



# The State of State, Territorial, and Tribal Suicide Prevention:

## Findings from Reviews of Suicide Prevention Plans



**Centers for Disease  
Control and Prevention**  
National Center for Injury  
Prevention and Control

# The State of State, Territorial, and Tribal Suicide Prevention: Findings from Reviews of Suicide Prevention Plans

**Developed by:**

Andrea Carmichael, MPH  
Katrina S. Kennedy, MPH  
Caroline W. Kokubun, MPH  
Margaret M. Brown, DrPH, MPH  
Laura E. Welder, DrPH, MPH  
Deborah M. Stone, ScD, MSW, MPH

**2022**

Division of Injury Prevention  
National Center for Injury Prevention and Control  
Centers for Disease Control and Prevention  
Atlanta, Georgia

**Suggested citation:**

Carmichael A, Kennedy KS, Kokubun CW, Brown MM, Welder LE, Stone DM. 2022. *The State of State, Territorial, and Tribal Suicide Prevention: Findings from Reviews of Suicide Prevention Plans*. Centers for Disease Control and Prevention; Atlanta, GA.

## Acknowledgments

We would like to thank the Division of Violence Prevention for supporting this important work, the Division of Injury Prevention for seeing these reports to completion, and the contractor, Global Evaluation & Applied Research Solutions, Inc., for leading this work alongside Centers for Disease Control and Prevention subject matter experts and program staff.

## Contact Information

For comments or questions, visit [www.cdc.gov/cdc-info](http://www.cdc.gov/cdc-info)

*The findings and conclusions in this report are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention. All materials in this report are in the public domain and may be used and copied without permission but require citation.*

# Table of Contents

<b>Background</b> .....	1
<b>Findings from Reviews of Suicide Prevention Plans</b> .....	4
<b>Reviews of Suicide Prevention Plans Background</b> .....	5
Figure 1. The Social-Ecological Model .....	6
<b>Reviews of Suicide Prevention Plans Methods</b> .....	7
First Review Methods: Characteristics and Activities of State and Territorial Suicide Prevention Plans .....	7
Second Review Methods: State Prevention Planning for Disproportionately Affected Populations .....	9
<b>Results</b> .....	11
First Review Results: Characteristics and Activities of State and Territorial Suicide Prevention Plans .....	11
Figure 2. State and Territorial Suicide Prevention Plan Release Dates .....	11
Figure 3. Collaborators Involved in State and Territorial Suicide Prevention Plan Development .....	12
Figure 4. Guiding Frameworks Used in State and Territorial Suicide Prevention Plans .....	12
Table 1. CDC's <i>Preventing Suicide Technical Package</i> Strategies and Approaches Used in State and Territorial Suicide Prevention Plans .....	14
Second Review Results: State Suicide Prevention Planning for Disproportionately Affected Populations .....	15
Figure 5. State Suicide Prevention Plan Coverage Years .....	15
Figure 6. Focus of State Suicide Prevention Plans .....	16
Figure 7a. Number of Disproportionately Affected Populations Named in State Suicide Prevention Plans .....	17
Figure 7b. Number of Disproportionately Affected Populations Included in Specific Prevention Strategies in State Suicide Prevention Plans .....	17
Figure 8. Most Commonly Named Disproportionately Affected Populations in State Suicide Prevention Plans .....	18
Figure 9. Number of Prevention Strategies in State Suicide Prevention Plans per Most Commonly Named Disproportionately Affected Population by Levels of the Social-Ecological Model .....	20
<b>Discussion</b> .....	21
<b>Limitations</b> .....	23
<b>Conclusions</b> .....	24
<b>References</b> .....	25

# Background

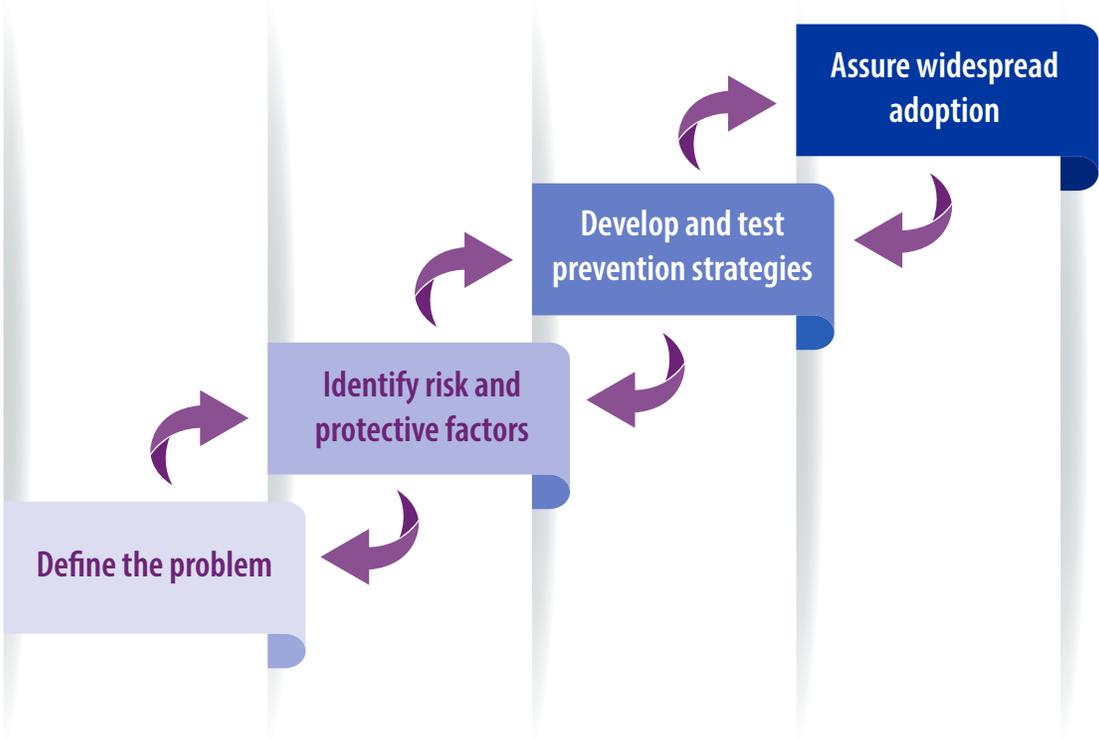
Suicide is in the top 9 leading causes of death for age groups between 10 and 64 and took nearly 46,000 lives overall in 2020.<sup>1</sup> Many more people think about, plan, or attempt suicide than die by suicide. In 2020, 12.2 million adults seriously considered suicide, 3.2 million planned a suicide, and 1.2 million attempted suicide.<sup>2</sup> Among high school students, 19% seriously considered suicide, 16% planned a suicide, and 9% attempted suicide in 2019.<sup>3</sup> Despite these sobering statistics, the good news is that suicide rates declined for two consecutive years, in 2019 and 2020.<sup>1,4</sup>

Suicide has no single cause. Preventing suicide requires a comprehensive public health approach that is: data driven; addresses multiple risk and protective factors at the individual-, relationship-, community-, and societal-levels; and relies on multisectoral partnerships working across multiple settings.<sup>5</sup>

The public health approach consists of four steps:

1. Using data to define, understand, and monitor the problem (for example, determining the “who,” “what,” “when,” “where,” and “how”)
2. Identifying factors that increase and decrease risk of suicide and that provide insight into the “why”
3. Developing and testing “what works” (best practices) to prevent suicide
4. Widely disseminating and implementing programs, practices, and policies with the best available evidence<sup>5</sup>

## The Public Health Approach



The public health approach has been widely acknowledged as the way to prevent suicide from at least 1999, with the release of [The Surgeon General's Call to Action to Prevent Suicide](#).<sup>6,7</sup> Using this document as a foundation, in 2001 the U.S. Department of Health and Human Services released the first [National Strategy for Suicide Prevention](#) (NSSP).<sup>8</sup> The release of the NSSP served as a catalyst for state strategic planning efforts across the country. A range of national suicide prevention activities has taken place since then, including but not limited to:

- funding of the National Suicide Prevention Lifeline (NSPL) in 2001;<sup>9</sup>
- establishing the Suicide Prevention Resource Center (SPRC) in 2002;<sup>10</sup>
- publishing the Institute of Medicine (IOM) report, [Reducing Suicide: A National Imperative](#), also in 2002;<sup>11</sup>
- signing the Garrett Lee Smith Memorial Act into law, creating the Substance Abuse and Mental Health Services Administration's widely implemented state, tribal, and campus suicide prevention grant programs, in 2004;<sup>12</sup>
- convening of the National Action Alliance for Suicide Prevention (NAASP), the public-private partnership tasked with advancing the NSSP, in 2010;<sup>13</sup> and
- releasing the NSSP revision in 2012, intended to guide suicide prevention activities in the United States until 2022.<sup>14</sup>

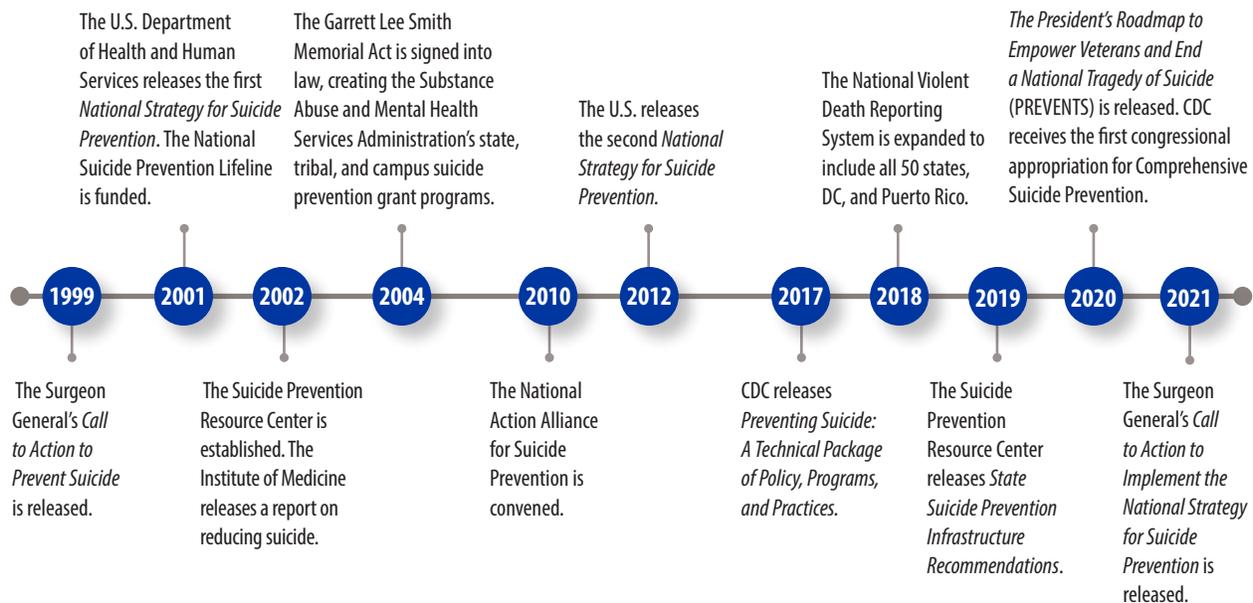
In 2017, the Centers for Disease Control and Prevention (CDC) released [Preventing Suicide: A Technical Package of Policy, Programs, and Practices](#).<sup>15</sup> This report is a collection of interventions that describes the best available evidence to guide and inform suicide prevention decision-making in states and communities.<sup>15</sup> This compilation of seven core strategies to achieve and sustain reductions in suicide focuses on risk and protective factors across the individual-, relationship-, community-, and societal-levels. The seven strategies are:

1. strengthening economic supports,
2. strengthening access and delivery of suicide care,
3. creating protective environments,
4. promoting connectedness,
5. teaching coping and problem-solving skills,
6. identifying and supporting people at risk, and
7. lessening harms and preventing future risk.<sup>15</sup>

Other major accomplishments include the 2018 expansion of the [National Violent Death Reporting System \(NVDRS\)](#) to all 50 states, DC, and Puerto Rico;<sup>16</sup> the release of SPRC's [State Suicide Prevention Infrastructure Recommendations](#) in 2019;<sup>17</sup> and the CDC's first congressional appropriation for Comprehensive Suicide Prevention in 2020.<sup>18</sup> Also in 2020, the [President's Roadmap to Empower Veterans and End a National Tragedy of Suicide](#) (PREVENTS) was released,<sup>19</sup> and the National Suicide Hotline Designation Act was signed into law.<sup>20</sup> Finally, coming full circle, the [Surgeon General's Call to Action to Implement the National Strategy for Suicide Prevention](#) was released in 2021.<sup>21</sup>

In addition to these accomplishments, the suicide prevention field is working toward a shared national goal to reduce suicide rates 20% by 2025.<sup>22</sup>

## Key National Suicide Prevention Accomplishments



Suicide rates have increased greatly since 1999. CDC conducted an environmental scan in 2018 to gain a better understanding of the current infrastructure and prevention landscape among states, territories, and tribes (STT); to identify gaps in resources; and to inform comprehensive prevention in the future. The scan had six main objectives:

1. Identify, document, and synthesize information about STT policies, programs, infrastructure, and other activities to prevent suicide
2. Describe STT climate around suicide prevention
3. Identify barriers and facilitators to implementing suicide prevention strategies
4. Identify how the above factors (for example, infrastructure, barriers, programs) may relate to variation in suicide rates
5. Provide insight into suicide rate increases
6. Share lessons learned with the field to inform future preventive action

Results from the environmental scan will be reported in three parts, in alignment with the scan's components:

1. Quantitative findings from an online survey<sup>23</sup>
2. Findings from a review of state suicide prevention plans
3. Qualitative findings from key informant interviews and online survey

Report findings may serve as a baseline for additional assessment activities carried out by CDC or its partners in the future. Results can inform suicide prevention infrastructure and prevention activities necessary to reduce rates of suicide across the United States. The current report covers the second component of the environmental scan.

# **Findings from Reviews of Suicide Prevention Plans**

# Reviews of Suicide Prevention Plans Background

The Centers for Disease Control and Prevention (CDC) conducted an environmental scan to better understand the current infrastructure and suicide prevention landscape among states, territories, and tribes (STT); to identify resource levels; and to inform comprehensive prevention in the future. This scan consisted of three parts, and scan objectives for each part are outlined in [The State of State Suicide Prevention background](#).

Results from the scan's first component (web-based survey) were released in the February 2021 Part One report: [State of State, Territorial, and Tribal Suicide Prevention: Findings from a Web-based Survey](#).<sup>23</sup> The current report, Part Two, highlights key findings from the review of state and territorial suicide prevention plans. Part Three will report qualitative findings from key informant interviews and the online survey in a future release. The contents of this report can be used in conjunction with [Part One](#) to better understand state and territorial activities and gaps in suicide prevention planning.<sup>23</sup> Findings from Part Two are presented here through visualizations with supplemental text.

*This report shares findings from two separate reviews of state and territorial suicide prevention plans.*

## Goals of the Suicide Prevention Plan Reviews

This report shares findings from two separate reviews of state and territorial suicide prevention plans.

The first review focuses on a comprehensive approach to suicide prevention and implementation of strategies and approaches with the best available evidence to address the range of risk and protective factors associated with suicide.

Goals of the first review were to:

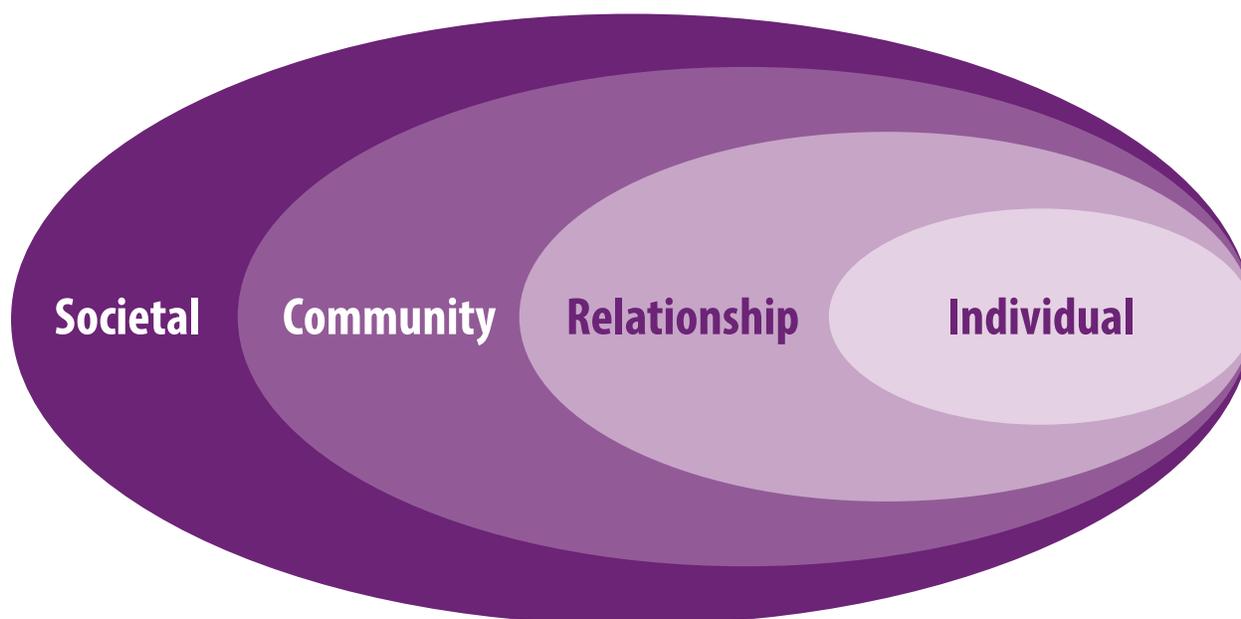
- summarize the characteristics of and activities described in the suicide prevention plans, and
- assess the alignment of planned activities with the strategies and approaches presented in CDC's [Preventing Suicide: A Technical Package of Policy, Programs and Practices](#)<sup>15</sup> (referred to as CDC's *Preventing Suicide Technical Package*, hereafter).

The second review uses a health equity lens and focuses on disproportionately affected populations.

Goals of the second review were to:

- identify disproportionately affected populations named in state suicide prevention plans, and
- identify gaps in state suicide prevention planning for these populations across the individual-, relationship-, community-, and societal-levels of the Social-Ecological Model, which applies a comprehensive approach to suicide prevention.<sup>24</sup>

**Figure 1. | The Social-Ecological Model**



*The Social-Ecological Model is a four-level model which can be used to understand how suicide prevention strategies can impact factors on the individual-, relationship-, community-, and societal-levels and highlights how a range of factors can either protect or put individuals at risk for suicide. The overlapping layers show that factors at one level influence factors at another level.<sup>24</sup>*

---

## **Suicide Prevention Planning Context**

CDC and the Suicide Prevention Advocacy Network (SPAN) hosted the United States' first national suicide prevention conference in Reno, Nevada, in 1998. Public and private partners in suicide prevention, such as suicide survivors, community activists and leaders, researchers, clinicians, and policy makers, participated in the conference. This flagship event helped establish groundwork for the [Surgeon General's Call to Action](#) and the subsequent [National Strategy for Suicide Prevention](#) (NSSP), both of which called for a public health approach to suicide prevention.<sup>6,14</sup> A public health approach uses data to define the problem and to understand factors associated with suicide, tests and evaluates prevention strategies and approaches with the best available evidence, and widely disseminates what works to communities for implementation and scale-up.

Developing, evaluating, and maintaining a suicide prevention strategic plan is critical to reducing suicide rates.<sup>25</sup> When the first NSSP was released in 2001, about half of all states were engaged in suicide prevention or were in planning stages.<sup>8</sup> The NSSP provided a model for state plans going forward and was instrumental in accelerating the development of state plans for suicide prevention. This report's review of suicide prevention plans is, to our knowledge, the only review of its kind and provides a snapshot of state and territorial plans at the time of data collection.

## Addressing Disproportionately Affected Populations in Suicide Prevention Planning

While suicide affects people in all demographics, some populations are disproportionately affected.<sup>14</sup> Populations experiencing a disproportionate rate of suicide nationally include youth,<sup>26</sup> middle-aged adults,<sup>26</sup> sexual and/or gender minorities,<sup>27,28</sup> American Indian/Alaska Native (AI/AN) populations,<sup>29</sup> people who live in rural areas,<sup>30</sup> veterans/active duty military personnel,<sup>31,32</sup> certain occupational groups,<sup>33</sup> and other groups such as people experiencing homelessness.<sup>34</sup>

A comprehensive approach to suicide prevention can help address health inequities among these populations. Each jurisdiction (for example, state, territory, or tribe) can use data to identify the specific populations at higher risk of suicide in their communities and can implement policies, programs, and practices with the best available evidence for these groups to ensure that prevention strategies are relevant and effective.<sup>21,35,36</sup> These prevention strategies include those:

- known to support all members of the general population regardless of risk for suicide (universal prevention),
- meant to support individuals experiencing risk factors that increase the likelihood of suicide (selective prevention), and
- meant to support individuals exhibiting suicidal behavior or who have lost a friend or loved one to suicide (indicated prevention).<sup>37</sup>

## Reviews of Suicide Prevention Plans Methods

Two separate reviews were conducted to characterize the content of state and territorial suicide prevention plans. For the purposes of the environmental scan, a suicide prevention plan was defined as a standalone document or chapter within a broader injury prevention plan that outlines, at a minimum, suicide prevention goals and objectives.

### First Review Methods: Characteristics and Activities of State and Territorial Suicide Prevention Plans

The first review was conducted from May 2018 through September 2018 and focused on compiling characteristics of suicide prevention plans and activities included in those plans. The most recent suicide prevention plans available from 48 states and 2 territories (Guam and Puerto Rico) were obtained from the Suicide Prevention Resource Center (SPRC) website,<sup>10</sup> or from state and territory health/behavioral health/mental health websites, and through outreach to state and territory suicide prevention coordinators. Suicide prevention plans were not available for all states and territories. Tribal suicide prevention plans were not analyzed in this review due to lack of access. In instances where a state or territory had more than one suicide prevention plan, the plans were coded together (the presence of a characteristic in one or more of the state or territory's suicide prevention plans would be counted as present for that state or territory). Therefore, the findings are reported for states and territories in this review and not by individual suicide prevention plan. Further, state and territorial plans were analyzed together in one group.

Data were abstracted from state and territorial plans and coded using NVivo and Microsoft Excel to generate qualitative themes, which were then quantified by state and territory. The analysis focused on characteristics of the plans and activities included in the plans. The characteristics coded from suicide prevention plans, along with a brief description/rationale, were:

- **Plan release date**

The [State Suicide Prevention Infrastructure Recommendations](#) indicate that state suicide prevention plans should be updated every 3-5 years.<sup>17,36</sup> Therefore, plans were coded for whether they were developed in the past 5 years or earlier.

- **Collaborators involved**

A comprehensive approach relies on multisectoral partnerships.<sup>5</sup> Plans were coded for inclusion of such partners, such as military, state/local government, crisis services, community-based organizations, faith-based organizations, and community members, including people with lived experience.

- **Plan structure/guiding framework**

Strategic plans often employ guiding frameworks founded on best practices that help provide direction in the development and implementation of the plan. Plans were coded for the inclusion of the following structures and guiding frameworks in the field at the time.

- [Zero Suicide](#)—This framework lays out seven key elements for health systems transformation.<sup>38</sup>
- [National Strategy for Suicide Prevention \(NSSP\) 2001](#)—This first NSSP includes 11 goals and 64 objectives addressing awareness, intervention, and methodology.<sup>8</sup>
- [NSSP 2012](#)—This second NSSP is aligned with the first NSSP and includes four interconnected strategic directions (healthy and empowered individuals, families, and communities; clinical and community preventive services; treatment and support services; and surveillance, research, and evaluation).<sup>14</sup>
- [Social-Ecological Model](#)—This model has four levels and considers the complex interplay of risk and protective factors impacting the individual, relationships, community, and society.<sup>24</sup>
- [Public Health Approach](#)—This approach focuses on the health of the entire population to achieve the greatest impact. It includes using data to define and monitor the problem, identification of risk and protective factors, development and testing of prevention strategies, and widespread adoption of what works.<sup>5</sup>
- [Spectrum of Prevention](#)—This framework identifies six levels of intervention focused on policy and legislation, organizational practices, coalitions and networks, providers, community education, and individual knowledge and skills.<sup>39</sup>
- [Awareness, Intervention, and Methodology \(AIM\) Model](#)—This model comes from the [Surgeon General's Call to Action to Prevent Suicide](#) (1999) and organizes activities using a public health approach.<sup>6,40</sup>

- **Funding/budget**

Resources, such as funding, are necessary to move suicide prevention plans into action. Plans were reviewed for mention of funding and other resources for implementation.

- **Plan implementation**

Time-bound suicide prevention plans provide information for evaluation and when plans should be updated, both of which are important in implementing and maintaining plans. Plans were reviewed for their focus on implementation, including whether a timeline or schedule was proposed.

- **Prevention activities**

The public health approach calls for implementing evidence-based strategies.<sup>5</sup> Activities were coded for alignment with [CDC's Preventing Suicide Technical Package](#).<sup>15</sup> The activities were coded in multiple strategies or approaches where an overlap was identified (activities could be coded in more than one strategy or approach). The technical package includes seven broad strategies:

- strengthen economic supports,
- strengthen access and delivery of suicide care,
- create protective environments,
- promote connectedness,
- teach coping and problem-solving skills,
- identify and support people at risk, and
- lessen harms and prevent future risk.

These strategies each contain corresponding approaches and were developed with the best available evidence.

- **Measuring and evaluating progress**

Evaluation is critical to measuring success and opportunities for improvement. Plans were reviewed for inclusion of evaluation activities or plans for evaluation.

(See [First Review Results](#))

## Second Review Methods: State Prevention Planning for Disproportionately Affected Populations

The second suicide prevention plan review was conducted from December 2019 through March 2020. This review focused on identifying whether the most recent state suicide prevention plans available identified populations that are disproportionately affected by suicide in their state and planned prevention strategies specifically for these populations.

A list of populations disproportionately affected by suicide was devised based on the literature and included:

- youth,
- middle-aged adults,
- sexual and/or gender minorities,
- American Indian and Alaska Native populations,
- people who live in rural areas,
- veterans/active duty military, and
- occupational groups at increased risk.

Plans were reviewed for these populations, but the review also captured other groups states identified that were not on the initial list (for example, people experiencing homelessness).

Suicide prevention plans were coded to quantify the disproportionately affected populations named and the specific strategies planned to address the needs of these groups. “Specific prevention strategies” is used in this report to mean those that focus on suicide prevention within a population identified to be at increased risk for suicide. Therefore, in some cases it is possible for a plan to identify or name a population as being disproportionately affected by suicide but not describe specific prevention strategies for that population within the plan.

Data were abstracted from suicide prevention plans and coded using Microsoft Excel. Overall, data were gathered on the following:

- **Plan coverage years**  
This describes the range of years covered by the most recent suicide prevention plan.
- **Focus population of suicide prevention plan**  
This describes whether plans focused on the general population or a subset of the population (for example, youth, older adults, other).
- **Number of disproportionately affected populations named**  
This includes instances where a population is identified by name in the plan as being disproportionately affected by suicide (for example, veterans/active duty military).
- **Number of specific prevention strategies planned**  
Specific prevention strategies are strategies that identify specific measures that focus on suicide prevention within a disproportionately affected population.
- **Level of planned approach**  
Suicide prevention strategies in the plans were categorized by level of the Social-Ecological Model (individual, relationship, community, societal; [Figure 1](#)).<sup>24</sup> Approaches presented in [CDC’s Preventing Suicide Technical Package](#) were categorized by level of the Social-Ecological Model and used as a guide for coding activities in the plans. Each specific prevention strategy was then coded based on its main target level of the Social-Ecological Model.

(See [Second Review Results](#))

# Results

## First Review Results: Characteristics and Activities of State and Territorial Suicide Prevention Plans

Suicide prevention plans were identified from 48 states and two territories (N=50). Results for states and territories are reported together in this first review.

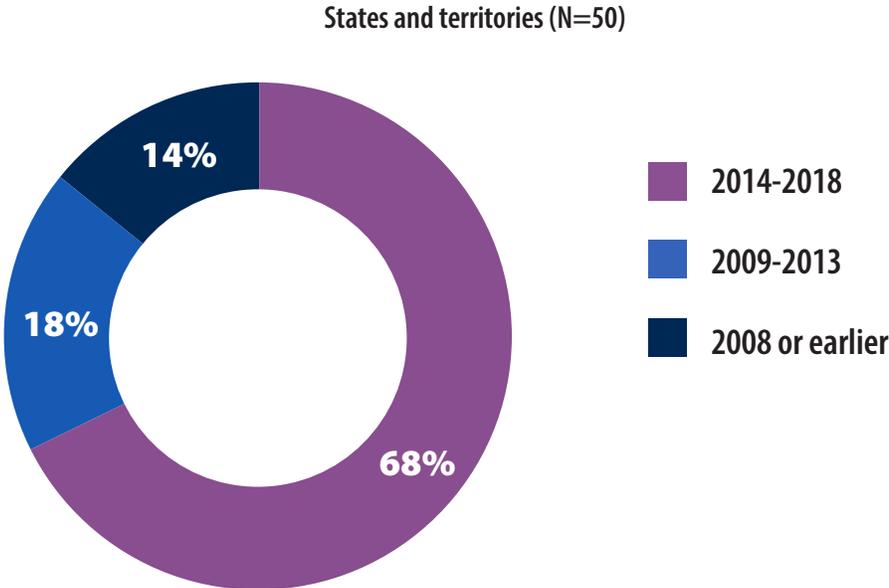
### Plan Release Date

Overall, 34 (68%) states and territories published plans between 2014-2018, nine (18%) published between 2009-2013, and seven (14%) published in 2008 or earlier (Figure 2).

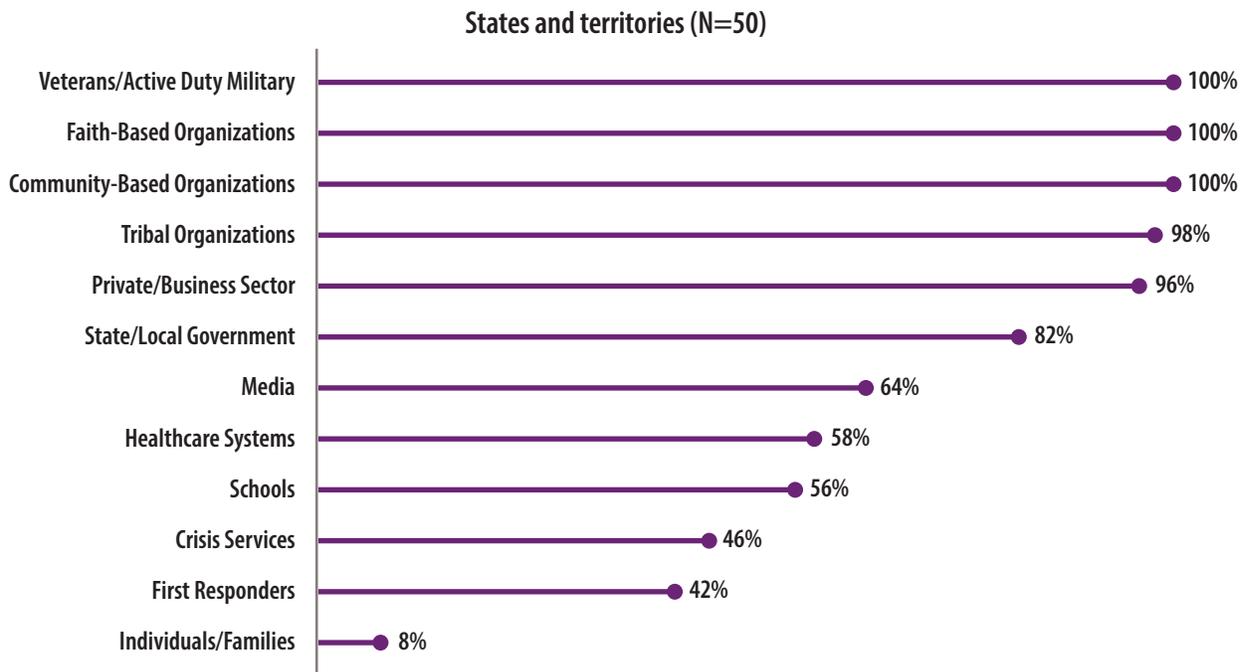
### Collaborators Involved in Plan Development

State and territories referred to a variety of collaborators in plan development. Veterans/active duty military, faith-based organizations, and community-based organizations were cited as being involved in the development of all plans (100%; Figure 3). The majority of plans made reference to involvement of state/local government (82%), media (64%), healthcare systems (58%), and schools (56%). Individuals and families were referenced least often (8%).

**Figure 2. State and Territorial Suicide Prevention Plan Release Dates, United States—May 2018–September 2018**



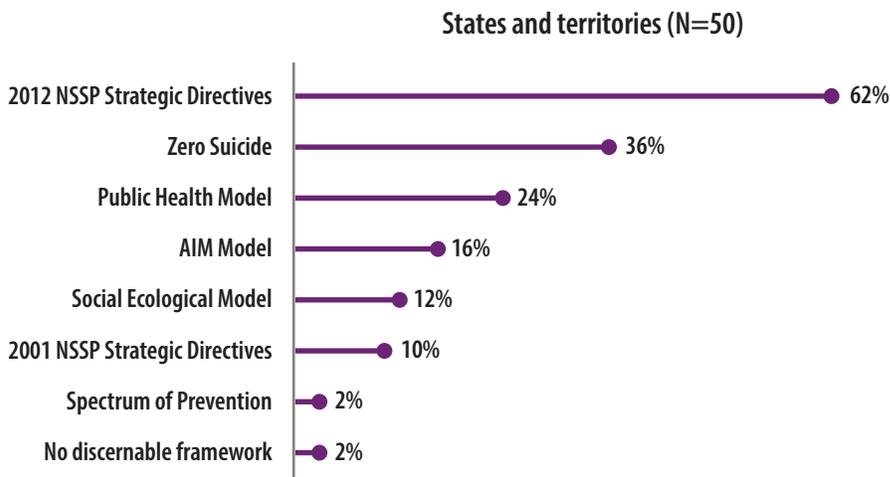
**Figure 3. Collaborators Involved in State and Territorial Suicide Prevention Plan Development, United States—May 2018–September 2018**



### Plan Structure/Guiding Frameworks

State and territorial plans were guided by a variety of frameworks. The three most commonly used by states and territories were the 2012 NSSP (n=31; 62%; [Figure 4](#)), Zero Suicide (n=18; 36%), and Public Health Model (n=12; 24%). Eight suicide prevention plans (16%; data not shown) used a combination of guiding frameworks, and one state did not use a discernable guiding framework (2%; [Figure 4](#)).

**Figure 4. Guiding Frameworks Used in State and Territorial Suicide Prevention Plans, United States—May 2018–September 2018**



## Funding/Budget and Plan Implementation

Thirty-five (70%; data not shown) states and territories reported funding sources. Of these, 12 (34%) states and territories reported funding to support suicide prevention from the Garrett Lee Smith Act, and 11 plans (31%) reported funding from other sources. Thirty-six (72%) states and territories described a timeline for implementation.

## Prevention Activities

### *Strategies* (Table 1)

When comparing prevention strategies to [CDC's Preventing Suicide Technical Package](#), we found that all states and territories included strategies to:

- strengthen access and delivery of suicide care (Strategy 2),
- promote connectedness (Strategy 4), and
- identify and support people at risk (Strategy 6).

Nearly every state and territory included strategies to:

- create protective environments (Strategy 3; 96%), and
- lessen harms and prevent future risk (Strategy 7; 98%).

Sixty-four percent of states and territories included “teach coping and problem-solving skills” (Strategy 5). Few plans included “strengthen economic supports” (Strategy 1; 8%).

### *Approaches* (Table 1)

More than 75% of states and territories included the following approaches:

- safer suicide care through systems change (Approach 5),
- reduce access to lethal means among persons at risk of suicide (Approach 6),
- organizational policies and culture to address suicide prevention (Approach 7),
- peer norm programs (Approach 9),
- community engagement activities (Approach 10),
- gatekeeper training (Approach 13),
- crisis intervention (Approach 14),
- treatment for people at risk of suicide (Approach 15),
- treatment to prevent re-attempts (Approach 16),
- postvention (Approach 17), and
- safe reporting and messaging about suicide (Approach 18).

Fifty-eight percent of states and territories included “social-emotional learning programs” (Approach 11). Fewer than 50% included:

- strengthen household financial security (Approach 1),
- housing stabilization policies (Approach 2),
- coverage of mental health conditions in health insurance policies (Approach 3),
- reduce provider shortages in underserved areas (Approach 4),
- community-based policies to reduce excessive alcohol use (Approach 8), and
- parenting skill and family relationship programs (Approach 12).

**Table 1. CDC's Preventing Suicide Technical Package Strategies and Approaches Used in State and Territorial Suicide Prevention Plans, United States—May 2018–September 2018**

States and territories (N=50)

Strategy and Corresponding Approaches	Use of Strategy or Approach (%)
<b>Strengthen Economic Supports</b>	<b>8</b>
1. Strengthen Household Financial Security	8
2. Housing Stabilization Policies	2
<b>Strengthen Access and Delivery of Suicide Care</b>	<b>100</b>
3. Coverage of Mental Health Conditions in Health Insurance Policies	46
4. Reduce Provider Shortage in Underserved Areas	44
5. Safer Suicide Care Through Systems Change	90
<b>Create Protective Environments</b>	<b>96</b>
6. Reduce Access to Lethal Means Among Persons at Risk of Suicide	78
7. Organizational Policies and Culture	96
8. Community-Based Policies to Reduce Excessive Alcohol Use	28
<b>Promote Connectedness</b>	<b>100</b>
9. Peer Norm Programs	92
10. Community Engagement Activities	92
<b>Teach Coping and Problem-Solving Skills</b>	<b>64</b>
11. Social-Emotional Learning Programs	58
12. Parenting Skill and Family Relationship Programs	24
<b>Identify and Support People at Risk</b>	<b>100</b>
13. Gatekeeper Training	88
14. Crisis Intervention	88
15. Treatment for People at Risk of Suicide	88
16. Treatment to Prevent Re-Attempts	82
<b>Lessen Harms and Prevent Future Risk</b>	<b>98</b>
17. Postvention	90
18. Safe Reporting and Messaging About Suicide	76

## Measuring and Evaluating Progress

Forty-five (90%; data not shown) states and territories discussed evaluation to some extent:

- 18 (40%) described an evaluation plan,
- 18 (40%) provided process or outcome indicators for evaluation, and
- nine (20%) mentioned only a need for evaluation.

Additionally, one state (2%) included a logic model. Four states/territories (8%) offered information on measuring achievement of goals and objectives.

(See [First Review Methods](#))

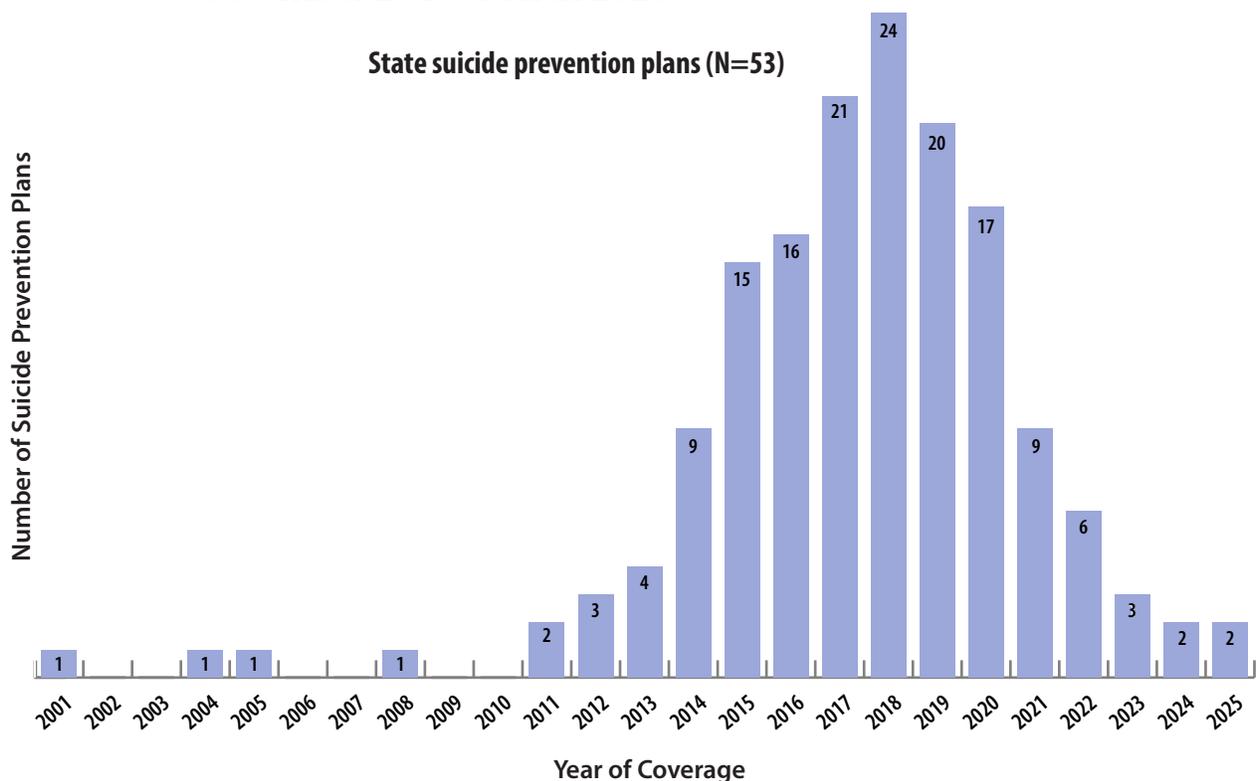
## Second Review Results: State Suicide Prevention Planning for Disproportionately Affected Populations

Two states out of 50 did not have a suicide prevention plan. Of the remaining 48 states with suicide prevention plans, one state had two plans and two states had three plans, totaling 53 plans from 48 states (N=53). Results for this review are reported by state suicide prevention plan.

### Plan Coverage Years

The years of suicide prevention plan coverage ranged from 2001 to 2025 ([Figure 5](#)).

**Figure 5. State Suicide Prevention Plan Coverage Years, United States—December 2019–March 2020**



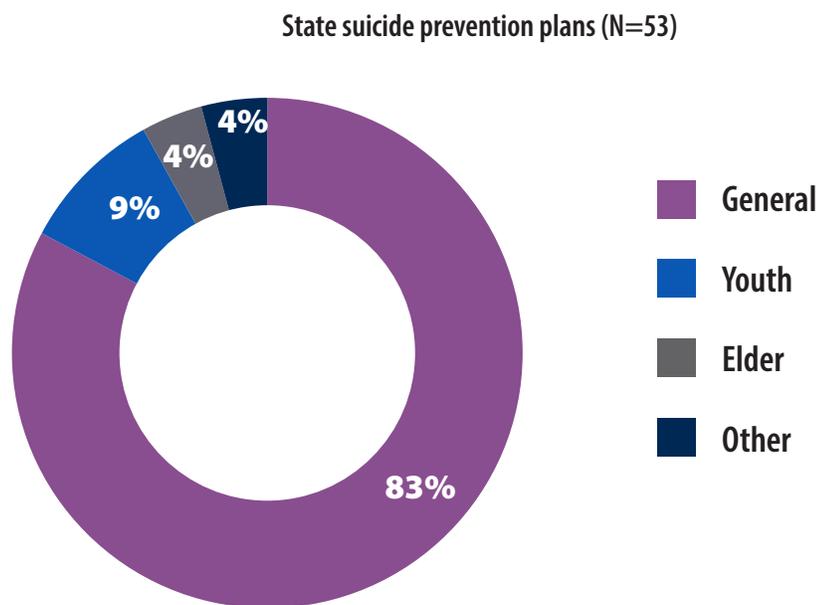
## Focus of Suicide Prevention Plans

A majority of suicide prevention plans (n=44, 83%; [Figure 6](#)) were general in nature and covered the state's entire population. Additional plans were specific to youth (n=5, 9.4%), older adults (n=2, 3.8%), and other populations (n=2, 3.8%; one general violence and injury prevention plan and one adult plan).

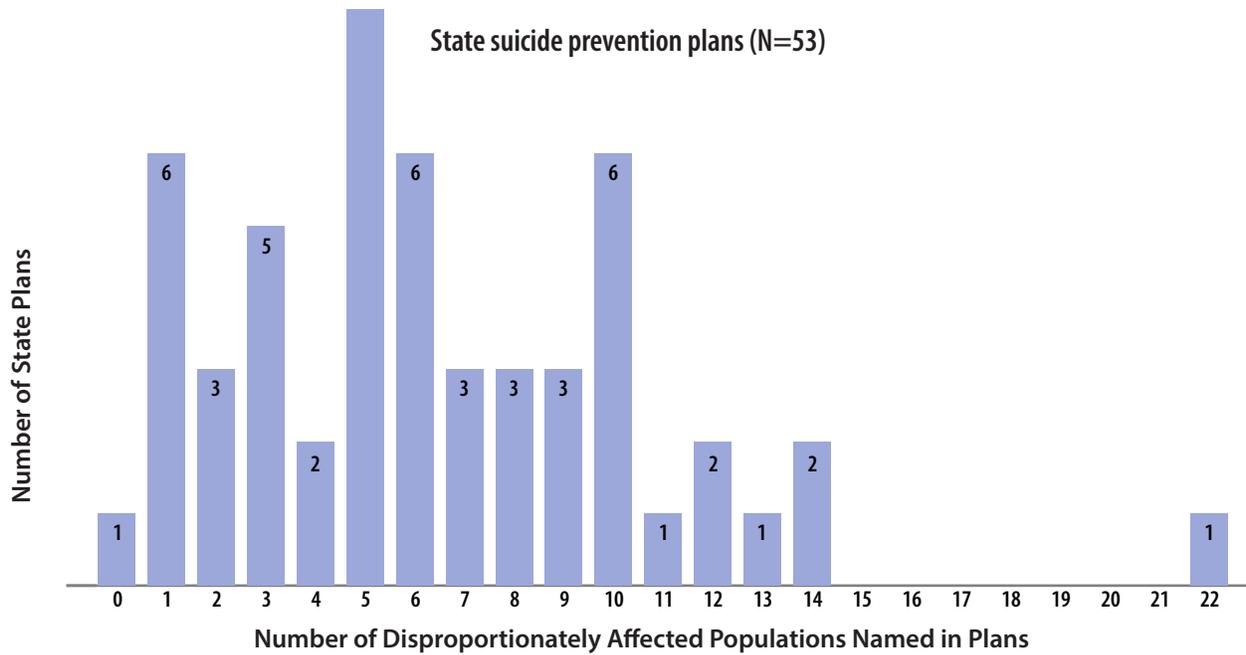
Suicide prevention plans named an average of 6.4 disproportionately affected populations. The most common number of populations named was five (range 0–22; [Figure 7a](#)), while 17 suicide prevention plans named fewer than five populations. Youth were most commonly named (n=47; 88.7%; [Figure 8](#)).

State plans varied in their attention to strategies specific to disproportionately affected populations. Plans included specific strategies for an average of 4.2 disproportionately affected populations and most frequently included specific strategies for one disproportionately affected population (range 0–14; [Figure 7b](#)). Plans included specific strategies for about two-thirds of the more commonly named disproportionately affected populations (221 specific strategies; [Figure 8](#)). Plans most often included specific strategies for youth (n=44; 94%).

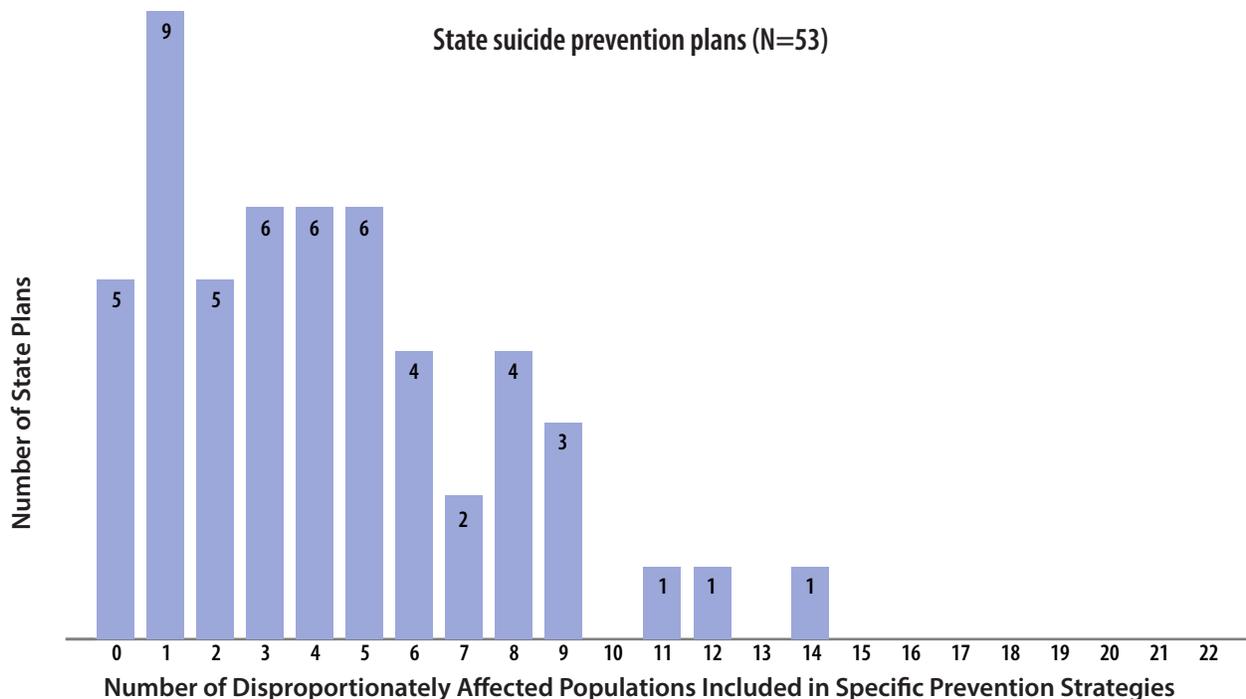
**Figure 6.** Focus of State Suicide Prevention Plans, United States—December 2019–March 2020



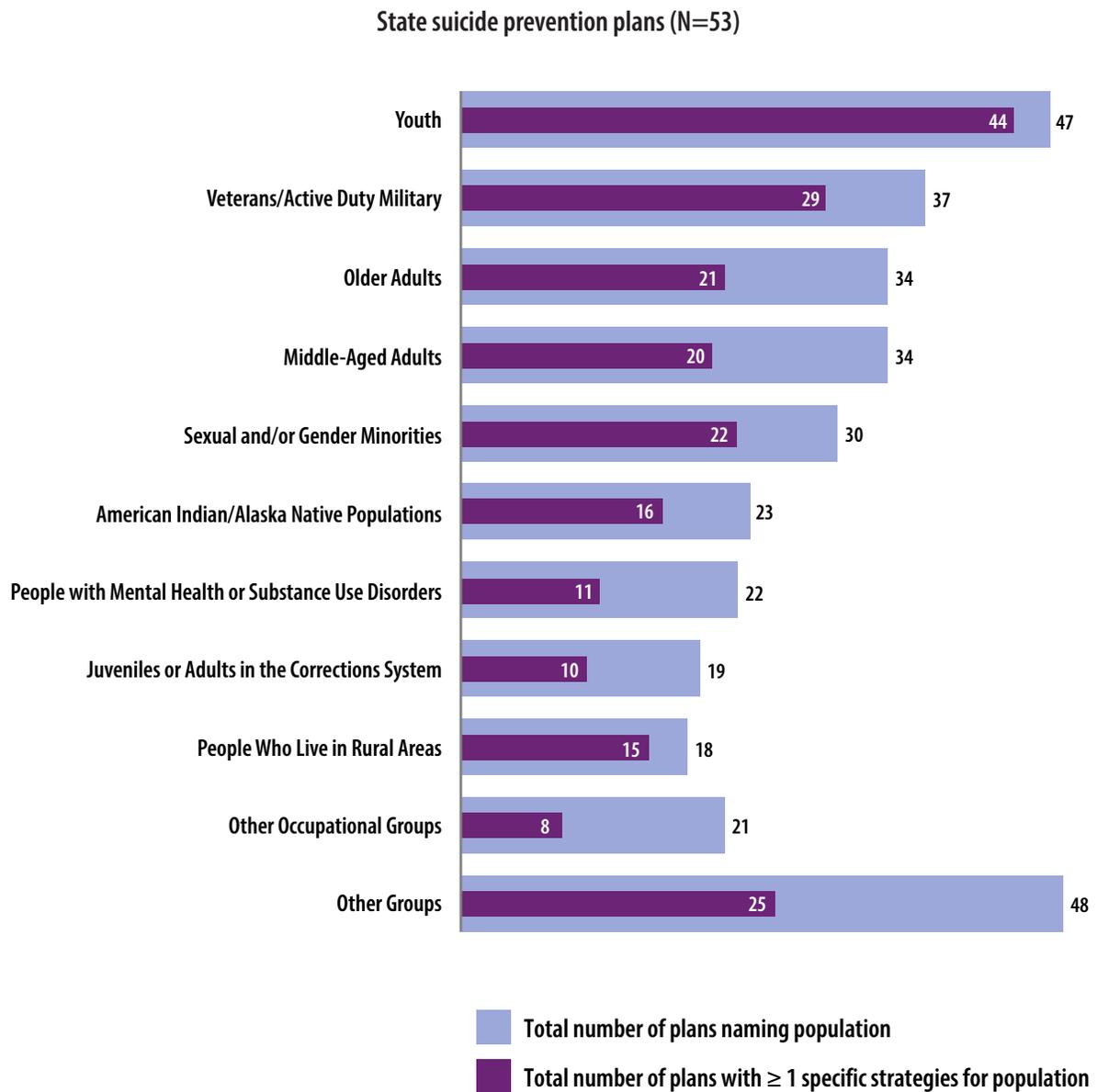
**Figure 7a. Number of Disproportionately Affected Populations Named in State Suicide Prevention Plans, United States—December 2019–March 2020**



**Figure 7b. Number of Disproportionately Affected Populations Included in Specific Prevention Strategies in State Suicide Prevention Plans, United States—December 2019–March 2020**



**Figure 8. Most Commonly Named Disproportionately Affected Populations in State Suicide Prevention Plans, United States—December 2019–March 2020**



Other disproportionately affected populations named in plans included (data not shown):

- people with chronic disease or disability (n=11; 21%),
- racial or ethnic minorities (n=11; 21%),
- youth in the foster or child welfare system (n=6; 11%),
- immigrants and refugees (n=5; 9%),
- first responders/health professionals (n=5; 9%),
- law enforcement (n=4; 8%),
- people who work in agriculture and ranching (n=3; 6%),
- people experiencing homelessness (n=3; 6%),
- people who are divorced (n=2; 4%),
- people with gambling addiction (n=2; 4%),
- people who work in construction (n=2; 4%),
- people who work in mining (n=2; 4%), and
- one mention (2%) each of women with perinatal depression, survivors of trauma, people with lower educational attainment, college students, non-English speaking adults, people who are deaf or hard of hearing, people with a history of adverse childhood experiences, people who work in oil and gas industries, coroners and funeral directors, people who work in installation and maintenance, legal professionals, and veterinarians.

## Strategies Addressing Disproportionately Affected Populations by Level of the Social-Ecological Model

The number of strategies addressing disproportionately affected populations across levels of the Social-Ecological Model ([Figure 1](#)) varied as follows ([Figure 9](#)):

141

**Individual-level strategies** (for example, postvention, gatekeeper training, treatment for people at risk of suicide, social-emotional learning programs),

50

**Relationship-level strategies** (for example, parenting skill and family relationships programs, peer norms/support programs, promoting connectedness),

122

**Community-level strategies** (for example, creating protective environments, reducing access to lethal means, reducing provider shortages in underserved areas), and

27

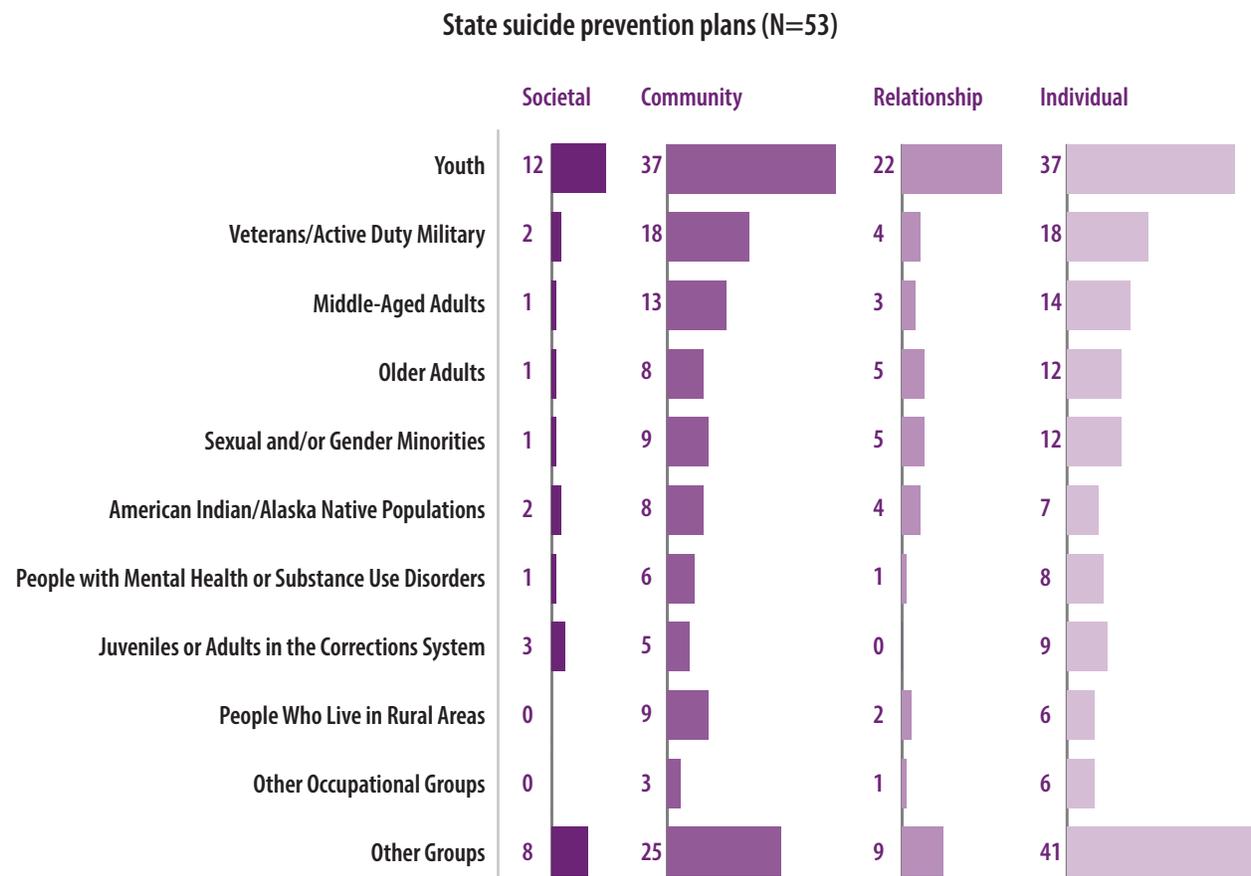
**Societal-level strategies** (for example, safer suicide care through systems change, strengthening household financial security, policy change).

Of suicide prevention plans with specific strategies for disproportionately affected populations, the proportion of strategies at only one level of the Social-Ecological Model (Figure 1) varied by population, as follows (data not shown):

- people who live in rural areas (n=12 plans [80% of plans that named this population] included specific strategies at only one level of the Social-Ecological Model),
- people with mental health or substance use disorders (n=6; 55%),
- American Indian and Alaska Native populations (n=8; 50%),
- sexual and/or gender minorities (n=10; 46%),
- veterans/active duty military (n=12; 41%),
- middle-aged adults (n=8; 40%),
- juveniles or adults in corrections system (n=3; 30%),
- older adults (n=6; 29%), and
- youth (n=5; 11%).

(See [Second Review Methods](#))

**Figure 9. Number of Prevention Strategies in State Suicide Prevention Plans per Most Commonly Named Disproportionately Affected Population by Levels of the Social-Ecological Model, United States—December 2019–March 2020**



# Discussion

The first suicide prevention plan review in the current report provides an examination of the basic characteristics of plans, as well as the activities aspired to by states and territories. The second review uses a health equity lens and examines whether states identify disproportionately affected populations, which ones they identify, and whether states include specific strategies focusing on these populations, including at what level of the Social-Ecological Model.

Suicide prevention plans primarily capture intentions of states and territories to implement activities versus actual implementation. However, analyzing suicide prevention plans is still useful as it allows us to consider what strategies are most utilized (or intended to be utilized) and where gaps exist when considering a comprehensive approach to suicide prevention.

The observations in this report back up results from the web-based survey in [Part One](#) of this report series, where we found that the self-reported capacity of states and territories (as well as tribes) to carry out a public health approach to suicide prevention was rated as modest, indicating room for improvement.<sup>23</sup> We also noted in [Part One](#) that many states have limited resources, which may explain the gaps identified here in Part Two.

## Comprehensive Public Health Approach to Suicide Prevention

CDC received an appropriation for its Comprehensive Suicide Prevention (CSP) program with a focus on disproportionately affected populations in 2020. The comprehensive approach calls for:

1. strong leadership that convenes multisectoral partnerships,
2. prioritization of data to identify disproportionately affected populations and to better characterize risk and protective factors impacting suicide in these populations,
3. leveraging existing suicide prevention programs,
4. selection of multiple and complementary strategies with the best available evidence to fill gaps,
5. effective communication with stakeholders, and
6. rigorous evaluation of the overall approach and individual activities with a focus on quality improvement and sustainability.

Further, the comprehensive approach seeks to address the range of factors associated with suicide, from the individual to the societal levels. It also seeks to prevent suicide risk in the first place and to support people at increased risk of suicide—or after a suicide or suicide attempt has taken place—to lessen future harms.

To begin to assess states' and territories' attention to a comprehensive public health approach, we explored how states and territories framed their plans. For example, did they consider strategies and approaches laid out in [CDC's Preventing Suicide Technical Package](#)? Which guiding frameworks were utilized to develop goals? Further, did states focus on particular populations at increased risk? Plans ascribed to a public health approach, by and large. For example, use of the Social-Ecological Model indicated the recognition that risk and protective factors occur at multiple levels and therefore strategies at those levels are warranted. Similarly, many states modeled their plans after the NSSP, which was meant to address suicide prevention from a public health perspective. Modeling plans after the NSSP may confer certain benefits (for example, many states working towards similar goals). However, direct application of the NSSP may miss the opportunity to tailor prevention plans to local cultures and environments. Similarly, the use of data to identify and prioritize populations and settings at increased risk for suicide prevention and over a specific time period is likely necessary given the breadth of the NSSP and recognizing resource constraints (see [Part One](#)).

The comprehensive approach includes a focus on upstream (primary prevention) as well as downstream (tertiary prevention) prevention. Upstream approaches (for example, strengthening economic supports by improving access to affordable housing, assuring access to care) are crucial to the prevention of suicide, since they can prevent suicide risk in the first place. Preventing suicide risk in the first place precludes the suffering experienced by individuals, families, communities, and society and minimizes the need for costly and/or difficult-to-access treatment. Most states appeared to direct their planned prevention efforts towards the individual-, relationship-, and community-levels of the Social-Ecological Model, as opposed to the societal-level, suggesting areas of opportunity.

[CDC's Preventing Suicide Technical Package](#) offers strategies and approaches across the Social-Ecological Model to support a comprehensive approach to suicide prevention.<sup>15</sup> Similar to [Part One](#),<sup>23</sup> in the current report we found that most states and territories included plans for implementing a wide range of strategies from the technical package. "Strengthening economic supports" and the two approaches associated with this strategy ("strengthening household financial security" and "housing stabilization policies") were least included in suicide prevention plans, while the strategies "promoting connectedness" and "identifying and supporting people at risk" were mentioned in all plans. Half of approaches and less than a third of strategies included in the plans were also reported as being implemented according to the web-based survey in [Part One](#).<sup>23</sup> This indicates plans may be aiming to achieve ambitious goals to include strategies and approaches from [CDC's Preventing Suicide Technical Package](#). The lack of capacity or resources, as reported in the web-based survey of [Part One](#),<sup>23</sup> may be limiting states and territories in implementing truly comprehensive efforts.

Various disproportionately affected populations were named in most state suicide prevention plans. However, not all plans that named disproportionately affected populations included specific strategies to reduce suicide within each population, which could be due to a lack of resources, as was reported in [Part One](#) of this report series.<sup>23</sup> This could also be due to few evidence-based programs having been designed specifically for these populations. When putting [CDC's Preventing Suicide Technical Package](#) together, few programs were noted as having addressed disproportionately affected populations. More attention is needed to assure that strategies are culturally relevant and that current strategies in populations disproportionately impacted by suicide are tested. These are goals set forth by CDC in the immediate and longer-term.<sup>41</sup>

## Measurability of Goals and Objectives, and Evaluation of Achievement

The comprehensive approach requires rigorous implementation and evaluation of the strategies implemented. Measurable goals and objectives are necessary to enhance the likelihood of plans' success, as is the support of multisectoral partnerships to help carry out the plans and to extend the reach of activities as broadly as possible. Setting goals which are specific, measurable, achievable, realistic, and time-bound (SMART goals) can aid in the development and implementation of a successful suicide prevention plan.<sup>42</sup> Only a limited number of suicide prevention plans provided information for measuring achievement of goals and objectives. Additionally, less than half of states and territories included mention of evaluation plans.

Findings from this report suggest the need for data to develop and evaluate suicide prevention plans in a standardized, systematic manner. Using appropriate indicators and metrics for measuring progress, outcomes, and impact can increase effectiveness of suicide prevention plans. Using data can also help identify populations disproportionately affected by suicide, as well as what risk and protective factors to focus on in these populations. Assessing and identifying gaps in data collection for suicide within disproportionately affected populations are also critical to understanding who is disproportionately affected by suicide. Additionally, understanding the motivation behind prioritizing certain disproportionately affected populations (for example, youth) instead of those that are less commonly identified (for example, racial or ethnic minorities) also warrants further investigation, since this could be due to limited capacity, as noted in [Part One](#).<sup>23</sup> However, it could include other local factors which have not yet been explored.

## Collaboration

Everyone has a role in suicide prevention. Collaboration is indeed critical, given limited resources for suicide prevention and the need to reach large swaths of the population. Our first review found that a variety of collaborators were involved in developing suicide prevention plans, including collaborators in the private, nonprofit and public sectors. Variation in collaborators was also noted. For example, veterans/active duty military, faith-based organizations, and community-based organizations were referenced as collaborators in all plans reviewed, while individuals and families were rarely noted as collaborators in plan development. Being intentional about involving people with lived experience and populations disproportionately impacted by suicide is critical to successful suicide prevention efforts. Involvement of the right collaborators may lead to practical, localized efforts that are effective in the communities they are intended to serve. Extending our collective table and engaging individuals, families, and communities, along with decision-makers, in our conversation can help continue to move the cause of suicide prevention to save lives.

*Being intentional about involving people with lived experience and populations disproportionately impacted by suicide is critical to successful suicide prevention efforts.*

## Limitations

This study is subject to several limitations. Overall, the analysis of suicide prevention plans can only capture the considerations and intent of states and territories to implement suicide prevention activities at the time of plan development. Only a limited number of plan components were reviewed, making in-depth analysis impossible. We were also confined to what was written, whereas interviews with plan developers would have provided richer contextual detail. We also relied on web sites for ascertainment of state/territorial plans and could have missed more recent versions not posted online. Some state suicide prevention plans reported planned activities and others reported activities that are in progress or have been completed. States and territories varied in how they reported their strategies within suicide prevention plans. Additionally, many suicide prevention plans have also been updated since the data in this report were collected, so the findings are only current as of the time the reviews were conducted.

For the first review, tribal suicide prevention plans were not included in the analysis. Also, the goals and objectives of each plan were not assessed using the SMART criteria. For the second review, not all disproportionately affected populations were included in the analysis and the degree to which disproportionately affected populations were covered in the suicide prevention plans varied. Territorial and tribal plans were not included. Additionally, characteristics, activities, and inclusion of specific strategies for disproportionately affected populations were reviewed in a binary capacity, meaning there was no assessment made regarding the quality or effectiveness of these characteristics, activities, and specific strategies within each suicide prevention plan. Further, strategies in the second review were coded into the level of the Social-Ecological Model using a best fit method and were not assessed for placement into multiple levels (one strategy was coded to only one level of the Social-Ecological Model).

# Conclusions

State and territorial suicide prevention plans provide an opportunity to outline a comprehensive public health approach to suicide prevention, including attention to disproportionately affected populations and prevention strategies that extend across the Social-Ecological Model to address the many factors associated with suicide. This report provides a descriptive review of state and territorial plans with results shedding initial light on the scope and depth of reviewed plans.

Overall, states and territories were guided by a variety of collaborators and frameworks planning a wide range of suicide prevention activities. More information is needed on level of funding, implementation status, and evaluation. Most technical package strategies were addressed by the majority of state and territorial suicide prevention plans even though most plans were developed prior to the release of [CDC's Preventing Suicide Technical Package](#). However, the use of technical package approaches was more varied and whether the included programs, practices, and policies were evidence-based could not be abstracted.

Most state suicide prevention plans included mention of disproportionately affected populations; however, gaps exist in specific suicide prevention strategies to address these populations. Addressing these gaps while using a comprehensive public health approach will be crucial in making progress towards achieving health equity in suicide prevention.

# References

1. Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2021 on CDC WONDER Online Database, released in 2021. Accessed January 24, 2022. <https://wonder.cdc.gov/>
2. Substance Abuse and Mental Health Services Administration. [Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health](#). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, 2021.
3. Ivey-Stephenson A, Demissie Z, Crosby A, et al. [Suicidal Ideation and Behaviors Among High School Students—Youth Risk Behavior Survey, United States, 2019](#). *Morbidity and Mortality Weekly Report* 2020;69(1):47-55.
4. Hedegaard H, Curtin SC, Warner M. [Suicide mortality in the United States, 1999-2019](#). NCHS Data Brief 2021, no 398. Hyattsville, MD: National Center for Health Statistics.
5. National Center for Injury Prevention and Control. [The Public Health Approach to Violence Prevention](#). 2019.
6. U.S. Public Health Service. [The Surgeon General's Call to Action to Prevent Suicide](#). Washington, DC: 1999.
7. Hendin H. [The Surgeon General's Call to Action to Prevent Suicide: American Foundation for Suicide Prevention Responds](#). *TEN*. 2000;2(3):54-56.
8. U.S. Department of Health and Human Services. [National Strategy for Suicide Prevention: Goals and Objectives for Action](#). Rockville, MD: 2001.
9. Substance Abuse and Mental Health Services Administration, National Suicide Prevention Lifeline. About. n.d. Accessed January 7, 2021. <https://suicidepreventionlifeline.org/about/>
10. Suicide Prevention Resource Center. About SPRC. n.d. Accessed January 7, 2021. <https://www.sprc.org/about-sprc>
11. Institute of Medicine. [Reducing Suicide: A National Imperative](#). Washington, DC: The National Academies Press; 2002.
12. 108th Congress. [Garrett Lee Smith Memorial Act](#). Vol Public Law 3552004.
13. National Action Alliance for Suicide Prevention. About Us. 2019. Accessed January 7, 2021. <https://theactionalliance.org/about-us>
14. U.S. Surgeon General, National Action Alliance for Suicide Prevention. [National Strategy for Suicide Prevention: Goals and Objectives for Action](#). Washington, DC: 2012.
15. Stone DM, Holland KM, Bartholow B, Crosby AE, Davis S, and Wilkins N. [Preventing Suicide: A Technical Package of Policies, Programs, and Practices](#). Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2017.
16. Centers for Disease Control and Prevention. National Violent Death Reporting System (NVDRS). 2019. Accessed January 7, 2021. <https://www.cdc.gov/violenceprevention/datasources/nvdrs>
17. Suicide Prevention Resource Center. [State Suicide Prevention Infrastructure Recommendations](#). Waltham, MA: Education Development Center, Inc.;2019.
18. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.

- Comprehensive Suicide Prevention. 2020. Accessed January 7, 2021. <https://www.cdc.gov/injury/fundedprograms/comprehensive-suicide-prevention/index.html>
19. U.S. Department of Veteran Affairs. PREVENTS: The President's Roadmap to Empower Veterans and End a National Tragedy of Suicide. 2020. Accessed January 7, 2021. <https://www.va.gov/prevents/>
  20. 116th Congress. National Suicide Hotline Designation Act of 2020. 2020. Accessed January 7, 2021. <https://www.congress.gov/bill/116th-congress/senate-bill/2661>
  21. U.S. Public Health Service. [The Surgeon General's Call to Action to Implement the National Strategy for Suicide Prevention](#). Washington, DC: 2021.
  22. National Action Alliance for Suicide Prevention, American Foundation for Suicide Prevention. [Leading Suicide Prevention Efforts Unite to Address Rising National Suicide Rate](#). Washington, DC: 2017.
  23. Kennedy K, Carmichael A, Brown M, Trudeau A, Martinez P, Stone DM. [The State of State, Territorial, and Tribal Suicide Prevention: Findings from a Web-Based Survey](#). Atlanta, GA: Centers for Disease Control and Prevention, 2021.
  24. Centers for Disease Control and Prevention. The Social-Ecological Model: A Framework for Prevention. 2021. Accessed April 26, 2021. <https://www.cdc.gov/violenceprevention/about/social-ecologicalmodel.html>
  25. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. [State Suicide Prevention Planning: A CDC Research Brief](#). Atlanta, GA: n.d.
  26. Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS). 2020. Accessed January 7, 2021. <https://www.cdc.gov/injury/wisqars/index.html>
  27. Kann L, O'Malley Olsen E, McManus T, et al. [Sexual Identity, Sex of Sexual Contacts, and Health-Related Behaviors Among Students in Grades 9–12—United States and Selected Sites, 2015](#). *Morbidity and Mortality Weekly Report Surveillance Summaries*. 2016;65(9):1-202.
  28. James S, Herman J, Rankin S, Keisling M, Mottet L, Anafi M. [The Report of the 2015 U.S. Transgender Survey](#). Washington, DC: National Center for Transgender Equality, 2016.
  29. Leavitt R, Ertl A, Sheats K, Petrosky E, Ivey-Stephenson A, Fowler, K. [Suicides Among American Indian/Alaska Natives—National Violent Death Reporting System, 18 States, 2003–2014](#). *Morbidity and Mortality Weekly Report*. 2018;67(8):237-42
  30. Ivey-Stephenson A, Crosby A, Jack S, Haileyesus T, Kresnow-Sedacca M. [Suicide Trends Among and Within Urbanization Levels by Sex, Race/Ethnicity, Age Group, and Mechanism of Death—United States, 2001–2015](#). *Morbidity and Mortality Weekly Report Surveillance Summaries*. 2017;66(18):1-16.
  31. U.S. Department of Veterans Affairs. [2019 National Veteran Suicide Prevention Annual Report](#). Washington, DC: 2019.
  32. U.S. Department of Defense. [Annual Suicide Report: Calendar Year 2018](#). Washington, DC: 2019.
  33. Peterson C, Sussell A, Li J, Schumacher PK, Yeoman K, Stone DM. [Suicide Rates by Industry and Occupation—National Violent Death Reporting System, 32 States, 2016](#). *Morbidity and Mortality Weekly Report*. 2020;69:57-62.
  34. National Health Care for the Homeless Council. Suicide and Homelessness Data Trends in Suicide and Mental Health Among Homeless Populations. 2018. Accessed May 4, 2021. <https://nhchc.org/wp-content/uploads/2019/08/suicide-fact-sheet.pdf>

35. Suicide Prevention Resource Center. Effective Suicide Prevention: Getting Started. 2020. Accessed April 26, 2021. <https://www.sprc.org/effective-suicide-prevention>
36. Suicide Prevention Resource Center. [State Suicide Prevention Plans and Leadership Guidance](#). Education Development Center, Inc.: 2020.
37. Cramer RJ, Kapusta ND. [A Social-Ecological Framework of Theory, Assessment, and Prevention of Suicide](#). *Frontiers in Psychology*, 2017;8(1756).
38. Education Development Center. Zero Suicide: About. Accessed July 13, 2021. <https://zerosuicide.edc.org/about>
39. Prevention Institute. The Spectrum of Prevention Oakland, CA. 2021. Accessed July 13, 2021. <https://www.preventioninstitute.org/tools/spectrum-prevention-0>
40. National Action Alliance for Suicide Prevention, Office of the U.S. Surgeon General. Overview—2012 National Strategy for Suicide Prevention: Goals and Objectives for Action. n.d. Accessed July 13, 2021. <https://www.hhs.gov/sites/default/files/national-strategy-for-suicide-prevention-overview.pdf>
41. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. 2021. Accessed August 31, 2021. <https://www.cdc.gov/suicide/strategy/index.html>
42. Centers for Disease Control and Prevention. Develop SMART Objectives. 2015. Accessed May 6, 2021.

[www.cdc.gov/suicide](http://www.cdc.gov/suicide)