 55, no. 5 (July 2014): 1063-1068: <https://doi.org/10.1016/j.comppsy.2014.02.005>; Aksha M. Memon, Shiva G. Sharma, Satyajit S. Mohite, and Shailesh Jain, “The Role of Online Social Networking on Deliberate Self-Harm and Suicidality in Adolescents: A Systematized Review of Literature,” *Indian Journal of Psychiatry* 60, no. 4 (October-December 2018): 384-39, [https://doi.org/10.4103/psychiatry.indianjpsychiatry\\_414\\_17](https://doi.org/10.4103/psychiatry.indianjpsychiatry_414_17); Amanda Marchant, Keith Hawton, Ann Stewart, Paul Montgomery, Vinod Singaravelu, Keith Lloyd, and Ann John, “Correction: A Systematic Review of the Relationship between Internet Use, Self-Harm and Suicidal Behaviour in Young People: The Good, the Bad and the Unknown,” *PLOS ONE* 13, no. 3 (March 2018): e0193937, <https://doi.org/10.1371/journal.pone.0193937>.

<sup>40</sup> Monica Anderson and Jingjing Jiang, *Teens, Social Media and Technology 2018*, Washington, DC: Pew Research Center, 2018, <http://www.pewinternet.org/2018/05/31/teens-social-media-technology-2018>.

<sup>41</sup> Amanda Lenhart, Mary Madden, Alexandra Rankin MacGill, and Aaron Whitman Smith, *The Use of Social Media Gains a Greater Foothold in Teen Life as They Embrace the Conversational Nature of Interactive Online Media* (Washington, DC: PEW Internet and American Life Project, 2007), [https://www.pewinternet.org/wp-content/uploads/sites/9/media/Files/Reports/2007/PIP\\_Teens\\_Social\\_Media\\_Final.pdf.pdf](https://www.pewinternet.org/wp-content/uploads/sites/9/media/Files/Reports/2007/PIP_Teens_Social_Media_Final.pdf.pdf).

<sup>42</sup> Anderson and Jiang, *Teens, Social Media and Technology 2018*.

<sup>43</sup> Lenhart, Madden, MacGill, and Smith, *The Use of Social Media*.

<sup>44</sup> Amanda Lenhart, *Teens and Mobile Phones Over the Last 5 Years: Pew Internet Looks Back* (Washington, DC: Pew Research Center, 2009), <http://www.pewinternet.org/wp-content/uploads/sites/9/media/Files/Reports/2009/PIP-Teens-and-Mobile-Phones-Data-Memo.pdf>.

2017.<sup>45</sup> Those who are online almost constantly (45% of teens) are far more likely to experience cyberbullying (67%), and the majority of them also feel that cyberbullying is a “major problem,” one that teachers and politicians in particular have failed to control.<sup>46</sup> Additionally, the most recent empirical evidence consistently links high levels of internet use with sleep deprivation, inactivity and obesity, stress on social relationships and increased loneliness, distracted and unsafe driving behaviors, lack of general productivity, and mental wellness issues.<sup>47</sup> Most recent research also shows self-harming behaviors and suicidal ideation to be linked to high levels of internet use.<sup>48</sup>

### Social Media

In 2018, “cyberbullying” is perhaps no longer the only real danger to kids who spend time online. Kids today have what amounts to two separate lives: one lived in reality and one (or more) lived online. One of the many problems with kids spending excessive time online is that “digital life, and social media at its most complex, is an interweaving of public and private personas, a blending and splintering of identities unlike anything other generations have experienced.”<sup>49</sup> After researching and writing the story of Madison Holleran, the 19 year old Ivy League student and track star who jumped off a parking garage to her death, ESPN journalist Kate Fagan writes that today “it’s easier to feel connected online than to truly connect in real life. So plugging in becomes addicting. We’d rather sign on and feel some superficial sense of connection than work and possibly fail at true connection offline. Being in the real world can be uncomfortable, especially after you spend so much time online.”<sup>50</sup> Holleran was never found to have been bullied but did spend a significant amount of time each day texting friends and posting on Instagram. Fagan speculates that among other things, this double life spent cultivating her online image kept her from the genuine and authentic in-person relationships and communication that could have better identified her calls for help when reaching out prior to her death.<sup>51</sup> Sadly, Holleran’s story does not appear to be unique. While each suicide is complex, there is a growing number of suicides today that highlight the danger of lives lived online—isolated from, or incapable of forming, real-world connection.<sup>52</sup>

In October of 2018, following two suicides occurring within just three days at a high school in Littleton, Colorado, school administrators followed a familiar routine. Letters were sent to the school community offering crisis intervention, grief counselors were available for students at school, and parents were reassured of their commitment to zero tolerance on bullying. Interestingly, the students focused their attention elsewhere after the suicide deaths of their peers.

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<sup>45</sup> Anderson and Jiang, *Teens, Social Media and Technology 2018*.

<sup>46</sup> Ibid.

<sup>47</sup> Jeremy McCarthy, Brent Bauer, Amit Sood, Paul J. Limburg, Tanya Goodin, and Thierry Malleret, “Wellness in the Age of the Smartphone,” (Miami, FL: Global Wellness Institute, 2018) <https://www.globalwellnessinstitute.org/global-wellness-institute-blog/2018/4/10/new-report-wellness-in-the-age-of-the-smartphone>.

<sup>48</sup> Memon, Sharma, Mohite, and Jain, “The Role of Online Social Networking.”

<sup>49</sup> Kate Fagan, *What Made Maddy Run: The Secret Struggles and Tragic Death of an All-American Teen* (New York: Little, Brown and Company, 2017).

<sup>50</sup> Kate Fagan, *What Made Maddy Run*, 141.

<sup>51</sup> Ibid.

<sup>52</sup> Adam Gazzaley and Larry D. Rosen, *The Distracted Mind: Ancient Brains in a High-Tech World* (Cambridge, MA: The MIT Press, 2016).

At this high school, a push for Offline October went into effect, driven by students who saw an obvious problem with the amount of screen time and social media consumption among their classmates. Students interviewed commented that they wished for more face-to-face connection with others and felt this could be a far more powerful way to prevent these tragic deaths.<sup>53</sup> Offline October is a grass-roots movement started by four high school students in Littleton, Colorado, in 2017. This unique student-led organization created a website with promotional videos and flyers urging other students and schools to participate in going “screen free” and getting off social media for the full month of October. One of the group’s catch phrases, “don’t post a story, live one,” speaks strongly to the need for teens to stop living each moment simply for the photo or comment they can post to social media.<sup>54</sup> It is interesting to note that teens see a major problem with social media consumption and a failure to connect face-to-face with others, yet *reducing social media consumption is not a part of any known teen suicide prevention strategies to date.*

The National Strategy for Suicide Prevention makes no reference to individual internet usage, social media, gaming, or any other online activity or media type consumption that affects individuals on a daily, personal level.<sup>55</sup> Naturally the problems that exist today between social media, cyberbullying, and teen suicide were nearly non-existent in the timeframe which the National Strategy drew data from to form its conclusions (2001-2009). MySpace got going in 2005, Facebook kicked off in 2006, but it was only after teens started acquiring smartphones that social media profiles among youth started to rise around 2010. Even then, text messaging was still the dominant way for teens to connect with friends, not via social media.<sup>56</sup> In this way, teen use of technology alone is a sizeable missing piece from the data used to inform the National Strategy on Suicide Prevention.

The potential impact of social media on teen suicide is critical and should clearly be studied further in empirical research. Social media consumption could also be exacerbating other issues that are known correlations to suicidality such as diminishing supportive relationships, causing conflict between parents and children, and reducing involvement in school activities. Surveys show that teens spend a significant portion of every day online, with most (89%) reporting they are online “several times per day” or “almost constantly.”<sup>57</sup> Studies show that teens have mixed views on the effect social media is having on them and their peers, but many express concerns about bullying, and one in three believe social media to have a more negative than positive effect on their lives.<sup>58</sup>

Another concern is that the landscape of social media in which teens spend most of their time looks remarkably different than it did just three years ago and is constantly changing with new technology and newly developed online platforms. What kids prefer online one day might

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<sup>53</sup> Jennifer Brown, “Offline October: Littleton Students Organize Social Media Blackout after Teen Suicides,” *The Denver Post*, October 13, 2017, <https://www.denverpost.com/2017/10/13/offline-october-student-social-media-blackout/>.

<sup>54</sup> Offline October, <https://offlineoctober.com/>.

<sup>55</sup> United States Department of Health and Human Services Office of the Surgeon General and National Action Alliance for Suicide Prevention, *2012 National Strategy for Suicide Prevention: Goals and Objectives for Action*.

<sup>56</sup> Lenhart, Amanda, Rich Ling, Scott Campbell, and Kristen Purcell, *Teens and Mobile Phones: Text Messaging Explodes as Teens Embrace it as the Centerpiece of Their Communication Strategies with Friends* (Washington, DC: Pew Internet and American Life Project, 2010), <https://www.pewresearch.org/internet/2010/04/20/teens-and-mobile-phones/>.

<sup>57</sup> Anderson and Jiang, *Teens, Social Media and Technology 2018*.

<sup>58</sup> *Ibid.*

very well change by the next, thus making it more difficult for parents and schools to keep up with how, where, and with whom teens are spending all of this time online. Just 55% of teens had social media profiles ten years ago<sup>59</sup> versus the 88% that do today.<sup>60</sup> According to Pew Research data from 2015, 71% of teens used Facebook—a number that has dropped by 20% in 2018. Today the preferred social media platforms are YouTube, Instagram, and Snapchat, of which adults and parents use far less and are likely far less familiar with.<sup>61</sup>

Finally, a critical issue is the unknown affect that social media is having on the psychological development of children who use it, especially for those who do so excessively. Instagram is a favorite of teens today with over 70% of 18-year-olds using the platform, yet some preliminary research has shown negative outcomes on children who use it. Instagram was ranked the “most negative platform in terms of sleep (quality and amount of sleep), body image (how respondents felt about their looks), and FoMO (the “fear of missing out,” or the fear that people are missing out by not being present in their various social circles).”<sup>62</sup> There are also concerns about the way “social media functions as a ‘highlight reel’ rather than a true reflection of day-to-day life. In comparison to other social networks, Instagram is uniquely poised to set unrealistic expectations, feelings of inadequacy, and low self-esteem.”<sup>63</sup>

### News Media and Hollywood Portrayals of Suicide

Another critical area that should be addressed more pointedly is that children across the country are regularly digesting dangerous portrayals of suicide in both journalism and entertainment media. How Hollywood and the news media describe instances of suicide has been identified as a critical area in suicide prevention. The National Strategy for Suicide Prevention calls for the promotion of “responsible media reporting of suicide, accurate portrayals of suicide and mental illnesses in the entertainment industry, and the safety of online content related to suicide.”<sup>64</sup> These guidelines are supposed to minimize the effect of *suicide contagion*, a phenomenon that occurs when it is believed other suicides have occurred as the result of a primary suicide that was reported on negatively.<sup>65</sup> Through messaging, news reporters and entertainment industry representatives are uniquely positioned to change the narrative about teen suicide from one of stigma to one that supports getting help and having hope for recovery. In the interest of minimizing contagion while also “changing the conversation” about suicide, the Action Alliance

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<sup>59</sup> Lenhart, Madden, MacGill, and Smith, *The Use of Social Media*.

<sup>60</sup> Anderson and Jiang, *Teens, Social Media and Technology 2018*.

<sup>61</sup> *Ibid.*

<sup>62</sup> Brenda K. Wiederhold, “The Tenuous Relationship Between Instagram and Teen Self-Identity,” *Cyberpsychology, Behavior and Social Networking* 21, no. 4 (April 2018): 215-216, <https://doi.org/10.1089/cyber.2018.29108.bkw>, 215.

<sup>63</sup> Wiederhold, “The Tenuous Relationship Between Instagram and Teen Self-Identity.”

<sup>64</sup> United States Department of Health and Human Services Office of the Surgeon General and National Action Alliance for Suicide Prevention, *2012 National Strategy for Suicide Prevention: Goals and Objectives for Action*.

<sup>65</sup> Patrick W. O’Carroll, *Suicide Contagion and the Reporting of Suicide: Recommendations from a National Workshop* (Atlanta, GA: Centers for Disease Control and Prevention, 2001), <https://www.cdc.gov/mmwr/preview/mmwrhtml/00031539.htm>; United States Department of Health and Human Services Office of the Surgeon General and National Action Alliance for Suicide Prevention, *2012 National Strategy for Suicide Prevention: Goals and Objectives for Action*; World Health Organization, *Preventing Suicide: A Resource for Media Professionals, Update 2017* (Geneva: World Health Organization, 2017), [http://www.who.int/mental\\_health/prevention/suicide/resource\\_media.pdf](http://www.who.int/mental_health/prevention/suicide/resource_media.pdf).

(a private partner with the Department of Health and Human Services that collaborated on the National Strategy on Suicide Prevention in 2012) has put forth recommendations for reporting on suicide that include not using sensationalized headlines, not explicitly describing the suicide method, and not speculating on motives for the suicide or recounting what was written in a suicide note specifically.<sup>66</sup>

Despite this guidance from national standards, one recent study of 184 U.S. news articles showed journalists are largely not complying with these recommendations in how they report on suicides,<sup>67</sup> and what is happening with Hollywood's portrayal of teen suicide is questionable at best and inciting contagion at worst. Perhaps the most recognizable TV show to breach the subject of teen suicide in graphic detail is the Netflix original "13 Reasons Why," the network's most popular and widely viewed show of 2017. Google searches for "how to commit suicide" rose by 26% in the weeks following the release of the show, prompting serious concerns about contagion.<sup>68</sup> Another study found those concerns to be well placed. University of Michigan researchers surveyed 87 children in an in-patient facility following suicide related incidents and found that over half reported that watching "13 Reasons Why" increased their risk of suicide.<sup>69</sup> Also noted was that of the children who watched the show, the majority did so alone, and the average age of participants was 14 years old. Among those with significantly increased suicide risk following watching the show were those who more strongly identified with the series' main character.<sup>70</sup>

Taking a closer look at "13 Reasons Why," there is no adherence to the guidance from any of the major suicide prevention organizations on how to responsibly report on suicide. While the show's creator and writers claim they genuinely want to use this show to "change the conversation" and bring attention to the issue of bullying and sexual assault in relation to suicide in particular,<sup>71</sup> it presents a multitude of problems when the viewership of the show is primarily young teens and not the mature audience it should be intended for. Given the distinct lack of adherence to responsible suicide reporting portrayals in conjunction with the increased suicidality of at-risk youth who watch the show, it appears a more precise inspection of this show's messages are warranted to further examine this dynamic.

Despite the show's writers' intentions or motives, several dangerous messages appear throughout the show for child viewers. First is that despite the presence of caring, well-intentioned "trusted adults," the code of silence between teens and adults should be kept at all costs. Several scenes depict dialogue between teen characters insisting that trusted adults should not be informed of even the most serious situations—felonies included. At least three other characters (in addition

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<sup>66</sup> United States Department of Health and Human Services Office of the Surgeon General and National Action Alliance for Suicide Prevention, *2012 National Strategy for Suicide Prevention: Goals and Objectives for Action*.

<sup>67</sup> Rachel Young, Roma Subramanian, Stephanie Miles, Amanda Hinnant, and Julie Andsager, "Social Representation of Cyberbullying and Adolescent Suicide: A Mixed-Method Analysis of News Stories," *Health Communication* 5, no. 9 (September 2017): 1082-1092, <https://doi.org/10.1080/10410236.2016.1214214>.

<sup>68</sup> John W. Ayers, Benjamin M. Althouse, Eric C. Leas, Mark Dredze, and Jon-Patrick Allem, "Internet Searches for Suicide Following the Release of *13 Reasons Why*," *JAMA Internal Medicine* 177, no. 10 (July 2017): 1527-1529, <http://doi.org/10.1001/jamainternmed.2017.3333>.

<sup>69</sup> Victor Hong, Cynthia J. Ewell Foster, Christina S. Magness, Taylor C. McGuire, Patricia K. Smith, Cheryl A. King, "13 Reasons Why: Viewing Patterns and Perceived Impact Among Youths at Risk of Suicide," *Psychiatric Services* 70, no. 2 (Feb 2019): 107-114, <http://doi.org/10.1176/appi.ps.201800384>.

<sup>70</sup> Ibid.

<sup>71</sup> Nic Sheff, "13 Reasons Why Writer: Why We Didn't Shy Away from Hannah's Suicide," *Vanity Fair*. April 19, 2017, <https://www.vanityfair.com/hollywood/2017/04/13-reasons-why-suicide-controversy-nic-sheff-writer>.

to the main character who already completed suicide) profess suicidal ideation and near-attempts to their peers, but never are they encouraged to seek help with trusted adults or mental health professionals—and none do. Other scenes illustrate the message that even when trusted adults are asked for help, they can neither fully understand the situation nor do anything to help. This is the case for the main character who committed suicide after finally seeking help from a trusted adult (her high school counselor) about being sexually assaulted. This pervasive message that adults cannot actually be trusted is a heavy contradiction to the current prevention programs like Sources of Strength that emphasize and rely almost exclusively on a message of the importance of trusting adults.

In the face of a media and entertainment industry that, while perhaps genuine in their desire to destigmatize suicide, is failing to adhere to responsible reporting measures that reduce instances of contagion, it should be considered that parents step in and monitor the media consumption of their children. This is particularly critical for those children who are already struggling with mental illness or suicidal ideation, but for all other children as well the impact of viewing graphic portrayals of a violent suicide and the other dangerous messages of shows like “13 Reasons Why” are harmful and numerous.<sup>72</sup> Controlling Hollywood or individual journalists is problematic for a variety of reasons to include that of First Amendment free speech. However, teen suicide prevention strategy might try to reduce the impact of irresponsible and graphic portrayals of suicide, especially in entertainment media, by more directly enlisting parents in the task of censoring explicit TV shows or movies. This is especially important for younger or more vulnerable teens who are not emotionally equipped to process themes and portrayals of suicide in a healthy or mature way.<sup>73</sup>

### Access to Mental Health Services

Some teen suicide prevention programs, such as the popular Garrett Lee Smith Youth Suicide Prevention Program, show that “gatekeeper training” (training teachers and others with primary access to teens to identify and support kids who need access to mental health services) can reduce suicide mortality.<sup>74</sup> However, the relationship between access to mental health services and reducing the teen suicide rate is tenuous at best. Utilizing mental health services when appropriate is likely beneficial to overall health in most cases, but there is little evidence showing that access alone (in the absence of perhaps a “gatekeeper” who takes a specific interest in the teen’s life and circumstances) has a significant impact on reducing teen suicide. Many studies have confirmed that teens with suicidal ideation are far less likely than those without suicidal ideation to seek help from any source. Even when mental health services are provided, the utilization of such services is historically low among such individuals.<sup>75</sup> Notably, studies also show that a large

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<sup>72</sup> Madelyn Gould, Patrick Jamieson, and Daniel Romer, “Media Contagion and Suicide Among the Young,” *American Behavioral Scientist* 46, no. 9 (May 2003): 1269-1284, <http://www.doi.org/10.1177/0002764202250670>; Hong, Foster, Magness, McGuire, Smith, and King, “13 Reasons Why.”

<sup>73</sup> Hong, Foster, Magness, McGuire, Smith, and King, “13 Reasons Why.”

<sup>74</sup> Christine Walrath, Lucas G. Garraza, Hailey Reid, David B. Goldston, and Richard McKeon, “Impact of the Garrett Lee Smith Youth Suicide Prevention Program on Suicide Mortality,” *American Journal of Public Health* 105, no. 5 (May 2015): 986-993, <https://doi.org/10.2105/AJPH.2014.302496>.

<sup>75</sup> Pamela A. Carlton and Frank P. Deane, “Impact of Attitudes and Suicidal Ideation on Adolescents’ Intentions to Seek Professional Psychological Help,” *Journal of Adolescence* 23, no. 1 (February 2000). 35-45, <https://doi.org/10.1006/jado.1999.0299>; Melanie Hom, Ian H. Stanley, and Thomas E Joiner Jr., “Evaluating Factors and Interventions that Influence Help-Seeking and Mental Health Service Utilization among Suicidal Individuals: A

number of teens today have emotional problems, yet the majority of those who do seek help do so from their friends rather than from parents or professionals.<sup>76</sup> A systematic review of 17 studies on help-seeking behaviors among youth with suicidal ideation found the rates of mental health service use to be consistently below 50%.<sup>77</sup> Thus, prevention programs that focus heavily on positioning additional mental health providers and screening in a school setting could be significantly less effective than focusing resources on other strategies.

An additional and compelling problem is that the use of mental health screening and treatment is only helpful in identifying and treating those *who have already developed mental health problems and suicidal ideation*. In this way, the use of mental health services could be considered a defensive tactic at best, and one that is only useful once the initial problems leading to suicide have already occurred and set in. Arguably, mental health services and intervention strategies that are being utilized are akin to putting a bandage on a pre-existing wound. They are treating a symptom as opposed to preventing a disease. This strategy fails to address the root causes of the systemic problems of depression and anxiety, which ultimately lead to the suicidal ideation. The U.S. Surgeon General also recognizes that suicide is not exclusively a mental health problem,<sup>78</sup> and other factors just as critical to teen suicide must be addressed just as rigorously when policies and programs are being developed.

#### “Access to a Trusted Adult” and Parental Involvement

Many teen suicide prevention programs heavily emphasize the presence of, or access to, a trusted adult; however, these programs have not been found to significantly reduce suicide attempts.<sup>79</sup> There is also a lack of any empirical research establishing a connection between trusted adult access and suicidal ideation or attempts. Programs like Sources of Strength heavily emphasize the importance of the trusted adult and focus most of their social messaging on this issue. Peer leaders are to model the importance of trusting adults in times of crisis and encourage

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Review of the Literature,” *Clinical Psychology Review* 40, (August 2015): 28-39, <https://doi.org/10.1016/j.cpr.2015.05.006>; Jina Pagura, Sarah Fotti, Laurence Y. Katz, and Jitender Sarren, “Help Seeding and Perceived Need for Mental Health Care among Individuals in Canada with Suicidal Behaviors,” *Psychiatric Services* 60, no. 7 (July 2009): 943-949, <https://doi.org/10.1176/ps.2009.60.7.943>; Substance Abuse and Mental Health Services Administration, “Half of Adults with Serious Thoughts of Suicide Did Not Receive Mental Health Services,” *The NSDUH Report* (Washington, DC: Department of Health and Human Services, 2014), <http://www.samhsa.gov/data/sites/default/files/spot136-suicide-services-2014.pdf>.

<sup>76</sup> Madelyn S. Gould, Drew Velting, Marjorie Kleinman, Christopher Lucas, John Graham Thomas, and Michelle Chung, “Teenagers’ Attitudes about Coping Strategies and Help-Seeking Behavior for Suicidality,” *Journal of the American Academy of Child and Adolescent Psychiatry* 43, no. 9 (September 2004): 1124–1133, <http://doi.org/10.1097/01.chi.0000132811.06547.31>; Amiram Raviv, Alona Raviv, Idit Vago-Gefen, and Abby Schacter Fink, “The Personal Service Gap: Factors Affecting Adolescents’ Willingness to Seek Help,” *Journal of Adolescence* 32, no. 3 (June 2009): 483-489, <https://doi.org/10.1016/j.adolescence.2008.07.004>.

<sup>77</sup> Lisa Michelmores and Peter Hindley, “Help-Seeking for Suicidal Thoughts and Self-Harm in Young People: A Systematic Review,” *Suicide and Life-Threatening Behavior* 42, no. 5 (October 2012): 507-524, <https://doi.org/10.1111/j.1943-278x.2012.00108.x>.

<sup>78</sup> United States Department of Health and Human Services Office of the Surgeon General and National Action Alliance for Suicide Prevention, *2012 National Strategy for Suicide Prevention: Goals and Objectives for Action*.

<sup>79</sup> Robinson, Cox, Malone, Williamson, Baldwin, Fletcher, and O'Brien, “A Systematic Review of School-Based Interventions.”

classmates to identify and seek out help from the trusted adults in their own lives.<sup>80</sup> This may add to the positive social ecology in schools; however, some questions about this strategy should be considered, such as, why are parents no longer the de-facto “trusted adult” in a child’s life? Further, if parents are not or cannot be a “trusted adult,” would not this present its own set of potential disadvantages and negative outcomes in that particular child’s life? What is happening among teens that has led so few of them to trust and connect with parents? Perhaps these root-cause issues should be considered first, as custodial parents would seemingly be the best and most accessible “trusted adult” a child could have—and the person most likely to discover any red flags of mental illness or suicidal ideation for that child.

While research is inconclusive on the “trusted adult” impact on suicide, studies do show that children with broken familial relationships, and specifically problems with parents, are at significantly greater risk for suicidal ideation.<sup>81</sup> Additionally, familial discord such as divorce, absent parents, and high levels of parental conflict has been consistently linked to a host of negative outcomes for children including mental illness that can lead to suicidal ideation.<sup>82</sup> Overall, it may be important to circle back and first consider why there is such a need to find or establish trusted adults in the lives of teens to begin with and then reexamine through research any potential statistical links between the presence of trusted adults and teen suicide.

Parents are clearly in the best position to not only support their child in times of crisis—as their “trusted adult”—but also to identify potential problems and assist with solutions. It is likely more feasible for bureaucrats and school administrators to emphasize access to mental health resources and screening instead of trying to find solutions to the complicated problems that research has associated with teen suicide—namely cyberbullying and excessive time online—problems that often take place outside of schools and are more able to be identified and impacted by parents. Curtailing those issues can truly only happen if families are involved to the extent that they take proactive measures to limit their child’s access to unhealthy amounts and types of media. Further, it is a parent or custodial guardian that can most readily ascertain the appropriate limits for their child and can enforce said limits or take corrective measures for the well-being of their child. Additionally, it can be incredibly difficult to identify and/or change the behaviors of someone else’s child, as parents of bullied children often know too well. In some instances, the school is bound by policies that protect both parties and their hands are tied when dealing with “he said, she said” accounts of bullying victimization, and no witnesses or physical evidence of wrongdoing. Issues like these have made dealing with instances of bullying or cyberbullying appropriately—and holding bullies accountable—exceedingly difficult. Thus, it seems it would be beneficial for schools to take a new approach in reaching out more directly to parents who have likely have more options for dealing with such situations than do school administrators.

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<sup>80</sup> Peter A. Wyman, C. Hendricks Brown, Mark LoMurray, Karen Schmeelk-Cone, Mariya Petrova, Qin Yu, Erin Walsh, Xin Tu, and Wei Wang, “An Outcome Evaluation of the Sources of Strength Suicide Prevention Program Delivered by Adolescent Peer Leaders in High Schools,” *American Journal of Public Health* 100, no. 9 (September 2010): 1653-1661, <http://doi.org/10.2105/AJPH.2009.190025>.

<sup>81</sup> Holland, Vivolo-Kantor, Logan, and Leemis, “Antecedents of Suicide among Youth Aged 11–15.”

<sup>82</sup> Christy Kleinsorge and Lynne M. Covitz, “Impact of Divorce on Children: Developmental Considerations,” *Pediatrics in Review* 33, no. 4 (April 2012): 147-54, <http://doi.org/10.1542/pir.33-4-147>; Sara McLanahan, Laura Tach, and Daniel Schneider, “The Causal Effects of Father Absence,” *Annual Review of Sociology* 39 (July 2013): 399-427, <https://doi.org/10.1146/annurev-soc-071312-145704>; Daniel Potter, “Psychosocial Well-Being and the Relationship between Divorce and Children's Academic Achievement,” *Journal of Marriage and Family* 72, no. 4 (July 2010): 933-946, <https://doi.org/10.1111/j.1741-3737.2010.00740.x>.

Recent studies have linked both peer victimization and perpetration, and youth suicide with poor familial situations—and more specifically, broken relationships with parents.<sup>83</sup> CDC data confirms the leading antecedent to suicide is relationship problems—identified in 42% of the suicides in their sample.<sup>84</sup> Specifically for adolescents and teens, who are already at risk for conflict between them and parents, a focus on stability in the home and trusting familial relationships could be helpful. One study found that interventions that are specifically directed at enhancing personal resiliency through “more consistent parenting, positive parent-child relationships, and adaptive coping have been shown to have long-lasting impact in at-risk populations.”<sup>85</sup> A 2018 study utilizing data from a randomized sample of 482 suicide deaths of children aged 11-15 found the most prevalent antecedent to suicide was relationship problems, particularly with parents.<sup>86</sup> This study and others highlight the critical need to engage family members more directly in suicide prevention strategies and to emphasize the critical need for healthy and *authentic* interpersonal relationships.

The National Strategy lists “Risk and Protective Factors” in a social ecological model, where “connectedness to family” is listed as a minor subset that also includes “connectedness to individuals” in general as well as “connectedness to social institutions.” The explanation then gives the example that “high conflict or violent relationships” as well as “family history of suicide” would be where such relationships might cause risk factors for suicide. Given the importance of parental support and involvement in teen suicide risk, it is interesting that “connectedness to family” (specifically parents) is not elaborated on more thoroughly. Further, should connectedness to family really be on the same level of importance (when dealing with suicide risk) as having “connectedness to social institutions?”<sup>87</sup>

Family involvement is a key component that is missing in most teen suicide prevention programs. Certainly, the wording of such written plans and objectives references how important family involvement is; however, there is rarely any mention of *how* families should be actively involved or what specific steps they should take to prevent such suicide antecedents like depression, bullying, or substance abuse in their teen’s life. Additionally, any reference to family involvement usually has to do with family members recognizing warning signs or specific behaviors that signal a potentially suicidal teen. Beyond this, there is little for a family to do other than wait and hope their child does not become suicidal, and if they do, hope they recognize a specific sign that has been mentioned to them at some point as a red flag.

In order for family involvement to be used as a truly preventive measure to suicidal ideation, strategies should include more specific action items that make parents aware of: (1) the reality and dangers of where and how often their child and his or her peers are online, (2) how to proactively talk to their child about the risks of online addiction, cyberbullying, social media, etc., and (3) how they can control for some of the more common dangers and social problems teens are

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<sup>83</sup> “Suicide Rising Across the U.S.,” Holland, Vivolo-Kantor, Logan, and Leemis, “Antecedents of Suicide among Youth Aged 11–15;” Kann, McManus, Harris, Shanklin, Flint, Queen, Lowry, Chyen, Whittle, Thornton, Bradford, Yamakawa, Leon, Brener, and Ethier, “Youth Risk Behavior Surveillance—United States, 2017;” McDougall and Vaillancourt, “Long-term Adult Outcomes of Peer Victimization in Childhood and Adolescence.”

<sup>84</sup> “Suicide Rising Across the U.S.”

<sup>85</sup> Glowinski, Bucholz, Nelson, Fu, Madden, Reich, and Heath, “Suicide Attempts in an Adolescent Female Twin Sample,” 1300.

<sup>86</sup> Holland, Vivolo-Kantor, Logan, and Leemis, “Antecedents of Suicide among Youth Aged 11–15.”

<sup>87</sup> United States Department of Health and Human Services Office of the Surgeon General and National Action Alliance for Suicide Prevention, *2012 National Strategy for Suicide Prevention: Goals and Objectives for Action*.

facing. Some specific examples could be disseminating information to parents about how to utilize online parent controls to monitor content that children are viewing, how to use tools that measure and track total time spent online, raising awareness about the messaging in TV programs like “13 Reasons Why,” or simple periodic reminders of the potential (and many) harms that excessive time online or using social media can create.

### Anti-Bullying Programs

Today, the link between youth suicides and bullying is undeniable,<sup>88</sup> especially so among minority and LGBTQ youth.<sup>89</sup> In the aftermath of a teen suicide, the presence of bullying is also often cited by parents or peers in news reports as a potential catalyst for the incident. A focus on bullying suggests what could be a simple solution by most politicians or school administrators: reduce the bullying and teen suicide will also be reduced. Lawmakers as well often want what appears to be a silver-bullet or quick fix,<sup>90</sup> especially so for a high visibility and emotional problem like teen suicide. However, in general, anti-bullying campaigns have been as ineffective as teen suicide prevention programs, and both bullying and suicide continue to escalate as major problems in the social ecology of most high schools.

Bullying among teens has been targeted by school-based prevention programs since the 1999 mass shooting at Columbine High School. Though bullying has always been present and problematic, never before had bullying been pin-pointed as the potential cause of a massive act of teen homicide against peers (in addition to the suicide of the two killers themselves). The collective conscience of the nation was shocked, and as more evidence of the two teens having been targeted by bullies emerged, more pressure came down on legislators and school administrators to take action. Bullying was likely a contributing factor in the Columbine shooting; however, many other factors were present as well, such as strained familial relationships and conflict with parents, past criminal history, and psychological issues such as depression.<sup>91</sup> The many variables of the two shooters’ motives that were exposed over the following years of investigation were complex; however, lawmakers took immediate action on the simplest single cause—bullying.<sup>92</sup> Lawmakers and school administrators did not have a silver bullet solution to fix familial discord or the complicated history that led to Dylan Klebold’s depression or Eric Harris’ proclivity for burglary, but they believed they could at least try to stop kids from harassing one another.

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<sup>88</sup> Dorothy L. Espelage, “Introduction: Bullying, Sexual Violence, and Suicide in Education,” in *The Wiley Handbook on Violence in Education: Forms, Factors, and Preventions*, ed. Harvey Shapiro, 323-326 (Hoboken, NJ: John Wiley and Sons, 2018); Ian H. Stanley, Lisa M. Horowitz, Jeffrey A. Bridge, Elizabeth A. Wharff, and Stephen J. Teach, “Bullying and Suicide Risk among Pediatric Emergency Department Patients,” *Pediatric Emergency Care* 32, no. 6 (June 2016): 347-351, <https://doi.org/10.1097/PEC.0000000000000537>

<sup>89</sup> Richard Montoro, K. Igartua, and B. D. Thombs, “The Association of Bullying with Suicide Ideation and Attempt Among Adolescents with Different Dimensions of Sexual Orientation,” *European Psychiatry* 33 (March 2016): S71. <https://doi.org/10.1016/j.eurpsy.2016.01.984>; Anna S. Mueller, Wesley James, Seth Abrutyn, and Martin L. Levin, “Suicide Ideation and Bullying among US Adolescents: Examining the Intersections of Sexual Orientation, Gender, and Race/Ethnicity,” *American Journal of Public Health* 105, no. 5 (May 2015): 980-985, <https://doi.org/10.2105/ajph.2014.302391>.

<sup>90</sup> Daniel P. Mears, *American Criminal Justice Policy: An Evaluation Approach to Increasing Accountability and Effectiveness* (New York: Cambridge University Press, 2010.)

<sup>91</sup> Dave Cullen, *Columbine* (New York: Twelve, Hachette Book Group, 2009).

<sup>92</sup> Daniel P. Mears, Melissa M. Moon, and Angela J. Thielo, “Columbine Revisited: Myths and Realities about the Bullying-School Shootings Connection,” *Victims & Offenders* 12, no. 6 (2017): 939-955, <https://doi.org/10.1080/15564886.2017.1307295>.

Since 1999, all fifty states have passed anti-bullying legislation. Laws vary from state to state but most require all schools to have some form of anti-bullying policy as well as standards for teachers to report instances of bullying to higher levels of authority. Hundreds of school-based anti-bullying programs have been developed and utilized, but when evaluated, few showed even modest correlations to decreased rates of bullying.<sup>93</sup> Empirical research has also failed to identify what the critical components of an effective anti-bullying program actually are.<sup>94</sup> Some concerns have also been raised about various school programs that are little more than posters on the wall. Messaging about zero tolerance for bullying abounds, and while teachers and even students may be able to stop something they witness during class or in the hallways, there is little that has been effective in addressing the bullying that spills over beyond the classroom.<sup>95</sup> This bullying that persists beyond the classroom should be the most critical new area of concern, given the 24/7 connection students now maintain with their classmates on their smartphones and various other devices.

Another reason bullying has been a difficult issue for schools to tackle is because until very recently, there has been no single definition of bullying.<sup>96</sup> This makes taking action even more complicated when bullying takes on less conventional forms that do not meet objective standards. Today, we know bullying can be highly nuanced and extremely subtle, with few teachers or other adults even able to detect it when looking.<sup>97</sup> One in five students report being bullied “at school;”<sup>98</sup> however, this may be a gross underrepresentation of the actual bullying that is occurring today. Much of the research conducted on bullying in the past decade focuses on bullying specifically in the school setting (i.e. happening on school grounds), thus eliminating much of the potential reporting on bullying between students that takes place via texting or on social media or gaming platforms.

Most children used to have some reprieve from bullies, classroom drama, or any other negative situations at school—every evening, weekend, holiday, and all summer long when school was not in session. Today this is not the case. Group texting, social media, online gaming, and videos posted to YouTube, Instagram or Snapchat are just a few of the many ways teens spend their hours outside (and for many even while inside) school walls. All of these are forums that often leave kids open and exposed to dozens, or more likely hundreds, of peers as well as strangers.

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<sup>93</sup> Christopher J. Ferguson, Claudia San Miguel, John C. Kilburn, and Patricia Sanchez. “The Effectiveness of School-Based Anti-Bullying Programs: A Meta-Analytic Review.” *Criminal Justice Review* 32, no. 4 (December 2007): 401–414. <http://doi.org/10.1177/0734016807311712>; Maria M. Ttofi, and David P. Farrington. “Effectiveness of School-Based Programs to Reduce Bullying: A Systematic and Meta-Analytic Review.” *Journal of Experimental Criminology* 7, no. 1 (March 2011): 27–56. <http://doi.org/10.1007/s11292-010-9109-1>.

<sup>94</sup> Shelley Hymel, Robyn McClure, Miriam Miller, Ellen Shumka, and Jessica Trach, “Addressing School Bullying: Insights from Theories of Group Processes,” *Journal of Applied Developmental Psychology* 37 (March–April 2015): 16–24. <https://psycnet.apa.org/doi/10.1016/j.appdev.2014.11.008>.

<sup>95</sup> Hinduja and Patchin, “Cyberbullying: Identification, Prevention, and Response.”

<sup>96</sup> Mears, Moon, and Thielo, “Columbine Revisited.”

<sup>97</sup> Susan M. Swearer, Meredith Martin, Marc Brackett, and Raul A. Palacios II, “Bullying Intervention in Adolescence: The Intersection of Legislation, Policies, and Behavioral Change,” *Adolescent Research Review* 2, no. 1 (March 2017): 23–35. <http://doi.org/10.1007/s40894-016-0037-9>.

<sup>98</sup> Kann, McManus, Harris, Shanklin, Flint, Hawkins, Queen, Lowry, Olsen, Chyen, Whittle, Thornton, Lim, Yamakawa, Brener, and Zaza, “Youth Risk Behavior Surveillance—United States, 2015;” Tracy Evian Waasdorp, Elise T. Pas, Benjamin Zablotzky, and Catherine P. Bradshaw, “Ten-Year Trends in Bullying and Related Attitudes Among 4th- to 12th-Graders,” *Pediatrics* 139, no. 6 (June 2017): e20162615. <https://doi.org/10.1542/peds.2016-2615>.

The multitude of harms from peer victimization are well documented, and include significant impact on “academic functioning, physical health and neurobiology, social relationships, self-perceptions, and mental health.”<sup>99</sup> The International Survey of Children’s Well Being collected data that showed more than one third of school-aged children experience bullying victimization.<sup>100</sup> Bullying was an identified problem in 22% of the teen suicide cases studied in one report of teens who committed suicide between 2003 and 2014;<sup>101</sup> however, it is expected this number could be much higher today given the increased use of social media in the last few years alone in addition to the increases in both how many hours per day teens spend online and how the differing concepts of “bullying” vs. “cyberbullying” may be misused when reporting victimization.

Many anti-bullying strategies appear to have the same fatal flaws that youth suicide prevention strategies do: they rely on kids alerting a trusted adult, they discount or simply fail to include active participation from parents, and they fail (or refuse) to acknowledge the dangers of spending excessive amounts of time online. Thus, in the same way that suicide prevention strategies must change to reflect the reality of kids’ lives today, so too do anti-bullying strategies. However, regarding bullying specifically, perhaps the most effective tool of all would be to simply encourage kids to spend less time online, as statistics show they would then be far less likely to become victims of bullying or harassment.<sup>102</sup> This, and other strategies for prevention, should be considered more thoroughly, particularly so as they relate to increased levels of teen suicide.

### Conclusion

While a stated goal of the U.S. Surgeon General is to reduce suicides by 20% by the year 2020,<sup>103</sup> it is clear that “changing the conversation” on suicide, supplying schools with additional counselors, and encouraging teens to alert trusted adults are doing little to reach that goal. Strategies like these that have been outlined in the National Strategy for Suicide Prevention and by other suicide prevention organizations are essentially reactive instead of proactive to the true problems that are fueling suicide. If teen suicide prevention strategies are to be truly an attempt at prevention, they must focus more heavily on the antecedents that have been identified as causes of depression and leading to suicidal ideation—like bullying, broken relationships, internet addiction, and parent-child conflict.

There is certainly merit in continuing to provide appropriate access to mental health services, as well as in continuing to foster prosocial culture in school environments and positive strength-based messaging. While the potential benefits of anti-bullying and suicide prevention

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<sup>99</sup> Janet Hicks, Lynn Jennings, Stephen Jennings, Stephan Berry, and Dee-Anna Green, “Middle School Bullying: Student Reported Perceptions and Prevalence,” *Journal of Child and Adolescent Counseling* 4, no. 3 (February 2018): 195-208, <http://doi.org/10.1080/23727810.2017.1422645>; McDougall and Vaillancourt, “Long-term Adult Outcomes of Peer Victimization in Childhood and Adolescence,” 300; Murat Haner and Heejin Lee, “Placing School Victimization in a Global Context,” *Victims and Offenders* 12, no. 6 (October 2017): 845-867, <http://doi.org/10.1080/15564886.2017.1361675>.

<sup>100</sup> Gwyther Rees and Gill Main, *Children’s Views on Their Lives and Well-Being in 15 Countries: A Report on the Children’s Worlds Survey, 2013-14* (York, UK: Children’s World Project, 2015), <https://www.york.ac.uk/inst/spru/research/pdf/ChildrensWorlds.pdf>.

<sup>101</sup> Kann, McManus, Harris, Shanklin, Flint, Queen, Lowry, Chyen, Whittle, Thornton, Bradford, Yamakawa, Leon, Brener, and Ethier, “Youth Risk Behavior Surveillance—United States, 2017.”

<sup>102</sup> Anderson and Jiang, *Teens, Social Media and Technology 2018*.

<sup>103</sup> United States Department of Health and Human Services Office of the Surgeon General and National Action Alliance for Suicide Prevention, *2012 National Strategy for Suicide Prevention: Goals and Objectives for Action*.

programs in schools are complicated to measure, they undoubtedly do good in some ways. The danger, however, is in assuming such programs are doing enough to combat these problems when the evidence clearly shows that suicide itself has not been significantly impacted and other factors must be addressed. Empirical evidence shows that addressing these factors specifically has the potential to prevent the *feelings of hopelessness* that lead to suicidal ideation. In preventing the lead-up to suicidal thoughts—as opposed to confronting and treating suicidal ideation after it has already become a problem—perhaps the rates of completed teen suicide can be reduced. Such strategies aim to curtail the social problems associated with suicidal ideation before they even start.

The goal of most suicide prevention campaigns is to prevent completion of the actual suicide act, not prevention of the root causes to suicidal ideation itself. It is clear that suicidal behavior is highly complex and is often the result of a “constellation of factors;”<sup>104</sup> however, when looking at the most current empirical data, several key factors do emerge with strong potential links to suicidality. Factors like social media consumption are being connected to a host of new problems for teens, especially given the significant amount of time they are spending online each day. Cyberbullying has been a problem on the radar for schools for decades, but in the last several years alone, it has risen dramatically. The negative outcomes for kids with poor parental relationships have been consistently shown in the research for decades, but more recently that has included strong correlations to both peer victimization and suicide among children. Overall, it is critical that teen suicide prevention strategies address research-based factors like these more directly than utilizing social messaging campaigns of “hope and strength” and relying on teens to seek help with adults when it is known from empirical research that the majority who are at risk will never do so.

Finally, current suicide prevention programs for teens must be evaluated on the basis for their reduction of suicide—not simply for how well they increase student and staff knowledge or change perceptions. There should also be a more objective standard for programs touting the label of “evidence-based,” and it should be limited to only those that show significant results that are measuring reduction in suicidal ideation, suicide attempts, or completed suicides. The academic community must strengthen the evidence base of the programs that are being funded and implemented across the country, so that critical resources are not being funneled into strategies that have done little to reduce suicide mortality among teens.

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<sup>104</sup> Holland, Vivolo-Kantor, Logan, and Leemis, “Antecedents of Suicide among Youth Aged 11–15.”

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