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Implementing the national suicide prevention strategy: Time for action to flatten the curve

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ABSTRACT

Since 1999, the Office of the United States Surgeon General has identified suicide prevention as a national public health priority. The National Strategy on Suicide Prevention, coordinated by the public-private Action Alliance, was most recently updated in 2012. In early 2021, the Surgeon General's office released a Call to Action to fully implement the national strategy. Six core types of actions to prevent suicide include adopting a broad public health approach, addressing upstream factors including social determinants of health, reducing access to multiple forms of lethal means, adopting evidence-based care for persons at risk, enhancing crisis care and care transitions, and improving the quality and use of suicide-related data. From 1999 through 2018, suicide rates in the U.S. increased by approximately one-third, and suicide had become the tenth leading cause of death. While most recent national data indicate a small reduction in the suicide rate, decreases were not seen across all demographic groups. Population groups which may require special emphasis or outreach efforts include adolescents, working age adults, military veterans, and American Indians/Alaskan Natives. Increases in social isolation, mental distress, and economic hardship during the COVID-19 pandemic indicate clear needs to address the full spectrum of suicidal behavior. This will require a multisector and whole of government approach, using contemporary evidence-informed approaches and best practices as well as innovative methods including those based on predictive analytics.

One of the informal functions of the Office of the U.S. Surgeon General (OSG) is to identify national public health priorities. In 1999, Surgeon General Dr. David Satcher released a report calling for action to prevent suicide (Satcher, 1999). This initiative was encouraged and supported by individual professionals and organizations engaged in suicide prevention (Hendin, 2000). The original National Strategy for Suicide Prevention followed shortly thereafter in 2001 (Center for Mental Health Services and OSG, 2001). The National Action Alliance for Suicide Prevention, formed in 2010, emerged as a key public-private partnership group working toward decreasing the numbers of suicides. Jointly with OSG, in 2012 the Action Alliance produced a revised National Strategy for Suicide Prevention (DHHS and Action Alliance, 2012). In this commentary we focus on the time period since the release of that report which represents the most recent National Strategy, reviewing trends in the epidemiology of suicide and suicidal behavior, providing an overview of the recently released Surgeon General's Call to Action to fully implement the National Strategy (US Department of

Health and Human Services, 2021), and sharing a preliminary vision of an evidence-based, comprehensive public health approach to suicide prevention.

While each suicide represents an individual tragedy that has extensive effects on families and within communities (Cerel et al., 2019), data trends also clearly indicate that suicide must be addressed at the level of population health. Over the past two decades, the U.S. suicide rate increased by more than 30%, up to 14.2/100,000 in 2018. This makes suicide the tenth leading cause of death overall, and the second leading cause for persons age 10–34. While the 2019 data indicated approximately a 2% decrease in the suicide rate, there are reasons not to be overly encouraged by this finding. The decline, which still represents more than 47,500 deaths due to suicide, may not represent the start of a positive trend but rather simply indicate year to year fluctuation in surveillance data (Stone et al., 2021). Additionally, suicides may be subject to ongoing systematic underreporting (Snowdon and Choi, 2020). Extrapolating from published estimates that up to 135 people are

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affected by each suicide (Cerel et al., 2019), in 2019 more than 6.4 million people—nearly 2% of the population—knew someone who died by suicide.

Focus on overall rates of suicide may also mask concerning trends among demographic and geographic subgroups. In 2019, Whites were the only racial or ethnic group to experience a significant decline in suicides, and only five states saw statistically significant decreases in their overall rates while Hawaii and Nebraska experienced significant increases. The rate for American Indian/Alaskan Native (AI/AN) persons was more than 60% higher than the national average. Rural-urban disparities were also marked, with the most rural areas experiencing approximately 80% higher rates compared with the most urban (Stone et al., 2021). Persons with certain occupations, for example construction workers, may face elevated risks of suicide (Peterson et al., 2018).

In a year when seemingly everything in public health revolved around the COVID-19 pandemic, the pandemic also illuminated issues important to suicide prevention that had been hiding in plain sight. The pandemic has been associated with increases in social isolation, mental distress, and economic insecurity, all of which have the potential to increase risks for suicidality (Czeisler et al., 2021). Other major causes of years of potential life lost which share with suicide risk factors such as isolation, for example drug overdoses, increased during the pandemic (Ahmad et al., 2021). The release by the Office of the Surgeon General in early 2021 during the tenure of VADM Jerome Adams of a Call to Action (CTA) to Implement the National Strategy for Suicide Prevention (US Department of Health and Human Services, 2021) therefore comes at a crucial time for the lifesaving work of suicide prevention. Key partners in shaping the CTA included the Action Alliance, led by Co-Chairs from both the public and private sectors, the U.S. Department of Veterans Affairs (Adams and van Dahlen, 2021), the Centers for Disease Control and Prevention (CDC), and the Substance Abuse and Mental Health Services Administration. The experiences of persons affected by suicide, including those who have survived suicide attempts, also play a crucial cross-cutting role in the organization and conclusions of the report.

The CTA describes a broad framework comprised of six types of action steps (US Department of Health and Human Services, 2021). The recommendations encompass scientific, policy, and communications approaches taken both within and outside of healthcare systems. The first set of activities involves launching an encompassing public health response to suicide. This includes building broader perceptions about risks for and populations affected by suicidality, empowering individuals and groups, especially those with lived experience, to engage in suicide prevention work, and effectively communicating messages about suicide prevention across multiple sectors. Second, proactively addressing antecedents to suicide and suicidality, so-called “upstream factors”, is another area of active focus. Consistent with principles of primary prevention, upstream approaches seek to modify antecedent risk and promote protective factors, typically at the group or population level, in order to reduce the likelihood that individuals will become suicidal (Wyman, 2014). Addressing risk and protective factors that overlap multiple adverse health outcomes may be an ideal approach to reducing morbidity and mortality. Community members may find strategies that can positively affect multiple health issues more attractive than having to implement separate programs for each health issue (Wilkins et al., 2018).

Moving upstream in suicide prevention involves promoting and enhancing social connections, strengthening economic supports, providing enhanced services and resources to underserved groups at elevated risk for suicidal behaviors, and devoting efforts to develop, implement, and evaluate primary suicide prevention initiatives. There are prevention programs that have shown effects on multiple forms of violence and injury such as those that improve economic stability, promote social connectedness, and enhance resiliency and coping skills (CDC, 2017). Examples of upstream interventions shown to be effective in reducing suicidality include The Good Behavior Game, implemented in school and classroom settings (CDC, 2017), and a comprehensive

prevention program undertaken within the U.S. Air Force (USAF) (Knox et al., 2003). Other innovative approaches, while not etiologically upstream, seek to identify individuals at risk for suicide or related behaviors who have not yet presented for care or treatment. One example involves use of machine learning to develop predictive analytics designed to identify persons at potentially high risk without them having to present for care (Reger et al., 2021).

Third, ensuring lethal means safety, a universal strategy, is another focus area within the CTA. The report advocates for an approach to lethal means safety that involves communities in implementing proven methods, increases counseling at the individual level, and allocates resources for developing and evaluating interventions. For firearms, a highly lethal means of suicide attempt (Bostwick et al., 2016), the CTA supports approaches including storing firearms locked and unloaded, with ammunition stored separately; temporarily storing firearms away from the home during periods of crisis or acute suicide risk; and partnering with gun sellers, ranges, and clubs to promote recognition of signs that a purchaser may be in distress, educate purchasers on safety, facilitate safe storage, and distribute safety devices. Lethal means safety approaches are not limited to interventions involving firearms; they can also be applied to poisonings, overdoses, and falls. Fourth, as a crucial action among public health focused interventions, the CTA identifies a clear need for suicide-related data that is more complete and timely, is of higher quality, and includes not just deaths by suicide but the full spectrum of suicidality encompassing thoughts and behaviors (Ivey-Stephenson et al., 2020). A prominent contemporary example of gaps in information is the lack of national data on the suicide rate during a pandemic that has now been going on for more than a year. It is also crucial that data is not only enhanced and more widely available, but that it is used promptly by decision-makers beyond public health to direct prevention activities.

While the CTA has a clear and deliberate public health focus, needs for better care for suicide risk and suicidality within health systems of care are also addressed. A fifth action in the CTA involves steps that can be taken to more widely adopt evidence-based care for persons at risk for suicide. These include increasing clinical training, improving identification of persons at risk who present for any type of healthcare, developing safety plans and clinical pathways for patients who are judged through screening to be at elevated risk, and increasing the availability of persons who can serve as trusted contacts for individuals who encounter suicidal crises. Sixth, crisis care is an action in the CTA. This area historically has been an important but “downstream” focus of suicide prevention, can also be further improved (Gould et al., 2013). Recommended approaches include greater use of statewide or regional crisis service hubs, mobile crisis teams, and crisis receiving and stabilization facilities. Transitions of care are also crucial points for secondary and tertiary prevention (McKeon, 2019), with the CTA calling out the need to ensure both safe care transitions for patients at risk, and adequate infrastructure to support implementation of the national 988 number. The Federal Communications Commission has authorized the creation of this new 3-digit number that will be used nationwide by July 16, 2022 to connect callers to mental health crisis assistance. Similar to 911, 988 will connect callers to crisis centers that will deliver intervention services by phone, triage the call to assess for additional needs, and coordinate connections to additional supports.

In its urgent call to fully implement all aspects of the National Strategy just described, the CTA holds the promise of being greater than the sum of its parts. What might a fully implemented National Strategy look like? It would begin with the recognition that suicide and its prevention are not merely an issue to be addressed by healthcare, mental health, or public health providers, but by broader segments of society. Recognizing that a variety of health, social, and financial predisposing circumstances can lead to suicidality, sectors including education and business would take steps to try and mitigate suicide risks well in advance of suicidal crises. For example, schools could more widely implement the Good Behavior Game in earlier grades or more broadly

across school systems (CDC, 2017). Consistently implemented interventions could decrease suicide and related outcomes at larger scales; for instance, other military services could seek to replicate the experience of the USAF, which saw decreases in a range of suicide-related behaviors and outcomes over a six-year period (Knox et al., 2003). Data on not only suicides but the full spectrum of suicidal behavior would be more complete and available in near real time, perhaps in a dashboard fashion similar to that popularized by multiple institutions during the COVID-19 pandemic, and would be viewed by stakeholders as indicative not only of suicide prevention program performance but as a broader indicator of societal health. At the population level and for specific groups, dashboards could incorporate indicators of morbidity and mortality for outcomes that share risk factors with suicide and suicidality, such as overdoses (Kalesan et al., 2020; Katz et al., 2020). Comprehensive suicide prevention programs, currently funded in nine states, implement multidisciplinary and cross-sectoral public health approaches (CDC, 2021). Resources to support suicide prevention would be allocated with consideration to trends in emerging data, balancing the needs of groups with disproportionately higher rates, such as AI/AN persons (Godoy Garraza et al., 2019; Wexler et al., 2015) with those of populations, including Whites and older males, who account for higher absolute numbers of suicides.

Communication around suicide-related issues would be enhanced, by consistently using people's lived experience as suicide survivors to decrease stigma (Iskander, 2021) and by covering suicide in traditional and social media in a way that promotes help seeking but does not promote suicide contagion (Sonneck et al., 1994). Some of this foreseeable future is with us or will be arriving soon. Nearly all media and professional communications around suicide now include mention of the National Suicide Prevention Lifeline, and as previously noted the telephone number 988 will be used nationwide by July 2022 to connect callers to crisis assistance. Progress evaluations of National Strategy implementation have already been produced (Substance Abuse and Mental Health Services Administration, 2017), but will need to be ongoing and grounded in implementation science.

The concept of an approach to suicide prevention based primarily on public health principles is not entirely novel (David-Ferdon et al., 2016), but resource and implementation support may gain new momentum in the wake of a CTA supported by a broad coalition of stakeholders and widespread recognition of the economic and social impacts of the current global pandemic. In addition to the previously described state level investments by CDC, the past five years have also seen the development of comprehensive resources to support suicide prevention, such as the CDC technical package for suicide prevention (CDC, 2017), and innovative state-level interventions described elsewhere in this supplement. Recent reductions in suicides, though relatively small and unevenly distributed, suggest that further decreases can be achieved and that realistic optimism may be warranted. A generation after suicide prevention first was identified as a national priority, robust efforts to scale up suicide prevention practices could save even more lives.

Credit author statement

John Iskander conceived of and drafted the manuscript. Alex Crosby contributed to the drafting and revision of the manuscript.

Disclaimer

This commentary does not represent the official position of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence

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