

Action Plan: Suicide Prevention

Summary

In 2018, New Mexico had the nation's highest suicide rate although rates decreased slightly in 2019 (national 2019 rates are currently unavailable). White and American Indian individuals and men died by suicide at the highest rates, and firearms were the most common means in New Mexico. In 2019, 515 New Mexicans died by suicide at an estimated cost of \$684 million over the lost lifetimes of the victims. Societal costs are also high, with people close to a suicide victim at higher risk for behavioral health problems and suicide themselves. The Covid-19 pandemic may exacerbate mental health issues and New Mexico's high suicide rates. The state projects a 20 percent increase in behavioral health needs based on national projections, with increases in crisis calls in line with this projection.

New Mexico has one of the highest suicide rates in the country, costing the state up to \$684 million over the lost lifetimes of the victims

Suicide does not have one cause so the state will need multiple strategies to prevent it. While the state, through the Department of Health, recently reestablished a suicide prevention coalition, it does not have a current prevention plan, although one is in process. The state should create a new plan and include a goal to reduce suicides by 10 percent in five years in line with reductions in some other states. State agencies and the suicide prevention coalition should expand and use proven initiatives, including ensuring care is provided to those in crisis and that care continues after a crisis, increasing access to behavioral healthcare through telehealth and expanding gatekeeper training in schools. Finally, the Legislature could enact laws to restrict access to lethal means and to strengthen best practices for the coalition and strategic plan. This action plan proposes an achievable goal to reduce suicide. Targeted funding of evidence-based programs and regular monitoring of progress may help refine action to reach the goal.

Action Plan

Program Evaluation Unit
Legislative Finance Committee
December 8, 2020



NEW MEXICO
LEGISLATIVE
FINANCE
COMMITTEE

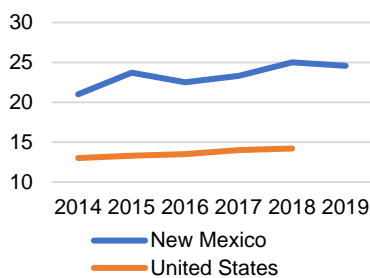


The Issue: New Mexico's High Suicide Rate Imposes a Heavy Financial and Social Burden

In New Mexico, over 500 people ended their own lives through suicide each year for the past two years. These deaths of despair obviously impart a heavy emotional toll on family members, others close to the victim, and communities but the numbers of suicides in the state also create societal costs to the state as a whole. Even more concerning is the rate at which New Mexicans die by suicide is higher than in any other state, indicating more could be done to prevent both the means and motivation for suicide in the state.

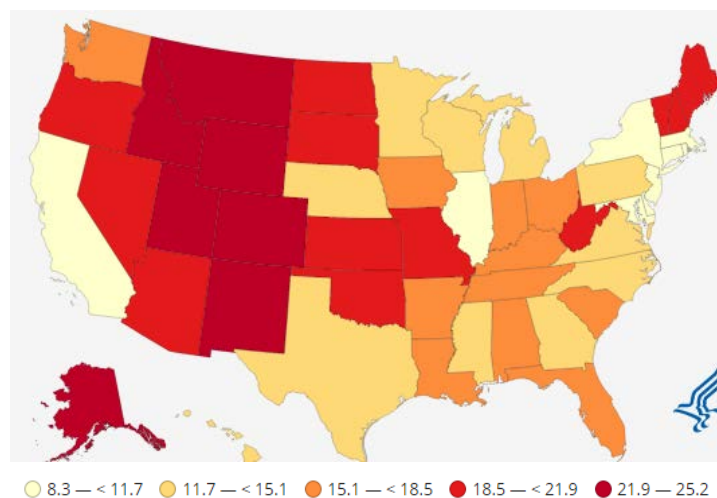
In 2018, the most recent year for which national data are available, New Mexico had the highest suicide rate in the United States, at 25.6 per 100 thousand residents,¹ and experienced a faster increase than the nation as a whole through 2018, however in 2019 suicides decreased slightly.² Other states with high suicide rates were also rural, western states, including Alaska, Wyoming, and Montana.¹ Since 2008, suicide rates in New Mexico have averaged 50 percent higher than the national rate, and since 2014, suicide has accounted for 4 percent of all deaths of New Mexicans between ages 5 and 84 and is the ninth leading cause of death statewide. From 2014 to 2018, New Mexico's suicide rate increased by 19 percent, more than double the national increase of 9 percent over the same time (see Appendix A).

Suicide Rate New Mexico and United States, 2014-2019



Source: CDC NCHS

Figure 1. Suicide Rates by State (per 100 thousand), 2018



Note: Most of the CDC data only include 535 suicide deaths as the last death was determined after most of the data was reported to the CDC, therefore the New Mexico rate is slightly higher than what is reported here.

Source: CDC

¹ New Mexico had the highest unadjusted suicide rate, when adjusted New Mexico had the second highest rate nationally.

² Statewide suicide data for 2019 showed 515 people dying by suicide in 2019, 21 less than in 2018. However national comparison data has yet to be released.

Estimates indicate suicide costs the state over \$650 million and imposes a heavy social and emotional burden on communities and individuals.

According to peer-reviewed research used by the Suicide Prevention Resource Center (SPRC), a national, federally funded organization, each suicide in the United States has a lifetime economic cost of approximately \$1.33 million.ⁱⁱ This cost includes both lifetime lost productivity and medical expenses. In New Mexico, the cost of the 515 suicides in 2019 would total over \$684.7 million. This figure does not account for the cost of treating intentional but nonfatal self-harm, which can be significant because only one out of every 25 suicide attempts results in death.

Each suicide death affects an average of 115 people in the United States.ⁱⁱⁱ Beyond the loss of life and the high economic cost, suicide exacts a significant toll on society. Research has shown those exposed to suicide, and particularly people close to the victim, have a heightened risk of mental health problems, including anxiety, depression, and post-traumatic stress disorder (PTSD).^{iv} In addition, suicidal behaviors are more common among people exposed to suicide.^v

Suicide rates are high in New Mexico, with specific populations most at risk.

Different populations and geographies experience variable suicide rates. In New Mexico, suicide accounts for a large proportion of the deaths of those ages 15-24, and rural counties generally have higher rates of suicide. In New Mexico, suicides are more prevalent among White and American Indian individuals, and men account for a majority of suicide deaths.

While most suicides occur in those over 24, suicides account for a large portion of deaths for 15 to 24 year-olds, with over 10 percent of high school students reporting attempting suicide. In New Mexico, suicide accounts for 29 percent of deaths for those between the ages of 15 to 24, a larger portion of total deaths than among other age groups, with suicides in 2019 increasing for this age group (see Appendix B for proportion of total deaths that were suicide by age group). Since 2014, New Mexico has been in the top 15 states for teen suicide. The state's suicide rate for 15- to 24-year-olds ranged from a low of 13 per 100 thousand in 2014 to a high of 29.5 per 100 thousand in 2017.

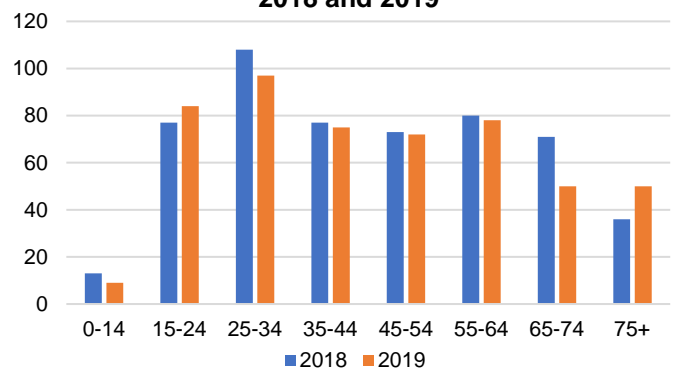
The 2019 *Youth Risk and Resiliency Survey* (YRRS) found that 10.5 percent of high school youth reported attempting suicide, similar to the rate in 2017 and higher than the national rate of 8.9 percent.^{vi} (For analysis of suicidality by county, see Appendix C.) Additionally, statewide 25.7 percent of youth who identified as LGBTQ reported attempting suicide. Therefore, LGBTQ youth likely need to be prioritized for services and other interventions, such as

Table 1. Estimated Economic Cost of Suicide in New Mexico

Estimated Cost of 1 Suicide	\$1,329,553
Number of Suicides in New Mexico in 2019	515
Estimated Total Cost of 2019 Suicides	\$684,719,795

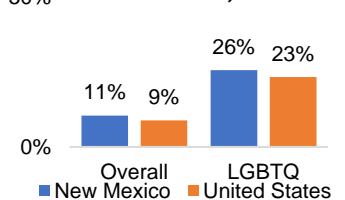
Source: Shepard et al. 2016; SPRC; LFC analysis

Chart 2. Number of New Mexico Residents Who Died by Suicide, 2018 and 2019

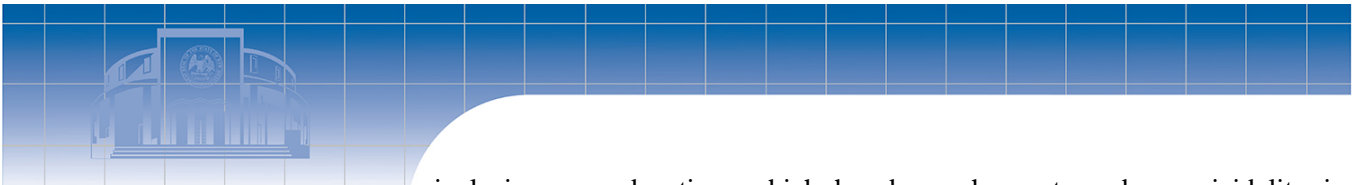


Source: DOH

Chart 3. Percent Reported Suicide Attempts for LGBTQ and All Youth, 2019

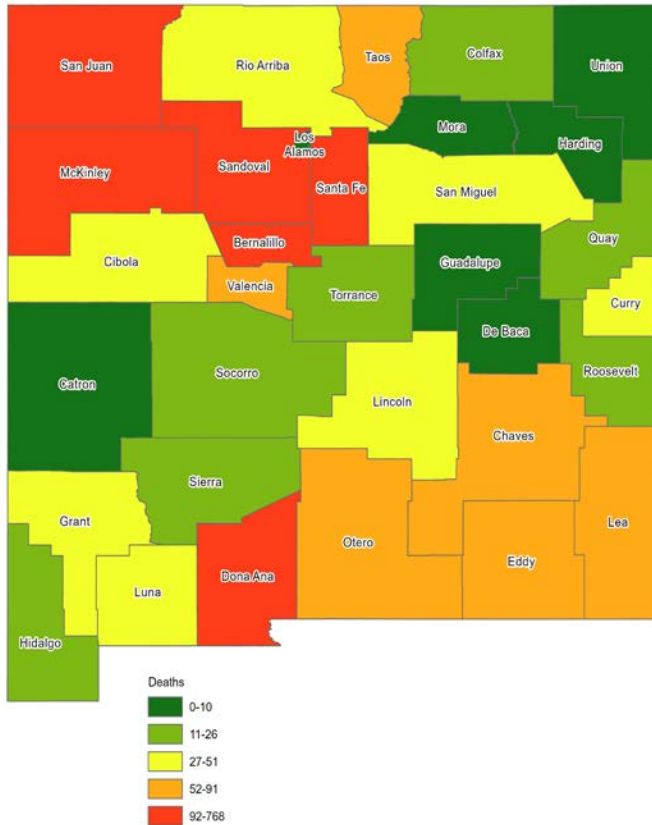


Source: CDC YRRS



inclusive sex education, which has been shown to reduce suicidality in LGBTQ youth.^{vii}

Figure 2. Suicide Deaths by County, 2014-2018



Note: See Appendix D for rates of suicide by county and table with rates and number of suicides by county.

Source: CDC Wonder

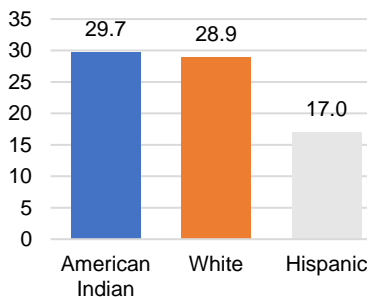
While rates of suicide are high in a number of rural counties, the highest number of suicides are in more populated counties. From 2014 to 2018, four counties with stable data had suicide rates more than 50 percent higher than the statewide rate of 23.4 per 100 thousand. There are Sierra, Lincoln, Grant, and Colfax counties -- all rural or frontier counties with relatively small populations. But while these counties have high suicide rates, the absolute number in each is relatively low. The counties with the highest absolute numbers are more populous, including Bernalillo, Doña Ana, Santa Fe, and San Juan counties.

In New Mexico, suicide rates and numbers are highest for whites, American Indians, and men.

In 2019, 261 New Mexicans identified as white died by suicide, a rate of 28.8 per 100 thousand and 60 American Indians died by suicide, a rate of 29.7 per 100 thousand. These rates are significantly higher than in the Hispanic population, which had 171 suicides, a rate of 17 per 100 thousand. Further, men are about three times more likely to die by suicide than women. In 2019, 117 women died by suicide, compared with 398 men, a rate of 11.1 per 100 thousand for women and 38.4 per 100 thousand for men.

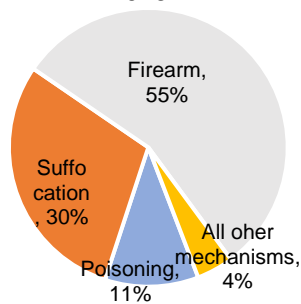
Firearms were used in over half of all suicide deaths in New Mexico in 2019.

Chart 4. Suicide Rate per 100,000 by Ethnicity and Race, 2019



Source: DOH

Chart 5. Suicides by Mechanism of Injury, 2019



Source: DOH

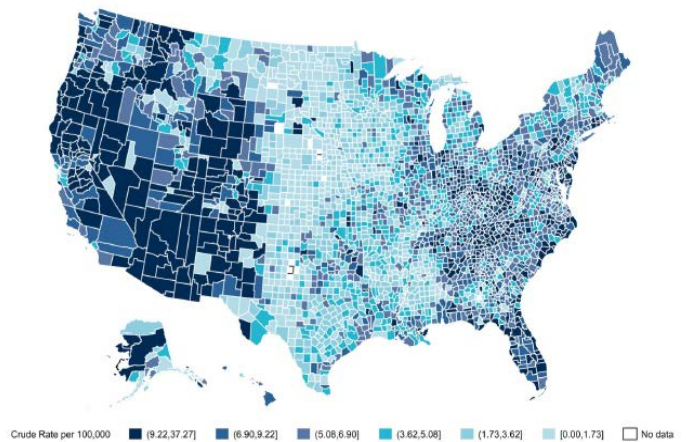
In 2019, 55 percent of suicides in New Mexico involved a firearm. Suffocation and poisoning, accounting for 30 percent and 11 percent of suicides, respectively, were the other primary means. According to the Harvard School of Public Health, attempted suicides by a firearm have a high lethality rate, meaning that firearms are more deadly than other mechanisms used for suicide.^{viii} New Mexico has the seventh highest rate of gun ownership in the United States and all the states with the highest rates of gun ownership are in the western United States, which also have high rates of suicide.^{ix}

The Covid-19 pandemic will likely exacerbate behavioral health issues and could lead to an increase in suicides.

According to the Kaiser Family Foundation, 45 percent of American adults reported the pandemic had negatively affected their mental health. Likely related, at least in part, deaths of despair – defined as deaths resulting from suicide, drug overdoses, and alcohol-related illnesses – are projected to increase nationally by 68 thousand from 2020 to 2029, with 865 additional deaths projected in New Mexico. New Mexico is expected to have the second-highest national rate per 100 thousand residents, behind only Nevada. Research suggests the country's economic recovery from Covid-19 will impact these projections. According to a May 2020 report by the Robert Graham Center and the Well Being Trust^x, the country could face anywhere from 27.7 thousand to 154 thousand additional deaths within the next 10 years depending on the length of the recovery and unemployment. New Mexico may be at particularly high risk because the state already has high rates of suicide, substance use disorders, and unemployment, which are factors correlated with increased risk for deaths of despair.

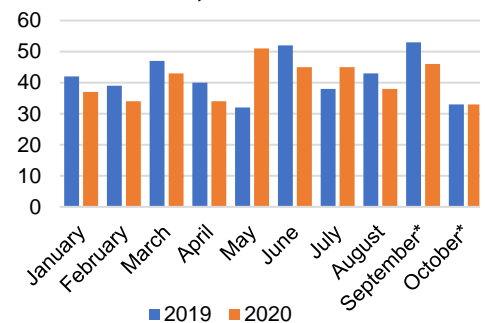
Preliminary 2020 data show a continuing high number of suicides and localized evidence could be cause for concern of a worsening trend. While national research states the country should expect an additional 68 thousand deaths of despair due to the pandemic, in New Mexico, this effect is not yet clearly apparent in statewide suicide data. This could be due to the length of time required for medical investigations to determine suicide as the cause of death or because behavioral health problems may take time to present after a traumatic situation. Through October, suicides did not increase in 2020 compared to 2019, although in 2020, suicides were higher in May and July. From January to October 2019, there were 419 suicide deaths, while through October of 2020, the Office of the Medical Examiner categorized 407 deaths as suicides. However, in May 2020, there were 19 more suicides than in May 2019, and in July 2020, there were seven more suicides than in July 2019. However, for those between the ages of 15 through 24, over the same time period, suicides increased slightly between 2019 and 2020 (see Appendix E). While this increase is not statistically significant, it is potentially concerning as suicides in this age group also increased between 2018 and 2019, and as there is evidence of increased behavioral health needs for youth. The Office of the Medical Investigator generally takes 90 days to determine cause of death, but may take longer, so these numbers are preliminary. Suicide death data is typically released by DOH within one year after the end of the calendar year.

Figure 3. Estimated Additional Deaths of Despair, Counties, 2020-2029



Source: Robert Graham Center, 2020 report

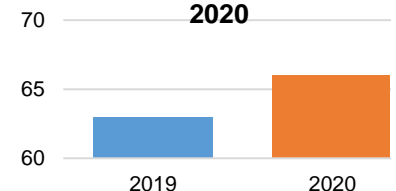
Chart 6. New Mexico Suicide Deaths, 2020 versus 2019



Note: OMI takes around 90 days to determine the cause of death. Because these data were received late November, September and October may not have the total number of suicide deaths included. These preliminary numbers may be different than the official numbers reported by DOH in the future.

Source: NM OMI

Chart 7. Suicides of 15 though 24 year olds, January through October 2019 versus 2020



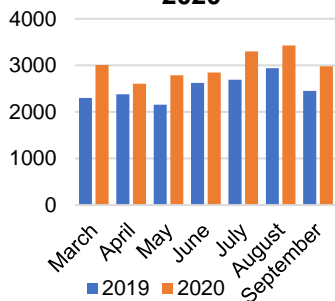
Note: OMI takes around 90 days to determine the cause of death. These preliminary numbers may be different than the official numbers reported by DOH in the future.

Source: NM OMI



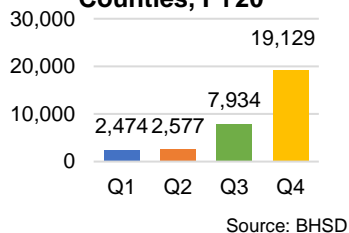
The Medical Advisory Team is tasked with responding to the question, how do we best use existing capacity and resources? It has looked at how New Mexico should respond to needs during the pandemic.

Chart 8. Crisis Calls, 2019 versus 2020



Source: NMCAL Utilization Reports

Chart 9. Number Served through Tele-Mental Health in Rural and Frontier Counties, FY20



Source: BHSD

Some evidence suggests a rise in suicides may already be occurring. Newspaper articles or other reports pointing to a possible increase include:

- National reports of a 20 percent increase in military suicides and risk for teen suicide deaths;
- Law enforcement reports in Farmington of an increase in suicide from four in 2019 to 11 in 2020;
- Reports of seven suicides of student athletes in New Mexico, some of these potentially representing suicide clusters;
- Report of two recently graduated youth from Hobbs dying by suicide within one month; and
- Report of two youth dying by suicide in San Miguel County.

New Mexico's Medical Advisory Team expects the need for behavioral health services to increase by 15 percent to 20 percent due to Covid-19.

The projections were published in a September 2020 report from New Mexico's Medical Advisory Team, composed of healthcare providers, state officials, and community members, and are based on national research showing increases in anxiety, depression, insomnia, PTSD, and psychological distress, as well as the mental health impacts of past public health emergencies and natural disasters.^{xi}

Crisis calls to the New Mexico Crisis Access Line increased in 2020.

According to New Mexico Crisis Access Line's (NMCAL's) utilization reports, there have been more crisis calls – or calls focused on an immediate, acute need – in 2020 than in 2019. In 2019 there were more calls to the warm line, which offers support and comfort for less urgent mental health challenges. On average, crisis calls increased almost 20 percent, while warm line calls declined almost 35 percent. The New Mexico Veteran's Administration hospital also reported a 24 percent increase in the number of consultations with NMCAL from January to November 2020. The number of text message conversations through NMConnect also generally increased in 2020, with an average increase of 20 percent, similar to the increase in crisis calls. The NMConnect text line provides connections to peer support workers as well as resources for substance use and community mental health services. The increased utilization of both the crisis and text services are in line with the projections from the Medical Advisory Team.

Tele-mental health services have also rapidly expanded during the pandemic.

According to the Human Services Department^{xii} and the annual healthcare workforce report,^{xiii} telehealth has rapidly expanded in New Mexico due to the pandemic, especially in rural and frontier areas. Due to social distancing behavioral healthcare visits shifted to a telehealth model, making it is unclear whether an increase in behavioral health need also led to this increase in telehealth visits. The state was ready for the expansion, partially due to the amendment of multiple acts, including the sections of the Health Care Purchasing Act, the New Mexico Insurance Code, the Health Maintenance Organization Law and the Nonprofit Health Care Plan Law, through *Laws 2019, Chapter 255*, which provided equal reimbursement, coverage, and patient payment for telehealth and regular health services. Tele-mental health services in rural communities increased 141 percent between the

third and fourth quarters of FY20.

School-based health centers (SBHC) also increased their telehealth usage, with the majority of the service increase for behavioral health visits. During March, April, and June, SBHCs had a total of 1,924 telehealth visits, and behavioral health visits made up the majority of telehealth visits each month.

Table 2. School-Based Health Center Telehealth Data for Behavioral Health, March-June 2020

	March	April	May	June
Percent of telehealth visits with a primary behavioral health diagnosis	57.2%	57.5%	38.2%	67.5%
Percent of behavioral health visits done through telehealth	17.0%	26.0%	14.5%	23.4%

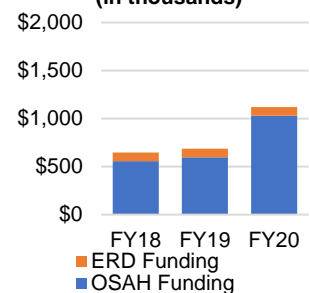
Source: DOH OSAH files

The Department of Health and the Behavioral Health Services Division of the Human Services Department together spent \$2.9 million on suicide prevention efforts in FY20.

Currently, about half of the suicide funding at the Department of Health (DOH) and the Behavioral Health Services Division (BHSD) go to youth, who account for 15 percent of the suicides in the state. In FY20, within DOH's Public Health Division, the Office of School and Adolescent Health (OSAH) provided \$1 million in programmatic funding for suicide prevention, largely from a five-year federal grant of \$735 thousand annually focused on youth suicide prevention. While the program focuses mainly on training, staff also met with communities statewide to provide technical assistance and broad postvention services, services to the community or family after a suicide death. (See callout box on page 12 for more information on postvention activities.) Within DOH's Epidemiology and Response Division, one full-time employee oversees the coordination of suicide prevention. This person is in charge of organizing the suicide prevention coalition meetings and writing the suicide prevention strategic plan, as well as providing training to hospital emergency departments.

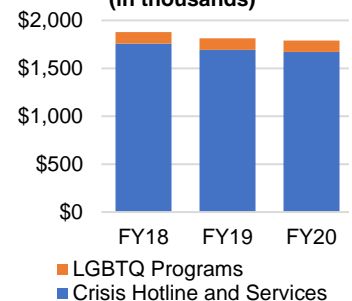
BHSD funds two programs specifically focused on suicide prevention. The first, Crisis Hotline and Services, provides the New Mexico Crisis Access Line (NMCAL), which includes statewide crisis and warm line services. Funding for the call line has decreased slightly since FY18 because the crisis line no longer provides some services around substance use. Beyond the call line, this funding also supports text messaging services. NMCAL is one of two crisis lines in New Mexico; the second, Agora, is run through the University of New Mexico and gets partial funding from OSAH. BHSD also funds a suicide prevention program with Santa Fe Mountain Center focused on helping LGBTQ individuals through peer-to-peer support.

Chart 10. DOH Suicide Prevention Funding, FY18-FY20 (in thousands)



Source: DOH

Chart 11. BHSD Suicide Prevention Funding, FY18-FY20 (in thousands)



Source: DOH



Contributing Factors to Suicide and Potential Solutions

Gambling has been associated with increased risk for suicide. However, New Mexico had high rates of suicide prior to gambling being permitted in the state. Research shows other factors may be impacting both gambling and suicide such as depression, economic instability, or impulsivity.

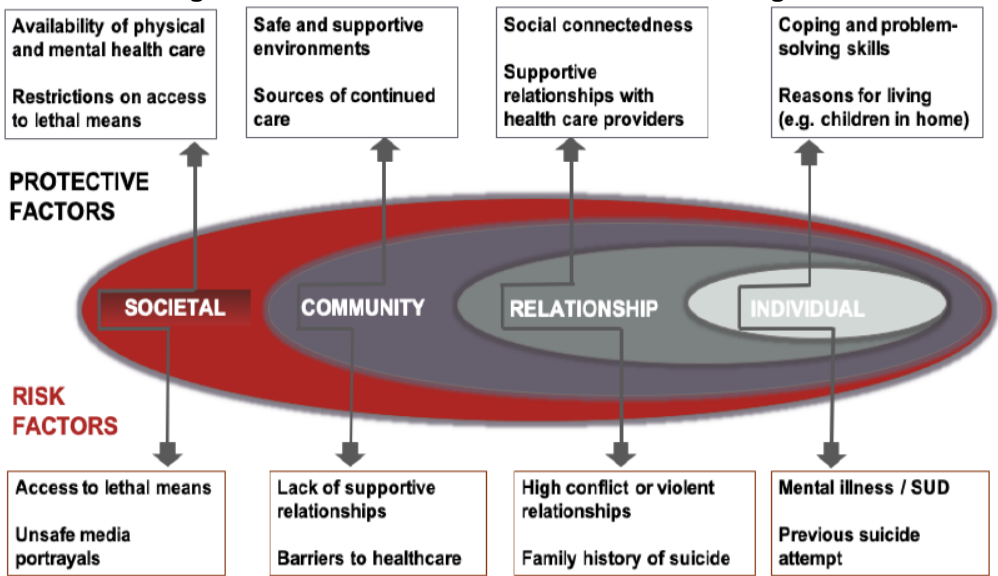
Governor Richardson signed legislation in 2006 creating the Council on Problem Gambling. The last major report regarding problem gambling in the state was completed in 2006. In 2017 the council had not met for at least seven years.

Source: Giovanni et al. 2017; CDC; ABQ Journal; SF Reporter; Responsible Gaming Association of New Mexico

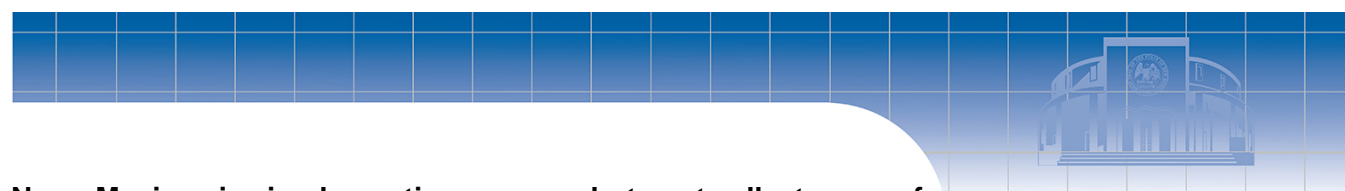
While the causes of suicide are numerous and complex, certain underlying behavioral health issues heighten risk. New Mexico may be at particularly high risk because the state has high rates of behavioral health issues and high rates of other factors related to suicide, such as child trauma and unemployment. Nationally, adverse childhood experiences (ACES) may lead to increased suicidality and suicide attempts in adulthood.^{xiv} Unemployment during the Great Recession was correlated with a 20 percent increase in suicides.^{xv} Research also shows individuals experiencing long-term or severe substance use disorders have a 10 to 14 times greater risk of death by suicide, and many individuals who die by suicide suffer from major depression or mental health disorders.^{xvixvii} In the past three years, the Legislative Finance Committee released two reports, one focused on children’s behavioral health which discussed interventions to prevent ACES and behavioral health problems, and a health note focused on substance use disorder, with a discussion of evidence-based interventions, including alcohol outlet density.

Factors relating to an individual’s society, community, relationships, and specific needs also contribute to suicide, according to the Centers for Disease Control and Prevention.^{xviii} Risk factors include a lack of support in relationships, barriers to healthcare, access to lethal means, and a previous suicide attempt. Protective factors include social connection, coping skills, availability of physical and mental healthcare, and restrictions on lethal means. Multiple interventions are likely needed to account for this variability. Interventions targeted toward the individual include mental health services, while societal interventions may focus on laws that can help keep people safe. Ensuring interventions of all types are evidence-based and evaluating the efficacy of homegrown programs is essential.

Figure 4. Causes and Protective Factors Relating to Suicide



Source: Alabama Commission on the Evaluation of Services adapted from the CDC



New Mexico is implementing some, but not all, types of interventions shown to decrease suicide.

According to the Pew Trust's Results First Clearinghouse Database, a few types of interventions are shown to reduce suicides, suicide attempts, or increase therapeutic skills around suicide. These include gatekeeper trainings (trainings to provide information on identifying and referring individuals who may be at risk of suicide), universal educational programs in schools, and firearm access, background checks, and licensing laws. Additional programs not in the Clearinghouse with some evidence of effectiveness include telemental health, integrated medical-behavioral healthcare, Caring Contacts which provides follow-up communication after a suicide attempt, and Zero Suicides, a prevention framework for healthcare settings. This report focuses on interventions shown to directly reduce suicide however there may be other interventions focused on contributing factors (such as substance use disorder or unemployment) that could also reduce suicides indirectly. The Legislative Finance Committee has previously published reports focused on some of the contributing factors, these reports include a 2014 Results First report on adult behavioral health, a 2017 Results First report on children's behavioral health, and a 2019 health note on substance use disorders.

Table 3. Interventions Shown to Reduce Suicide Attempts or Suicidality

Program name	Evidence rating	Outcomes	In New Mexico?
Firearm access, background or licensing	Second-highest rated	Reduced suicide, reduced unintentional injuries, reduced unintentional deaths	No
Gatekeeper Training for Suicide Prevention	Second-highest rated	Knowledge about suicide and resources, self-efficacy and skills, diffusion of information	Yes
Universal school-based suicide awareness & education programs	Second-highest rated	Reduced suicide, increased knowledge of suicide, improved coping skills	No

Note: Only suicide prevention models highest or second highest rated and had an outcome relating to suicide reduction, suicide attempts or increased training towards these outcomes were included. Therapeutic modalities were excluded as they were discussed in previous reports. For the disaggregated table, see appendix F.

Source: Pew MacArthur Results First Clearinghouse



If New Mexico reduced suicides by 52, it could save an estimated \$69.1 million in avoided costs and unmet earnings.

Figure 5. Iterative Goal Setting Process



Source: Adapted from O'Malley, 2019

Setting a Goal: New Mexico Should Aim to Reduce Suicide Deaths by 10 Percent Over the Next Five Years

If New Mexico reduced its suicide rate by 10 percent, or by 52 deaths, in five years, it would no longer be among the 10 states with the highest rates in the country (assuming other state rate increases remain constant), which would lead to a smaller social, emotional and economic burden for the state.

Setting a goal helps reach targets.

Setting goals and creating a strategic plan can lead to improved organizational performance.^{xix} Setting goals may be particularly effective when the goal is both ambitious and made public. Goal setting is a key component of State Stat, a process originally established in Baltimore and now adopted by multiple states to increase government accountability and success by using data and evidence. The iterative model has four steps: set an important goal, build a habit of accountability, target action, and keep a scoreboard.

Using this approach, setting a target for suicide reduction may help the state get better outcomes. Additionally, the state will need to take targeted action, regularly monitor data, including at the county level, and routinely meet to determine if it is moving toward its goal.

Table 4. Counties with High Rates or High Numbers of Suicides, 2014-2018

	County	Suicides 2014-2018	Rate per 100,000	% Total Suicides 2014-2018
High Number of Suicides	Bernalillo	768	22.7	31
	Santa Fe	191	25.7	8
	San Juan	181	29.7	7
	Dona Ana	177	16.5	7
High Rates of Suicide	Hidalgo*	12	54.9	0
	Sierra	25	44.7	1
	Colfax	23	37.3	1
	Quay*	17	40.6	1
	Grant	51	36.2	2

Note: According to CDC, both Hidalgo and Quay, as well as Roosevelt counties have unreliable rates due to the low number of suicides. For the full list of counties, see appendix D.

Source: CDC Wonder

Identifying counties with high numbers of suicides can help prioritize efforts. The state has a number of counties with high numbers of suicide deaths, including Bernalillo, Santa Fe, San Juan, and Doña Ana. Bernalillo County alone accounted for 31 percent of the suicide deaths in the state between 2014 and 2018. When determining how to effectively lower suicide rates, the state will likely want to prioritize both counties with high rates and high absolute numbers. (For an analysis of urban versus rural data, see Appendix G.)

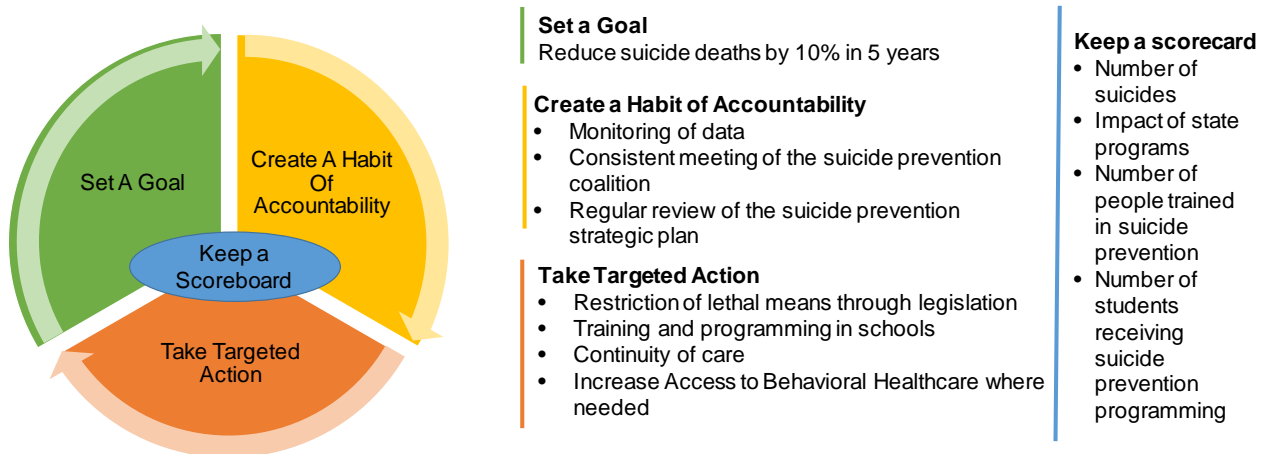
State agencies should continue to partner with local stakeholders.

State investment alone is not likely to reduce suicides in the absence of effective partnerships with community organizations that can help identify local priorities and monitor data. These partners could form local collaboratives to identify their own goals, create targeted action plans, and monitor local data to help refine and reach their goal. For instance, the state could expand its work through the suicide prevention coalition by working with the Las Cruces Suicide Prevention Taskforce that provides suicide prevention training. State investment in evidence-based programs, as well as expertise in data monitoring within state agencies, could be used to support these collaboratives for a successful top-down and bottom-up approach to the issue.

Action Plan: To Reduce Suicide, the State Needs to Establish a Habit of Accountability and Increase Targeted Action

To reduce suicide by 10 percent in the next five years, the state will need to create a habit of accountability and target actions. As each component is part of an iterative process, the state will need to monitor performance to determine how to improve results and determine if the state is making progress toward the goal. The targeted actions will need to be evaluated, as part of keeping a scorecard to make sure each initiative is delivering the expected results.

Figure 6. Action Plan to Reduce Suicide



Note: Changed terminology of the original figure Changed Focus on Wildly important to create a goal, changed act on lead measures to take targeted action, and changed create a cadence of accountability to create a habit of accountability.

Source: Adapted from O'Malley, 2019

New Mexico needs to create a habit of accountability through proactively monitoring surveillance data and ensure best practices for suicide prevention.

Regularly assessing suicide data to determine how to best deliver targeted services is important to reduce suicides. Ensuring the state is meeting frequently to discuss current suicide data trends as well as review suicide prevention plans and goals is also needed as part of creating the habit of accountability. While DOH's Epidemiology and Response Division has internal accountability structures in place, there may be opportunity to expand these efforts and DOH could provide continued technical assistance to aid the suicide prevention coalition in increasing its accountability measures.



Postvention Activities

After a suicide, family, friends and community members may need help to deal with the trauma. These postvention activities may lessen harm and reduce future risk. The approach also includes reporting and messaging following a suicide.

In New Mexico, postvention services are available through the Office of the Medical Investigator for the immediate family, through some school districts, and through DOH. Santa Fe Public Schools contracts with a local behavioral health provider to provide postvention services in schools after an unexpected death or suicide. Virginia's Fairfax county released a resource guide to assist organizations in supporting communities after a loss. As of fall 2020, 10 states had legislation requiring certain types of postvention services, largely in schools.

The **Medical Reserve Corp (MRC)** is a fully federally funded program at DOH that uses volunteers to respond to crises. New Mexico has 8 MRC units statewide. Other states use MRC units for suicide postvention with families and suicide prevention training.

Proactive data surveillance can help identify potential suicide clusters or troubling trends. The state provides some resources and postvention services but is not proactively flagging potential increases in suicide within communities nor reaching out to provide services when clusters, or a series of suicides that are connected, arise. Moving toward a proactive model of suicide surveillance could help to reduce suicide. DOH can use current suicide death data to identify troubling trends, such as the development of suicide clusters. DOH's Epidemiology and Response Division (ERD) has access to the Office of the Medical Investigator's database of recent deaths, which includes the likely cause of death. Additional expansion of monitoring real time data could occur through the use of electronic syndromic surveillance to monitor suicides and suicide attempts. Both Tennessee and the White Mountain Apache Tribe use this type of system, allowing the tribe or state to identify regions or specific populations experiencing increased suicides or suicide attempts and provide coordinated prevention efforts.^{xxxi} The White Mountain Apache Tribe decreased suicides after implementing this system and mandating reporting to it by those responding to suicide. Because ERD has the most current data and houses the suicide prevention coordinator, the state may be able to regularly inspect these data to identify communities in immediate need of targeted intervention. For instance, if the state notices multiple youth suicides in a city, the suicide prevention coordinator could, with the Office of School and Adolescent Health (OSAH), reach out to the local high school or school district and determine what resources or interventions the area needs to prevent additional deaths. The sooner data is monitored; the sooner services can be deployed to communities in need.

To perform effective surveillance, the state may need to add an evaluator position dedicated to suicide prevention. The Suicide Prevention Resource Center (SPRC) recommends six primary strategies for creating effective state infrastructure to reduce suicides (Appendix H). One is for a single agency to lead suicide prevention efforts with at least two core staff positions: a leadership position and a data analyst or evaluator. Depending on the size of the state, regional coordinators could be added. New Mexico currently has only one full-time staff position dedicated to suicide prevention coordination. The state had approved adding an evaluator, but according to DOH, due to budget cuts and the priority of hiring for direct Covid-19 response, the position has not been filled. This new full-time employee would help coordinate the response to potential clusters by monitoring the most current data. Such monitoring would also allow the state to better target resources to communities through OSAH or other programs. Additionally, DOH could leverage the Medical Reserve Corp if and when too many incidents overwhelm current staffing or community providers.

New Mexico reconvened a suicide prevention coalition and is currently drafting a strategic plan. In 2019, the state reconvened a suicide prevention coalition to create a new strategic plan and to gain insight about suicide across the state from over 20 different organizations. An active coalition whose work is guided by a current strategic plan is likely a necessary foundation for making progress in reducing suicide death. Of the three states to decrease their rates of suicide between 2014 and 2018, two had an active strategic plan, these plans

may help prioritize actions, but are likely not sufficient to reduce suicides. The National Conference of State Legislatures also highlights the benefit of having a long-standing coalition. The new strategic plan should be guided by best practices. According to SPRC, strategic plans should be updated every three to five years and require an annual progress report. Additionally, in a legislative hearing on December 4, 2020, the CEO of the Behavioral Health Collaborative mentioned the development of a multiagency effort that will include suicide prevention as one of its key components.

Legislation could support New Mexico's suicide prevention coalition and strategic plan to increase the chances of success in reducing suicide.

New Mexico could follow other states in using legislation to ensure the coalition follows best practices. In Colorado, Delaware, and Idaho, legislation requires suicide prevention coalitions to build strategic plans, examine statistics, and report to legislatures. Because New Mexico is currently revising its strategic plan and recently re-established the statewide suicide coalition, the Legislature might consider legislation to promote the effectiveness of these efforts. Legislation could require the coalition to establish and review a strategic plan and to annually report to the Legislature regarding suicide surveillance, prevention activities and progress in reducing deaths.

New Mexico can target actions to reduce suicide through implementing initiatives shown to work

If the state implements a combination of evidence-based programs targeted toward hospitals and schools and enacts legislation to restrict access to lethal weapons, the state may be able to not only meet but exceed the goal of reducing suicides by 10 percent in five years. Some proven programs are already operated in the state, while some will need to be brought to New Mexico. To get results, the state must ensure its programs are both evidence-based and run as intended. Furthermore, state agencies operating suicide prevention programs should work together to determine how to best target funding and expand initiatives through regular surveillance of program and outcome data.

Table 5. Components of Suicide Coalition Legislation

State	Unique Component
Colorado	<ul style="list-style-type: none"> Requires annual report to the legislature
Delaware	<ul style="list-style-type: none"> coalition reviews and analyzes suicide and suicide-attempt data Includes specific coalition members
Idaho	<ul style="list-style-type: none"> Requires establishment of suicide prevention plan Specifies Department of Health and Welfare provide support to the coalition.

Source: NCSL

Table 6. Estimated Cost per Participant Projections for Selected Suicide Prevention Programs

Program	Cost per participant	Current #s Served	Potential Expansion	Expansion Cost	Potential Reduction in Suicides
Permit to Purchase Legislation	N/A	-	Enact Legislation	N/A	40
Child Access Protection Laws	N/A		Enact Legislation	N/A	13
QPR Instructor Certification	\$400	73 school personnel	445 at school districts	\$178,000	
Universal Suicide Programming for Students	\$4	none required	50,680	\$200,186	1
Caring Contacts*	no per unit cost	none	statewide through NMCAL	\$250,000	3
Zero Suicide*	None	None	Enact Legislation or DOH expand ED program if shown effective	up to \$450,000	12
Total				\$1,078,186	69
Goal by 2025					52

Note: Based on the most conservative effect size found. QPR current served is for school personnel only. Universal programming would be for one grade in middle school and one grade in high school. Zero Suicide and Caring Contact data is based on numbers from Missouri, adjusted for population. While Zero Suicide is recorded as no cost, there could be some cost due to lost staff time. The \$450,000 would be if the state hires staff for its ED program if effective.

Source: LFC analysis



85 percent of suicide attempts with guns, 69 percent of suicide attempts with hanging and 2 percent of suicide attempts with pills are lethal.
Source: *Scientific American*

Table 7. Effect of Permit to Purchase Legislation

State	Change	Effect of Change on Firearm Suicides
CT	ADDED Permit to Purchase	15.4% DECREASE

Note: Comparison groups was a synthetic control group.
Source: Preventative Medicine, 2015

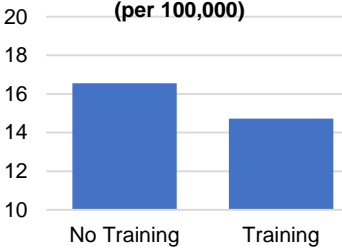
Reducing access to lethal means of suicide would likely decrease deaths

Research shows restricting access to lethal means can reduce the likelihood an individual will die during a suicide attempt.^{xxii} In New Mexico, over 50 percent of deaths by suicide involve firearms. Statistics highlighted in a 2016 *Scientific American* article show that 85 percent of suicide attempts with guns are lethal, compared with 69 percent of attempts by hanging and 2 percent of attempts with pills.^{xxiii} Determining how to keep guns safely stored and less accessible to individuals who are suicidal can help reduce deaths.

“Permit to purchase” and child access protection laws can reduce suicide, but New Mexico has enacted neither. In Connecticut, changes to “permit to purchase” legislation impacted firearm suicides by over 15 percent.^{xxiv} Permit to purchase laws require an individual to obtain a permit to purchase a firearm or a license to own the firearm before purchasing it. If New Mexico reduced suicides by firearm by 15 percent, similar to Connecticut, approximately 40 fewer New Mexicans would die from suicide annually (for graphs showing this change, see Appendix I.) Additional research highlights the impact of child access protection legislation on firearm-related mortality. Child access protection laws impose penalties on adults who allow children unsupervised access to firearms or violate firearm storage requirements. Researchers found that when child access prevention laws are enacted, there is a 96 percent chance gun-related deaths will decrease within six years.^{xxv} Furthermore, child access protection laws may reduce suicide deaths by firearms by 5 percent, which could mean approximately 13 fewer suicides in New Mexico annually.

Child access protection and licensing laws are in the Results First Clearinghouse Database as second-highest-rated and highest-rated programs (Appendix F), meaning there is convincing evidence these programs reduce suicide. New Mexico does not currently have a child access prevention law and should consider this legislation, as well as permit to purchase legislation, as a way to reduce not only suicides but other gun-related deaths (Appendix J).^{xxvi} However, means restriction alone likely will not be sufficient to reduce suicides. Other interventions, such as targeted trainings, access to mental health services and continuity of care, are necessary to reduce suicide and increase well-being.


Chart 12. Suicide Rates for States with Gatekeeper Training Laws versus Not, 2018 (per 100,000)



Note: These laws are for schools and mandate or encourage training.
Source: CDC

Gatekeeper trainings and suicide prevention programming in schools can be better targeted toward areas of need.

Suicide accounts for 29 percent of youth deaths, and over 10 percent of youth in New Mexico report attempting suicide. These alarming statistics indicate New Mexico should continue its focus on preventing youth suicide. New Mexico is one of the few states without legislation requiring suicide prevention training in schools. This training, commonly referred to as gatekeeper training, teaches adults to recognize warning signs of suicide and respond appropriately. Forty-seven states have legislation mandating or encouraging training school personnel in suicide prevention (see Appendix K).^{xxvii} Twenty-two states also require or encourage suicide prevention programming in schools, an effective method of reducing suicide, according to the Results First Clearinghouse Database. Legislation mandating training and programming could help ensure students have support prior to or after a suicide attempt, as well as ensure the school has resources to deal with suicide. This training is also fairly inexpensive. The



training used in Colorado only costs \$3.95 per student. New Mexico should consider legislation around mandatory suicide prevention training for all school personnel to ensure staff can recognize risk and refer students to services, whether through a school-based health center, school mental health staff, or outside community resources. The state should also consider legislation to require school districts to provide universal school-based suicide prevention programming for public middle and high school students.

DOH's Office of School and Adolescent Health (OSAH) provides training for youth suicide prevention statewide. In FY20, OSAH trained 2,382 people for a cost of \$800 thousand, including over half of the individuals receiving instructor certification in the QPR model, an evidence-based training included in the Results First Clearinghouse Database (Appendix F). This model is relatively low in cost, at between \$2.50 and \$3 per person for the gatekeeper training and \$400 per person for the instructor certification. In 2019, the bureau received a five-year \$735 thousand Substance Abuse and Mental Health Service Administration (SAMSHA) grant to provide training statewide and to more intensely focus attention on five counties – Bernalillo, McKinley, San Juan, Otero, and Rio Arriba – with the highest rates of teen suicide in 2017. Because New Mexico is a largely rural state, it may be more effective to prioritize more populous counties or to focus on both the counties with the highest numbers and those with the highest rates of suicide. If the state focused on counties with the highest number of teen suicides from 2014 to 2018, it would target Bernalillo, San Juan, Santa Fe, and Doña Ana counties. (See Appendix L for overview of funding and training.)

While the Public Education Department (PED) recommends school districts receive suicide prevention training, only 31 percent of districts had personnel attend a DOH suicide prevention training since September 2019. PED states in its school safety planning guidelines that school districts should work with DOH to train staff in QPR. However, PED does not require districts train their staff, nor does it outline how frequently training should occur. Because only 28 districts, or about one third, had anyone trained by DOH in suicide prevention over the last year (see Appendix M for a list of districts that were trained), the state may need to increase accountability for suicide prevention training. If school districts trained an average of five personnel in the QPR instructor certification, it would cost \$178 thousand, which could be covered by the recent SAMSHA grant. The cost of the training would also decrease over time as districts built up capacity to offer the trainings themselves.

New Mexico can ensure continuity of care through two different avenues which worked in other states to reduce suicide. DOH is starting a new program focused on improving continued care for adults who visit the emergency department for suicide attempts. DOH recently started the Secondary Prevention of Suicide in the Emergency Department Project, focusing on increasing training and safety planning in emergency departments. The project, run by the Epidemiology and Response Division (ERD), has DOH staff train emergency department personnel about suicide and provide sample safety plans, plans for the individuals or family to follow during a behavioral health crisis. The program also helps refer patients who attempt suicide to

Gatekeeper training can build skills and knowledge and change attitudes around suicide, as well as reduce suicidal thoughts, attempts, and deaths. These trainings may also help people know how and when to help someone in crisis.

The training involves educating adults who interact with youth as part of their regular day to recognize warning signs for suicide and to respond appropriately to suicidal youth. A gatekeeper should ultimately be able to provide a link, or open the gate, between a young person and a mental health professional.

Source: APA

Mobile Crisis Teams (MCT) and Crisis Triage Centers (CTC) can play key roles for acute behavioral health.

MCT: provides a non-law enforcement response to the scene of a behavioral health crisis. Used for de-escalation, shown to reduce acute service utilization. New Mexico has MCT in Bernalillo and Doña Ana counties.

CTC: Provides a place to go during an acute behavioral health incident that does not rise to the level of traditional inpatient services. CTCs are as effective and potentially less costly than traditional inpatient services. There are CTCs in Bernalillo, Hidalgo and Santa Fe counties.

Source: SAMSHA



Elements of Zero Suicide

Lead system-wide culture change committed to reducing suicides.

Train a competent, confident, and caring workforce.

Identify individuals with suicide risk via comprehensive screening and assessment.

Engage all individuals at risk of suicide using a suicide care management plan.

Treat suicidal thoughts and behaviors using evidence-based treatments.

Transition individuals through care with warm hand-offs and supportive contacts.

Improve policies and procedures through continuous quality improvement.

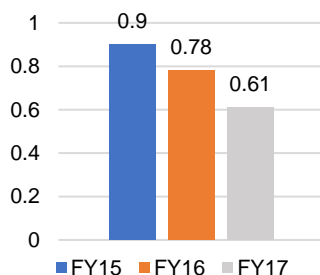
Source: Adapted from Zero Suicide

services and has the ED provide information about Caring Contacts, an evidence-based suicide reduction program that reaches out to patients after a behavioral-health-related discharge. These program components include a number of elements of the Zero Suicide model, an evidence-based model focused on system change in healthcare settings. ERD plans to begin the program at Christus Saint Vincent in winter 2020 and is meeting with other hospitals to expand the program. DOH should evaluate the effect of this program using data from Office of the Medical Investigator or the National Violent Deaths Reporting System and expand it if the program is proven effective. Further, if the program is successful, DOH may need additional staff for expansion. One solution would be for DOH to fund three to five regional suicide prevention positions that could implement this program and assist with the state's suicide prevention coordination more generally. This would cost between \$270 thousand and \$450 thousand. To expand Caring Contacts, the state could use NMCAL, the current crisis access line, to provide outbound calls. In a spring 2020 grant application, DOH stated it would cost \$251 thousand to contract with NMCAL to provide this service statewide. (See Appendix N for another example of a promising program in New Mexico for youth visiting emergency departments for a behavioral health incident.)

BHSD brought the Zero Suicide approach to some counties but did not provide continued support, leading to an unknown impact. The Zero Suicide model helps healthcare providers shift their practices to better incorporate suicide prevention through seven core elements. The approach includes gatekeeper training and highlights the need for continued quality improvement, follow up for patients at risk, and counseling that encompasses better understanding of lethal means. In 2014, the Behavioral Health Services Division (BHSD) was awarded a \$470 thousand SAMSHA grant for up to three years to implement Zero Suicide. The state used the approach in Curry and Otero counties with the goal of decreasing adult suicide. In these counties, hospitals began providing more direct referrals to behavioral health providers and increased evidence-based gatekeeper trainings.^{xxviii} However, BHSD did not continue to provide technical assistance after the conclusion of the grant and does not know the current impact of the program. It is unclear if the program continued after the grant cycle.

New Mexico could implement Zero Suicide through two different avenues to replicate the success of other states. Missouri's Department of Mental Health implemented the Zero Suicide framework among the department's own behavioral health providers and provided ongoing technical assistance to providers, leading to a 32 percent decrease in suicide deaths among clients served. Adjusted for population, if the same occurred in New Mexico, 12 suicide deaths would be avoided. The state agency contributed to this decrease in suicides by enrolling in the Zero Suicide academy and creating a 90-day plan for statewide implementation of the model. The state helped fund all of its contracted treatment providers in Zero Suicide over a three-year period, and Missouri continues to participate in quarterly learning collaboratives for all trained in Zero Suicide statewide. Colorado and Louisiana enacted legislation to implement Zero Suicide. This legislation encouraged the state and medical system to work in collaboration to adopt components of the Zero Suicide

Chart 13. Suicide Rate per 1,000 Served by Missouri Mental Health Division Behavioral Health Providers



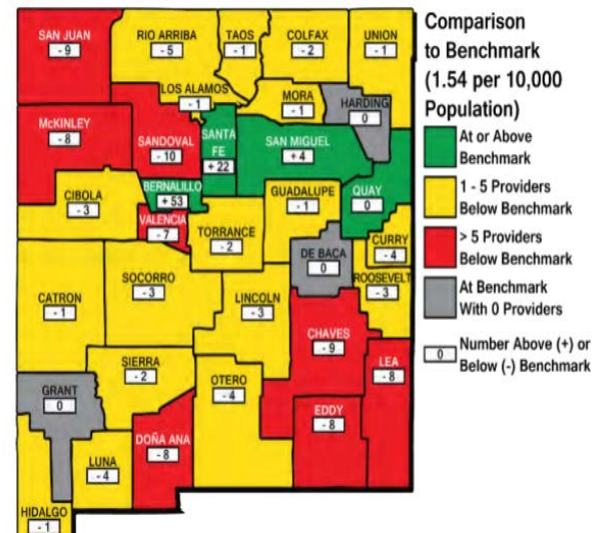
Source: MO Mental Health Division Zero Suicide Outcome Report

model and expand training.^{xxxxxx} According to NCSL, this legislation also can improve training for medical personnel and helped stakeholders identify individuals at risk and connect them to appropriate services.^{xxxi} New Mexico could consider creating legislation focused on expanding the Zero Suicide model, which would increase training for providers and connect patients with needed services.

The state can reduce suicide by improving access to behavioral health services through telehealth, integrating physical and behavioral healthcare, and increasing access in schools. Telehealth, or virtual visits with a mental health professional, can be an effective intervention for suicide and is a promising avenue for expanding access to services in areas of the state with few behavioral health providers.^{xxxii} The effectiveness of any delivery model assumes those providing tele-mental health services are using evidence-based interventions, which have been detailed in LFC's children's behavioral health and adult behavioral health *Results First* reports. Mental health providers are unevenly spread through the state, with the majority in Bernalillo County. Chaves, Roosevelt, and McKinley counties have the highest ratio of visits to provider, potentially indicating a need for additional providers. According to the 2020 *Healthcare Workforce Report*, only four counties (Bernalillo, Santa Fe, San Miguel, and Quay) meet or exceed the national target of 1.54 psychiatrists for every 10 thousand residents, while eight counties need more than five psychiatrists, mainly in the northwest and southeast regions. Because some counties exceed the national benchmark for psychiatrists by more than 10, the state could leverage its expertise in counties with fewer providers through the expanded provision of telehealth. (See appendix O for community examples of provider training programs.)

The Human Services Department should allow providers to bill Medicaid for integrated medical-behavioral health services, or collaborative care, as some other states have done. As of August 2020, 17 states allowed billing for collaborative care (see Appendix P). The collaborative care model has been shown to reduce depression by up to 50 percent, reduce costs of behavioral healthcare by 22 percent, and reduce emergency room visits by up to 68 percent.^{xxxiii xxxiv} Because individuals with chronic illness are three times more likely to have a mental health problem, and because 20 percent of those who die by suicide had a physical health precipitant, ensuring coordinated services could help these individuals receive care.^{xxxv xxxvi} (See Appendix Q for graphs of physical health impact of suicide by age.) The September Medical Advisory Team behavioral health report recommended expanding New Mexico's Medicaid billing codes to cover integrated healthcare visits. Doing so could not only increase access to care but improve behavioral health outcomes.

Figure 7. Number of Psychiatrists Compared to Benchmark, FY19



Source: New Mexico Healthcare Workforce Committee Report

Key Components of Integrated Behavioral Health:

Co-location: Behavioral Health, primary care and others within the same facility or practice;

Team-Based Approaches: Mental and physical Health providers operate as a team;

Patient Centered Care: Individuals have one treatment plan covering physical and mental health with care offered to support the patient's preferences and social situation;

Care Management: Patients are routinely screened to identify, treat and track mental health concerns.

Source: American Hospital Association



PED recently received a \$10 million behavioral health education grant.

The five-year grant provides \$2.4 million annually to increase the number and quality of mental health providers in schools. The proposal includes

- Loan repayment for school-based mental health providers;
- Increased pay for school-based providers;
- Stipends for trainee providers;
- Advanced licensure assistance for providers;
- Professional community facilitation.

Selection of districts will be driven by risk factors in the student population and geographic location. PED anticipates this program to support 400+ school-based mental health providers and provide community facilitation for hundreds more.

Source: PED, DOE grant narrative

To increase behavioral healthcare access in schools, districts can hire more school-based mental health providers, and DOH can consider behavioral healthcare need when funding school-based health centers. In Oregon, students attending schools with increased behavioral health services had a decreased risk of attempting suicide.^{xxxvii} This could be due to an increase in access because students attending a school with mental health services had a 40 percent higher chance of using any type of mental health services when needed.^{xxxviii} The state could use *The Youth Risk and Resiliency Survey* data to determine which counties and school districts have the highest rates of suicidality (see map on page 4 and table on page 10), targeting these districts or counties for increased behavioral health services through either spending unused allocated funds for school-based health providers or through DOH examining behavioral health need in school-based health center funding decisions.

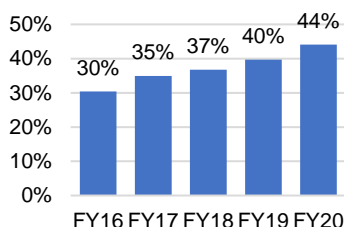
Districts had unspent funds allocated to counselors, social workers, and psychologists. According to PED's operating budget management system data for the 2019-2020 school year, districts allocated an additional \$12 million for guidance counselors, social workers, counselors, and psychologists that went unspent. If districts and schools used these allocated funds for more mental health providers, it may increase the number of children accessing mental health supports. If districts hired the projected 24.4 FTE based on the average salary of the current school mental health personnel, it would cost \$1.49 million, well within the over \$12 million districts budgeted for these personnel. Districts could target these positions to those schools with the highest rates of mental health needs and suicidality as shown in the *Youth Risk and Resiliency Survey* data that do not already have mental health services through school-based health centers

Table 8. Allocated Funds and FTE for Guidance Counselors, Counselors, Social Workers and Psychologists, SY20

	Actual Expenditures	Actual FTE	Unspent Funds	Unused FTE
Total for All School Districts & Charters	\$86,896,982	1,426	\$12,299,938	24.4

Note: unspent funds and unused FTE represent the difference between Actuals and Projections
Source: OBMS JobClass Reports

Chart 14. Behavioral Health Visits as Proportion of Total Visits at SBHC

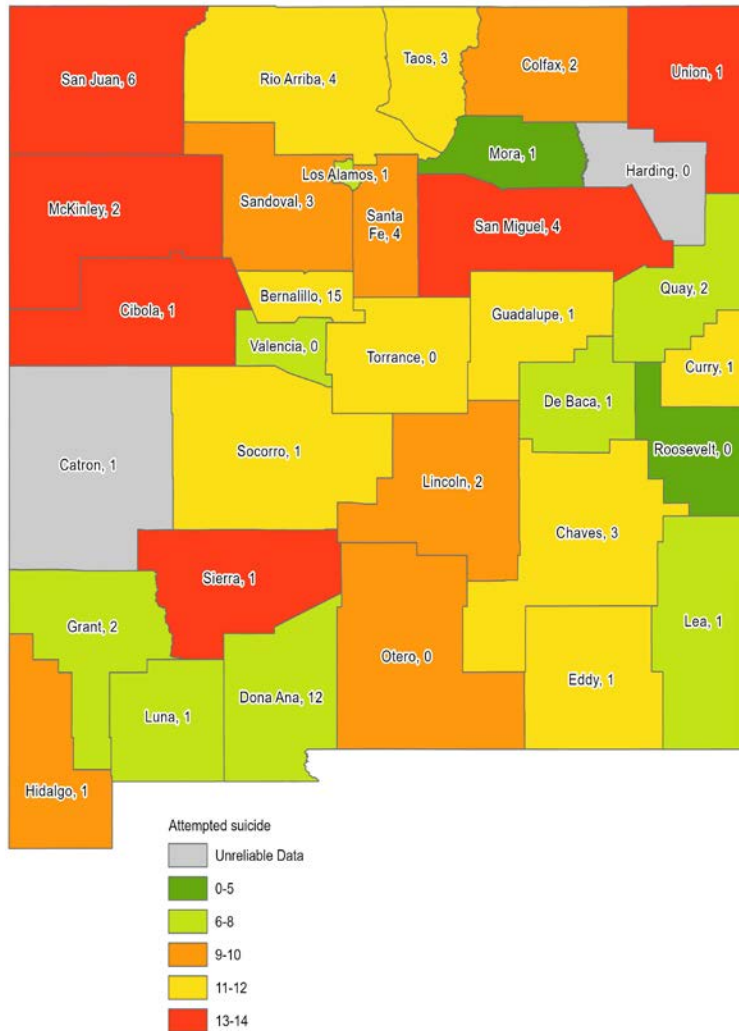


Note: Data excludes dental visits and visits without a primary diagnosis.
Source: DOH OSAH

DOH should consider local behavioral healthcare need when allocating funds to school-based health centers (SBHC). Because most of New Mexico is designated by the federal government as a primary care shortage area, SBHCs are a critical locus of integrated healthcare for adolescents, offering primary, behavioral, and reproductive healthcare. In 2020, behavioral health accounted for 44 percent of visits to SBHCs, an increase of 43 percent from 2016. DOH funds 54 SBHCs statewide. An additional 25 centers operate in the state but do not receive DOH funding. DOH funding includes operational support based on hours of operation and size of student population served. Additional funding is available if a SBHC provides services designated for health provider shortage areas. Funding grew 10 percent from FY16 to FY20, with nearly \$4 million distributed in FY20. OSAH could include a consideration of local need for behavioral health services when allocating funds to better target services to areas with higher need. This consideration could be used as an incentive or

as a part of core funding. Local need could be determined based on district-level data on suicidality from the New Mexico *Youth Risk and Resiliency Survey* and county-level data on suicide deaths from New Mexico's Indicator-Based Information System. To account for yearly variation, a multi-year average could be used.

Figure 8. Youth Percent Reporting Suicide Attempts by County and Number of School Based Health Centers, 2019



Source: YRRS



Action Plan Summary

GOAL: DECREASE SUICIDE DEATHS BY 52, OR 10 PERCENT, IN 5 YEARS						
Action Plan Strategies						
		Strengthen Prevention	Increase Use of Data Surveillance	Increase Access	Provide a Continuum of Care	Increase Trainings in Schools
Acting Stakeholder	Legislature	<ul style="list-style-type: none"> Consider restricting lethal means through enacting child access protection and permit to purchase legislation. Consider funding the coalition along with language requiring reporting and best practices. 			<ul style="list-style-type: none"> Consider establishing a Zero Suicide approach statewide with required support from DOH, HSD, or the Behavioral Health Collaborative. 	<ul style="list-style-type: none"> Consider mandating gatekeeper training for school personnel. Consider mandating suicide prevention programming in middle and high schools.
	Department of Health		<ul style="list-style-type: none"> Examine up-to-date suicide death data as well as explore other data sources to identify trends or potential clusters through the use of a suicide prevention evaluator. 	<ul style="list-style-type: none"> Include an estimate of behavioral health need for school-based health center funding. 	<ul style="list-style-type: none"> Evaluate the Secondary Prevention Program in Emergency Departments, and if effective, expand it, focusing on areas with the highest number of suicide attempts. Expand Caring Contacts, potentially through contracting with NMCAL. Establish a Zero Suicide approach statewide. 	<ul style="list-style-type: none"> Expand gatekeeper training for school personnel focusing on areas with high suicidality.
	Human Services Department			<ul style="list-style-type: none"> Continue and expand telehealth to rural communities that have little access to behavioral health. Include coordinated behavioral health services in Medicaid billing codes. 		
	Public Education Department and School Districts			<ul style="list-style-type: none"> Hire all allocated mental health personnel on the district level, prioritizing schools with high suicidality and no school-based health center. 		<ul style="list-style-type: none"> Require evidence-based training for school personnel. Expand gatekeeper training targeting high suicidality areas. Establish required suicide prevention programming in middle and high schools.



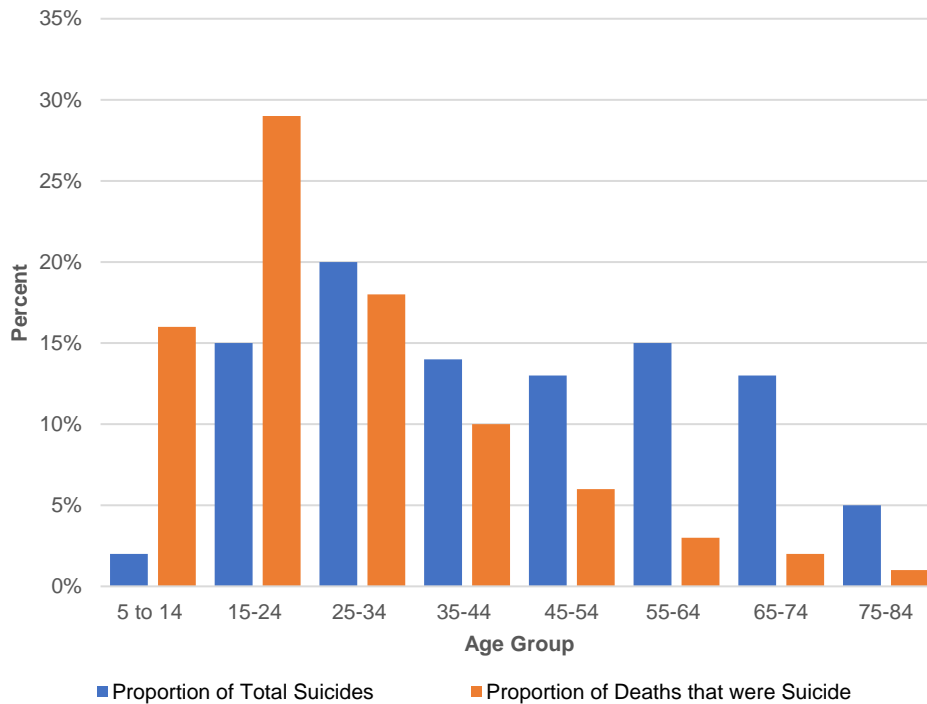
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APPENDICES

Appendix A: Suicide Rate Changes by State, 2014-2018

State	2014	2018	Percent Change
AL	14.5	16.5	14%
AK	22.1	24.6	11%
AZ	18	19.2	7%
AR	17.3	18.3	6%
CA	10.5	10.9	4%
CO	19.9	21.9	10%
CT	9.8	10.6	8%
DE	13.2	11.4	-14%
FL	13.9	15.2	9%
GA	12.6	14.6	16%
HI	13.8	11.9	-14%
ID	20	23.9	20%
IL	10.5	11.3	8%
IN	14.3	16	12%
IA	12.9	15.5	20%
KS	15.7	19.3	23%
KY	15.9	17.5	10%
LA	14.3	15.1	6%
ME	15.7	18.5	18%
MD	9.8	10.2	4%
MA	8.2	9.9	21%
MI	13.3	15	13%
MN	12.2	13.1	7%
MS	12.5	13.8	10%
MO	16.3	19.5	20%
MT	23.9	24.9	4%
NE	13.4	13.4	0%
NV	19.6	20.8	6%
NH	17.8	19.4	9%
NJ	8.3	8.3	0%
NM	21	25	19%
NY	8.1	8.3	2%
NC	13	13.7	5%
ND	17.8	19.2	8%
OH	12.6	15.3	21%
OK	19.1	20	5%
OR	18.6	19	2%
PA	13.3	14.9	12%
RI	10.1	9.5	-6%
SC	15.2	15.4	1%
SD	17.1	19.3	13%
TN	14.1	16.6	18%
TX	12.2	13.7	12%
UT	20.5	22.2	8%
VT	18.7	18.8	1%
VA	12.9	14	9%
WA	15.2	15.9	5%
WV	18.1	21.2	17%
WI	13.1	14.8	13%
WY	20.6	25.2	22%
United States	13	14.2	9%

Appendix B. Suicides by Age Group and Death in Age Group that Were Suicide, 2014-2018



Note: 2019 data is not shown here because complete death data is not available. In 2019, the total number of suicides for 15-24 year olds increased 9 percent to 84, this age group and those above 75 were the only groups with more suicides in 2019 than in 2018.
Source: CDC Wonder

Appendix C. Youth Risk and Resiliency Survey Suicidality Question Responses by County, 2019

	% Engaged in non-suicidal self-injury	% Felt sad or hopeless	% Seriously considered suicide	% Made a suicide plan	% Attempted suicide	% Injured in a suicide attempt
Bernalillo County	23.8	40.8	21.4	18.4	10.7	3.3
Catron County	10.6	21.0	10.5	5.2	0.0	0.0
Chaves County	18.9	43.3	18.5	17.6	11.0	4.4
Cibola County	24.9	40.1	17.8	16.6	12.5	4.3
Colfax County	16.4	35.5	15.7	14.3	8.2	2.2
Curry County	18.9	30.6	18.5	17.0	11.1	2.6
De Baca County	7.8	15.4	9.4	11.2	5.2	0.0
Dona Ana County	16.9	41.1	14.8	12.7	7.1	3.6
Eddy County	18.7	40.3	18.3	17.1	10.8	3.2
Grant County	18.3	44.5	17.8	16.5	5.6	1.8
Guadalupe County	19.1	41.2	18.2	19.2	11.8	6.2
Harding County	25.0	50.0	25.0	25.0	25.0	0.0
Hidalgo County	16.3	38.9	16.5	10.2	8.3	2.3
Lea County	18.0	40.8	13.1	14.3	7.3	1.6
Lincoln County	25.1	42.9	19.7	15.5	9.6	3.8
Los Alamos County	28.8	35.8	21.3	15.8	6.4	3.0
Luna County	15.8	41.9	15.2	13.7	7.6	2.1
McKinley County	21.3	37.9	18.6	15.2	13.6	1.5
Mora County	14.5	29.9	9.5	8.4	2.8	2.8
Otero County	28.0	48.8	22.6	19.0	9.8	3.3
Quay County	15.2	29.2	13.7	12.8	5.6	1.3
Rio Arriba County	18.2	35.4	15.8	13.8	11.0	3.2
Roosevelt County	22.0	37.5	17.6	14.9	5.0	2.5
Sandoval County	23.3	40.9	19.6	16.6	8.1	3.3
San Juan County	22.8	39.2	19.5	18.3	12.2	3.8
San Miguel County	22.3	41.3	20.0	16.5	13.8	5.4
Santa Fe County	21.1	41.6	16.6	13.5	9.4	3.0
Sierra County	23.8	43.0	19.8	17.6	13.2	6.3
Socorro County	18.5	32.6	16.6	14.0	11.5	2.6
Taos County	21.5	40.6	18.2	16.4	10.5	2.9
Torrance County	27.1	41.0	24.6	18.2	11.3	4.5
Union County	28.5	51.2	26.5	21.0	12.1	2.8
Valencia County	20.1	42.5	15.2	13.7	7.8	2.5

Note: The questions all ask over a time of 12 months. Catron and Harding counties did not have a large enough sample to produce reliable rates and should not be used for decision making.

Source: DOH

Appendix D: Suicide Deaths and Rates by County, 2014-2018

County	Deaths	Population	Rate per 100,000
Bernalillo	768	3,384,663	22.7
Chaves	63	326,479	19.3
Cibola	30	135,764	22.1
Colfax	23	61,631	37.3
Curry	49	250,896	19.5
Dona Ana	177	1,075,279	16.5
Eddy	84	286,491	29.3
Grant	51	141,018	36.2
Hidalgo*	12	21,830	55.0
Lea	61	349,298	17.5
Lincoln	35	97,506	35.9
Los Alamos*	10	91,453	10.9
Luna	32	121,682	26.3
McKinley	97	370,583	26.2
Otero	91	327,452	27.8
Quay*	17	41,880	40.6
Rio Arriba	45	197,447	22.8
Roosevelt*	18	95,328	18.9
Sandoval	134	706,713	19
San Juan	181	609,570	29.7
San Miguel	39	139,305	28
Santa Fe	191	744,307	25.7
Sierra	25	55,882	44.7
Socorro	26	85,126	30.5
Taos	54	164,686	32.8
Torrance	25	77,495	32.3
Valencia	84	379,576	22.1
Total	2,446	10,435,194	23.4

Note: *denotes unreliable data

Source: CDC Wonder

Appendix E: Suicide Death Data January through October 2019 and 2020 By Age Group

Age Groups	2019 Suicides	Proportion of Total 2019	2020 Suicides	Proportion of Total 2020
0-14	5	1%	7	2%
15-24	63	15%	66	16%
25-34	75	18%	74	18%
35-44	62	15%	56	14%
45-54	63	15%	63	15%
55-64	62	15%	52	13%
65+	88	21%	89	22%

Note: Data are preliminary and subject to change through either ongoing OMI or DOH review. Data late November, 2020.

Source: OMI

Appendix F: Programs in Results First Clearinghouse Shown to Reduce Suicide

Programs Shown to Reduce Suicide Attempts, Suicides or Trainings Increase Suicide Prevention Skills

Program name	RF rating color	Outcomes	Ages
American Indian Life Skills Development/Zuni Life Skills Development	Second-highest rated	Hopelessness, Suicide prevention skills	Adolescent
Child firearm access prevention laws	Second-highest rated	Reduced suicide, Reduced unintentional injuries, Reduced unintentional deaths	
Comprehensive firearm background checks	Second-highest rated	Reduced homicide, Reduced suicide, Reduced intimate partner violence	
Dialectical Behavior Therapy	Highest rated	Suicide attempts, Nonsuicidal self-injury (Para-suicidal history), Psychosocial adjustment, Treatment retention, Drug use, Symptoms of eating disorders	Young adult through Older adult
Firearm licensing laws	Highest rated	Reduced homicide, Reduced suicide	
Model Adolescent Suicide Prevention Program (MASPP)	Second-highest rated	Suicide attempts, Suicide gestures	Childhood, Adolescent, & Young adult
Multisystemic Therapy With Psychiatric Supports (MST-Psychiatric)	Highest rated	Mental health symptoms, Family relations, School attendance, Suicide attempts, Days in out-of-home placement	Childhood & Adolescent
Multisystemic Therapy-Psychiatric	Second-highest rated	Youth Self-Rated Suicide Attempts, Caregiver-Rated Youth Suicide Attempts, Suicidal Ideation	Adolescent
QPR Gatekeeper Training for Suicide Prevention	Second-highest rated	Knowledge about suicide, Gatekeeper self-efficacy, Knowledge of suicide prevention resources, Gatekeeper skills, Diffusion of gatekeeper training information	Young Adult through Older Adult
United States Air Force Suicide Prevention Program	Second-highest rated	Suicide prevention	Young Adult and Adult
Universal firearm background checks	Second-highest rated	Reduced homicide, Reduced suicide	
Universal school-based suicide awareness & education programs	Second-highest rated	Reduced suicide, Increased knowledge of suicide, Improved coping skills	

Note: Only those suicide prevention models that were highest or second highest rated and had an outcome relating to suicide reduction, suicide attempts or increased training towards these outcomes were included. Other programs may also have impacts that are less direct such as Mental Health First Aid

Source: Pew MacArthur Results First Clearinghouse

Discussion of therapeutic modalities such as Multisystemic Therapy and Dialectical Behavior Therapy were included in previous LFC reports including the 2017 Children's Behavioral Health Results First Report and the 2014 Adult Behavioral Health Report.

Appendix G. Suicide by Urbanization with Best Practice Strategies

Suicide Deaths and Rates by Urbanization, 2014-2018

	Number of Deaths	Crude Rate	Percent of Total Suicide Deaths
Medium Metro	1,011	22.2	41%
Small Metro	549	22.6	22%
Micropolitan	724	24.2	30%
NonCore, Nonmetro	162	35.2	7%

Note: Medium metro has a population between 200 thousand and 500 thousand; Small metro has a population between 50 thousand and 200 thousand; Micropolitan has a population between 10 thousand and 50 thousand; NonCore has a population below 10 thousand.

Source: CDC Wonder

In 2014 the SPRC published and strategies of rural suicide prevention work.^{xxxix} These strategies include using incentives to encourage mental health professionals to work in rural areas, training primary care professionals to screen for suicide risk, strengthen crisis centers ability to link with local resources, establish crisis response protocols for the local community and target suicide prevention programming to the community or population needs by collaborating with the state to access local data on suicide. Others highlight the need for improved telehealth and integrated primary and behavioral health care.^{xl} Also, some states create a strategic plan focused solely on rural areas to reduce suicides in these areas.

Appendix H. Suicide Prevention Resource Center Essential Elements for Suicide Prevention Infrastructure

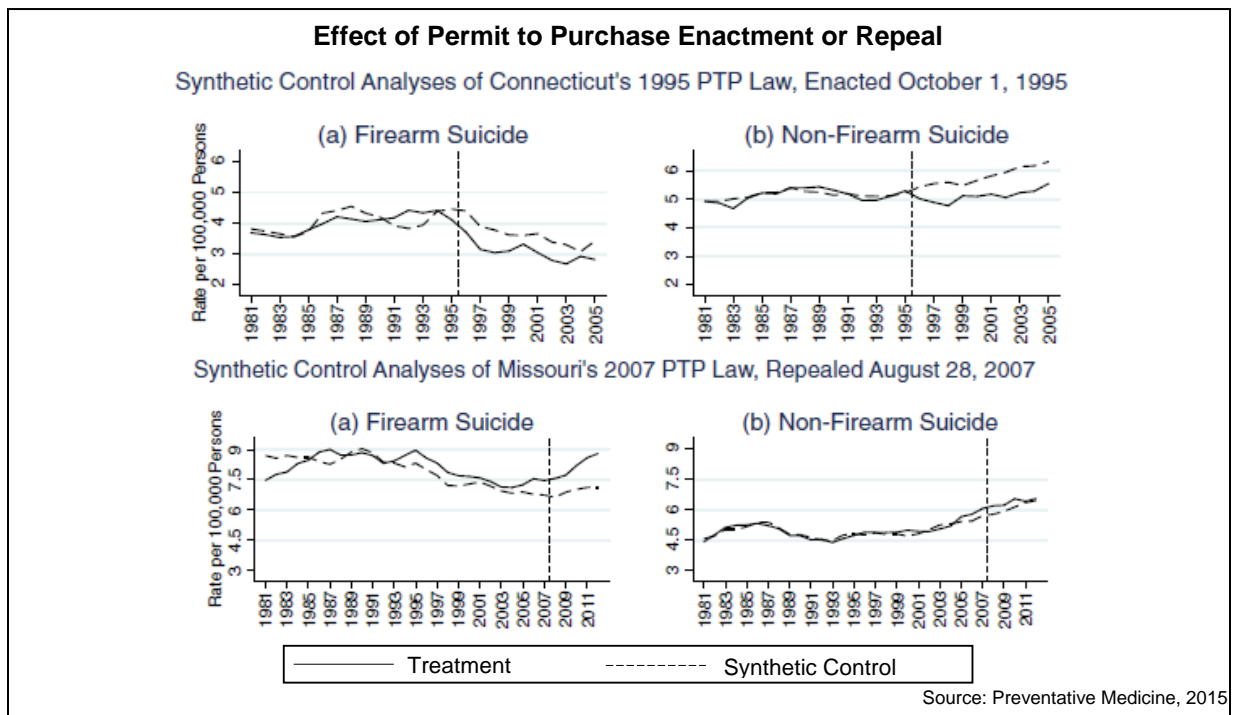
Essential Elements for Suicide Prevention Infrastructure

Essential Element	Recommendation
Authorize (1/3)	<ul style="list-style-type: none"> Designate a lead division of organization Identify and secure resources required to carry out all essential functions Maintain a state suicide prevention plan that is updated every 3-5 years
Lead (1/3)	<ul style="list-style-type: none"> Maintain a dedicated leadership position Identify and fund core staff position, training, and technology need to carry out essential functions Develop capacity to respond to information request from officials, communities, the media and the general public.
Partner (2/2)	<ul style="list-style-type: none"> Form a statewide coalition representation from broad public and private sectors Adopt a shared vision and language across partners
Examine	<ul style="list-style-type: none"> Ensure that sufficient funding and personnel are allocated to support high quality, consistent, privacy-protected suicide morbidity and mortality data collection and analysis Identify, connect with and strengthen existing data sources Develop the skills and a plan for regularly analyzing and using data to inform action at the state and local levels
Build	<ul style="list-style-type: none"> Build a multi-faceted, lifespan approach to suicide prevention across the state, in concert with the state plan Designate sufficient funding to carry out or support a multi-faceted approach Develop the ability to evaluate and share results
Guide	<ul style="list-style-type: none"> Ensure the ability to plan, provide, and evaluate guidance for state, county, and local efforts Identify and allocate resources needed to support consultation and capacity building training for state, county, and local efforts

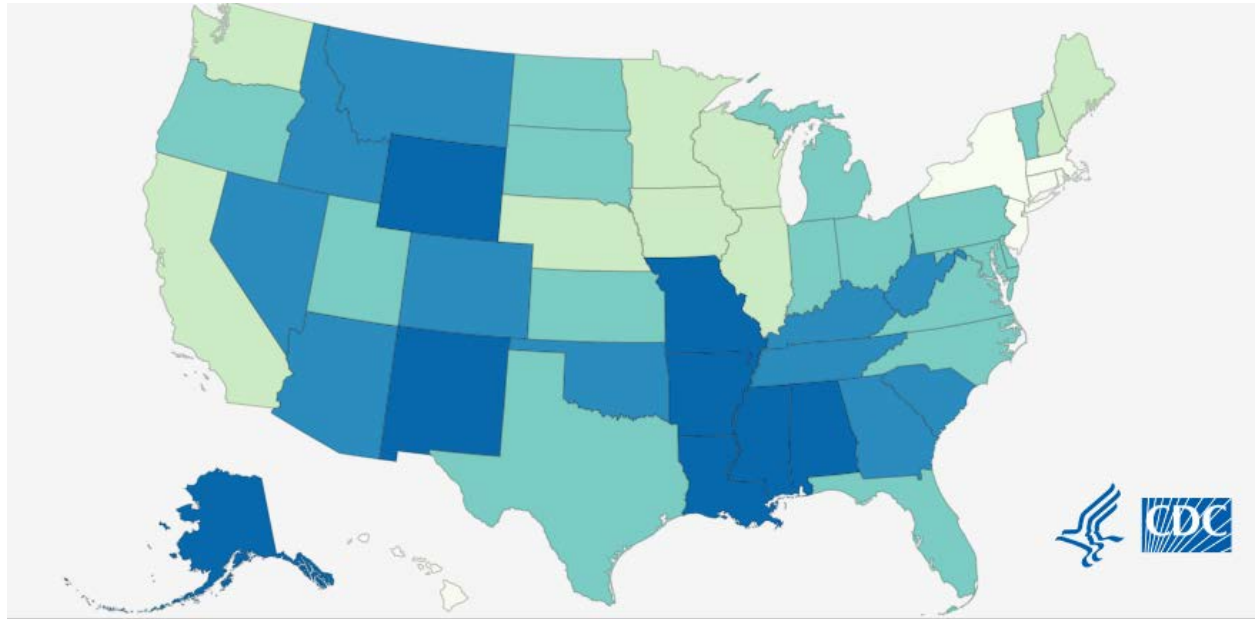
Source: Adapted from SPRC State Infrastructure Recommendation Report

Appendix I: State Effects of Permit to Purchase Legislation

In the below figure, Connecticut enacted a permit to purchase law while Missouri repealed a permit to purchase law. The data showed a 15% decrease in firearm suicide from Connecticut and a 15 percent increase in suicide for Missouri.



Appendix J: Firearm Mortality by State, 2018



Age-Adjusted Death Rates¹

○ 3.3 — < 7.2 ● 7.2 — < 11.1 ● 11.1 — < 15 ● 15 — < 18.9 ● 18.9 — 22.9

Location	Death Rate (per 100,000)	Deaths
Mississippi	22.9	681
Alabama	21.8	1,064
Missouri	21.5	1,311
Wyoming	21.5	124
Louisiana	21.4	991
Alaska	21	155
New Mexico	20.7	438
Arkansas	18.9	573
West Virginia	18.2	343
Nevada	17.9	550
Tennessee	17.8	1,228
South Carolina	17.6	895
Montana	17.3	186
Kentucky	16.9	762
Oklahoma	16.8	665
Idaho	16.6	294
Georgia	15.7	1,680
Arizona	15.3	1,147
Colorado	15.2	889
Kansas	14.8	424
Indiana	14.7	977
South Dakota	13.6	117
North Carolina	13.3	1,416
Utah	13.2	397
Ohio	13.1	1,555
Florida	12.9	2,902
Michigan	12.9	1,310
Vermont	12.8	82
Pennsylvania	12.5	1,654

Texas	12.2	3,522
Virginia	11.8	1,035
Maryland	11.7	707
Oregon	11.7	519
Delaware	11.6	107
North Dakota	11.5	89
Illinois	10.9	1,382
New Hampshire	10.8	155
Washington	10.4	809
Maine	10.3	159
Wisconsin	10.1	598
Nebraska	9	183
Iowa	8.7	282
Minnesota	7.8	437
California	7.5	3,040
Connecticut	4.9	186
New Jersey	4.8	420
New York	4.1	821
Hawaii	4	59
Massachusetts	3.5	258
Rhode Island	3.3	37

Source: CDC

Appendix K. States with Legislation for Suicide Prevention Training and Programming in Schools

Number of States with School Suicide Prevention Training, by Statute Type

Type of Training Statute	# of States with Statute	Statute in New Mexico?
State Mandates Annual Training	13	No
State Mandates Training, Not Annual	19, plus D.C.	No
State Encourages Training	15	No
State Requires Suicide Prevention Programming	22, plus D.C.	No
State Encourages Suicide Prevention Programming	7	No

Source: AFSP

Appendix L. Department of Health's Office of School and Adolescent Health Training with Cost and Number Served

Office of School and Adolescent Health Training and Support Programs, FY18-FY20

	FY18		FY 19		FY 20	
	# Served	Funding	# Served	Funding	# Served	Funding
Question, Persuade and Refer (Regular and train the trainer)	357	\$0	No data provide	\$40,000	1160	\$250,000
Suicide awareness and Anti-Stigma	No data provided	\$350,000	No data provided	\$310,000	1222	\$550,000
Natural Helpers	612	\$165,000	642	\$205,000	646	\$188,000
Call Line Services	38912	\$42,000	39417	\$42,000	39621	\$42,000

Note: For QPR, counts based on trainings provided by OSAH staff as well as contractors funded; The Suicide Awareness and Anti-stigma trainings include signs of suicide, CALM, and CRRS (assessment) training; Natural Helpers is a peer to peer support model to focus on risk reduction and resiliency building; Call Line Services is some funding for Agora, DOH is not the sole funder but the # served is all calls Agora received. Missing data was not recorded by DOH.

Source: DOH OSAH files

Appendix M: Districts Receiving DOH Suicide Prevention Training, September 2019-October 2020

District or Type of School	QPR	QPR Trainer	YMHFA	YMHFA Instructor	Total
Albuquerque	36	24	3	3	68
Aztec				1	1
Bernalillo	56	2		1	59
Bloomfield	1	2			3
Capitan	1				1
Central Consolidated	1	1			2
Charter	14	8		2	24
Cloudcroft		2			2
Clovis		1			1
Dexter		2			2
Espanola		2			2
Farmington				1	1
Gadsden	3	11		1	15
Gallup McKinley		2		1	3
Grants Cibola	1				1
Jemez Mountain		1		1	2
Jemez Valley	1	1			2
Las Cruces	1	3		1	5
Lordsburg		1			1
Los Lunas	1				1
Magdalena		1			1
Mora		1			1
Private	6	1		1	8
Rio Rancho		1	31	20	52
Roswell	2				2
Santa Fe				1	1
Silver		2		1	3
Socorro	1	3	1	1	6
State Run				2	2
Taos	2			1	3
Tularosa		1			1
Total	127	73	35	39	276

Note: October 2020 is a partial month. QPR is Question, Persuade Refer and YMHFA is Youth Mental Health First Aid. Shaded rows represent school personnel trained but not from a school district.

Source: DOH OSAH

Appendix N. Christus St. Vincent and Sky Center Youth Emergency Room Program

Quickly providing services and referrals to youth after a mental health hospitalization may reduce suicide risk. Research highlights the benefits of timely mental health service referrals. Youth who received outpatient services within seven days of being discharged from the hospital were 44 percent less likely to attempt suicide.^{xli} Christus Saint Vincent and the Sky Center partner to provide the Adolescent Hugs program, an immediate outpatient mental health referral program for all youth visiting the emergency department (ED) for a behavioral health issue. The program has a social worker or licensed clinician on call 24/7 who can interact with youth and their family in the ED and continue to provide services once the youth is discharged. This service has not been rigorously evaluated, but seems to be a promising solution to service provision after a crisis. Patients who received these services reported a 30 percent decrease in suicidal ideation in 2017, and 93 percent of patients in 2019 did not return to the ED that year. The program cost Christus Saint Vincent \$110 thousand to serve 58 youth, or approximately \$1.9 thousand per patient. DOH should partner with Christus Saint Vincent and the Sky Center to thoroughly evaluate the program, and expand it to other hospitals if the results are positive, with priority given to areas with the highest number of youth in crisis based on suicidality data from the YRRS and suicide attempts.

Appendix O. Examples of Local Provider Training programs in the state

The Sky Center and El Centro Help to Grow Providers in the State

The Sky Center offers suicide prevention services, including an advanced training opportunity for clinicians in youth suicide prevention. According to a FY20 report, the Sky Center worked with 13 clinicians in spring 2020. Of those responding to a post training survey, 78 percent of the clinicians are working in the field of mental health or social work, with all of the respondents staying in New Mexico.

El Centro has the “Semillas De Salud” program to simultaneously reduce health disparity and improve health education in rural communities. The program focuses on providing clinical rotations as well as mentoring middle and high school students. It has led to the hiring of 33 licensed health professionals in the community upon training completion. DOH or higher education institutions could work with the Sky Center, El Centro and other mental and physical health providers to increase clinician training on youth suicide prevention and suicide prevention generally as well as expand our rural provider base through training and mentoring in rural communities.

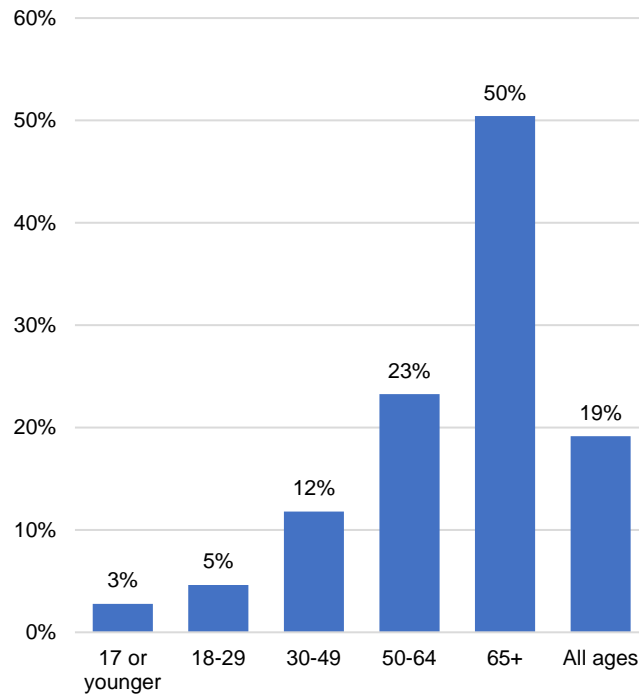
Source: The Sky Center NM Suicide Intervention Project 2019-2020 Youth Suicide Prevention Evaluation Report to DOH OSAH



Source: The author reviewed online the Physician Fee Schedule for all 50 states and DC, and looked for any Medicaid provider bulletins for states that had codes listed in the Physician Fee Schedule.

Source: California Health Care Foundation, 2020

Appendix Q. Percent of Suicide Decedents with Physical Health Problems as a Suicide Precipitant by Age



Source: Adapted from Choi et al. 2016

Appendix R. Selected References

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