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

Findings from Key Informant Interviews and Qualitative Web-Based Survey Questions

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

The State of State, Territorial, and Tribal Suicide Prevention: Findings from Key Informant Interviews and Qualitative Web-Based Survey Questions

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Background

The number of suicides in 2021 (48,183) was nearly 5% higher than in 2020 (45,979). This translates to 14.1 suicides per 100,000 in 2021 as compared to 13.5 suicides per 100,000 in 2020.[1] Suicides are part of a much larger problem. In 2021, 12.3 million adults aged 18 or older had serious thoughts of suicide, 3.5 million made suicide plans, and 1.7 million attempted suicide.[1] Among high school youth, 22% seriously considered attempting suicide.[2]

Suicide is preventable. 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.[3] It is important to identify factors that are often outside of individual control but can have great impact on suicide prevention efforts.

The Centers for Disease Control and Prevention (CDC) released the *Suicide Prevention Resource for Action | Suicide | CDC* in 2022, hereafter referred to as "the Prevention Resource."[4] 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. It includes seven core strategies to achieve and sustain reductions in suicide focused 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.

In addition to the development of the Prevention Resource, and its 2017 predecessor *Preventing Suicide: A Technical Package of Policy, Programs and Practices*,[5] some other milestones in suicide prevention include the:

- 2018 expansion of the National Violent Death Reporting System (NVDRS) to all 50 states, Washington DC, and Puerto Rico[6],
- release of SPRC's *State Suicide Prevention Infrastructure Recommendations* in 2019[7],
- first congressional appropriation for CDC's Comprehensive Suicide Prevention in 2020[8],
- release of the *President's Roadmap to Empower Veterans and End a National Tragedy of Suicide* (PREVENTS)[9] in 2020,
- signing into law of the National Suicide Hotline Designation Act in 2020[10], and
- release of the *Surgeon General's Call to Action to Implement the National Strategy for Suicide Prevention* in 2021[11].

The suicide prevention field is also working toward a shared national goal to reduce suicide rates 20% by 2025.[12] Suicide rates have increased greatly since 1999 despite these and many other accomplishments. 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—, and
6. Share lessons learned with the field to inform future preventive action

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 third component of the project: qualitative findings from key informant interviews and the web-based survey.

Results from the scan's first component (quantitative findings from a 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*.[13] The Part Two report: *State of State, Territorial, and Tribal Suicide Prevention: Findings from Reviews of Suicide Prevention Plans*, was released in 2022. It highlights key findings from the review of state and territorial suicide prevention plans. This report, Part Three: State of State, Territorial, and Tribal Suicide Prevention: Findings from Key Informant Interviews and Qualitative Web-Based Survey Questions, describes qualitative findings from key informant interviews conducted with suicide prevention coordinators from nine states and qualitative information from open-ended questions used in the online survey.

Part One, the web-based survey, highlights successes and challenges states have encountered when implementing suicide prevention activities. Findings from Part Three confirm findings from Parts One and Two and add new information. This is to be expected given that each part of the report has a specific focus. Unique to Part Three, key informants' and web-based survey respondents' own words were analyzed. Data from the three reports, when taken together, can provide a more robust understanding of the state of suicide prevention across the United States. Part Three qualitative findings can be used to contextualize Part One and Part Two findings, to understand the suicide prevention environment among a cross-section of states, and to hear directly from state-level suicide prevention coordinators about suicide prevention work implemented in different states.

Qualitative Analysis of Key Informant Interviews

This section examines qualitative responses from the web-based survey covered in Part One. The purpose of this analysis was to glean additional qualitative information from respondents to the web-based survey to find any further unique input about suicide or suicide prevention from State, Territorial, and Tribal (STT respondents. For further information on the Part One survey, please review the report found here: The State of State, Territorial, and Tribal Suicide Prevention: Findings from a Web-based Survey (cdc.gov).

Methods

An OMB-approved (OMB No. 0920-0879) open-ended semi-structured qualitative interview guide with associated probes was developed and administered by telephone to nine key informants representing nine different states in 2018. Interviewees were invited by e-mail to participate in the interview process. All interviews were voluntary. Inclusion criteria included: five states with the highest increases and rates of suicide as reflected in the 2018 CDC Suicide Vital Signs report,[14] states with low and medium rate increases, and inclusion of geographically diverse states, resulting in interviewees from the North, South, East, Midwest, and West, and covering urban, rural, and frontier geographies. All key informants identified as suicide prevention coordinators or the equivalent within their state and spoke on behalf of their state. A request to audiotape the interviews was accepted by all nine interviewees. Interviews lasted approximately 45 minutes in length and were then transcribed. The interview guide covered the following domains not all of which are reflected in the results section below:

- position, role, and years involved in suicide prevention,
- nature of responsibilities,
- description of the problem of suicide in key informant's state,
- how the problem of suicide changed over the past five years and what has contributed to these changes,
- groups most impacted by suicide,
- specific work with tribal communities,
- characterization of the suicide problem in tribal communities,
- description of suicide prevention challenges or successes,
- suicide clusters in the past five years and their impact,
- factors driving suicide prevention efforts in the state,
- a particular person or event that motivates suicide prevention efforts in the state,
- ways to achieve a 20% reduction in suicide by 2025 in the state,
- barriers or constraints to bringing about these changes,
- facilitators to help achieve these changes, and
- top three highest priority activities to reduce suicide in the state.

Transcriptions were entered into NVivo 12.0, a qualitative data analysis software. Both NVivo and Microsoft Excel were utilized for organization and management of data. Qualitative analysis followed. The purpose of the data analysis was to iteratively generate a set of themes, illustrated by supporting quotes from key informants. More specifically, each transcript was read line by line twice. A technique called memoing allowed for notating initial thoughts and reactions. Next, open coding of each interview (i.e., case) individually and then across cases helped identify primary, secondary, and tertiary themes in the interviews. The constant comparison method was utilized to identify within-case themes and was followed by identification of common and divergent themes across cases. Identification of themes broadly followed the interview guide questions and further analysis allowed for the identification of additional emergent

themes. A hierarchical embedded coding process, the constant comparison methodology, was employed to identify conceptual similarities, group data into categories, and discern patterns from these categories, coming to a rich and nuanced understanding of the data. [15-17]

Results

Disproportionately Affected Populations

Key informants were asked to describe the problem of suicide within their state, including disproportionately affected populations. Interviewees identified between zero and seven disproportionately affected populations in their respective states.

The populations identified by key informants closely mirrored those named in the state suicide prevention plans in Part Two. The only substantive difference involved corrections; key informants identified those working in corrections at higher risk for suicide while the review of suicide prevention plans identified juveniles/adults in the correctional system itself at higher risk.

Thematic Analysis

Primary, secondary, and tertiary themes grounded in the data are presented in Table 1. Both secondary and tertiary themes relate back to identified primary themes.

Table 1. | Key Informant Interviews Thematic Analysis

Primary Themes	Secondary Themes	Tertiary Themes
Characterizing the problem of suicide	Access to Care	*Workforce development*
		School-based access to care
	Stigma	
Drivers of suicide prevention work	Behavioral health approach versus public health approach to suicide prevention	
	Developing and keeping the momentum going: The role of champions and leaders in state suicide prevention work	
Reducing suicide rates 20% by 2025	Facilitators to decreasing state suicide rates	*Early intervention and increased suicide awareness and education*
		Changing community social and cultural norms
		Implementation of the Zero Suicide Model
	Barriers to decreasing state suicide rates	*Funding, resource, and infrastructure constraints*
		Ability to scale suicide prevention work and sustain infrastructure
		Funding and its implications for data
		Rurality: issues of access and isolation

1.0 Characterizing the problem of suicide

Interview transcript analyses revealed access to suicide care and stigma as two secondary themes related to the primary theme, characterization of the problem of suicide among states. Key informants largely described the problem of suicide in the context of mental health and suicide-specific care as opposed to focusing on more upstream determinants known to be risk factors for suicide behaviors.

1.1 Access to care

All key informants raised the issue of access to care when characterizing the problem of suicide. One key informant described how a lack of funding for their state's mental health system made accessing suicide care difficult, disclosing, "how hard it is to get into the public mental health system here." A key informant from another state articulated their belief that, "The first [priority] is to improve access and quality of care, which is no tiny task… So, really, that people have access when they need it, and this includes things like workforce development, parity, access to insurance, all of those things." Part One also identified lack of access to behavioral-mental health care as an issue impacting suicide prevention.

1.1.1 Workforce development

Part Three interviewees identified a concern about the lack of a robust workforce with many key informants citing a dearth of providers; this aligns with Part One's quantitative web-based survey results. One key informant shared, "We also have, and we're not unique in this, a workforce development barrier." Another key informant shared that workforce retention was a workforce development barrier experienced in their state. The workforce development issue also encompassed the current state of clinical training in suicide care among providers. One key informant shared that more should be done to train clinicians in how to work with suicidal individuals, including specific training that is mandated. The key informant expressed that mental health providers ought to "receive the proper training around suicide and suicide prevention and treating suicidality." They went on to state that this training should be required and should also include assessing and managing risk, concluding with, "I think that is something that desperately needs to happen as… a first round."

Conversely, one key informant expressed a positive outlook on the workforce development changes taking place in healthcare systems in their state, explaining, "I'm really excited about the changes that some of these systems or some of these organizations, both healthcare and behavioral health, are making as far as system changes… It's going to be easier for them to implement those things if their workforce has the proper training."

Highlighting the need to provide appropriate care for those struggling with suicide, one key informant distinguished overarching mental healthcare from suicide-specific care, stating that there is a need to "continu[e] to push…out care… [that is] responsive to the problem of suicide specifically, not just as a subset of a potential mental health problem."

1.1.2 School-based access to care

Web-based survey respondents from Part One reported youth as a priority population and the focus of a majority of suicide prevention efforts. They identified gatekeeper training as one intervention that typically occurs in schools and teaches school personnel how to identify youth at risk of suicide as the focus of state efforts. Several key informants described how children in their state did not have adequate access to mental health clinicians to address suicide in the school setting in spite of lay persons working in schools receiving gatekeeper training. This was often a function of the level of financial resources available in particular school districts. One key informant stated:

> *There has been a lot of discussion and a lot of frustration with staffing at schools in that, again, there is this disparity between some of the larger school districts that have a better ratio of school nurses, school psychologists, and so forth to the student population and yet you have other counties where you have a school nurse that might be covering four schools. To have those resources actually in-house can be quite challenging.*

The lack of clinicians equipped to address suicide was noted as a significant issue in some schools and key informants cited telehealth as a viable solution to increase identification and care of suicidality among youth in school settings.

1.2 Stigma

Key informants identified stigma as a challenge across multiple populations, similar to Part One web-based survey findings. Key informants provided additional context around this issue and emphasized that stigma is a substantial barrier to help-seeking among multiple populations. They noted that solutions to destigmatize the issues of mental illness and/or suicide need to be tailored to the needs, beliefs, and circumstances of specific populations.

The belief that an individual should be able to fix their own problems was one of the most common manifestations of stigma. One key informant summarized it this way:

> *. . . the biggest [problem related to suicide] that we see is stigma. The stigma, of course, that's something that's all over, but really in our region, especially, there is a cowboy-up mentality . . . there is a sense of independence. You take care of your own, you don't talk about your problems, especially when it comes to mental health issues.*

Another key informant similarly described stigma as stemming from a "...'fix your own problems ethos.' It creates challenges that often people don't get help for." One key informant highlighted a different angle--that stigma can lead to unprocessed grief among suicide loss survivors and that this, in turn, can increase the survivor's own risk of suicide:

> *[Stigma] perpetually builds on itself . . . we have so many . . . people that when they lose somebody--because of the stigma, the shame, the guilt that's associated with it, they don't openly grieve. They keep it inside. And so, we have a lot of people that are suffering.*

Key informants identified certain groups as more challenging to reach due to the stigma surrounding suicide and/or mental health issues. Schools were one such group noted:

> *. . . we brought in a lot of students from across the state and did kind of a focus group with them on school safety, and suicide prevention was mentioned multiple times among the students; and there were a couple that said. . . we had a suicide last year and they brought crisis counselors in the day after and then it was swept under the rug and we didn't need to talk about it anymore. . . that's an issue that we hear pretty often...*

Key informants identified the faith-based community as a group that has shown openness and yet is still sometimes challenging to reach:

> *. . . every year we are making progress and we are seeing things I think get better and a lot of that is just the openness and the willingness to talk about it. . . I mean, they (faith-based communities) meet with us regularly. It (suicide) is very open and discussed. But then some of the other denominations-- it's just, it's not quite as openly discussed.*

Key informants also identified the military as a population impacted by stigma. One key informant stated, ". . . there is still just a lot of stigma about even using the word[s] mental health or suicide in the military." Key informants also identified farmers and middle-aged men as disproportionately affected

by stigma around suicide. One key informant underscored the need to de-stigmatize help-seeking behaviors among middle-aged men, noting their increased isolation and higher suicide rates.

Another key informant described stigmatizing language she had observed clinicians using to refer to those struggling with mental illness and/or suicide, "We need to be more about protecting the rights [of people struggling with suicide] and advocating for anybody that struggles with a mental illness to get help..."

2.0 Drivers of suicide prevention work

Analysis of key informant interviews identified the following secondary themes:

- behavioral health approach versus public health approach to suicide prevention, and
- developing and keeping the momentum going and the role of champions/leaders in state suicide prevention work.

2.1 Behavioral health approach versus public health approach to suicide prevention

Awareness of suicide as a public health issue was described as a facilitator of suicide prevention in the web-based survey; however, both Parts One and Two reflected that state and territorial capacity to implement a public health approach was modest. Many state suicide prevention plans reviewed in Part Two focused on a public health approach; however, reports from state coordinators in Part Three revealed a gap in implementation.

Of the nine key informants interviewed, five shared that their state addressed suicide prevention from a behavioral health orientation while three key informants shared that their state addressed suicide prevention using a public health focus (one key informant did not discuss their state's approach). An interviewee explained that their state's primary prevention work shifted to a behavioral health approach primarily due to funding priorities:

> *. . . there was a [shift in] focus from primary prevention. . . to systems treatment and that's when we really had to turn to our colleagues in the Division of Mental Health and just say the focus of the federal funding has switched from public health [and] primary prevention. . . to more of a clinical, systems-based (approach) and so they would be better fit to apply for it.*

Another key informant articulated a contrasting point of view, explaining the preference of using the public health approach and looking at the commonality of cases versus "the effort of trying to identify this individual and that individual."

Other key informants believed that the best suicide care is delivered via a collaborative approach between mental health and public health and that division of duties between the two approaches, while still maintaining open lines of communication, is crucial:

> *We (Department of Public Health) have a very close tie with our Department of Mental Health (DMH) and in fact, the adult suicide prevention grant is housed with DMH and we work in close partnership with them. . . we work very closely together on [their] grant[s] as well as... our grant and we've been very fortunate that our two commissioners are so open to this collaboration. . . I don't think I could do this work without their assistance.*

A key informant from another state explained the collaboration and division of suicide prevention work among and between behavioral health and public health systems within their state this way:

> *I have a colleague over in mental health that works on multiple issues. . . I try to explain that. . . when things come up, if it's an issue regarding treatment of clinical issues, provision of care issues, that's in her camp. When it*

> *comes down to technical assistance, program presentations linked to education and other sorts of resources, then that's more in my line of work...there are opportunities to overlap and collaborate on special issues.*

The majority of states implemented suicide prevention from a behavioral health approach rather than a public health approach—whether due to funding availability, logistical considerations, or theoretical perspectives. Key informants clearly described the utility of collaboration between behavioral health and public health systems to meet the needs of state residents impacted by suicide.

2.2 Developing and keeping the momentum going: The role of champions and leaders in state suicide prevention work

Part One identified champions' work to facilitate suicide prevention in their states as "moderately active." Part One respondents also rated the work of champions as "somewhat influential." These findings contrasted with the data analyzed for Part Three. Key informant interviews centered on the role of champions and leaders, especially those with lived experience, as the main drivers in creating momentum for state-level suicide prevention work. Key informants linked lived experience of suicide among those in leadership roles as critical to developing state funding for suicide prevention work. One key informant explained:

> *... we had another really big champion who was [a relative of a person working in the state]. She had lost [a close family member] to suicide and she had lost a number of other folks in her family to suicide as well as in her community and really put a big push and that's where they got a significant [amount of state funding for suicide prevention]. And then over the years it's really been the advocacy work from our coalition that has helped drive the [among of funding] up a little more.*

Key informants also identified other champions with lived experience as instrumental in advancing state-level suicide prevention work. One key informant succinctly stated, "... when you've been touched by [suicide], that is your motivation." This theme emerged across multiple key informants:

> *...the woman I was just telling you about who lost her son. She's a very powerful advocate and she rallies people. She... builds upon her legislation every year that she goes back. Honestly, I'd say it's her specifically but it's her efforts and her work with advocacy and the people she gets involved so it's those advocacy groups. They've passed all the legislation that's gone through in the last several sessions.*

A key informant from a different state shared a similar story about a mother with lived experience who was active at the national level:

> *She addressed the state Injury Prevention Coalition and literally was going around to every state agency saying, "What are you doing around suicide prevention?" And we're like, "We aren't doing anything, but we see that it's a public health issue, it's an injury and violence prevention issue" ... and so [the development of an Injury Prevention Coalition Suicide Prevention Committee] started with that.*

Another key informant shared their perspective on how those with lived experience drive local and state-level suicide prevention work, explaining:

> *... for [those with lived experience] to be able to... speak up and let people know that it's okay to talk about [suicide]... it has been such a growing experience for all of us. And that to me is the driving force. If the people who are suicidal or have attempted or even you know, the loss survivors are talking about their loved one who died and they didn't feel as if they got the proper support or treatment and care during that time of crisis, then that's broken and that's what we need to work on.*

A different key informant explained that individuals with lived experience keep the issue of suicide prevention centered, especially given the substantial funding limitations for suicide prevention work:

> *To me, what keeps [suicide] in the forefront… are… individual citizens, the groups that are coming together and saying something needs to change, this is too important. I say individuals [because] the state doesn't have any specifically designated funds for [suicide prevention] … To me it's the … constant kind of push and growth of various vocal survivors and advocates who are dealing with [the issue of suicide]. They see it firsthand for themselves how many people are suffering.*

Key informants also discussed the role of developing and keeping momentum going around suicide prevention work. They described how harnessing momentum occurred at a grass roots level. One key informant described how community-level engagement propelled suicide prevention work in their state. Another key informant described how they created this momentum in their state:

> *I think a lot of [the progress] is making people feel like they are playing a key role in saving lives and keeping them constantly motivated and then having leaders that make sure that that is a priority as well… that emphasis in keeping [advocacy] groups motivated and keeping [up to date] information at their fingertips… every time a survey comes out, every time something [is published by] the CDC.*

Key informants also described momentum as a tool used to obtain additional resources to support suicide prevention work. Interviewees emphasized the contributions of those with lived experience of suicide, whether attempt or loss survivors, as advancing suicide prevention work within their states. These individuals were often connected politically and could secure state funding for suicide prevention work while other survivors advocated at a more grass roots level to leverage change.

3.0 Reducing suicide by 20% by 2025

Key informants were specifically asked what measures they believed would be necessary to meet the national goal of reducing suicide by 20% by 2025 in their states. Key informants spoke of facilitators and barriers impacting their states' achievement of this goal:

- **Facilitators to decrease state suicide rates**
  - early intervention and increased suicide awareness and education
  - changing community social and cultural norms
  - implementation of the Zero Suicide Model
- **Barriers to decrease state suicide rates**
  - funding, resource, and infrastructure constraints
  - ability to scale suicide prevention work and sustain infrastructure
  - funding and its implications for data
  - rurality: Issues of access and isolation

3.1 Facilitators to decrease state suicide rates

Analysis of key informant interviews identified several tertiary themes with respect to facilitators of a reduction in suicides by 20% by 2025 within their states.

3.1.1 Early intervention and increased suicide awareness and education

Part One identified increased awareness of suicide prevention as a public health issue as a facilitator in decreasing suicide rates. Key informants from Part Three also emphasized the lack of

awareness of suicide as a significant challenge in decreasing suicide rates. Key informants believed that early intervention and increased suicide awareness and education across varied populations and the life course were strategies with the potential to decrease suicide by 20% within their states.

One key informant spoke to the need to educate a range of populations across the lifespan:

> *… in order to [increase awareness and early intervention], you have to educate all groups. You know, it's one of those issues that… affects everyone…So, if you're going to focus on, you know, children and youth, parents have to be educated. Teachers have to be educated. The community has to be educated. It's not just the children. If you're going to target the military, it's not just the people who are in the National Guard. It's their family members as well. It's the communities that support them. It's the churches that support them.*

This same key informant elaborated on the need for increased education and awareness around suicide, remarking:

> *I think awareness and education and early intervention are keys to [reducing suicide by 20%]. So, to me, a lot of additional awareness of the warning signs, awareness of the risk factors, knowing how to seek help, knowing how to get help, knowing how to handle if someone tells you that they're having thoughts of suicide, all of that plays a role in being able to decrease those numbers.*

Another key informant underscored the need to raise awareness of suicide as a problem as well as the need to call attention to availability of suicide prevention resources among residents in their state, explaining that raising awareness is an ongoing process and includes making services more easily accessible. One key informant noted the drive to increase awareness coupled with slow progress: "I'm getting a much greater sense that the communities want to raise awareness and they want to start to address this issue. It's just a slow process." Another key informant contextualized their state's awareness efforts, describing how their state prioritized addressing stigma related to suicide as a key component of raising awareness. Multiple key informants spoke to the long-term, ongoing nature of efforts to raise awareness of the problem of suicide.

Key informants noted that part of increasing awareness requires making substantial strides in early identification and intervention services; this finding aligns with Part One results which identified that the majority of funding, programming, and policy focused on youth suicide. A key informant reinforced this point, stating: "The first [area to take action] … would definitely be the early identification, and it has to start in elementary schools."

Another key informant framed the issue of awareness and early identification as one of building social-emotional capacity among youth; they advocated for suicide prevention programming in schools to build youth resiliency. One key informant identified the importance of social-emotional learning among youth in preventing future suicides:

> *The long-term effects of the Good Behavior Game (an evidence-based program used to increase self-regulation, group regulation and stimulate prosocial behavior among students while reducing problematic behavior) have been shown to have positive effects …years later… Early intervention is critical, it really is, and just raising that awareness in all the other age groups, too. But starting early is critical.*

Part One responses called for effective prevention measures focused on people across the lifespan, including youth. Part One responses also stressed the primacy of addressing youth suicide; among those states that reported passing suicide prevention legislation or policy, 75% of these states passed legislation for youth (K-12) suicide prevention. Part Three informants reported that raising awareness among youth and providing early education around suicide prevention was crucial. Key informants also identified fostering inclusivity among those affected by suicide across the

life course as crucial. Key informants communicated that stigma remained a barrier to raising awareness and implementing educational efforts around suicide prevention.

3.1.2 Changing community social and cultural norms

Key informants spoke to the importance of changing social and cultural norms around suicide, especially the stigma around help-seeking, to reduce states' suicide burden. A key informant shared their view on the benefits of cultural change to reduce isolation, a risk factor for suicide. They noted that society in general is negatively affected by a sense of disconnectedness and that a cultural shift towards connectedness is needed to decrease isolation and suicide rates.

Another key informant discussed the need to change the culture around communicating about mental health challenges and normalizing the stigma surrounding help seeking by:

> *. . . shift[ing] the public dialogue and community messaging and community culture about . . . mental health and making sure that our social norms and how we talk about these issues are very supportive of help-seeking and help people know how to actually [recognize signs of suicide] . . . just like we recognize signs and symptoms of a heart attack or of the flu.*

One key informant succinctly expressed their view on social and cultural norm changes with respect to suicide, sharing, "[suicide] is not a new issue. It's a cultural issue, and it's going to take a cultural shift in thinking."

3.1.3 Implementation of the Zero Suicide Model

Zero Suicide is an evidence-based practice focused on individuals under the care of health and behavioral health systems.[18] The model provides a framework for system-wide change toward safer suicide care. Part Two identified Zero Suicide as one of the most commonly used frameworks among states and territories; almost all key informants in Part Three identified implementation of the Zero Suicide Model as a facilitator in decreasing suicides in their states.

Key informants described how engaging the community, identifying novel methods of implementation, and focusing Zero Suicide programming in areas with high suicide burden were ways of increasing uptake of Zero Suicide in their states. One key informant explained the importance of community and provider engagement in developing and implementing the Zero Suicide Model by connecting Zero Suicide providers with at-risk community members. Key informants spoke of the potential of using telehealth modalities to implement Zero Suicide. Another key informant described the process of building Zero Suicide care:

> *We were able to have our first Zero Suicide Academy on one of our reservations not too long ago, and there's going to be a push in the next legislature to kind of expand and kind of adapt more of a Zero Suicide perspective.*

A key informant also spoke to the utility of implementing Zero Suicide where suicide burden is highest and then broadening the focus to decrease suicide rates across their state:

> *. . . we have been focusing [Zero Suicide] in very specific areas . . . we kind of targeted areas where we knew there were higher suicide rates. So, we want to see, does it make a difference in those areas? Kind of learn from those experiences, and then see how we can make it go further out in the state. . . .*

3.2 Barriers to decrease state suicide rates

Analysis of key informant interviews identified several tertiary themes reflecting barriers to reducing suicide by 20% within states. Half of respondents in Part One indicated a low likelihood of achieving a

20% reduction in suicide by 2025. This finding is consistent with the additional details shared by key informants in Part Three.

3.2.1 Funding, resource, and infrastructure constraints

The most frequently reported barrier to reducing suicide in states was a lack of funding and resources. This aligns with findings from Part One which reported the average rating of the likelihood of whether a state could reduce suicide rates 20% by 2025 at current resource/funding levels as "somewhat unlikely." Key informants from Part Three identified limitations with federal funding and a lack of state funding for suicide prevention efforts as a substantial challenge in carrying out their work. One key informant shared, "there's just a lot of conversation from our stakeholders about wanting to gain more state resources to support suicide prevention… And I tell you… that, we only had state funding for two, maybe three years… [over the course of] 16 years and so we do not have the diversified funding."

Many of the states represented by key informants performed suicide prevention work that was either federally funded and/or completely unfunded at the state level. As noted in Part One, almost one-quarter of states reported no budgeted funding to carry out suicide prevention work. Those that did report having funding cited that federal funding resources come with certain limitations. Part One also noted that when federal grants run out progress made can be lost or stalled. One key informant shared, "If we get [state] legislature dollars obviously we have more freedom to be able to approach [suicide prevention] in different ways but until that happens, we do have to kind of stick with what we have." Another key informant concurred that state funding was needed, sharing, "The big push right now is to have state funding to support suicide prevention. [We] would like a suicide prevention office or program… in place to support addressing this issue." A key informant further highlighted the issue of providing state-funded suicide prevention programming in terms of prioritization of state issues:

> *There are a lot of states that are functioning under unfunded mandates… I think there has to be state and federal funding. It's just not made a priority. A lot of times it's because there are other things that they find more valuable and because [state legislators] have a tendency to take a look at numbers and say, "well, [suicide] isn't affecting as many people as this [other] issue is."*

3.2.2 Ability to scale suicide prevention work and sustain infrastructure

Analysis of Part One data found only modest suicide prevention infrastructure. Part Three key informants described how those states with a dedicated line item for suicide prevention have greater potential for sustainability of suicide prevention activities. Key informants articulated how the lack of capacity to create strong infrastructure and to sustain state-level suicide prevention work were barriers to reducing state suicide rates. One key informant shared, "… I think there definitely has to be that infrastructure and that's beyond just funding for activities. It's actually having people who can really [accomplish suicide prevention] work and make sure things are being addressed."

Key informants called for consistent standards of suicide care to reduce suicide by 20%. They highlighted the necessity of providing suicide care across the care spectrum from primary prevention to crisis response and postvention to build a sustainable suicide prevention infrastructure. One key informant explained the need for universal guidelines inclusive of the range of suicide care:

> *[States need] [i]nfrastructure support… but also standards for crisis services [such as] national guidelines [which are] just starting to be developed. The whole… range of making sure we invest in best practices and research all the way to investing in the services themselves and the workforce that does them… I think that*

> *there are some consistent grant offerings and things like that, but I think [that addressing suicide] across the spectrum from primary prevention to crisis intervention is pretty inconsistent.*

Part One respondents reported cross-sector collaboration as a facilitator of suicide prevention work. Key informants in Part Three elucidated on the need for more robust cross-sector collaboration. A key informant described their state's struggle to provide care across the suicide prevention spectrum. They cited the unrealistic goal of one state entity providing the entire continuum of services and highlighted the need to partner with other providers to ensure comprehensive suicide care:

> *I said there was a lot of activity in the state but no one entity that I can think of does it all themselves from prevention to intervention to postvention. They might [try] to [do] some of those domains or areas but not the entire thing, which doesn't mean that they're not actively trying to create networks... It's just that one group might [provide] education but they're not going to go into survivor support… Having that capacity to provide and do everything outlined in the state plan to me is not realistic. You would have to network to be able to do it. You couldn't do it all within your own entity.*

Another key informant concurred that states rely on a variety of entities to provide the spectrum of suicide prevention care; however, they also stressed the need to scale all aspects of suicide prevention work to achieve population-level change:

> *One of the things that I feel like is we have taken all of the… core components of suicide prevention and we've done a little bit of all of them. But to have population level effects, we're going to have to have a true investment and we're going to have to do more of all of it… And to say whether it's a person in the community, a lawmaker, a teacher, everyone has their own role, but to make a real difference at a full state level or a national level, we're going to have to invest and do more of everything.*

Highlighting the point made by several key informants regarding the need for a collaborative approach and resources to provide comprehensive suicide prevention, one key informant described challenges for their state-level suicide prevention partnerships and ability to collaborate:

> *… the [state] Suicide Prevention Alliance actually does continue to meet on a quarterly basis and there's a couple of issues that they stay on top of. But for the most part, it's just not as active as it's been in the past and that's just simply because of no resources, whether it's staff time or funding, and so there's not as much to report on what's going on.*

This key informant also described how lack of funding impacted their state's ability to increase state-level prevention capacity by meeting the demand for additional suicide prevention training:

> *I wish we could do trainings throughout the year throughout the state... I mean I wish we had a full-time person that could just schedule trainings just so folks can have that available, whether that is online or more in-person. But I tell you what, we get a lot of requests. I mean and I wish there was more that we could offer.*

One key informant detailed a contrasting experience, describing how the use of a modest amount of funding to build suicide prevention infrastructure in one small, local community led to the community's ability to sustain their prevention work after the initial funding expired:

> *[The community] implemented [suicide prevention work] to the extent that they could because they didn't have the resources, ... the grant ended a year ago… I had created this training ... and data collection infrastructure and so like ten [local staff] ... decided to collect data on their own "just because it was the right thing to do" which was shocking to me.*

One key informant from Part Three reinforced a prevention gap noted in Part One, describing the need for comprehensive and sustainable infrastructure that includes a range of programs that address suicide across the life course:

> *. . . beyond just funding trainings here and there, we're going to have to invest in an infrastructure that's responsive to the problem of suicide, that includes things from the very beginning, like a nurse-family partnership to. . . parenting supports, to really young kids starting to focus on skill development, life skills, coping skills, all the way through. . . the lifespan and. . . [making sure] older adults don't become so isolated. I just think that we have to respect the complexity of the issue and not push any one solution.*

Part Three interviewees noted that lack of capacity and/or resources could hinder state efforts to implement a comprehensive public health approach to suicide. Most key informants described the lack of funding to develop and sustain state-level suicide prevention work as a barrier; however, one state's key informant described how putting in place sufficient infrastructure led to a community's ability to continue its suicide prevention work once funding ended. This suggests that there might be utility in better understanding these "success stories" to replicate and scale similar efforts.

3.2.3 Funding and its implications for data

Findings from Parts One and Three both refer to data as a critical component of suicide prevention. Part One noted the importance of surveillance resources and characterized states' ability to carry out routine surveillance as modest. Part Three reinforced problems with surveillance capacity and contextualized the limitations to conducting routine surveillance and carrying out data-driven strategic planning, program implementation, evaluation, and dissemination.

Key informants described a circular process depicting how the ability to collect quality data often required financial resources; however, allocation of these resources was not guaranteed. One key informant shared how providing data, especially local data, was often a prerequisite or justification for receiving continued funding for suicide prevention activities. States were challenged to collect the required data for prevention activities without funding in hand.

Approximately 88% of states utilized the Youth Risk Behavior Surveillance System (YRBS) and nearly 69% used data from the Behavioral Risk Factor Surveillance System (BRFSS) to track risk and protective factors for suicide, according to Part One respondents. Over 70% of Part One respondents additionally reported using NVDRS to track suicide within their states. Key informants in Part Three cited a lack of access to these data sources in their state. For those states that did have access to surveillance tools, lack of participation was a common barrier to collecting robust surveillance data. One key informant shared their struggle to add suicide-specific questions to their state's BRFSS survey and to obtain useful data from these questions:

> *. . . it's [suicide-related questions] like one of the last questions they ask and most people have hung up [the phone] by then and so [we] haven't got enough data yet to even be significant. . . that's so frustrating because it was so hard for me to get those questions [into the survey]. And then to get them funded just for the first time and then to have [the results] not be significant [makes it hard] to try to get [the questions] funded again-- so that's frustrating because that's two years now in the process and I've got [no results] from [the suicide questions].*

Not all states represented in Part Three successfully developed data surveillance systems. A key informant spoke to the issue of undercounting and underreporting of suicide attempts given that health departments often do not collect data on suicide attempts. Additional key informants identified the lack of a robust surveillance system as contributing to an inability to identify suicide clusters within their states. One key informant shared, "…we haven't had a chance to… analyze the

data and make some analysis of the trends and how suicide changes over the years… we haven't had the surveillance to track if there [have] been those clusters."

Two key informants shared success stories regarding use of surveillance data and validated other key informants' accounts of the need for robust data. One key informant identified use of several sources of surveillance data. A key informant from another state successful in using data to demonstrate the burden of suicide in their state and obtain additional funding described their experience:

> *…we had the Mortality Review Team where we review every single suicide that occurs, and that really woke a lot of people up as far as the data that we were getting... That led directly to legislation. We were able to get $1 million worth of grants the last legislative session, and it was all based on our findings of the review team… I think that was a driving force in a lot of the legislation, definitely because the numbers…were startling. And not only that, but the depth of the data that we were getting really put a face to the issue.*

Key informants identified reporting on outcomes from suicide programming and interventions as another challenging area. One key informant described how the measurement of outcomes and impact was especially problematic:

> *We've struggled with measurement in everything that we do, but we're going to redouble our efforts to make sure that whatever we develop and undertake, these tasks are measurable beyond performance measures, of course. Because I hear a lot about performance measures and I don't hear a lot about outcomes, so I'm always pushing for that.*

Another key informant underscored the importance of demonstrating outcomes and developing methods to track these outcomes, stating, "we need to track those processes and look and see if we're getting [the results] we want… Yes, we want the outcomes. We have to show that [our suicide prevention programming] works." One key informant described their state's efforts to track outcomes and evaluate suicide interventions without adequate resources, sharing, "That's a[n] [area] where we are consistently trying to do better… How do we sort of manage the evaluation and outcomes with very… limited resources to make sure that even with limited resources [interventions are] as effective as possible? I think that is definitely something we need to continue to focus on."

3.2.4 Rurality: Issues of access and isolation

Rurality impacted states' ability to provide timely suicide services. Key informants described engagement of rural residents as especially challenging and spoke to the disproportionate effects that access to timely services, isolation, and the impact of suicide on rural communities. One key informant described: "I think it's what we all know, that [individuals at risk of suicide] are undertreated. They're not getting help. They're out there in those rural areas and it's all the things that we all know. It's access to care. It's the rural problem we're facing in America." Other key informants also noted the strong connection between rurality and access to the spectrum of suicide care services, especially crisis services:

> *When somebody has to drive four hours, four or five hours, to get to the nearest behavioral health unit, that's an issue…I work with some of these county sheriffs where they'll say, … it depends on where the call comes from in the county; there's an hour and a half to two-hour response time for a 9-1-1 call. Those are issues that have to be addressed but… I'm not sure how to [address] it.*

One key informant drew a distinction between suicide work among urban versus rural areas in their state: "We are a pretty urban state in that most of our population is urban. But when you go

out, it's very rural. It's very under-resourced and has a lot of economic challenges… outside of the… urban hub." Another key informant also noted this disparity in resources:

> *Well, we have a very large veteran population, and that's always been a concern… many of them reside in rural communities … There is a strong disparity between counties… many [disproportionately affected populations] reside in rural communities.*

A key informant explained how their state needed to develop creative solutions to reach rural populations such as public service announcements aimed at, for example, isolated, middle-aged men. They described how rural locations in their state attract people who might already be prone to isolation and that this compounds suicide risk. One key informant described how this manifested in their state:

> *This is part of the issue with our rural and frontier area. When we get people moving here into our really frontier areas, they already fit the mold of kind of a [solitary individual]. That's why they're moving there… One of the persons who died, all of their family was out of state. Loneliness is a – I was just having a discussion about this. It's a big deal, you know.*

Other key informants spoke about the magnified impact that suicides have within rural communities: "… in the rural and the frontier areas, that one death affects everybody because everybody knows everybody… So, the ripple effect is [magnified] in our frontier counties."

Limitations

At least five limitations should be considered in interpreting Part Three: Qualitative Analysis of Key Informant Interviews. First, the study lacked multiple coders and analysts and thus intercoder agreement was not established. Second, member checking, or participants' reviews of the credibility of the findings and interpretations, was not performed. Third, the sample of key informants was purposively selected, and hence, generalizability of study findings to other suicide prevention coordinators or their equivalent is limited. Fourth, only nine key informants were interviewed. Qualitative studies typically have smaller sample sizes than quantitative investigations; however, it is not known if data saturation was achieved and thus if the results are fully representative of the views of all state suicide prevention coordinators. Finally, data were collected from key informants at a snapshot in time; all interviews were conducted in 2018 and may not reflect current information about suicide prevention in states and/or experiences of key informants.

Conclusions

Analysis of key informant interviews aimed to build upon the insights garnered from the Part One and Part Two reports by better understanding the suicide prevention landscape among a select number of states. Analysis of interviews of nine state suicide prevention coordinators (or their equivalent) knowledgeable of prevention efforts in their states provided a detailed picture of the status of suicide prevention work in multiple regions of the United States. The analysis clarified that many barriers related to state suicide prevention work still exist. At the same time, the interviews illustrated the creative ways states worked to address these barriers. Key informants described how the issue of suicide manifested in their states and identified drivers of state-level suicide prevention work. Key informants also outlined what they saw as some of the major barriers to achieving a 20% reduction by 2025 in suicide as well as the facilitators that could achieve this reduction. Challenges and successes were identified and provide a framework for future action.

Qualitative Analysis of Web-Based Surveys

This section examines qualitative responses from the web-based survey covered in Part One. The purpose of this analysis was to glean additional qualitative information from respondents to the web-based survey to find any further unique input about suicide or suicide prevention from State, Territorial, and Tribal (STT respondents. For further information on the Part One survey, please review the report found here: [The State of State, Territorial, and Tribal Suicide Prevention: Findings from a Web-based Survey (cdc.gov)].

Methods

Respondents

Respondents represented all 50 states and D.C., a selection of 15 tribes, and 5 territories.

Survey Format

The web-based survey consisted of 54 closed- and open-ended questions covering 10 domains:

1. Awareness of recent suicide trends
2. Data sources
3. Infrastructure
4. Prevention planning
5. Collaboration
6. Legislation/policy
7. Prevention readiness/capacity
8. Populations addressed
9. Risk and protective factors addressed
10. Barriers and facilitators

Qualitative Data Analysis

A subset questions from the web-based survey allowed respondents to include free text answers. These answers were coded and analyzed for convergent and divergent emerging themes using Microsoft Excel. The constant comparison methodology that aims to identify conceptual similarities, develop categories, and discern patterns from these categories, coming to a nuanced understanding of the data was utilized.

Selective qualitative results from open-ended questions cover the following themes:

- identifying new populations disproportionately affected by suicide,
- facilitators of STT suicide prevention efforts,
- barriers to STT suicide prevention efforts, and
- additional thoughts on STT suicide prevention.

Results

1.0 Identifying disproportionately affected populations

One question posed to respondents asked if/how their state's attention to specific disproportionately affected populations had changed over the past five years. Thirty-eight respondents answered this question; respondents indicated a change in focus on specific disproportionately affected populations. Answers were coded and are tabulated below.

Table 2. Web-Based Survey: Identification of Disproportionately Affected Populations

Newly Addressed Disproportionately Affected Populations	Number of STT focusing on population
Youth under 15 years of age	9
American Indian/Alaskan Native/tribal	8
Lesbian, gay, bisexual, transgender, queer, and questioning individuals	7
Middle-aged/working age males	4
Individuals accessing care through health/behavioral health systems	3
First responders	3
Adults 75+ years/older adults	3
Individuals struggling with substance misuse	2
Veterans/active-duty military	2
Individuals involved in the criminal justice system	2
Refugees	1
Individuals working in construction industry	1
Individuals working in agriculture	1
Faith-based communities	1
Adolescents in middle/high schools, juvenile detention centers, and homeless shelters	1
Individuals with lived experience of suicide or suicide loss survivors	1

Respondents expressed differing reasons for these shifts. The development of state suicide prevention plans highlighted more recent disproportionately affected populations. Shifts resulted from access to better data revealing specific disproportionately affected populations, increased information sharing and networking with providers serving specific groups, and a pivot from a lifespan approach to an approach focused on specific, distinct populations. It is noteworthy that respondents identified intersectionality in populations newly addressed, including among LGBTQ youth and American Indian/Alaskan Native youth.

Also noteworthy, the number of populations identified in the open-ended section of the web-based survey was greater than those cited in key informant interview results. All disproportionately affected populations noted in Part Two state suicide prevention plans were mentioned in the web-based qualitative answers with the exception of persons experiencing homelessness.

1.1 Facilitators of STT suicide prevention efforts

Respondents took the opportunity to use open-ended questions to expand upon closed-ended information already provided. Respondents expanded on:

- funding,
- supportive legislation,
- effective collaboration and partnerships,
- heightened awareness of suicide, and
- access to suicide prevention guidance.

1.1.1 Funding

Several respondents provided additional details in open-ended responses related to funding. Funding was cited as helping to expand suicide prevention efforts more generally and some respondents identified specific activities able to be carried out with funding. One respondent shared that their first state funding for suicide prevention led to the creation of a statewide suicide prevention program and the implementation and evaluation of their first statewide, evidence-informed public awareness campaign; funding of the state's suicide prevention hotline; continued upstream youth suicide prevention education programming; and the development of regional crisis centers. Another respondent described creative uses of funding such as the ability to braid dollars from federal resources with the use of discretionary and formula grants to carry out their suicide prevention work. An additional respondent described successful use of limited funding to advance state suicide prevention efforts.

1.1.2 Supportive legislation

Seven respondents described how enactment of legislation facilitated suicide prevention efforts within their STT. These respondents noted that legislation helped raise awareness of suicide prevention activities and facilitated the development of a Governor's Task Force to provide suicide-specific recommendations; increased implementation of the Zero Suicide Model; developed a youth suicide intervention and prevention plan; supported closer collaboration with school systems and mandatory training for school employees; and created the first state suicide prevention coordinator role to advance the state's suicide prevention efforts. One respondent commented on bills introduced with the goal of consolidating and coordinating youth, adult, and older adult suicide prevention activities under their state's department of health.

1.1.3 Effective collaboration and partnerships

Eight respondents identified collaboration and partnership as important to facilitating suicide prevention efforts in their STT. Emphasizing the need for collaboration, one respondent stated, "State government isn't going to solve this problem alone. We need to be engaged in communities with high rates of suicide, listening to their proposed solutions, partnering to build capacity and sustainability of our efforts." Respondents identified a number of ways collaboration and partnership benefitted their suicide prevention work, including:

- improving communication across community programs and sectors such as schools, medical providers, behavioral health services, law enforcement, and tribal representatives as well as among local, state, and national partners;
- developing actionable strategic plans addressing suicide across the lifespan, focusing resources, and the hiring of one state's first full-time suicide prevention coordinator;
- supporting the longer-term sustainability of suicide prevention efforts; and
- raising awareness of suicide prevention, including the establishment of new American Foundation for Suicide Prevention (AFSP) chapters in states.

1.1.4 Heightened awareness of the issue of suicide

Four respondents cited increased awareness of suicide as a facilitative factor. One respondent noted that increased awareness of upstream determinants such as trauma led to an acceleration of their STT's proactive suicide prevention efforts. Most respondents cited an increased awareness of suicide prevention efforts and resources only after a suicide occurred.

One respondent noted a heightened awareness of the need for suicide prevention efforts after a school shooting, leading to increased attention and funding allocated toward youth mental health and school safety. Another respondent identified increased attention regarding the importance of suicide prevention from all levels of government after a public suicide at a high-profile annual event attended by politicians resulted in statewide press coverage. One respondent who noted increased awareness of the issue of suicide in their STT remarked, "… in the last two years the public health department has added suicide prevention to its priority list of goals which has helped us raise efforts and awareness around the public health issue and approach. We have gotten more and more state and local level buy-in…" Several respondents indicated that their STT had experienced increased awareness of the need for suicide prevention over the prior five years. One respondent described how state policy change helped increase awareness of suicide as an important issue in their state while another respondent shared how increased awareness of suicide led to greater emphasis on accessing suicide care services. Other respondents spoke to how increased awareness of the issue of suicide led to decreased stigma in talking about the topic and encouraged help-seeking behaviors. One respondent attributed greater awareness of suicide as leading to an increase in suicide prevention efforts across the board and reflected on how "the issue is more known and addressed statewide by local, tribal, and state organizations."

1.1.5 Access to suicide prevention guidance

Respondents from Part One and Part Three also cited access to suicide prevention guidance as important in facilitating their work. Part One respondents cited the National Strategy for Suicide Prevention (NSSP)[19] and federal/national guidance materials as highly facilitative of their suicide prevention efforts. Part Three respondents noted the following resources as beneficial in their suicide prevention efforts: the National Syndromic Surveillance Program (NSSP), community-level suicide prevention coalitions helping to build out local suicide prevention efforts, guidance from CDC, and the Substance Abuse and Mental Health Services Administration's (SAMHSA) Suicide Prevention Resource Center Evidence-Based Prevention site (formerly the National Registry of Evidence-Based Programs and Practices).

1.1.6 Suicide prevention and technical assistance

Respondents were asked to share any additional thoughts related to their STT suicide prevention efforts prompted by participation in the survey. Several respondents raised the issues of technical assistance/guidance and identification of evidence-based practices.

Part Two covered the content of state, territorial, and tribal suicide prevention plans. Part Three expands upon these findings and identifies a need among states for additional federal direction on how to effectively and efficiently monitor and evaluate implementation of state suicide prevention plans. One respondent questioned how to discern between programs and practices that are evidence-based versus evidence-informed or promising when providing technical assistance. The respondent spoke to the impact of losing SAMHSA's National Registry of Evidence-Based Programs and Practices (NREPP) guidance, stating, "The loss of NREPP has been a problem, but even when NREPP was active, more distinction between EBPs (evidence-based practices) was needed; specifically answering, evidence-based to do what?" The respondent suggested developing a database with clearer distinctions delineating the effectiveness of different programs, "for example, between programs that are proven to temporarily increase knowledge and those that have lasting impact on skills, protective factors, or risk factors." Another respondent stated:

> *If CDC is moving towards a health/social equity model of using social determinates of health and changing environments to influence health, then perhaps as the [CDC Suicide] Technical Package (now the Suicide Prevention Resource for Action) suggests, we need more guidance on community-level change regarding life skills, workforce training, relationships, financial health, addressing racial and ethnic disparities, sexual and domestic violence, all parts of [Dr. Thomas] Frieden's Health [Impact]. . . Pyramid , and access to culturally and linguistically appropriate mental healthcare.*

Respondents sought more detailed guidance on the designation and implementation of practices that would most benefit populations at risk within their STT.

1.2 Barriers to STT suicide prevention efforts

Within the web-based survey, respondents identified barriers not listed as a pre-populated selection that hindered or stalled their STT suicide prevention efforts. Barriers identified in the free text portion included:

- lack of funding
- legislation
- workforce and leadership issues
- collaboration and partnerships challenges

1.2.1 Lack of funding

States participating in the key informant qualitative interview process identified lack of funding as a major barrier to decreasing state suicide rates. The web-based survey clarified types of funding available to STT and how suicide prevention efforts operated without dedicated funds. Block grants were the most common funding source utilized by STT. Additional respondents whose suicide prevention efforts were unfunded obtained financial support from private foundations, nonprofit organizations, and, in one case, a for-profit healthcare insurer. Issues related to funding included an inability to use federal block grants for suicide prevention as well as a lack of state funding for suicide prevention activities. One respondent remarked that their STT suicide prevention work was "completely dependent on federal funding" while another respondent shared that their STT had "been without federal funding since 2016." One respondent also described challenges with funding suicide prevention work due to funding that had "fluctuated wildly over the past three years."

Several respondents cited significant cuts in state-level funding for suicide as slowing efforts to advance suicide prevention work. Specifically, one respondent noted that lack of funding to

modernize community mental health systems' electronic health records had stalled their state's progress. The respondent described how it had "made it nearly impossible to track suicidal patients, build in universal screenings, enter or export data, or analyze data at the individual or aggregate level." Another respondent shared how "significant cuts in funding for suicide prevention… has really harmed our growth as we lost one of the few staff available and focused on suicide prevention." Other respondents referenced a "lack of state general funds for suicide prevention" and the impact of the loss of federal funding.

Loss of federal funding, similar to loss of state-level funding, led to reduced suicide prevention activities, making it challenging to advance suicide prevention efforts. Limited funding affected one state's ability to develop additional programming and partnerships. The respondent shared their experience: "We believe we have achieved good coordination and alignment around our state strategy, but limited funding hampers our efforts to implement more programs and develop additional partnerships." Respondents specifically noted lack of federal and/or state funding for STT suicide prevention work, grant dependency when federal funding was available, and difficulty in finding sustainable ways to fund suicide prevention work as challenges to effective suicide prevention efforts. Respondents also shared that funding was tied to the amount of money in state coffers; when an STT experienced a budget deficit, there was little ability to secure suicide prevention funding. Other respondents believed that suicide prevention work at the state-level was "vastly underfunded" and that state-level funding "has been stagnant."

1.2.1.1 Garrett Lee Smith funding

Many STT received Garrett Lee Smith (GLS) funding, which allowed STT to begin providing suicide prevention services to youth. Multiple respondents noted the importance and value of GLS funding but also pointed to the funding mechanism's pitfalls. GLS funding functioned as a gateway for STT to start implementation of suicide prevention work and build STT infrastructure and capacity. One respondent remarked, "GLS state funds have allowed us to have more state employees knowledgeable in suicide prevention and implementing elements of our suicide state plan." However, when the funding was not renewed, the state "went several months without any suicide prevention funding." One respondent shared, "Our youth efforts have been recognized across the state for their value, but [this also] point[s] out the lack of adult prevention programming in our state." Another respondent questioned this dilemma, asking, "Where is the focus on federal (and state) [funding] efforts towards adult suicide prevention? There is GLS for youth, but the lack of prevention funding for [the remaining] 80-90% [adult] deaths is striking." Another respondent described how their STT's "GLS-funded staff have reached across multiple sectors for support and focused on how our work could have an 'aging up' impact on prevention of future deaths." Due to a "lack of state general funds for suicide prevention," once GLS grants expired, there was little to no funding for either youth or adult suicide prevention work within STT.

1.2.2 Legislation

Respondents described legislative issues as a factor that stalled STT suicide prevention work. One STT passed legislation that included mandatory suicide prevention training for school personnel every three years; however, it was stipulated as mandatory only with an appropriation which the law did not include. The STT noted that since this law was passed, they had been unsuccessful in mandating suicide prevention training. Another respondent noted that proposed legislation to mandate training of school staff in their jurisdiction had been stalled for over two years. Some respondents reported progress through legislative action while other respondents cited the repeal of legislation and a lack of specificity regarding suicide within legislation as continued barriers to making progress in reducing suicide in STT.

1.2.3 Workforce and leadership issues

Respondents also raised workforce and leadership issues as areas stalling the progression of suicide prevention efforts. One respondent noted the high turnover of executive staff and behavioral health counselors as well as grant-funded staff. The respondent explained that "continuity of care is compromised at times because of this." Another respondent pointed out that, "state leadership changes and special interest groups have created barriers in treatment, awareness, and education for suicide prevention [efforts]." A respondent from another STT cited state-level "hiring freezes, resulting in significant reductions in staff capacity" to address suicide prevention. Respondents from two states shared that "lack of human capital, lack of a suicide prevention coordinator" and experiencing "several personnel changes at the state level" contributed to the slowing or halting of suicide prevention work.

Staffing and resources were issues reported as having worsened in recent years. One respondent shared that their state "previously had multiple staff working on suicide and injury prevention. Due to turnover, a state hiring freeze, and lack of resources, the program now consists of [only] a Program Manager and a grant-funded position." In some cases, STT had strong leadership to support suicide prevention efforts; however, this endorsement was "not followed up with staffing and resources." One respondent pointed towards high performance expectations not being met with necessary resources to complete the work. Respondents also cited issues with state leadership as contributing to the worsening of state suicide prevention efforts. One respondent mentioned high turnover among state leadership as a barrier while another respondent spoke to the effects of "drastic changes in our state leadership" creating "consistent budget cuts and lack of focus on mental/behavioral health which has resulted in less focus on suicide prevention at the state level."

1.2.4 Collaboration and partnership challenges

The comprehensive approach to suicide prevention focuses on building strong partnerships as a foundation for prevention efforts and decreasing suicide rates. Findings from the qualitative portion of the web-based survey included respondents citing ineffective collaboration, at multiple levels, leading to stalled suicide prevention activities. One respondent shared that,

> *There is currently no coordination with the state nor is there an identified stakeholder at the state level. At the state level, the coordination of state oversight of mental health/behavioral health [and] crisis services was transferred from the Department of Health to [another agency] which does not have the organization[al] structure nor legislative power to coordinate suicide prevention efforts.*

Another respondent described how "departments that were in the same agency with suicide prevention were moved to separate agencies that created silos and barriers." A third respondent spoke to challenges at the intersection of tribal and federal policy, noting the "difficulty within our hospital to coordinate policy between various departments." Roadblocks to effective collaboration spanned multiple tiers of suicide prevention work.

Limitations

This review of open-ended responses from the web-based survey is subject to several limitations. The survey design was cross-sectional in nature and questions captured data from 2018, prior to implementation of CDC's Comprehensive Suicide Prevention Program. Responses may not be representative of all individuals who completed the survey as up to three respondents from a single jurisdiction participated in the survey but not all answered the open-ended questions. Responses may also

not be applicable to all STT as not all STT were represented in the answers to the open-ended questions; no tribal representatives responded to the open-ended web-based survey questions analyzed for Part Three. Some open-ended questions asked respondents to reflect over the prior five years; these responses could be subject to recall bias. Analysis of responses to the open-ended questions aimed to better understand and contextualize both the results from Parts One and Two as well as the analysis of the key informant interviews; however, results should be interpreted with caution as the generalizability of findings presented in this section may be limited.

Conclusions

Analysis of responses to open-ended questions within the web-based survey aimed to provide a more contextualized framework for understanding Part One and Part Two results as well as the analysis of key informant interviews in Part Three. Information consistently addressed similar topics, whether from the perspective of facilitators of, or barriers to, suicide prevention. Some of the most prominent topics raised included:

- funding for suicide prevention work,
- state suicide prevention plans,
- legislation,
- awareness of suicide prevention activities,
- leadership,
- collaboration/partnerships,
- access to robust surveillance tools, and
- guidance on best practices.

Consideration of these domains may shed light on those areas most worthy of attention as well as those which will prove most impactful in advancing suicide prevention efforts and successfully building out a national comprehensive approach to suicide prevention. While the gaps are many, the areas of focus as laid out by respondents in Part Three offer an opportunity to prioritize and engage in suicide prevention efforts for change.

Addressing suicide using a comprehensive public health approach requires recognition of the multiple risk and protective factors associated with suicide and identifying such factors across the entire social ecological spectrum. To truly be successful in comprehensively addressing the problem of suicide, multi-level and complimentary interventions based upon the best available evidence and addressing populations disproportionately affected by suicide, must be identified and put into practice. Noted by key informants, effective suicide prevention requires multi-sectoral partnerships and collaboration. Everyone plays a role in working towards the national goal of reducing suicide 20% by 2025.

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