# New Hampshire Suicide Prevention



# Annual Report 2019

This report was produced by the NAMI New Hampshire, State Suicide Prevention Council (SPC) and Youth Suicide Prevention Assembly (YSPA).

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# Introduction

The 2019 Annual Suicide Prevention Report, which includes a summary of accomplishments and data, is the result of the collaborative work of many groups, committees, and organizations in NH who have dedicated time and resources to study the issue of suicide and to look at prevention and postvention across the lifespan.

The work of these groups in suicide prevention and postvention is reaching across the state and into communities, schools, organizations and individual lives.

Evidence of this includes some of the following accomplishments from calendar year 2019:

- The passage of Senate Bill 282 requiring schools to develop suicide response plans and to implement suicide prevention training for all faculty and staff.
- Again selling out of seats at the NH Suicide Prevention Conference.
- The continued work being done in the area of Zero Suicide by representatives from the health and behavioral health care field, Department of Corrections, Department of Safety, and military organizations.

Many achievements will be described further throughout this report. It is critical to NH that we continue to build on the momentum and collective knowledge that has been gained in suicide prevention to strengthen capacity and sustainability in order to reduce risk of suicide for all NH citizens and promote healing for all of those affected by suicide.

Knowing that it takes all of us working together with common passion and goals, thank you to everyone who has been involved in suicide prevention and postvention efforts in New Hampshire.

# What's New in this Year's Report?

Some of the new highlights this year include:

- NH Violent Death Reporting System data has been integrated throughout the report, replacing duplicate information from other sources.
- Highlights of activities that took place across the state.
- New examples of positive outcomes and testimonials related to suicide prevention work being done in NH. These examples are included as text boxes interspersed throughout the report.

# **Primary Partners**

# NAMI New Hampshire and the Connect Suicide Prevention Program

NAMI New Hampshire (National Alliance on Mental Illness), a grassroots organization of families, consumers, professionals and other members, is dedicated to improving the quality of life of persons of all ages affected by mental illness and suicide through education, support and advocacy.

NAMI NH's Connect Suicide Prevention Program has been recognized as best practice and model for a comprehensive, systemic approach. The community-based approach of the Connect Program focuses on education about early recognition (prevention); skills for responding to attempts, thoughts and threats of suicide (intervention); and reducing risk and promoting healing after a suicide (postvention). NAMI NH and The Connect Program assist the State Suicide Prevention Council and the Youth Suicide Prevention Assembly with implementation of the NH Suicide Prevention Plan. Connect provides consultation, training, technical assistance, information, and resources regarding suicide prevention throughout the state. NH specific data, news and events, information and resources, and supports to survivors are available on the Connect website at <u>www.TheConnectProgram.org</u>.

# New Hampshire Office of Chief Medical Examiner

The New Hampshire Office of Chief Medical Examiner (OCME) is responsible for determining the cause and manner of all sudden, unexpected or unnatural deaths falling under its jurisdiction (RSA 611-B:11). This includes all suicide deaths occurring within the state of NH. As the central authority making these determinations, the OCME is in an ideal position to provide timely data on NH suicide deaths. For more than 15 years the OCME has partnered with YSPA, and more recently the SPC, to provide data and insight into the deaths affecting the state.

# New Hampshire Violent Deaths Reporting System

In 2015, NH partnered with the Centers for Disease Control and Prevention (CDC) Injury Prevention Division and began a joint surveillance program, also known as the National Violent Death Reporting System (NVDRS), which is now applied in all fifty US states and Puerto Rico. The surveillance program in NH is known as the NH Violent Death Reporting System (NH-VDRS), which is supported by CDC NVDRS grant funding. NH-VDRS is housed in the NH Office of Chief Medical Examiner (OCME) with administrative oversight by the NH Department of Health and Human Services Injury Prevention Program as the grant holder. The NH-NVDS program is tasked with compiling case level data on all violent deaths in NH, including suicides, homicides, all deaths involving firearms, and deaths resulting from legal intervention (such as law enforcement or war). The NH-VDRS program's work also entails disseminating information within NH and to CDC Injury Prevention Division and other affiliates. Since its inception, NH-VDRS has endeavored to engage entities focusing on suicide in NH, including: local suicide prevention service providers, suicide prevention advocates, law enforcement, law makers and other interested groups. These groups are making use of aggregate data reported by NH-VDRS to enhance prevention efforts in the state. The NH-VDRS data in this report is made possible under Grant Award # 5NU17CE924939-02-00

For information regarding NH-VDRS or to request data, contact:

- JoAnne Miles-Holmes, Injury Prevention Program Manager, NH-VDRS Principal Investigator, Maternal and Child Health Section, Division of Public Health Services, NH Department of Health and Human Services, <u>JoAnne.MilesHolmes@dhhs.nh.gov</u>.
- Djelloul Fourar-Laïdi, Planning Analyst/NH-VDRS Planning Analyst-Data Systems, Office of Chief medical Examiner, NH Department of Justice, <u>djelloul.fourar-laid@doj.nh.gov</u>.
- Kim Fallon, Chief Forensic Investigator, Office of Chief Medical Examiner, <u>kim.fallon@doj.nh.gov</u>.

# **State Suicide Prevention Council**

The mission of the State Suicide Prevention Council (SPC) is to reduce the incidence of suicide in New Hampshire by accomplishing the goals of the NH Suicide Prevention Plan:

- \* Raise public and professional awareness of suicide prevention;
- \* Address the mental health and substance misuse needs of all residents;
- \* Address the needs of those affected by suicide; and
- \* Promote policy change.

The success and strength of the Council is a direct result of the collaboration that takes place within its membership and with other agencies/organizations, including public, private, local, state, federal, military, and civilian. Strong leadership and active participation come from the Council's subcommittees: Communication and Public Education; Data Collection and Analysis; Law Enforcement; Military and Veterans; Public Policy; Suicide Fatality Review; and the Survivors of Suicide Loss subcommittee.

As part of NH RSA 126-R, which legislatively established the Suicide Prevention Council, the Council is required to annually report on its progress, to both the Governor and the legislature. This report serves that purpose, as well as providing an annual update on the accomplishments of our collective achievements and data regarding suicide deaths and suicidal behavior in NH.

# Youth Suicide Prevention Assembly

The Youth Suicide Prevention Assembly (YSPA) is dedicated to reducing the occurrence of suicide and suicidal behaviors among New Hampshire's youth and young adults up to the age of 24. This is accomplished through a coordinated approach to providing communities with current information regarding best practices in prevention, intervention, and postvention strategies and by promoting hope and safety in our communities and organizations.

YSPA is an ad hoc committee of individuals and organizations that meet monthly to review the most recent youth suicide deaths and attempts in order to develop strategies for preventing them.

Over the years, YSPA and its partners have been involved with a wide range of suicide prevention efforts in the state – including but not limited to: collecting and analyzing timely data on suicide deaths and attempts, collaborating on an annual educational conference, creating the original NH Suicide Prevention Plan and identifying the need for statewide protocols and training, which were developed through NAMI NH into the Connect Program. The Survivor of Suicide Loss packets that are sent to the Next of Kin of anyone who dies by suicide in New Hampshire got their start in YSPA before expanding to all ages.

# **Accomplishments of Suicide Prevention Efforts in NH**

### **State Suicide Prevention Council**

This year marked the 11<sup>th</sup> anniversary of NH's Suicide Prevention Council (SPC) since its legislative inception in 2008. As part of a revision of the NH Suicide Prevention Plan (<u>https://www.dhhs.nh.gov/dphs/bchs/spc</u>) in 2016, the concept of a Zero Suicide approach was adopted by the SPC. This concept was built into the overall goals of the Plan, as well as the goals of the individual SPC subcommittees. More information about Zero Suicide is available from <u>http://zerosuicide.sprc.org/</u>. A selection of accomplishments in NH related to Zero Suicide are featured below on pages 13-14. During 2019, the SPC, its subcommittees, and other stakeholders in the state have looked at ways of implementing the goals outline in the revised Plan.

Much of the work of the SPC is done at the subcommittee level. Some of the subcommittee activities occurring in 2019 to move forward the goals of the NH Suicide Prevention Plan included:

### **Communications Subcommittee**

- Coordinated a press event in September for Suicide Prevention Awareness Week.
- Worked with the Public News Service on writing and publishing stories around prevention efforts in the state. The stories take into account the media recommendations for reporting on suicide (<u>http://reportingonsuicide.org/</u>) as well as the National Action Alliance's Framework for Successful Messaging: <u>http://suicidepreventionmessaging.org/</u>.

### **Data Collection and Analysis Subcommittee**

- Worked with multiple statewide partners to compile and analyze data covering calendar year 2018. The data were then included in the 2018 NH Suicide Prevention Annual Report and distributed statewide.
- Collaborated with the Analyst for the NH Violent Death Reporting System (NH-VDRS) to expand the use of NH-VDRS data in the NH Annual Suicide Prevention Report.

### Military and Veterans Subcommittee

The Military & Veterans Committee of the NH Suicide Prevention Council underwent organizational and structural changes in 2019. The committee merged with the *NH Governor's Challenge to Prevent Suicide among Service members, Veterans and their Families* team which consolidated the two groups' membership and added new members to the Committee. The Governor's Challenge team was developed in 2018 and focused on efforts to prevent suicide among Service members, Veterans and their families. There were many duplications in membership between the two groups and both were focused on the same work. In order to reduce duplication of work, enhance membership of the Committee and ensure sustainability of the Governor's Challenge work, a merger between the two groups took place. In 2019, the work of the combined groups included:

- Members of the Committee hosted a Community Mental Health Summit in September 2019, offering a free training to the community on Counseling on Access to Lethal Means (CALM), training on ethical considerations and strategies for health professionals on responding to stigmatization, and a keynote address in which a Veteran shared his story of mental health recovery.
- Federal funding was accessed to send a total of 38 committee members to national conferences and Academies focused on effective suicide prevention practices for Service Members, Veterans and their Families (SMVF) including services & resources for rural Veterans and safe messaging practices.
- Federal funds were used to bring professional facilitators from SAMHSA-SMVF TA Center to New Hampshire to help the Committee continue development of an action plan and prepare for implementation of plan strategies.
- The Committee collaborated with SAMHSA-SMVF TA Center to re-convene the Manchester Mayor's Challenge to Prevent Suicide among Service members, Veterans and their Families team for a 1.5 day Crisis Intercept Mapping workshop where participants from a variety of sectors identified gaps SMVF may experience when seeking help for a mental health crisis. This re-energized the Mayor's Challenge team in the Manchester area and resulted in non-profit organizations pursuing private grant funding to address the gaps identified.
- Implementation of military cultural competency training across stakeholder organizations.
- Implementation of a statewide resource coordination center for SMVF so that SMVF will benefit from better coordinated referrals and more timely access to appropriate services.

### Survivor of Suicide Loss Subcommittee

- Provided support and technical assistance to 15 NH Loss Survivor Support Groups, including bi-monthly facilitator calls, and supported 9 American Foundation for Suicide Prevention (AFSP) International SOSL Day events around NH.
- Coordinated over 28 Survivor Voices speaking engagements and engaged new Adult Young Adult Survivor Voices Speakers.
- Ensured Loss Survivor participation in community events through targeted outreach.
  - Four identified Loss Survivors participated in the NH Annual Suicide Prevention Conference.
  - The Team SOS (Survivors of Suicide) participated at the annual NAMI NH Walk.

As the council looks to continue its work, there is a desire to increase active membership on its subcommittees. This is particularly true for representatives from the field of substance use disorders as the council looks at the relationship between substance misuse and suicide prevention. The council also recognizes the role public health departments play in this work and their perspective is important for future collaborations. The public private partnerships developed in subcommittees should continue to expand and enhance the impact of the work being done by the council. Contact any of the committee chairs if you have an initiative you would like to put forward related to suicide prevention efforts throughout the state.

The council continues to collaborate with the Department of Health and Human Services (DHHS) for statewide leadership and support as it looks to continue its work in promoting evidence-based initiatives and refining and expanding the state plan to ensure the very best outcomes for NH citizens.

If you would like to join any of the Suicide Prevention Council Subcommittees, please contact the designated committee chair. The committee meeting schedule has been included on pages 73-74 of this report.

# The Youth Suicide Prevention Assembly (YSPA)

The Youth Suicide Prevention Assembly (YSPA) continues to meet the second Thursday of every month in Concord, NH.

YSPA is a grass roots organization comprised of individuals interested in learning more about how to prevent all suicides, but especially those that occur in individuals age twenty-four and under. YSPA supports the State Suicide Prevention Plan by promoting a greater awareness of youth/young adult suicide risk factors, protective factors and warning signs. YSPA encourages the development and maintenance, of professional networks and the use of natural supports to decrease the risk of suicide and promote support and postvention activities in the aftermath of a suicide death.

YSPA regularly includes educational activities as part of the meetings. Speakers or topics that were part of the 2019 meeting scheduled included: an overview of services provided by a Mobile Crisis Response Team from Concord; viewing the film, "Resilience", about the impact of Adverse Childhood Experiences and ways to mitigate them; a presentation that was open to a larger audience about work with youth and the Bureau of Drug and Alcohol Services titled, "The Voice of NH's Young Adults" (this attracted 44 attendees); and an annual "retreat", whereby the "Assembly" of YSPA can review the Mission Statement, the brochure and provide feedback to the meeting structure, content and/or other items. Other topics included: A mid-year review of YSPA-specific data covering information about youth and young adult suicide deaths in 2018 and initial data for 2019; an overview of grief and loss issues that are common to suicide loss survivors; an overview of the services provided by Peer Support Agencies; and conference feedback and a "status report" of the progress of then-Senate Bill 282 relative to suicide prevention education in schools.

There was also a meeting where a Participant Bio of a meeting attendee was shared in order to learn more about "who is at the table" and the rich background attendees bring to the meetings.

YSPA membership continues to be diverse with regular membership representing behavioral health, substance use, all levels of education, law enforcement, Lesbian, Gay Bisexual, Transgender, and Questioning (LGBTQ) groups, public health, social service agencies and persons with lived experience.

For more information on YSPA, please contact Elizabeth Fenner-Lukaitis: <u>Elizabeth.Fenner-Lukaitis@dhhs.nh.gov</u> or Elaine de Mello: <u>edemello@naminh.org</u>

# The NH Suicide Survivor Network

In 2019 Survivors of Suicide Loss (SOSL) continued in their efforts of building capacity and establishing groups throughout NH, with 15 groups already in motion and attendees growing in numbers as the groups are added. More and more loss survivors are finding comforting support in their healing journey and continue to mentor each other in facilitating and co-facilitating these groups by providing a safe environment to share their experience of suicide loss. These support groups continue to meet on a weekly, bi-weekly and monthly basis. Talk of teen (ages 14-18) and young adult (ages 18-25) survivor of suicide loss peer support groups will commence.

An ever growing number of Loss Survivor Speakers continued to share their personal stories and experiences of suicide loss to help educate the public and provide healing and support, within their communities and throughout the state. In 2019 there were 28 presentations by loss

survivors, including 10 presentations given by Young Adult SurvivorVoices Speakers. The NH Survivors of Suicide Loss Resource Packet was updated and disseminated through the NH Office of Chief Medical Examiner to the next of kin of all those who died by suicide. The book "Healing the Hurt Spirit: Daily affirmations for people who have lost a loved one to suicide", authored by a NH survivor, continues to be available to new loss survivors. An online survey is also provided to solicit feedback on the folder and provide additional avenues to connect loss survivors to help.

Viewings of the American Foundation for Suicide Prevention (AFSP) International Survivors of Suicide Loss Day (ISOSLD or Survivor Day) were held at 9 sites throughout NH on the Saturday before Thanksgiving

### **Positive Outcomes and Testimonials**

#### Both Sides of the Door - Law Enforcement Investing in Loss Survivors!

Several Loss Survivors have experienced an extremely difficult situation at the scene of a suicide death in their home. Loss Survivors are in complete shock and disbelief upon finding out of this tragedy and along with their grief, sadness, and devastation. The last thing they want is to be separated from their family and their loved one they just lost to suicide.

Through the chaos of a suicide death, most often Loss Survivors aren't given any information during the investigation and Loss Survivors are led to feel like a suspect in their own home and loved ones death.

The Goffstown law enforcement is one step ahead of this for Loss Survivors, their goal is to "invest" in Loss Survivors and recognize that it is most important to treat Loss Survivors with the utmost respect and compassion at the scene of a suicide death and on a longer term thereafter. With their police department chaplain, they work together to make this unimaginable tragic situation run as smoothly as it can.

Since this workshop, it has been discovered that many law enforcement departments in NH do have something like this in place and through the Laconia Police and the Partnership for Public Health in this region a protocol for unattended death/death notification has been put together for all law enforcement to have on hand at the scene to help remind them of what can be done and said to Loss Survivors at the upon a suicide death and an unattended death as well. These two examples help to make a tragic situation such as a suicide death to go a little more smoothly for Loss Survivors to be understood and for law enforcement to make sure that they have that important compassionate part to achieve that goal.

and gathered over 100 loss survivors together in healing, support, and understanding.

The annual NH Survivor of Suicide Loss Newsletters were distributed throughout the state, with hard copies made available at trainings, loss survivor speaking presentations, the State Suicide

Prevention Conference, health fairs, libraries, hospitals, healthcare facilities, mental health centers, funeral homes, churches and faith-based organizations, and in the Survivors of Suicide Loss Resource Packet. The newsletter was also distributed electronically to many email lists.

More and more loss survivors in NH are becoming involved in advocacy and fundraising efforts for various local and national suicide prevention organizations and initiatives. NH loss survivors volunteered over 1110 hours of volunteer time, by displaying the 4 quilts that were lovingly crafted by NH survivors of suicide loss in memory of their loved ones lost to suicide. Along with loss survivor resources at many of these events such as NAMIWalks NH, several AFSP "Out of the Darkness community walks", many different suicide postvention trainings, Paddle Power, Compassionate Friends, Zero Suicide Academy, at SurvivorVoices speaker presentations, and the State Suicide Prevention and NAMI NH Conferences.

The NH State Suicide Prevention Council continues to include a Survivors of Suicide Loss Subcommittee on the council, and also to include loss survivors on the membership of the Council and its other sub-committees. Feedback from the NH loss survivor network clearly indicates great interest by loss survivors in expressing their voice, building capacity of support groups, expanding the International Survivors of Suicide Teleconference day, and being involved in more advocacy and public speaking events.

This committee encourages new members to join and attend their monthly conference calls.

### Attempt Survivor Initiative:

An attempt survivor committee was formed to look at resources and support for individuals in NH who have attempted suicide. The committee had representation from persons with lived experience (loss and attempt survivors), staff from New Hampshire Hospital (NHH), NAMI NH, the Office of Consumer Affairs, and Peer Support Centers in NH. In the course of the committee's work, models for attempt survivor support groups were researched and the committee began to draft a manual to provide guidance around leading support groups.

### **Positive Outcomes and Testimonials**

"The resources for survivors are critical and every effort must be made to keep and improve their availability. Many survivors would not be functioning, healing or grieving if it were not for these programs. For a situation which is not understood by a large percentage of society, support and education still remain a priority".

A New Hampshire Survivor of Suicide Loss

# **Other Statewide Initiatives**

### AFSP (American Foundation for Suicide Prevention)

AFSP's International Survivors of Suicide Loss Day (ISOSLD) is the one day each year when people affected by suicide loss (survivors) gather around the world at events in their local communities to find comfort and gain understanding as they share stories of healing and hope. ISOSLD, by U.S. Senate resolution, takes place annually on the Saturday before Thanksgiving. Intended to be a day of healing and support, loss survivors often attend these intimate conferences to help in their grief journey and connect with other survivors. Over 100 loss survivors attended conference events around the state in 2019 in collaboration with: Partnership for Public Health; Dartmouth College; VA Manchester; the Samaritans; NH Healthy Families and the Survivor Support Groups in NH.

Advocacy is at the heart of AFSP's mission to save lives and bring hope to those affected by suicide, and those pushing for grassroots change are invaluable in that effort. More than 200 Field Advocates in the Granite State worked closely with the national Public Policy Team and the NH Chapter to help build strong, meaningful working relationships with elected officials at all levels of government, including providing both written and verbal testimony to the Senate and House education committees in support of Senate Bill 282 relative to suicide prevention education in schools.

AFSP partnered with various like-minded organizations to bring together over 400 individuals in Exeter, NH to attend a Town Hall Forum on mental health and youth suicide prevention. The NH Chapter moved forward with the 'train the trainer' model of getting suicide prevention programming out to local volunteers so that they can share information around the recognition and intervention of individuals in crisis within their own communities. This model allows volunteers to bring programming such as Talk Saves Lives and More Than Sad: Teen Depression back to their communities, businesses, and schools where it's needed, rather than community members needing to travel to a training.

AFSP conducted four (4) Out of the Darkness Community Walks in 2019 in the communities of Concord, Portsmouth, Nashua, and Keene as well as two (2) Campus Walks at Southern New Hampshire University in Manchester and Dartmouth College in Hanover. Over 2,500 individuals participated in these Walks to raise funds that allow AFSP to invest in new research, create educational programs, advocate for public policy, and support survivors of suicide loss. From funds raised, AFSP was able to provide free suicide prevention trainings to over 500 individuals including Talk Saves Lives for Occupational Safety and Health Administration conferences; Youth-Mental Health First Aid in collaboration with UNH Cooperative Extension from Nashua, New London, Brentwood, Derry and Somersworth; More Than Sad: Teen Depression to parents, students and educators in various NH communities including Andover, New London, Seabrook, Nashua, Hanover, Gilford, Rochester and Dover.

### **Connor's Climb Foundation**

Connor's Climb Foundation is a New Hampshire based nonprofit with the mission to provide suicide prevention education to NH youth and communities. In 2019, the foundation hosted over 20 suicide prevention events across the state with over 2,600 attendees. Eleven of these events were focused on the SOS Signs of Suicide® Prevention Program, which is a nationally recognized, evidence-based school suicide prevention program that includes screening and education. Connor's Climb provided funding to implement the program with students, faculty, and parents to 20 schools throughout the year. In addition, the foundation led multiple upstream prevention efforts. Highlights include over 550 individuals participating in the Connor's Climb Foundation Annual 5K & Family Walk, over 845 attendees to Stick it to Stigma Hockey Games, and over 500 attendees participating in town hall/community-based events and forums. The foundation prioritized advocacy as a key initiative in 2019 and was instrumental in supporting Senate Bill 282, an act relative to suicide prevention in schools, which became 193-J when it was signed into law; going into effect July, 2020.

### Zero Suicide Examples of Efforts in New Hampshire

Hosted by Exeter Hospital, providers around NH came together in November 2017 for a Zero Suicide Academy to kick off strategic efforts to prevent suicide in systems across the state. Since that time many initiatives have been implemented in facilities and organizations in NH. For instance, many emergency departments, health care facilities and mental health centers have been implementing universal screening for suicide risk. While this summary is not all inclusive, some of these efforts in 2019 include the following:

### The Foundation for Healthy Communities' Behavioral Health Clinical Learning

**Collaborative** is a two-year program designed to address the management and treatment of patients experiencing mental health crises in the emergency department (ED) setting, and is funded by the Endowment for Health, New Hampshire Charitable Foundation and Foundation for Healthy Communities' Partnership for Patients. The Collaborative members consist of New Hampshire Emergency Department and Community Mental Health Center staff working together to design and adopt strategies to assist in the immediate evaluation, management and treatment of patients with behavioral health emergencies and their longer-term care pending disposition to an appropriate level of care.

An agreed upon priority identified by Collaborative members is to examine and implement opportunities to standardize the use of the Columbia-Suicide Severity Rating Scale (Columbia) in NH Emergency Departments (ED). This evidence-based tool allows ED staff members to screen quickly for suicidality and provide clinical decision support to help determine next steps. The Behavioral Health Clinical Learning Collaborative is creating this strategy to outline recommendations for suicide screening in the EDs based on current evidence, experience, and input from Collaborative members and stakeholders. 20 of the 26 acute-care hospitals in NH currently have access to the Columbia in their emergency departments, however, use of the tool varies amongst hospitals. The goal of the project is to invoke confidence and support for screening staff and provide guidelines to further assess and manage suicide risk for all patients presenting in the ED. Referring to standardized screening questions can support clinical staff in speaking the same language and collaborating efficiently and effectively with their care team partners. The strategy will be available to all emergency departments in the fall of 2020. **New Hampshire Hospital's (NHH)** Suicide Prevention Task Force became a permanent committee at New Hampshire Hospital and is now the New Hampshire Hospital Suicide Prevention Committee (SPC). The NHHSPC hosted a showing of the Kevin Hines' film, "The Ripple Effect," followed by a presentation and question/answer session from a NAMI In Our Own Voice speaker. The SPC also hosted a resource table for staff and patients on World Suicide Prevention Day to bolster awareness and share supports/resources.

**The Mental Health Center of Greater Manchester (MHCGH)** has reported Zero Suicide related accomplishments including decreasing suicide deaths by 44%, training 80% of staff in suicide prevention, and assessing suicide risk in 100% of active clients. MHCGM has posted an extensive outcome story to the Zero Suicide website that can be viewed at <a href="https://zerosuicide.edc.org/evidence/outcome-story/mental-health-center-greater-manchester">https://zerosuicide.edc.org/evidence/outcome-story/mental-health-center-greater-manchester</a>

**The NH Army National Guard (NHARNG)** The NHARNG provided 3 Applied Suicide Intervention Skills Training (ASIST) workshops in 2019 training over thirty key gatekeepers of the military and non-military personnel. For Suicide Prevention Month the NHARNG hosted Suicide Postvention for Military with Ms. Ann Duckless of NAMI NH the guest instructor, 28 current and/or new commanders or their designated Suicide Invention Officer (SIO) attended.

# **Annual NH Suicide Prevention Conference**

The NH Annual Suicide Prevention Conference was held on November 7, 2019 and was sold out once again weeks before the event. Titled "Generations of Hope", the day opened with a plenary: "Generations of Inspiration" carried by three In Our Own Voice speakers sharing their lived experience. The panel closed with the revelation that one of the speakers, Rosie Muise, had been a college student struggling with mental illness when she saw Todd Donovan, an In Our Own Voice speaker, share his story at her college. This ultimately led to her getting treatment and ongoing recovery. Two years later, Rosie went to another one of Todd's presentations at her college where she approached Todd and let him know

### Positive Outcomes and <u>Testimonials</u>

"This Conference saved my life"

Feedback from an attendee at the Annual NH Suicide Prevention Conference

how she had turned her life around based as a result of Todd inspiring her. Rosie subsequently became an In Our Own Voice speaker and presented with Todd to share this inspiring story. The cross-section of workshops throughout the day were attended by a diverse group representing many sectors of the community including a wide range of providers and people with lived experience. The day closed with a plenary delivered by Dr. Corey Martin who engaged participants with the research on expressing gratitude and notecards to actively engage in this exercise.

# **NH Grown National Initiatives**

### **Connect**

NAMI NH's Connect Suicide Prevention and Postvention program continued to provide training and consultation to organizations, schools and communities across NH and around the U.S, providing evidencebased strategies in responding to individuals at risk for suicide and promoting healing and reducing risk after a suicide death.

In NH in 2019, there were 1,108 participants trained in Connect Prevention and 131 in Connect Postvention. 24 trainers were trained from schools, mental health centers and NH Hospital to help sustain their suicide prevention efforts in their respective organizations. NH Hospital continued to train all of the mental health workers through the year in the Connect program as part of their orientation. At the NH Police Academy, 240 new recruits also received training from Connect staff in suicide prevention and postvention as a standard part of their training curriculum.

Three Schools in NH also implemented Connect's Youth Leader program, training 120 high school youth to partner with adults to lead this program for peers and

### **Positive Outcomes and Testimonials**

"I feel more confident if a clinic patient is suicidal, I now know the steps to take to keep a suicidal patient safe. Thank you."

"I thoroughly enjoyed this training as it is a topic that hits close to home and makes me more acutely aware of ways to help and share resources for friends, family, staff, patients, etc."

"I am a triage nurse and some of the most stressful calls for me are the calls from individuals expressing thoughts of self harm. This information will be a huge help to me! I will also pass it on to others!"

"I really liked that we addressed the 'elephant in the room' and that suicide is more complicated and it takes a village to save someone's life."

Feedback shared by Connect Suicide Prevention Training participants.

teachers in their school and communities as a strong and vibrant protective factor. Over 80 young adults were trained in a Connect Young Adult version of the program throughout 2019; and since that time these leaders have not only been educating their peers around these critical issues, but have also reported making life saving interventions using the knowledge that they gained from the program.

Staff in the Connect program assisted individuals, schools and communities in their journeys after a suicide with over 89 hours of postvention support and technical assistance to communities and organizations in NH.

An E-Learning Connect Suicide Prevention training was launched for school personnel, health care and mental health providers, and gatekeepers and is now being utilized in NH and in schools and organizations across the U.S.

The Connect Program staff were also providing training and consultation in Canada and throughout the country in 2019 in numerous states, tribes, community coalitions and campuses, including Alaska, Arizona, California, Massachusetts, Nebraska, Oregon, South Carolina, Wisconsin, and Wyoming.

Furthering suicide prevention efforts in NH came with the opportunity to apply for a federal SAMHSA grant, called the Garrett Lee Smith grant, focused on suicide prevention for young people through the age of 24. NAMI NH was selected by the state to be the applicant for this grant in 2019, and in early 2020, NAMI NH received notification that its application was approved for a five year award to focus on young people through the age of 24, with a concentration in the Northern region to include Carroll and Coos Counties, and the Capital Region. The work for this grant is to be started by mid-January, 2020.

### Counseling on Access to Lethal Means - CALM

CALM (Counseling on Access to Lethal Means) is a national best practice that was developed here in NH to help health care providers and others talk to their patients and families about

reducing access to medications and firearms as part of a comprehensive suicide prevention effort. Since it began in 2006, as an in-person workshop in NH, on-line versions have been created at the Suicide Prevention Resource Center (www.sprc.org) and in both Colorado and Utah. CALM has been offered in many states including a Train the Trainer model and, beginning this year, Master Trainers are being prepared to offer Trainings of Trainers to others. In addition to the mental and physical health providers for whom it

### **Positive Outcomes and Testimonials**

"I feel [the CALM training] was very valuable. I feel that this training will help improve my skills."

"The data helped me to challenge many of my false perceptions."

"Excellent and helpful for staff to educate patients and families on prevention and actions to take."

Feedback shared by 2018 CALM training participants.

was first developed, CALM has been used by educators at all levels, first responders, clergy and those serving active military and veterans.

A shorter version of CALM is being rolled out and evaluated to bring this information to the broader community, with particular emphasis on gun owners. CALM continues to be evaluated to demonstrate and improve its effectiveness.

### National Guard and Veteran's Affairs Initiatives

Collaboration continues with medical and mental health providers in collective efforts of providing healthcare for the Service Members and their Families, and Veterans of New Hampshire. Veterans and First Responders (VFR) Healthcare joined the subcommittee in 2018 among the newest members. VFR Healthcare provides peer support groups and outreach support to all Veterans and First Responders. The Alcohol and Drug Control Officer (ADCO) of the NH Army National Guard (NHARNG) has been able to utilize VFR to provide substance use disorder services to current Service Members, as fewer and fewer substance use disorder counselors accept TRICARE or cannot take on new patients due to the increase of opioid drug misuse.

The military subcommittee helped one of the members of the subcommittee, JoAnn Clark, launch Chris' Pets for Vets, which honors her son Chris who died by suicide after discharge from the Army. In 2018 the subcommittee was able to find other Animal Shelters throughout NH to

join Chris' Pets for Vets in providing free pets for any Veteran that serves or served in New Hampshire. Two shelters in Salem and Claremont, NH joined and by Christmas of 2018 had 6 pets adopted by needy Veterans from these locations. Since December of 2014 when launched, over 200 pets have been adopted.

### The NH Gun Shop Project

Another NH grown initiative is the Gun Shop Project that engages firearm retailers in Suicide Prevention efforts. It has been adopted and adapted by groups across the country demonstrating that the suicide prevention and firearm communities can find common ground in this arena. The NH Firearm Safety Coalition who spearheaded and continues to innovate in this collaborative effort has served as a model. In 2019, members of the Coalition were invited to present a one-day Lethal Means Institute to colleagues in New York State on why and how to work together with gun retailers and firearm instructors in this work.

The NH Firearm Safety Coalition (NHFSC) continued to provide suicide prevention materials to gun shops and ranges and began to make in person visits to re-introduce the materials for broader and sustained use.

Members of the NH Firearm Safety Coalition continued their analysis of gun purchases associated with suicide deaths in NH to identify any trends or opportunities for future prevention measures. The coalition also engaged in discussions with state leadership to give input and navigate various proposals for legislation

A federal Garrett Lee Smith suicide prevention grant was written and submitted by NAMI NH early in the year which included funds to support the NHFSC's work and to continue CALM Training of Trainers in NH during the five-year grant period. This grant was approved for 2020-2025.

### Have you found this report to be useful?

Please share your feedback through the survey linked below so that this report can be even better in the future.

https://www.surveymonkey.com/r/2NMF8K2

# 2019 Data

# SPC/YSPA Data Subcommittee Membership Representation 2019-2020

Injury Prevention Center at CHaD National Alliance of Mental Illness New Hampshire New Hampshire Army National Guard State of New Hampshire Department of Corrections State of New Hampshire Department of Health and Human Services State of New Hampshire Office of Chief Medical Examiner

### Introduction

The data presented in this report are the result of collaboration among a variety of organizations and people. The data were compiled by two major collaborative groups for suicide prevention in New Hampshire, the YSPA and the SPC. YSPA and SPC merged data efforts, combining historical expertise with emerging methods. YSPA has been collecting and analyzing data about youth and young adult suicide deaths and behavior over the last 20+ years and first created this report format in 2003. The SPC has been analyzing and planning for data capacity improvements for the last 11 years. Key areas of interest and concern for suicidal behavior in NH are included in this report. A data interpretation and chart reading section has been included at the end of the report.

While each suicide is a separate act, only aggregate data is presented in this report. Aggregate data helps inform which populations and age groups are most at risk, reveals points of particular vulnerability, and thus helps guide prevention and intervention efforts, and identify where to direct program funding. It also protects the privacy of individuals and their families. We respectfully acknowledge that the numbers referred to in this report represent tragic lives lost, leaving many behind who are profoundly affected by these deaths.

In previous years this report included death data from two primary sources; Vital Records data (official death records for NH residents) for the State of NH obtained from Health Statistics and Data Management (HSDM), Division of Public Health Services, NH DHHS; and Office of Chief Medical Examiner (OCME) for the State of NH. Beginning with the 2019 NH Suicide Prevention Annual Report, the primary source of death data has been changed to NH's implementation of the National Violence Death Reporting System (NH-VDRS).

NH DHHS collaborates with the NH Department of Justice (DOJ) on implementation of the NH-VDRS<sup>1</sup> under the auspices of the OCME. The CDC currently includes all fifty states and Puerto Rico in the NVDRS project. NVDRS is a de-identified secure database system used by all US states. NH-VDRS utilizes the system to collect data on violent deaths in NH. Violent deaths include suicides, homicides, firearms accidents, and other violent deaths.

<sup>&</sup>lt;sup>1</sup> Disclosure: NH-NCDRS funding is from the Centers for Disease Control and Prevention Cooperative Agreement Number 6 NU17CE002610-04-02.

Suicide death data is collected on all suicide victims who died in the state of New Hampshire. NH residents who died in other states are included in the NH-NVDRS statistics in the state where they died. NH-VDRS data come from Assistant Deputy Medical Examiner (ADME) investigation reports, toxicology and autopsies reports, all of which are located in the Medical Examiner's office. Another data resource is law enforcement reports which include state, local and sheriff departments.

NH-VDRS is required to report the outcomes of the data on violent deaths as defined by CDC grant requirements. The analysis as provided is focused on direct outcomes and does not engage in policy analysis. Any policy analysis based on the NH-VDRS provided data included in this report was done by the NH Suicide Prevention Council Data Subcommittee.

Additional data sources were used for specific purposes throughout this report that may have varying methods of collection. All of the Tables and Figures in this report include citation for the data source to prevent confusion. Different data sources also vary regarding how quickly the information is made available and how often it is collected/reported. The time periods reported for each source are indicated with the corresponding Table or Figure.

# **Demographic profile of New Hampshire**

### **Comparing New Hampshire to the US**

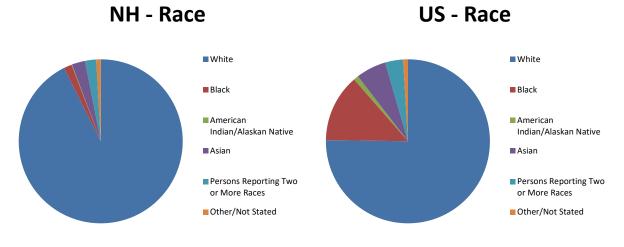
**Tables 1** through **6** below present NH and US demographic characteristics, as well as indicators of substance use and mental health. NH is a small state, with just over 1.3 million residents (US Census, 2019). Overall, NH is relatively homogeneous in terms of race and ethnicity, and has above average ratings for economic factors and education. NH is also above the US average for alcohol and illegal drug use, with the 2<sup>nd</sup> highest rate in the US for alcohol use in the past month and the 11<sup>th</sup> highest rate for marijuana use in the past month (National Survey on Drug Use and Health, 2017-2018).

	New Hampshire	United States
Rac	e	
White	92.6%	72.0%
Black	1.6%	12.8%
American Indian/Alaskan Native	0.1%	0.9%
Asian	2.6%	5.7%
Persons Reporting Two or More Races	2.2%	3.4%
Other/Not Stated	0.9%	5.2%
Ethnie	city	
Persons of Hispanic or Latino Origin	4.0%	18.4%
Data Source: US Census Bureau 2019		•

### Table 1

### Figure 1

### NH and US Race/Ethnicity.



### Data Source: US Census Bureau 2019

#### Table 2

Age.		
	New Hampshire	<b>United States</b>
Under 18	18.8%	22.23%
18 to 24	9.1%	9.3%
25 to 44	24.2%	26.7%
45 to 64	29.2%	25.4%
65 to 74	11.2%	9.6%
75 and Up	7.4%	6.9%
		2010

Data Source: US Census Bureau 2019

### Table 3

#### **Economic Factors.**

	New Hampshire	<b>United States</b>
Unemployed Residents	3.0%	4.5%
Persons Below Poverty Level	7.3%	12.3%
Persons Without Health Insurance	6.3%	9.2%
Per Capita Income (Yearly)	\$41,241	\$35,672
Median Household Income	\$77,933	\$65,712
Median Home Value (Owner Occupied)	\$281,400	\$240,500

Data Source: US Census Bureau American Community Survey 2019

### Table 4

#### Education – Individuals Age 25 and Older.

	New Hampshire	United States
Less Than High School	6.7%	11 40%
Graduate	0.1%	11.4%
High School Graduate or	55 901	55 501
Associates Degree	55.8%	55.5%
Bachelor's Degree or Higher	37.6%	33.1%

Data Source: US Census Bureau American Community Survey 2019

### Table 5

#### Substance Use – Individuals Age 12 and Older.

	New Hampshire	<b>United States</b>				
Marijuana Use – Past Month	14.24%	9.83%				
Alcohol Use – Past Month	63.26%	51.37%				
Tobacco Use – Past Month	20.71%	21.96%				

Data Source: National Survey on Drug Use and Health, 2017-2018

### Table 6

#### Mental Health Indicators - Individuals Age 18 and Older.

	New Hampshire	<b>United States</b>
Serious Mental Illness – Past Year	5.34%	4.55%
Major Depressive Episode – Past Year	8.14%	7.14%
Had Thoughts of Suicide – Past Year	4.91%	4.34%

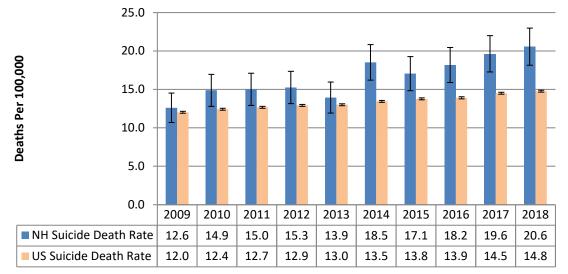
Data Source: National Survey on Drug Use and Health, 2017-2018

# The Big Picture: Suicide in NH and Nationally

The Tables and Figures below depict various suicide related data. Some are specific to NH while others compare NH and national statistics.

**Figure 2** (pg. 22) presents the suicide rate in NH and the US for the past ten years. The rate in NH has varied from year to year, due to its small size, while the US rate has remained more consistent year to year. Even though the NH rate has varied, until 2014 there had been no statistically significant differences from one year to the next since at least the year 2000. 2010 was the first year in recent history where there was a statistically significant difference compared to any other recent year. The 2010-2012 suicide rates are significantly greater than the rates for 2000, 2002, and 2004. This appears to be consistent with changes in the rates of suicide nationally. In 2014 there was a spike in the NH rate that brought it significantly above the rates prior to 2010. This increase was not seen in other states or for the US as a whole in 2014. The increase starting in 2014 has continued through 2018, though not statistically significant from year to year.

**Figure 2** Crude Suicide Death Rates per 100,000 in NH by Year 2009-2018.



NH and US Suicide Deaths By Year - 2009 to 2018 (Crude Rate)

Data Source: 2009-2017 - CDC Data; 2018 - NH OCME Data

**Table 7** (pg. 23) displays the 10 leading causes of death for people of different age groups in NH. From 2014-2018, suicide among those aged 10-34 was the second leading cause of death in NH and nationally. Suicide rates for individuals age 10-34 during 2014-2018 were behind only deaths due to unintentional injury. Within that age group, a substantial number of unintentional injuries in NH include motor vehicle crashes and unintentional overdose deaths. Suicide among individuals of all ages was the 8<sup>th</sup> leading cause of death in NH, and the 10<sup>th</sup> leading cause of death nationally.

10 Leading Causes of Death, New Hampshire, by Age Group, 2014 – 2018.											
					Age (	Groups					
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Short Gestation 37	Congenital Anomalies (*see note)	Malignant Neoplasms (*see note)	Malignant Neoplasms 14	Unintentional Injury 322	Unintentional Injury 795	Unintentional Injury 601	Malignant Neoplasms 891	Malignant Neoplasms 2,641	Heart Disease 1,102	Malignant Neoplasms 13,817
2	Congenital Anomalies 33	Unintentional Injury (*see note)	Unintentional Injury (*see note)	Suicide (*see note)	Suicide 154	Suicide 183	Malignant Neoplasms 210	Unintentional Injury 594	Heart Disease 1,320	Malignant Neoplasms 9,973	Heart Disease 13,173
3	Maternal Pregnancy Comp. 19	Homicide (*see note)	Homicide (*see note)	Unintentional Injury (*see note)	Heart Disease 18	Malignant Neoplasms 60	Suicide 198	Heart Disease 562	Unintentional Injury 447	Chronic Low. Respiratory Disease 3,069	Unintentional Injury 4,321
4	Placenta Cord Membranes 12	Influenza & Pneumonia (*see note)	Benign Neoplasms (*see note)	Congenital Anomalies (*see note)	Malignant Neoplasms 14	Heart Disease 51	Heart Disease 113	Suicide 281	Chronic Low. Respiratory Disease 393	Cerebro- vascular 2,158	Chronic Low. Respiratory Disease 3,580
5	Circulatory System Disease 10	Malignant Neoplasms (*see note)	Heart Disease (*see note)	Benign Neoplasms (*see note)	Homicide 12	Liver Disease 13	Liver Disease 53	Liver Disease 169	Liver Disease 295	Alzheimer's Disease 2,147	Cerebro- vascular 2,434
6	Respiratory Distress (*see note)	Diabetes Mellitus (*see note)	Cerebro- vascular (*see note)	Chronic Low. Respiratory Disease (*see note)	Chronic Low. Respiratory Disease (*see note)	Homicide 10	Diabetes Mellitus 24	Diabetes Mellitus 97	Diabetes Mellitus 253	Unintentional Injury 1,539	Alzheimer's Disease 2,181
7	Intrauterine Hypoxia (*see note)	(*see note)	Congenital Anomalies (*see note)	Influenza & Pneumonia (*see note)	Congenital Anomalies (*see note)	Cerebro- vascular (*see note)	Homicide 20	Chronic Low. Respiratory Disease 87	Suicide 219	Diabetes Mellitus 1,196	Diabetes Mellitus 1,583
8	SIDS (*see note)	(*see note)	(*see note)	Nephritis (*see note)	Diabetes Mellitus (*see note)	Congenital Anomalies (*see note)	Chronic Low. Respiratory Disease 17	Cerebro- vascular 72	Cerebro- vascular 170	Influenza & Pneumonia 1,066	Suicide 1,263
9	Bacterial Sepsis (*see note)	(*see note)	(*see note)	Pneumonitis (*see note)	Cerebro- vascular (*see note)	Chronic Low. Respiratory Disease (*see note)	Cerebro- vascular 15	Septicemia 34	Septicemia 91	Nephritis 776	Influenza & Pneumonia 1,167
10	Three Tied (*see note)	(*see note)	(*see note)	(*see note)	Benign Neoplasms (*see note)	Complicated Pregnancy (*see note)	Congenital Anomalies 10	Congenital Anomalies 24	Nephritis 78	Parkinson's Disease 729	Nephritis 882

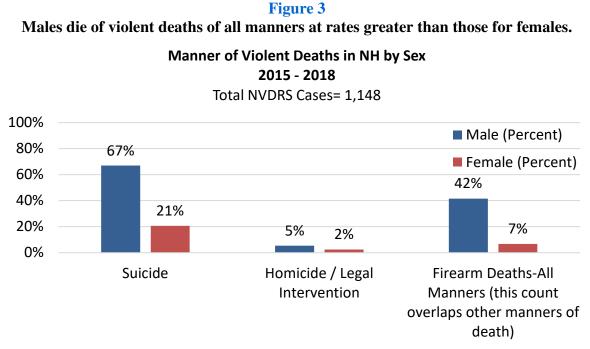
Table 710 Leading Causes of Death, New Hampshire, by Age Group, 2014 – 2018.

**Produced By:** Office of Statistics and Programming, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention

\*Note: Beginning with 2008 data, the CDC has suppressed state-level counts for categories with fewer than ten deaths

Data Source: National Center for Health Statistics, National Vital Statistics System

The vast majority of violent deaths in NH are suicides. For every homicide in NH, there are approximately 14 suicides. This ratio is in sharp contrast to national statistics, which show approximately 2 suicides for every homicide. For every suicide death in NH and nationally, there are approximately 3 deaths classified as unintentional injuries (CDC WISQARS, 2014-2018). Overall, suicide constitutes a larger proportion of all traumatic deaths in NH than in the US as a whole. The breakdown of violent deaths<sup>2</sup> in NH by gender is presented below in **Figure 3**.



Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

The most effective way to compare NH to the US is to look at suicide death rates. **Table 8** (below) presents NH and US suicide death rates by age group.

Table 8Crude Suicide Death Rates per 100,000 in NH & US, by age group, 2014-2018.

	ALL AGES	YOUTH 10-17	YOUNG ADULTS 18-24	YOUTH AND YOUNG ADULTS 10-24
NH	18.80	4.55	20.86	12.73
US	14.09	4.72	15.08	9.71
			-	
	AGES 25 TO 39	AGES 40 TO 59	AGES 60 TO 74	OVER 75
NH	22.78	27.17	17.34	21.19
US	16.72	19.66	16.49	18.49

Data Source: CDC WISQARS

<sup>&</sup>lt;sup>2</sup> Violence deaths include suicide, homicide, and any firearm related death regardless of intent.

Adults age 40 to 59 had the highest suicide rates of all age groups identified above (27.17 NH, 19.66 US) from 2014-2018 in both NH and the US. There is a tremendous increase in the rates from youth (ages 10-17) to young adults (ages 18-24) revealing the transition from middle/late adolescence to late adolescence/early adulthood as a particularly vulnerable time for death by suicide.

### Youth and Young Adult Suicide in NH

Between 2015 and 2018, 121 NH youth and young adults aged 10-24 have lost their lives to suicide. Males are much more likely to die by suicide in NH (81%) and nationwide (79%). Hanging and firearms were the most frequently used methods in NH among youth and young adults during this period, with firearms being used with a slightly higher frequency. Nationally, a greater proportion of youth and young adults who die by suicide use firearms.

**Table 9** (pg. 28) presents the number of youth and young adult deaths by year. This year by year data has been plotted in **Figures 4 and 5** (pg. 26). There are a relatively small number of deaths in this age group that can fluctuate from year to year. The rates presented on the chart of deaths over rolling three-year intervals shown in **Figure 49** (pg. 63) helps to smooth out small year to year fluctuations, and also addresses population increases by presenting rates per 100,000.

### **Positive Outcomes and Testimonials**

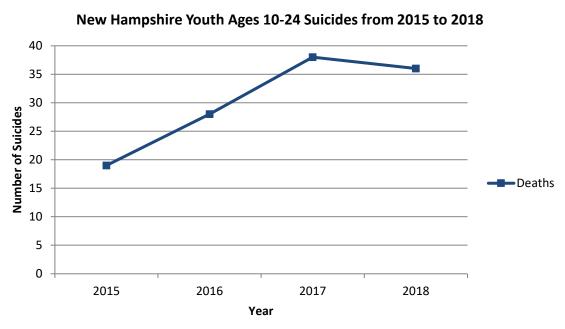
A student and his mother were sent to a NH emergency department one spring morning for an emergency suicide assessment based on requirements of the School District Suicide Intervention Protocol. The student had expressed suicidal warning signs. The School Resource Officer and a member of the Response Team, both known by the family, joined them at the hospital.

During the process the student's mother shared that her son had been asking for permission to take his father's rifle and go out into the woods near their home. The mother had denied his request and explained her safety concerns to him.

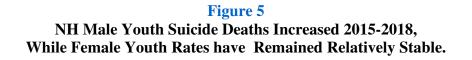
"There was a simultaneous shiver that went through each of us when we registered the great relief of intervening with an emergency assessment before a suicide attempt...especially with such a potentially lethal plan."

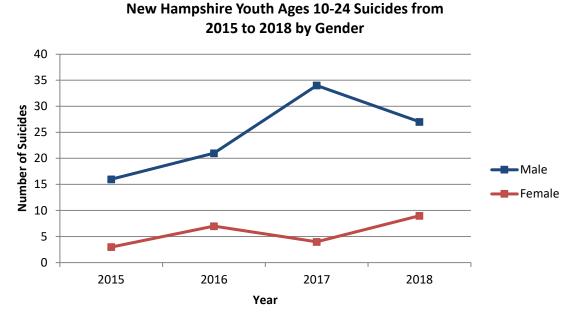
The student was able to share his feelings and a comprehensive follow up plan was created. The student and his mother learned about the resources available to help them both.





Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program



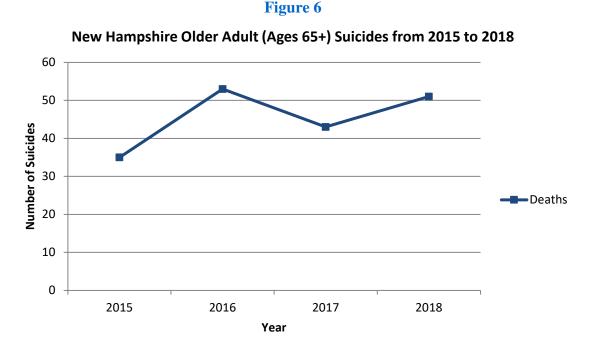


Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

# **Older Adult Suicide in NH**

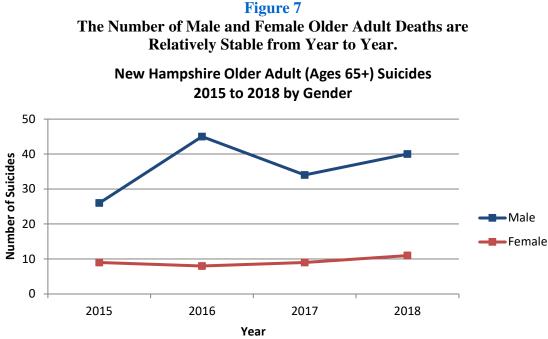
In light of the rapidly expanding number and proportion of older adults in New Hampshire's population, suicide in older adults is a growing public health concern. Added to the changing demographics is the rising prevalence of mental illness and substance disorders. Untreated mental illness such as depression is a significant risk factor for suicide among all ages, but it is particularly of concern in later life as older adults with depression or other mental health conditions receive treatment at markedly lower rates than the rest of the population.<sup>3</sup>

Another concern is the rate of attempts to completed suicides for older adults. The lethality rate in people over 65 years of age is markedly higher in comparison to other age groups. While there is one death for every 36 attempts in the general population, there is one death for every four attempts in individuals over 65. One related factor is that aged individuals may be physically frailer than younger individuals and are therefore less likely to survive self-injurious acts. A second is that older adults tend to be more isolated than younger people, making detection or timely intervention less likely. A third factor is the lethality of means; compared to other age groups, adults over 65 are more likely to use firearms as a means of suicide.



Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

<sup>&</sup>lt;sup>3</sup> Conwell Y. Suicide and suicide prevention in later life. Focus 2013; 11(1): 39–47. <u>http://www.aoa.gov/AoA\_Programs/HPW/Behavioral/docs2/Suicide%20Prevention%20Webinar</u> <u>%20Presentation%20Slides2.pdf#page=14</u>



**Data Source:** NH-VDRS data prepared by the NH DHHS Injury Prevention Program

# Suicide Across the Lifespan in NH

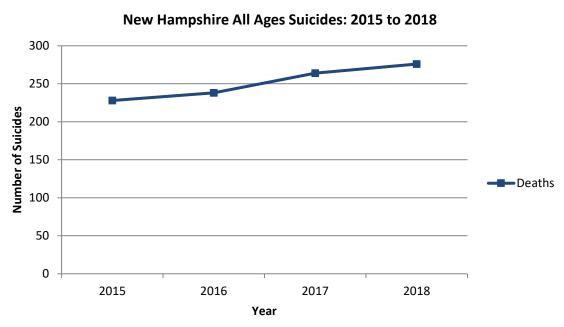
**Table 9** presents the number of suicide deaths in NH by year by gender and selected age groups. These counts include both NH residents and out-of-state residents who died by suicide in NH. When comparing year to year, there is a noticeable increase in the number deaths from 2015 to 2018. The proportion of deaths by gender and age group remained relatively consistent from one period to the next. The number of deaths by year have been plotted in **Figure 8** (pg. 29) and **Figure 9** (pg. 29).

Table 9NH All Ages Suicide Death Trend, by Gender, Age Group and<br/>Method, 2015-2018.

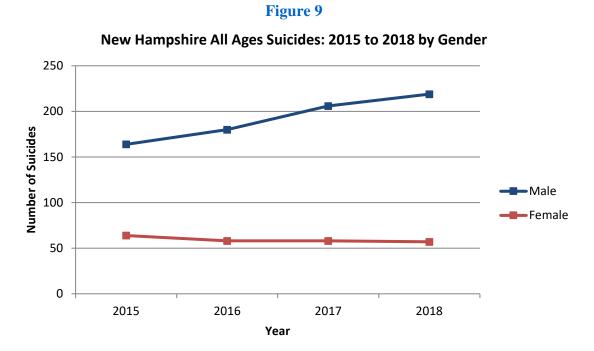
Year	Total	Male	Female	<u>&lt;</u> 24	25-64	65+
2015	228	164	64	19	174	35
2016	238	180	58	28	157	53
2017	264	206	58	38	183	43
2018	276	219	57	36	189	51
Total	1006	769	237	121	703	182
Percent of Total	100%	76%	24%	12%	70%	18%

Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program





Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

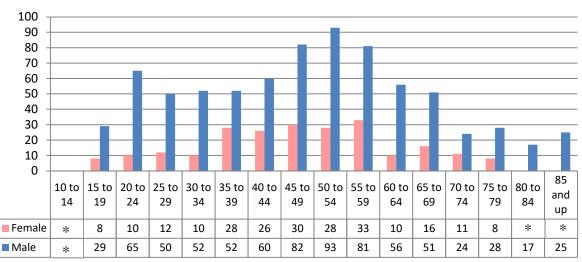


Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

**Figure 10** (below) and **Figure 11** (pg. 31), respectively, display NH suicide deaths and suicide death rates for all ages by age groups and gender from 2015-2018. Rates are expressed as the number of suicide deaths per 100,000 people. Displayed together, these charts reveal how death rates correct for differences in the size of each age group. While the highest number of suicide deaths occur in the 45 to 59-year-old age groups, the highest rates, or those at the greatest risk, are males over the age of 85. This is followed by males between the ages of 45 and 55. This second high risk group is younger than has been seen in past years, where individuals in their 70's generally exhibited higher rates of suicide than individuals in their 40's and 50's.

### Figure 10

### The highest numbers of suicides deaths are seen in males and females in the 40 and 50year-old age groups.



# New Hampshire Resident Suicide Deaths by Age Group, 2015-2018

\*Note: Counts/Rates for categories with fewer than six deaths have been suppressed. **Data Source:** NH-VDRS data prepared by the NH DHHS Injury Prevention Program

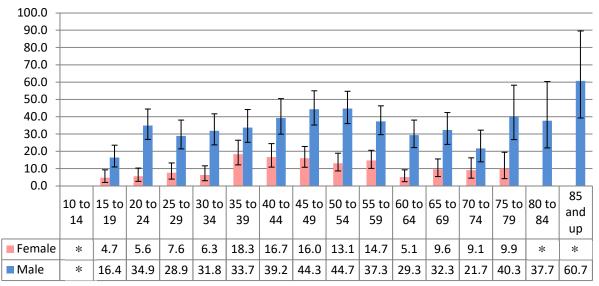
Suicide death rates are also important in determining vulnerable age groups and age-related transitions. The suicide death rate in males rises rapidly from ages 10-14 to 15-19 and then again from ages 15-19 to 20-24, pointing to a rise in vulnerability during the transitions from early

adolescence to middle adolescence and then middle adolescence to late adolescence/early adulthood. Similarly, suicide rates among elderly males increase substantially at 85 years compared to the younger age groups, indicating another vulnerable time of life for men. As mentioned above, there has been a recent increase in the suicide rates among individuals between the ages of 45 and 59. This may indicate an additional transition period where individuals are vulnerable.

### **Quick Facts/Talking Points**

- Males in NH die by suicide at a rate that is three times the rate for females (CDC WISQARS, 2018).
- Although males are more likely than females to die by suicide, females report attempting suicide at nearly twice the rate of males (NH YRBS, 2019)
- Suicides are preventable (WHO. Suicide prevention: a global imperative. Geneva, Switzerland: WHO Press; 2014).





New Hampshire Resident Suicide Death Rates (per 100,000) By Age Group, 2015-2018

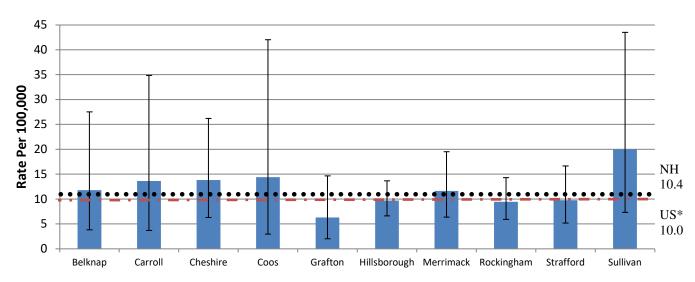
\*Note: Counts/Rates for categories with fewer than six deaths have been suppressed. **Data Source:** NH-VDRS data prepared by the NH DHHS Injury Prevention Program

### Geographic Distribution of Suicide in NH

The numbers and rates of suicide in NH are not evenly distributed throughout the state. Figure 12 (pg. 32) shows youth and young adult suicide rates by county in NH. Figure 13 (pg. 32) presents this data for NH residents of all ages<sup>4</sup>. The county suicide death rate chart indicates geographical locations that may be particularly vulnerable to suicide (youth and young adult and/or all ages). Due to small numbers, most of these differences are not statistically significant. However, the all ages rate (Figure 13 - pg. 32) for Rockingham County (all ages rate: 14.6 per 100,000) is significantly lower than the all ages suicide rates for Merrimack County (all ages rate: 20.5 per 100,000). It is also significantly below the overall NH rates (all ages rate: 17.3 per 100,000). The rates for Carroll County (all ages rate: 21.9 per 100,000), Coos County (all ages rate: 22.8 per 100,000), Hillsborough County (all ages rate: 16.9 per 100,000), Merrimack County (all ages rate: 20.5 per 100,000), and Sullivan County(all ages rate: 23.2 per 100,000) were significantly higher than the all ages US rate (all ages rate: 14.3 per 100,000). County limits are neither soundproof nor absolute. A suicide that occurs in one county can have a strong effect on neighboring counties, as well as across the state, due to the mobility of residents. Figure 14 (pg. 33) presents the suicide rates for all ages from 2015 to 2018 as a NH map broken down by county.

<sup>&</sup>lt;sup>4</sup> County level analyses exclude any cases where location data were unknown or otherwise not available. Six cases were excluded due to missing data for 2015-2018.

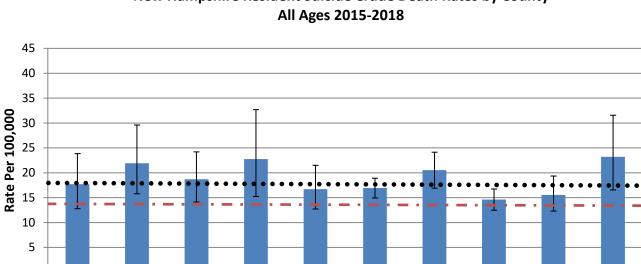




New Hampshire Youth Suicide Crude Death Rates by County Ages 10-24 2015-2018

NH Rate Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program US Rate Data Source: CDC WISQARS

### Figure 13



New Hampshire Resident Suicide Crude Death Rates by County

NH Rate Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program US Rate Data Source: CDC WISQARS

Grafton

Hillsborough Merrimack Rockingham

Coos

0

Belknap

Carroll

Cheshire

Sullivan

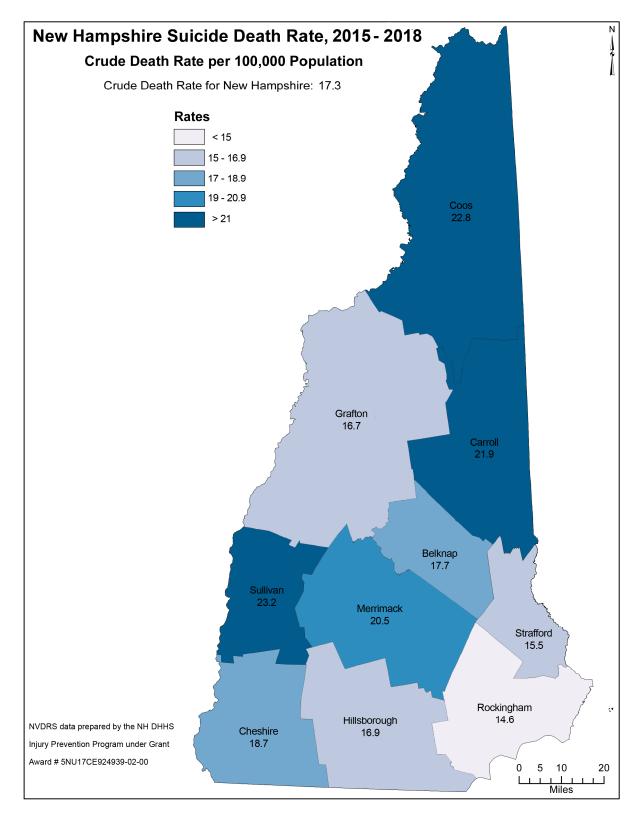
Strafford

NH 17.3

US\*

14.3

**Figure 14** Map of NH suicide death rates



**Table 10** (below) further expands upon this county breakdown by presenting the percent of suicide deaths in each county by gender. In the majority of counties, the ratio is four male deaths for every one female death. The exceptions to this include Belknap County where there are approximately two male deaths for every one female death, and Coos and Strafford Counties where the ratio is approximately five male deaths for every one female death. The ratio of males and females residing in each county is approximately one-to-one statewide.

Percent of Suicide Death by Gender in NH Counties							
	Percent	Percent	Male to	Percent of	Percent of	Male to Female	
	of Female	of Male	Female Suicide	Female County	Male County	Population	
	Deaths	Deaths	Death Ratio	Residents	Residents	Ratio	
Belknap County	33%	67%	2:1	51%	49%	1:1	
Carroll County	21%	79%	4:1	50%	50%	1:1	
Cheshire County	19%	81%	4:1	51%	49%	1:1	
Coos County	17%	83%	5:1	47%	53%	1:1	
Grafton County	20%	80%	4:1	51%	49%	1:1	
Hillsborough County	26%	74%	4:1	50%	50%	1:1	
Merrimack County	28%	72%	4:1	51%	49%	1:1	
Rockingham County	22%	78%	4:1	50%	50%	1:1	
Strafford County	16%	84%	5:1	51%	49%	1:1	
Sullivan County	20%	80%	4:1	51%	49%	1:1	

# Table 10 ent of Suicide Death by Gender in NH Counti

Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

# Suicide Behavior in NH: Gender Differences – Attempts, Deaths, and Risk Factors

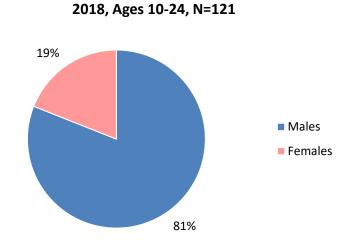
### Youth and Gender

While males represent over 80% of the youth and young adult suicides from 2015-2018, the fact that males *die* by suicide at a higher rate than females may largely be due to males using more lethal means. See **Figures 15** (pg. 35) and **16** (pg. 35). In fact, females *attempt* suicide at a higher rate than males. When examining how many NH youth and young adults ages 15-24 were hospitalized and then discharged for self-inflicted injuries in 2012-2016, it is shown that 64% of the 572 inpatient discharges represent females, while only 36% represent males. Likewise, the 2019 NH Youth Risk Behavior Survey (YRBS) reports approximately 1.6 times as many female youth attempt suicide as males each year (8.4 % of females and 5.3% of males). Emergency department (ED/ambulatory) data reveals a similar gender ratio, based on self-inflicted injury rates.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Classifying an injury as self-inflicted is another way of stating that the injury was an instance of deliberate selfharm. Not all self-inflicted injuries necessarily represent suicide attempts. However, analysis of these injuries is the best currently available proxy for estimating suicide attempts.

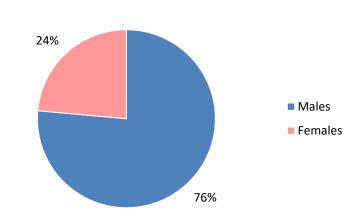
**Figure 15** Four times as many male NH residents ages 10-24 died by suicide 2015-2018.

NH Resident Suicide Deaths by Gender 2015-



Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

Figure 16 For NH residents of all ages, three times as many males died by suicide than females during 2015-2018.



2015-2018. NH Resident Suicide Deaths by Gender 2015-

2018, All Ages, N=1,006

Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

Female youth are less likely to die by suicide, possibly resulting from less severe injuries during suicide attempts (self-inflicted injuries). However, female youth do attempt suicide more frequently than males – 1.1-1.8 times as often (**Figure 17, Figure 18, and Figure 19** – pgs. 36-37). This report refers to three types of data; Emergency Department Discharges, Inpatient Discharges, and individuals treated/transported by Emergency Medical Services (EMS). Emergency Department (ED) data includes patients who came to the ED and stayed at the hospital for less than 24 hours (also called Ambulatory Discharges). Inpatient data refers to patients who were admitted to the hospital for more than 24 hours. If a patient goes to an ED and is admitted for inpatient services, they are removed from the count in the ED data and listed as inpatients. The hospital discharge data records the number of hospital visits, not the number of individual persons who went to the hospital for care. For example, if one patient went to the hospital three different times over the course of a year it would be counted as the same number of visits as three different patients who went to the hospital one time each over the course of one calendar year.

The EMS data presents the number of times individuals were treated and/or transported by an EMS provider where the individual had some type of self-inflicted injury. As with the hospital data, the EMS data looks at the number of visits/incidents, not unique individuals. The EMS data comes from a different source than the hospital data. Therefore, the cases are not de-duplicated between the two datasets (i.e., an individual may be counted in the hospital and EMS datasets for the same incident). The cases included in the EMS dataset are ones where the intent of the injury was listed as "self-inflicted". This does not include incidents where an injury was deemed to be accidental.

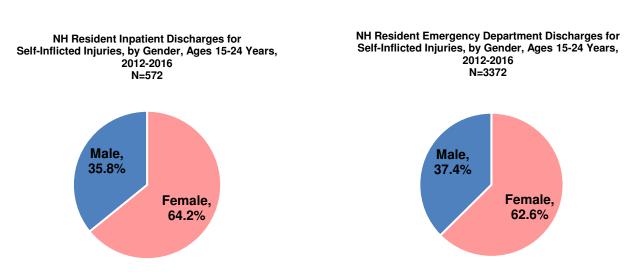
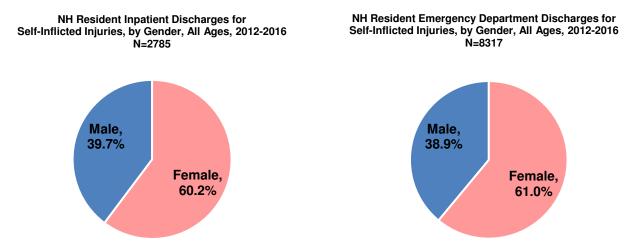


Figure 17 A greater percentage of female than male NH residents attempted suicide, as seen in inpatient self-inflicted injuries 2012-2016.

Data Source: NH Hospital Discharge Data by the NH DHHS Injury Prevention Program

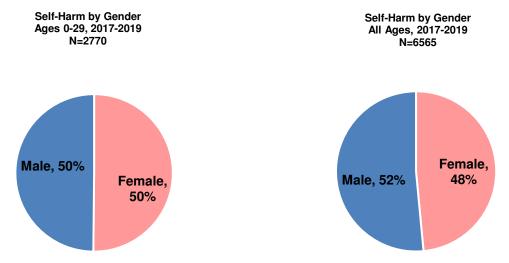
#### Figure 18 A greater percentage of female than male NH residents attempted suicide, as seen in ambulatory self-inflicted injuries 2012-2016.



Data Source: NH Hospital Discharge Data by the NH DHHS Injury Prevention Program

#### Figure 19

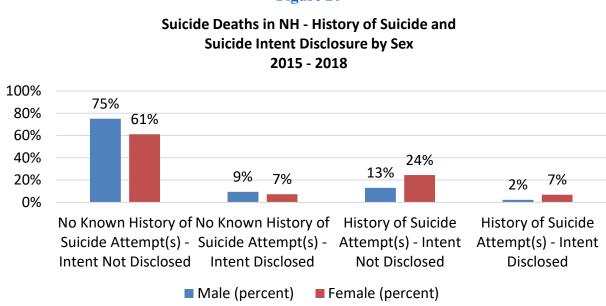
The percentage of male and female NH residents who attempted suicide, as seen by selfinflicted injuries treated by Emergency Medical Services self-inflicted injuries, was approximately equal from 2017-2019.



**Data Source:** New Hampshire Department of Safety, Division of Fire Standards and Training and Emergency Medical Services

#### History of Suicide Attempts and Intent Disclosure

The vast majority of individuals who died by suicide in NH have no reported history of prior suicide attempts or disclosure of suicidal intent. Females who died by suicide in NH were approximately twice as likely as males to be known to have a prior history of suicide attempts. Females who died by suicide in NH were also three times as likely as males to have previously disclosed their suicidal intent (**Figure 20** – below).



Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

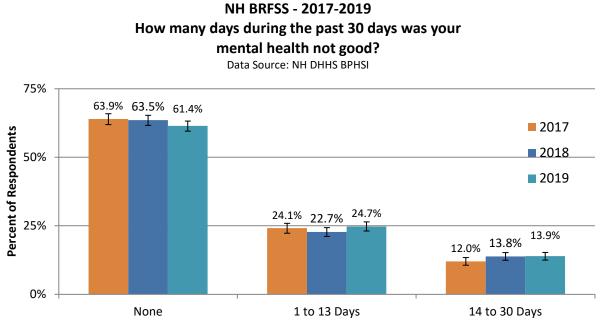
Disclosure of suicidal intent and prior suicide attempt(s) are significant risk factors for suicide. If you are concerned about an individual with these or other risk factors, connect them with appropriate resources such as the National Suicide Prevention Lifeline – 1-800-273-8255 or a local mental health professional. **If you are concerned that there is imminent risk, call 911.** 

Figure 20

#### NH Behavioral Risk Factor Surveillance System (BRFSS)

The Behavioral Risk Factor Surveillance System (BRFSS), is a survey conducted with a representative sample of state residents. The survey includes the question "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?". Although this is not a perfect proxy measure for depression, it gives one a general sense of the percentage of NH residents that may be experiencing a depressed mood. The results from this item are included in **Figure 21** (below).





Data Source: BRFSS data prepared by NH DHHS BPHSI

Gender differences exist not only for suicide attempts and deaths, but also for help-seeking behavior. A 2018 CDC report indicated that approximately half of individuals who take their own life had a mental health condition; the most common diagnoses being depression, anxiety and substance use disorders<sup>6</sup>. Yet a much smaller percentage were receiving treatment. In NH, over 44,500 people received treatment at one of the state's ten Community Mental Health Centers (CMHC)<sup>7</sup>each year. In 2019, this works out to approximately 1 out of every 31 residents

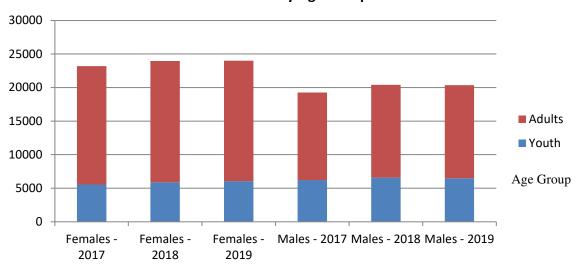
<sup>&</sup>lt;sup>6</sup> Stone DM, Simon TR, Fowler KA, et al. Vital Signs: Trends in State Suicide Rates — United States, 1999–2016 and Circumstances Contributing to Suicide — 27 States, 2015. MMWR Morbidity Mortality Weekly Report 2018;67:617–624. DOI: <u>http://dx.doi.org/10.15585/mmwr.mm6722a1</u>.

<sup>&</sup>lt;sup>7</sup> Community Mental Health Centers are private not-for-profit agencies that have contracted with the NH Department of Health and Human Services, Bureau of Behavioral Health, to provide publicly funded mental health

in the state. Of those individuals in treatment, approximately 54% of them were female and 46% were male. This is illustrated in **Figure 22** (below). Without additional data it is not possible to say how these numbers relate to the connection between these treatment figures and the greater number of suicide deaths among males and/or the greater number of suicide attempts reported among females.

#### Figure 22

#### Individuals receiving treatment at NH Community Mental Health Centers presented by age and gender.





Patients that cannot be treated in an outpatient setting, such as involuntary admissions due to potential suicide risk, will generally be admitted to New Hampshire Hospital, the NH state psychiatric hospital. In an average year there are approximately 1,527 admissions to New Hampshire Hospital (estimates based on New Hampshire Hospital admissions for fiscal years 2015 - 2019<sup>8</sup>). **Figure 23** (pg. 41) presents the number of admissions per bed at New Hampshire Hospital.

#### **Positive Outcomes and Testimonials**

Suicide is preventable with the understanding we all must embrace: "treatment works".

Support and early intervention is everyone's job, as saving a life makes a world of difference for so many.

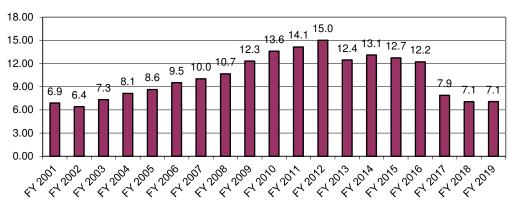
Maggie Pritchard Executive Director, Lakes Region Mental Health Former Vice-Chair, NH Suicide Prevention Council

Data Source: NH Bureau of Behavioral Health

services to individuals and families who meet certain criteria for services. More information on the centers is available from <a href="http://www.dhhs.state.nh.us/dcbcs/bbh/centers.htm">http://www.dhhs.state.nh.us/dcbcs/bbh/centers.htm</a>

<sup>&</sup>lt;sup>8</sup> The NH State Fiscal Year runs from July 1<sup>st</sup> of one calendar year through June 30<sup>th</sup> of the following calendar year (e.g., fiscal year 2019 ran from July 1<sup>st</sup> 2018 through June 30<sup>th</sup> 2019).

#### Figure 23



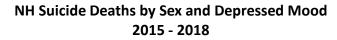
#### New Hampshire Hospital: Number of Admissions Per Hospital Bed By Fiscal Year

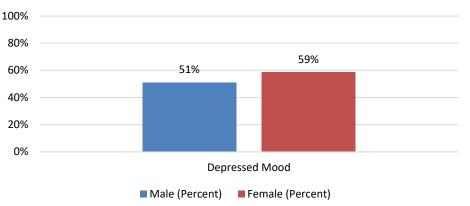
Data Source: New Hampshire Hospital

#### Mental Health and Suicides in NH

Among the various risk factors for suicide in NH, depression and depressed mood<sup>9</sup> figure prominently. From 2015 to 2018, over half of all individuals who died by suicide in NH were reported to have a depressed mood around the time of death. A slightly greater proportion of females than males were reported to have been experiencing a depressed mood (**Figure 24** – below)

#### Figure 24



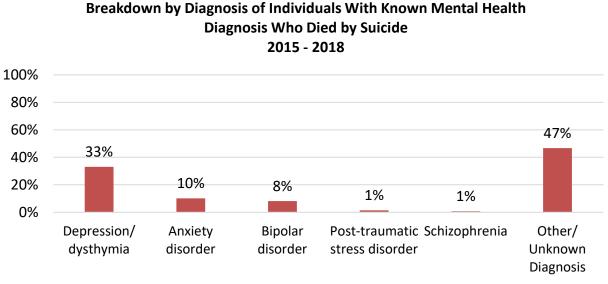


Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

<sup>&</sup>lt;sup>9</sup> Depressed mood is a field tracked in the NH-VDRS. Based on CDC criteria, depressed mood does not require a clinical diagnosis, and does not need to have been identified as a factor directly contributing to the death.

**Figure 25** (below) addresses mental health diagnoses of individuals who died by suicide, where this information was available. The mental health diagnoses are based on evidence at the scene such as medications prescribed to the deceased, information confirming that the individual had a mental health provider (psychiatrist, mental health counselor, etc.), and reports from next of kin. A challenge with reports from next of kin is that they may not have up-to-date knowledge on their loved one's mental health treatment and condition. As a result, there are many suicide deaths where there is no data available related mental health diagnosis. The availability of mental health diagnosis information in the NH-VDRS continues to improve as death scene investigators expand their documentation of mental health issues.

#### Figure 25



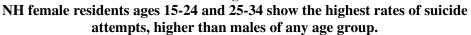
Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

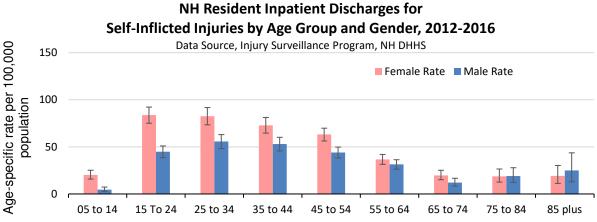
### Age, Gender and Self-inflicted Injury

When the rates for NH resident inpatient hospitalizations/discharges and emergency department use for self-inflicted injuries from 2012-2016 are examined by gender and age group, the variability can be seen (**Figures 26** and **27** – pg. 43). As above, these data refer to number of visits; therefore, individuals may be counted multiple times if they were admitted or seen more than once during the year.

Female NH residents have a higher overall rate of inpatient hospitalizations/discharges for selfinflicted injuries until the ages 75-84 where the rates are nearly identical, and ages 85 where the male rate exceeds the rate for females. For females aged 15-24, the rate of those being discharged from inpatient care (**Figure 26 –** pg. 43) is 84/100,000, nearly two times the rate for males of the same age. The peak age for males is between 24 and 34 for self-inflicted injuries requiring hospitalizations. Again, ED usage rates, depicted in **Figure 27** (pg. 43), point to females aged 15-24 as a population particularly vulnerable to self-injury and/or suicide attempts, with females in this group exhibiting a rate over 480/100,000, about 105 times the suicide death rate for this population. Males also peak in self-injury around this age group with the male rates for ages 15 to 24 being over 276/100,000. Although male rates peak around this age group, their rates are much lower than those for females. Also of note, the total number of youth and young adult (ages 15-24) ED visits (2,110) is 5.7 times greater than the number of inpatient discharges for this population. Because less severe injuries are more common among self-inflicted youth injuries, there are many more attempts than deaths. This data reinforces that the transition from middle adolescence to late adolescence/early adulthood is a time of great risk for suicidal thinking, self-harm and suicide attempts. EMS data (Figure 28 - pg. 44), which includes individuals treated and/or transported by Emergency Medical Services for a self-inflicted injury, presents a similar picture to the hospital data in terms of high-risk age groups. Males age 20 to 39 present the highest rates of self-inflicted injuries. In other age groups, female rates are comparable to male rate in the EMS data.

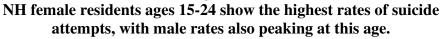
#### Figure 26

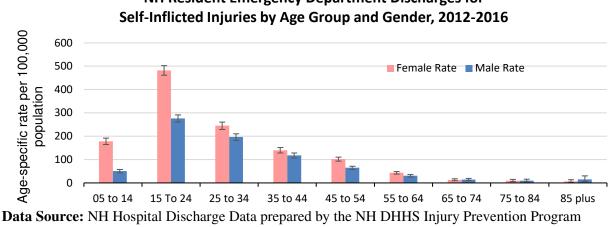




Data Source: NH Hospital Discharge Data prepared by the NH DHHS Injury Prevention Program

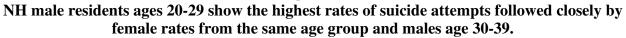
#### Figure 27

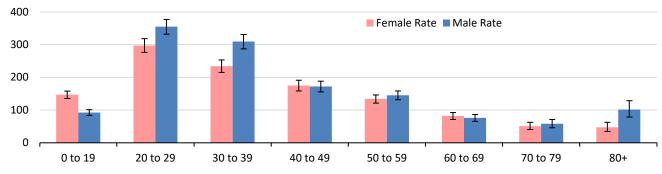




NH Resident Emergency Department Discharges for

#### Figure 28





EMS Data Self-Harm Treatment/Transportation Rates by Age Group and Gender 2017-2019

**Data Source:** New Hampshire Department of Safety, Division of Fire Standards and Training and Emergency Medical Services

According to inpatient admissions/discharges and ED/ambulatory use data across all ages in NH, there are approximately 13 suicide attempts for every suicide death. This number does not include attempts that go unreported, unrecognized, or without a hospital or ED visit which required medical intervention. Further, the rates of attempts for young people and females create an even greater ratio of suicide attempts to deaths. Based solely on hospital and emergency department self-injury data, it is estimated that over 1,190 youth and young adults (age 24 and under) attempt suicide each year in NH.

#### **Positive Outcomes and Testimonials**

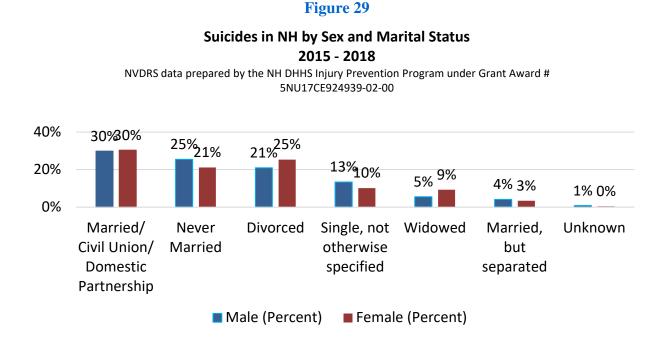
Following a SAMHSA grant awarded in 2018, the NH State Police have begun implementing the Crisis Intervention Team (CIT) Program coordinated by NAMI NH. This training has resulted in Troopers being able to identify individuals experiencing a mental health crisis and/or individuals at risk for suicide, defuse situations, and direct individuals to mental health services where they might have otherwise been arrested.

In contrast to the above data, which are based on cases where medical intervention is required, the results of the YRBS presents data collected from high school aged youth by self-report. In 2019, nearly 7 percent of high school students completing the YRBS reported having attempted suicide at least one time over the previous year. Based on the YRBS figures, this works out to over 3,800 high school age youth in NH who may attempt suicide each year. The YRBS reports may account for attempts not included in hospital self-injury data. This could be the case for any attempts with relatively non-lethal means where medical assistance was not sought. Of particular concern for this data is the likelihood that in many of these cases, the youth have never sought help or disclosed the attempt to any adult. It is also possible that self-reports exaggerate the incidence of suicide attempts among high school age youth.

While the great majority of self-inflicted injuries<sup>10</sup> are not fatal, because of the larger incidence they may directly and indirectly affect a greater number of people than fatalities. A significant risk factor for suicide is a previous attempt: in one study 21-33% of people who die by suicide have made a previous attempt (Shaffer & Gould, 1987). Therefore, any suicide attempt, regardless of its lethality, must be taken seriously. If not addressed, it could lead to additional attempts. Therefore, once an individual has made an attempt, secondary prevention is necessary.

#### Additional Demographic Characteristics of Individuals in NH Who Died By Suicide

Additional demographic factors may play a role in suicide. **Figure 29** (below) presents the marital status of individuals who died by suicide in NH between 2015 and 2018. The data in **Figure 29** differs substantially from the overall breakdown by marital status for NH with fewer married individuals and more divorced individuals dying by suicide. In the NH population as a whole, approximately 50% of individuals are married and approximately 12% are divorced, while only 30% of individuals who died by suicide in NH were married and over 21% were divorced.



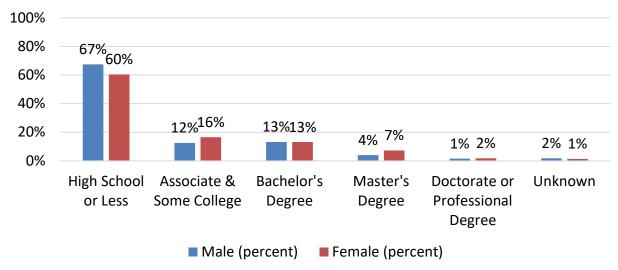
Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

<sup>&</sup>lt;sup>10</sup> Classifying an injury as self-inflicted is another way of stating that the injury was an instance of deliberate selfharm. Not all self-inflicted injuries necessarily represent suicide attempts. Analysis of these injuries, however, is the best currently available proxy for approximating suicide attempts.

Educational attainment may also play a role in suicide. The prevalence of suicides in NH is greatest among individuals who had educational levels of high school or less than high school (**Figure 30** – below) and substantially lower among individuals with college degrees. Among adults in NH, over 37% have a bachelor's degree or higher (**Table 4** – pg. 21), while only 20% of male and 23% of female suicide deaths in NH are by individuals with an equivalent educational level.

#### Figure 30

#### Suicide Deaths in NH by Sex and Educational Levels 2015 - 2018



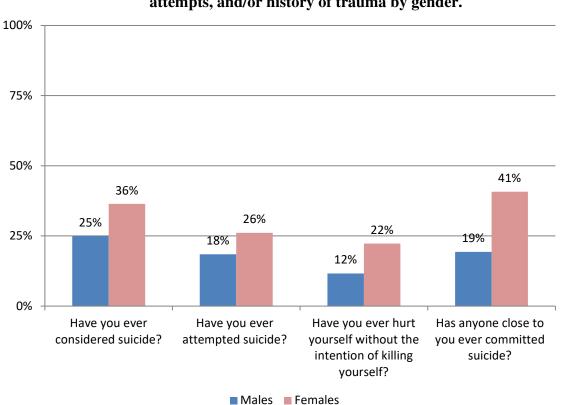
Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

#### Suicide Risk While Incarcerated - NH Department of Corrections

The New Hampshire Department of Corrections reported that there have been no deaths by suicide in any of their facilities during 2019. There are approximately 2,500 residents (includes all facilities), with 385 individuals admitted to Department of Corrections facilities in 2019. Every resident (includes new or returning) receives a comprehensive behavioral health screening which includes an assessment for risk of suicide. Individuals assessed as being at risk for suicide are placed on a 24-hour observation level that includes continuing assessment by mental health professionals. After they are discharged from this level of care, they receive appropriate follow up services for a time-period based on their individual needs.

Ongoing training includes quarterly suicide prevention trainings conducted for the corrections officers on the Special Housing Unit (SHU), the Reception and Diagnostics Unit (R & D), and the Secure Psychiatric Unit. All new Department of Corrections employees, both uniformed and non-uniformed, receive four hours of suicide prevention and mental health training as part of the comprehensive orientation program and security officers newly employed at the Secure Psychiatric Unit receive an additional 16 hours of training on behavioral health issues.

From January 1, 2016 to November 15, 2016<sup>11</sup> the NH Department of Corrections screened 910 males and 184 females for suicidality and history of trauma upon their entry into the prison facilities. (Note: this does not reflect the populations in county or local facilities.) After an immediate screening by a correctional officer, mental health staff met with the individuals within 14 days of entry into the system to complete an individual in-depth mental health assessment. Data available from 2016 shows that approximately 18% of males and 26% of females indicated a past suicide attempt<sup>12</sup>. Although past suicidal ideation and attempts were relatively high for this group, roughly 1% of the individuals screened at intake answered yes to the question, "Are you currently thinking about killing yourself?" Figure 31 (below) displays the percentage of intakes indicating suicidal ideation and/or attempts by gender.



**Figure 31** Percentage of individuals entering NH prisons 2016 indicating past suicidal ideation, attempts, and/or history of trauma by gender.

Data Source: NH Department of Corrections

<sup>&</sup>lt;sup>11</sup> NH Department of Corrections switched Electronic Medical Records on November 16, 2016. Equivalent data after November 16, 2016 are not yet available. <sup>12</sup> This information should be interpreted cautiously as it is self-reported at a single point in time.

## **Suicide in NH: Methods**

The gender difference in suicide deaths/attempts may be explained in part by the fact that males, in general, use more lethal means. Of NH male youth and young adults who died by suicide between 2015 and 2018, 58% used firearms compared to 9% of females (**Figure 33** – pg. 49). This gender disparity in firearm use persists as residents enter their late 20's, 30's, and 40's with the proportion of male and female deaths from firearms decreasing equally for both genders. The proportion of firearm deaths increases sharply at age 65 for males, with 70% of the suicide deaths in that age group involving a firearm. In NH, the vast majority of all deaths involving a firearm are suicide. This can be seen in the **Figure 32** below.

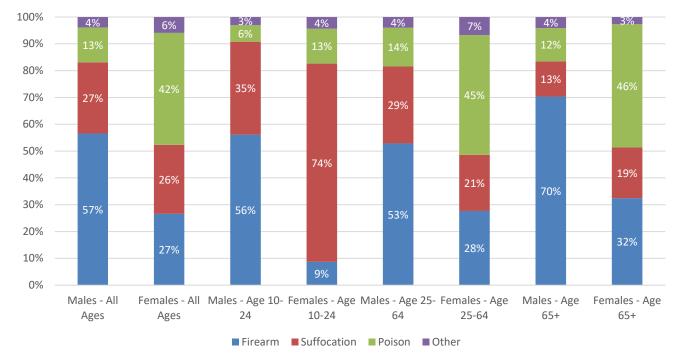




Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

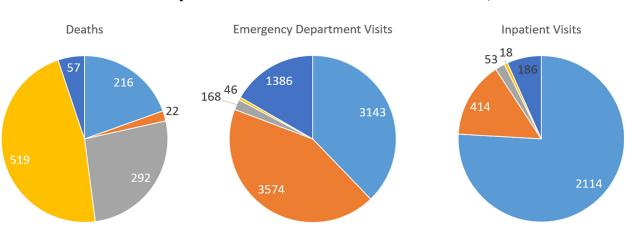
Suicide attempt methods have varying lethality. Figure 36 (pg. 50) compares firearms, hanging, poisoning, and cutting/piercing in terms of the percentage of various outcomes (emergency department visit, inpatient admission, or death) for each method. Over 80% of self-injuries using a firearm result in death. Among youth and young adults, suicide is often a highly impulsive act and poor impulse control is one of the risk factors for suicide. Therefore, intervention efforts that reduce access to firearms and other highly lethal means may be effective to reduce suicide among those at risk for suicide, particularly for those who are more likely to be impulsive. Firearms remain the most commonly used method of suicide throughout the lifespan in NH. Figure 35 (pg. 50) indicates that self-inflicted cut/pierce injuries are treated/transported by EMS at more than twice the rate of any other mechanism. Hospital data (Figure 37 – pg. 51) does not show this same proportion of cut/pierce injuries indicating that EMS providers may treat selfinflicted cut/pierce injuries without the need to transport the individual to a hospital, or that individuals are more likely to contact EMS for a cut/pierce injury and be transported to a hospital by other means for things such as a poisoning. It may also indicate that EMS providers are more likely to report that a cut/pierce injury as being self-inflicted than they are with other injury types. The use of suffocation as a suicide method peaks in early adolescence and decreases steadily throughout the lifespan (Figure 33 – pg. 49).

**Figure 33** Variation in Method of Completed Suicide Deaths by Gender and Age Group, 2015-2018.



Method Used in Completed Suicides, 2015-2018

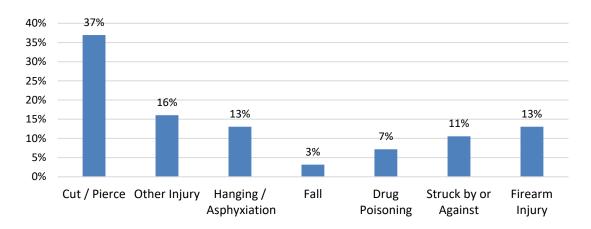
Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program



**Figure 34** Count of Lethality of Means Used for Suicidal Behavior in NH, 2012-2016

■ Firearms ■ Poisoning ■ Cutting / Piercing ■ Hanging / Strangulation ■ Other **Data Source:** Bureau of Vital Records Death Certificate Data and NH Hospital Discharge Data prepared by the NH DHHS Injury Prevention Program

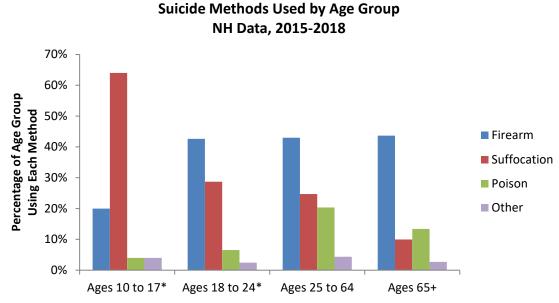
**Figure 35** Percent of method of self-inflicted injuries treated/transported by EMS from 2017.



EMS Self-Harm Treatment/Transportation by Type Where Cause of Injury was Reported - 2017

**Data Source:** New Hampshire Department of Safety, Division of Fire Standards and Training and Emergency Medical Services

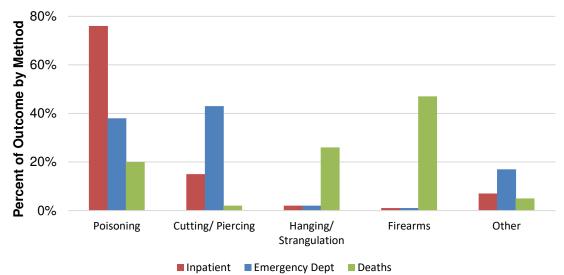
**Figure 36** Suicide methods used in NH vary by age group, as seen in 2015-2018.



Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

#### Figure 37 Poisoning is the most frequent method of suicide attempt, as seen in hospital discharge data 2012-2016.

Percent of Total Lethality of Means Used for Suicidal Behavior in NH, 2012-2016



**Data Source:** Bureau of Vital Records Death Certificate Data and NH Hospital Discharge Data prepared by the NH DHHS Injury Prevention Program

Although suicide attempts employing poison do not account for as many deaths in NH as firearms or hangings, intentional poisonings account for the overwhelming majority of inpatient and ED admissions for suicide attempts (**Figure 34** – pg. 49). **Figure 38** (pg. 52) depicts the prevalence of the most common substances used in suspected suicide attempts in NH as collected by the NNEPC. The top two substances from 2014 through 2018 have been antidepressants and benzodiazepines.<sup>13</sup> A recent trend noted by the NNEPC is an increase in the use of cardiovascular medications which can have severe clinical effects. Based on the NNEPC Annual Report covering July 1, 2018 – June 30, 2019, Poison Center staff responded to 8,677 NH human exposure cases during that one-year period. Of those cases approximately 16% were identified as suicide attempts.

<sup>&</sup>lt;sup>13</sup> The suspected suicide attempt cases presented were determined by self-report or the report of an individual acting on behalf of the patient (e.g., a health care professional), or a NNEPC staff assessment. For more information on the NNEPC Annual Report, contact Colin Smith - <u>SMITHC12@mmc.org</u>.

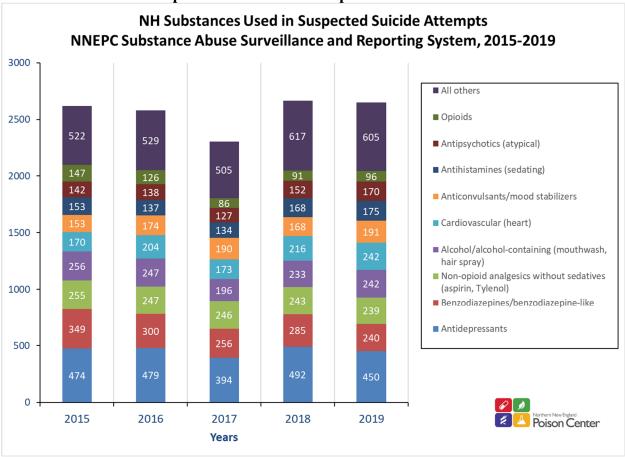


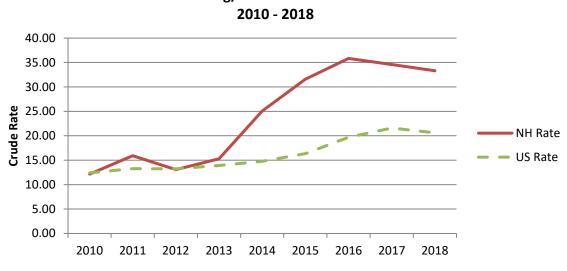
Figure 38 Antidepressants and Benzodiazepines have been the top substances used in suspected NH suicide attempts from 2015-2019.

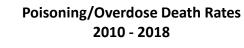
Data Source: Northern New England Poison Center

### Increasing Accidental Poisoning and Drug-Related Death Rates – Cause for Concern

As seen in **Figure 39** (pg. 53), the accidental poisoning and drug-related death rates in NH and the US as a whole have steadily increased from 2010 to 2018. During this time the US rate has increased by approximately 76% while the NH rate has increased more than 180%. Although it is not possible to determine an exact number, it is likely that these accidental poisoning and drug-related deaths include suicide deaths where there was not enough evidence for the Medical Examiner to classify them as such. This trend is a cause for concern as both a potential increase in poisoning and drug-related suicide deaths, and as a potential indicator of increased risk-taking behavior.

Figure 39 Poisoning/Drug-related death rates in NH increase by more than 170% from 2010 to 2018.



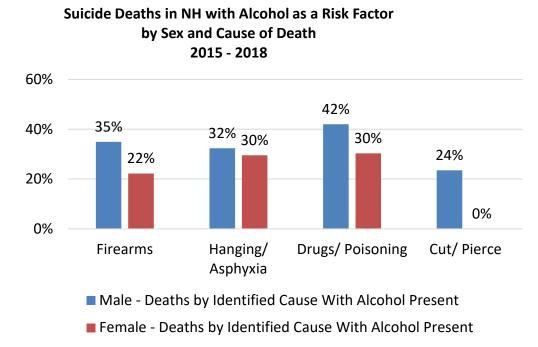


Data Source: CDC WISQARS

#### Alcohol and Drug Use and Suicide

Alcohol was found to be present in over 30% of all NH suicide deaths from 2015 to 2018. Alcohol was found in a greater percentage of male deaths (35% of deaths) than female deaths (27% of deaths). When looking at the presence of alcohol by cause of death (Figure 40 – pg. 54), it was found to most often be present in drug/poisoning deaths (42% of male drug/poisoning deaths and 30% of female drug/poisoning deaths). Alcohol is often not the only substance used by individuals who die by suicide in NH. In cases where alcohol and/or drugs were detected, approximately 25% of cases had both alcohol and one or more drugs present (Figure 41 – pg. 54).

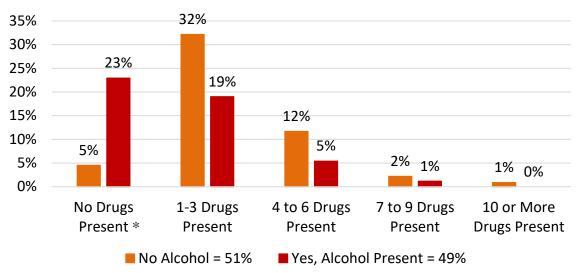
#### Figure 40



Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

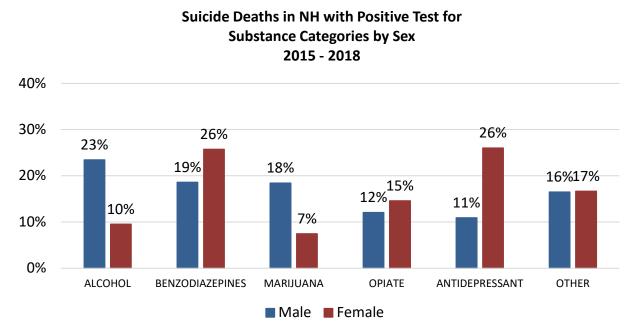
#### Figure 41

Suicide Deaths in NH Alcohol Present with Drugs 2015-2018



Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

The results of toxicological reports include testing various specimen from suicide victims, at various points of the investigation or autopsy. **Figure 42** (below) depicts the categories of the most commonly found substances from toxicology reports. The most frequently detected substances were benzodiazepines and antidepressants among females, and alcohol and marijuana among males. The figure is based on a total count of the number of times a substance was found in a positive test. Some decadents tested positive for multiple substances and are therefore counted in multiple categories. Individuals who tested positive in this compilation of substance(s) used may or may not have died of such substance(s). Cause of death is presented in **Figure 33** (pg. 49).



#### Figure 42

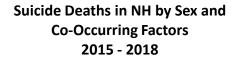
Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

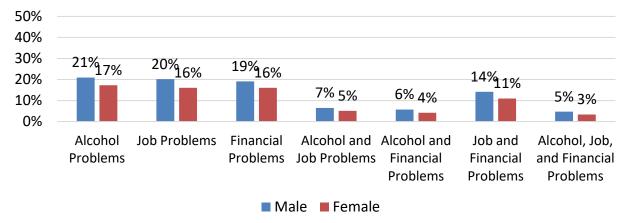
#### **Co-Occurring Factors and Suicide**

Suicide is most often the result of a number of co-occurring risk factors. **Figure 43** (pg. 56) identifies three risk factors that are tracked in the NH-VDRS – problems with alcohol, employment, and finances<sup>14</sup>. Approximately 20% of males and 16% of females who died by suicide from 2015 to 2018 experienced at least one of those three risk factors. When looking at the intersection of those risk factors, nearly 70% of individuals who were experiencing job problems around the time of death were also experiencing financial problems. It is not surprising to find such a strong correlation between employment and finances as one can have a direct relationship on the other. However, as these risk factors compound, individuals may feel that they are under ever increasing levels of stress.

<sup>&</sup>lt;sup>14</sup> The NH-VDRS does not have access to detailed data on financial hardship or other such documents, only observations made during field investigations were compiled in ADME reports. Financial hardship may include any one of the following: loss of income, foreclosure on estate/business or, loss of business. NH-VDRS also does not have access to detailed employment data. Job troubles were documented based on OCME field investigations, death certificate statements, by funeral home directors, and declarations by next of kin.

#### Figure 43

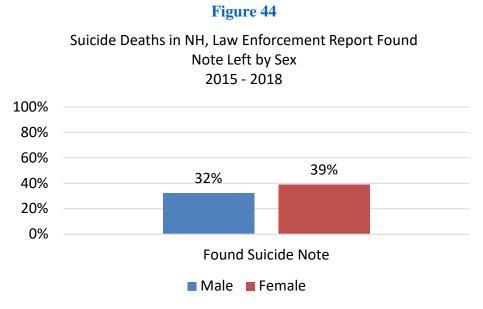




Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

#### **Suicide Notes**

In just over 30% of NH suicide deaths from 2015 to 2018, individuals left some form of note behind (**Figure 44** – below). Females being more likely to have left a note (39% of female deaths) than males (32% of male deaths). These notes vary in format, content, and intent. Individuals may leave instructions for their loved ones on how to resolve financial, estate, burial, and other affairs; complaints/obstacles that they faced; or planning/details that the deceased went through leading up to the death. For the individuals left behind after a suicide death, a note will rarely ever give a satisfactory answer to why their loved one died by suicide.



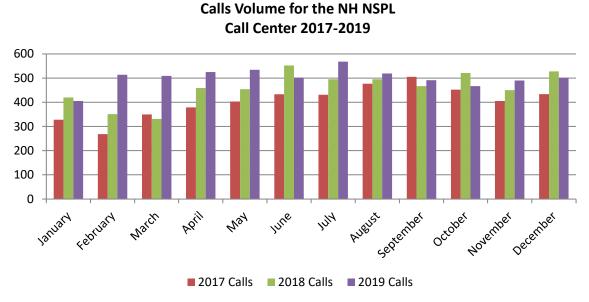
Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

## Linking At-Risk Individuals with Help

Crisis lines, such as the National Suicide Prevention Lifeline (NSPL) are vital to suicide prevention efforts in NH and nationally. Nationally, the NSPL receives approximately 2 million calls per year. In 2019, over 6,000 of those calls, or roughly 500 per month, were received by the NH NSPL call center (see **Figure 45** – below). These calls indicate that individuals in the state who are at risk for suicide are reaching out for help. The large volume of calls may also indicate decreased stigma around help seeking for mental health and/or suicide.



#### **Figure 45** NH NSPL call center responded to an average of 500 calls per month in 2019.



Data Source: National Suicide Prevention Lifeline

### **Positive Outcomes and Testimonials**

We received a call on our general mailbox from a woman that was directed to our Hotline Manager. The woman stated that she had been calling the Hotline for a long time whenever she is feeling down and everyone has been so great and supportive. "They make me feel better. I have just gotten to the point where I can't even reach out to my church pastor. I called tonight and was feeling very low and I don't remember who I talked to, but she was wonderful. Keep doing what you're doing, you train your people well. You people do good work. Thank you for what you do."

We also recently received a call from a gentleman who had just gotten off the phone with one of our hotline counselors who wanted to share his experience. He said he had called that morning because he was contemplating taking his life and that the Hotline counselor he spoke to had a "very calming and caring voice and listened to me for several minutes, with no judgement whatsoever. He then gave me some places I could call to get further help." He stated that our counselor gave him hope for the day.

Two examples of the feedback received by Headrest, the only accredited hotline in NH that receives calls placed to the National Suicide Prevention Hotline. Headrest receives the majority of calls originating from individuals in NH.

## **Costs of Suicide and Suicidal Behavior**

There were between 35,717 and 47,806 years of potential life lost<sup>15</sup> to suicide from 2014-2018 in NH (CDC WISQARS, 2019). The most obvious cost of suicide is the loss of individuals and their potential contribution to their loved ones and to society. For each suicide death, there are many survivors of suicide loss (the family and close friends of someone who died by suicide) who are then at higher risk for depression and suicide themselves. In addition, many others are affected, including those who provide emergency care to the victims and others who feel they should have seen the warning signs and prevented the death.

Nationally, suicide attempts treated in emergency departments and hospitals represented an estimated \$3.9 billion in health care costs in 2010. This does not include the costs associated with mental health services on an inpatient or outpatient basis (CDC WISQARS, 2019). In NH, suicide deaths where the individual received treatment in a hospital or emergency department and subsequently died resulted in an estimated \$500,000 in medical expenses in 2010 (CDC WISQARS, 2019). Harder to measure is the cost to employers of lower or lost productivity due to suicide attempts or deaths by employees or their loved ones. An estimate provided by the CDC indicates that there is an average work loss cost of \$1.1 million for each suicide death in NH (CDC WISQARS, 2019).

<sup>&</sup>lt;sup>15</sup> Years of potential life lost (YPLL) is a measure of the extent of premature mortality in a population. This estimate is based on the approximate age at death as well as the number of people who died in that age group in a given year.

## **Military and Veterans**

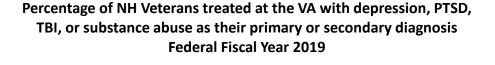
#### The NH National Guard

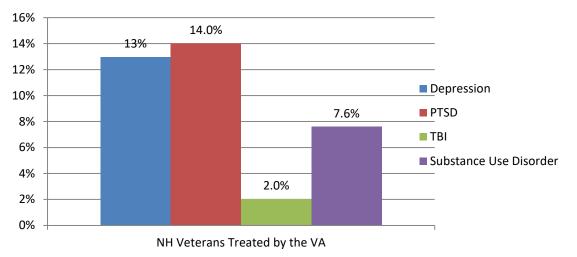
From 2015 through 2019 the NH Army National Guard recorded a total of 47 suicide related incidents of varying levels of severity (ideation, plan in place, attempt, or death), with the majority being ideation or having a plan in place. Of these incidents, 17% were from individuals under the age of 22, 23% were age 22-26, 13% were age 27-31, 9% were age 32-36, 15% were age 37-41, and 15% were ages 42-46. The remaining 9% were age 47 and above (total may not equal 100% due to rounding). Forty percent of the incidents were by non-deployed personnel, veterans, or dependents of National Guard personnel. Of the incidents recorded, 98% were by males and 2% were by females (males may be disproportionally represented among the NH National Guard compared with the general population).

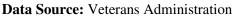
#### NH Veterans Served by the Veterans Administration (VA)

The VA provides care to many of the Veterans in the State of NH. During the 2019 Federal Fiscal Year (October 1, 2018 – September 30, 2019), the VA provided care to 26,517 individuals in NH. The percentage of these individuals treated for depression, post-traumatic stress disorder (PTSD), traumatic brain injuries (TBI), and substance use disorder is presented in **Figure 46** below.

#### Figure 46





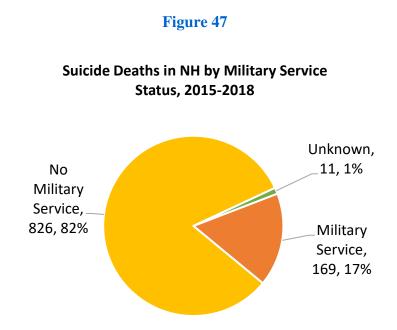


#### Suicide among Veterans in New Hampshire<sup>16</sup>:

Of the individuals who died by suicide in NH from 2015 to 2017, 17% of were identified as having current or prior military service (**Figure 47** – below). The use of the term military service is for all those who served in the armed services of the United States or are still serving. The data sources available to NH-VDRS do not distinguish between individuals who are currently active and those who have been discharged. Veterans made up approximately 8% of the NH population as of  $2018^{17}$ . With veterans accounting for 17% of the individuals who died by suicide in the state, this may indicate a high-risk group dying at a greater than expected rate.

#### Military Service and Cause of Death:

Individuals in NH who die by suicide that have served in the military are substantially more likely to use a firearm than civilians (**Figure 48** – pg. 61). This difference is evident in males with 53% of individuals with no military service using firearm compared with 72% of males with military service using a firearm. The difference is even more significant among females with military service. Among females with no military service just 26% used firearms, while 75% of females with military service used a firearm.



Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

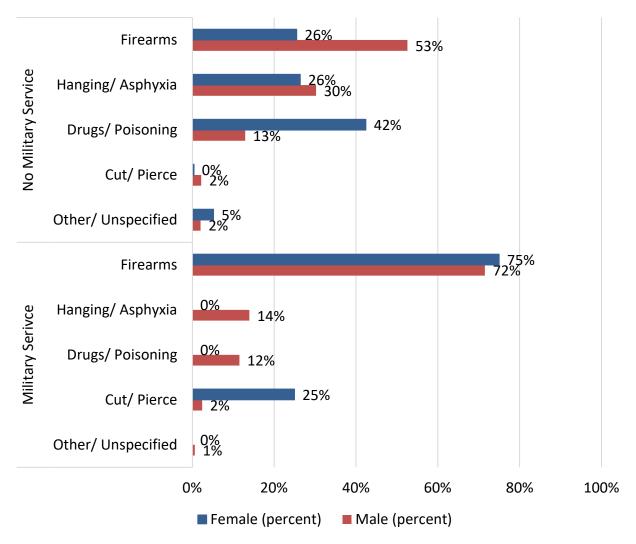
<sup>&</sup>lt;sup>16</sup>NH-VDRS collects data on veterans only from standard surveillance data sources. The data collection is based on medical examiner data, death certificates, and law enforcement reports. There is no data used that is sourced from any branch of the military.

<sup>&</sup>lt;sup>17</sup> Veteran population data by state available from <u>https://www.va.gov/vetdata/veteran\_population.asp</u>

Figure 48

#### Suicide Deaths in NH of Individuals Who Served in the US Armed Forces by Sex and Cause of Death 2015 - 2018

NVDRS data prepared by the NH DHHS Injury Prevention Program under Grant Award # 5NU17CE924939-02-00



Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

### Suicide Rates in NH

Until 2010, data had indicated that rates of youth and young adult suicide and suicidality overall in NH were flat or on a downward trend. It is nearly impossible to firmly establish causality for such trends. Statewide collaborative prevention efforts, including the work of YSPA, the SPC, implementation of NH's Suicide Prevention Plan, the *Connect* Program, GLS funding through SAMHSA, CALM and the work of many community partners likely played a role in that downward trend. Even though rates have recently increased, the value of prevention efforts should not be discounted. Without the continued work of these and other individuals and organizations, a greater increase in NH suicide rates may have occurred.

**Figure 49** (pg. 63) presents NH suicide death rates for youth and young adults aged 10-24 in rolling three-year intervals from 2015 to 2018 and **Figure 50** (pg. 63) presents the same information for individuals of all ages. NH-VDRS data is currently limited to 2015-2018. As new data becomes available these figures will be expanded and used to identify trends in NH rates over time and compare them with national trends.

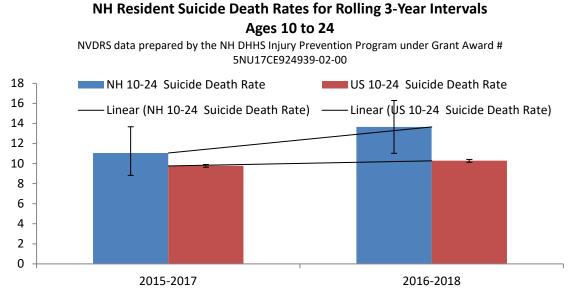
#### **Positive Outcomes and Testimonials**

Safe Messaging and Media Guidelines:

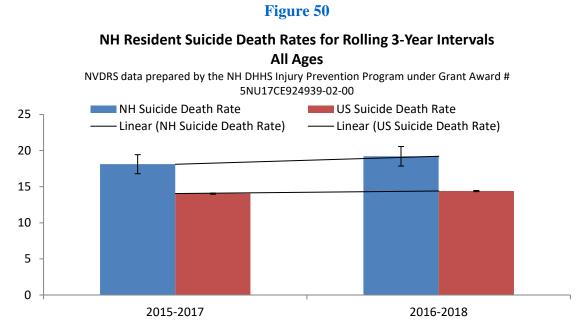
Work has been done continuously across the state to educate the public and media about safe messaging, a national best practice standard (www.sprc.org/library/SafeMessagingfinal.pdf). Safe messaging has become part of the standard for statewide and regional meetings, part of suicide prevention trainings, a guide for health promotion materials, and essentially part of the culture in NH. Media Guidelines have been disseminated to media outlets across the state, and journalism students in several universities in NH have received training in the Media Guidelines and how to safely write about suicide. The Communications/Media Sub-Committee of the SPC provides feedback to media outlets and suicide prevention experts in the state to guide public information that is produced through consultation, media contributions and feedback. The results of these efforts became evident after the tragic death of Robin Williams. Rather than sensationalizing this highly publicized tragedy, many media outlets across NH interviewed local representatives in the mental health and suicide prevention field. "Not only did the media in our state reach out to partner with key stakeholders to create responsible follow up articles, but all of the people interviewed provided the same consistent messages of hope and help for those struggling with mental illness and resources for those in crisis. It was clear that everyone, independent of each other, was reading off of the same page."

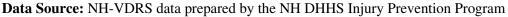
Elaine de Mello Supervisor of Training and Prevention Services NAMI New Hampshire

#### **Figure 49** Suicide rates among 10-24 year old NH residents have increased from 2015-2018.



Data Source: NH-VDRS data prepared by the NH DHHS Injury Prevention Program

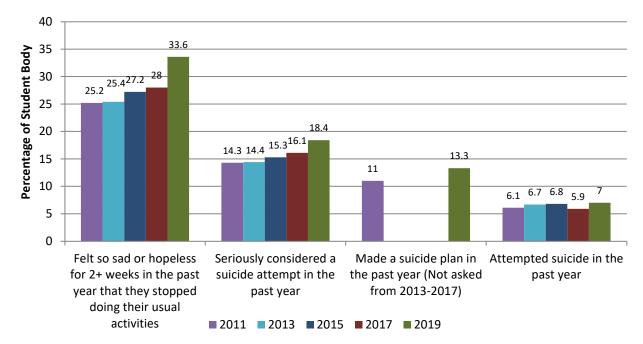




**Figure 51** (below) presents the results of the NH YRBS from 2011, 2013, 2015, 2017, and 2019. The percentage of high school youth in NH who felt sad or hopeless for 2+ weeks in the past year and the percentage of youth who seriously considered a suicide attempt in the past year have both increased between 2011 and 2019. In 2019, 1 in 5 youth surveyed reported having seriously considered attempting suicide in the past year, while 1 in 14 reported actually having made an attempt.

#### Figure 51

# Self-reported depression and suicidal ideation among high school youth increased from 2011 to 2019.



NH Youth Risk Behavior Survey (High School Students) Suicidal Behavior: 2011, 2013, 2015, 2017, 2019

Data Source: NH YRBS Results, NH Department of Education

The NH YRBS item addressing whether students have made a suicide plan in the past year was not asked from 2013-2017. This was removed due to the similarity to the question asking whether youth had seriously considered a suicide attempt during the past year. At the time the removal of this question allowed for the addition of a question addressing non-suicidal self-inflicted injuries (e.g., cutting or burning oneself without the intent of dying). Beginning in 2019 the question was again included in the survey. The results of the question on self-inflicted injuries indicate that 19.8% of NH high school age youth (12.6% of males and 27.3% of females) report intentionally hurting themselves without the intent to die during the past year (NH YRBS, 2019).

# **Reading Tables and Figures**

This section is intended to assist the reader in interpreting the various charts included in the report. The four topics covered in this section include types of charts; common parts of a chart; frequently used scales in charts; and interpreting the information presented in a chart. These topics contain information that applies primarily to the charts included in this report, but much of the information can also be applied elsewhere.

#### **Types of Charts**

- Line Chart: A line chart presents a series of connected observations in order. For example, the line chart in **Figure 4** of this report shows the number of youth and young adult suicides over a 4-year span in NH.
- **Pie Chart:** A pie chart gives the percent values for the individual parts of a whole using a circle that is divided into wedges. For example, a pie chart (**Figure 15**) of this report shows the percent of male and female youths and young adults in NH that died by suicide from 2015 to 2018.
- **Bar Chart:** A bar chart shows the values for one or more categories using rectangular boxes with height representing the value (greater height being a larger value and lesser height being a smaller value). For example, two bar charts (**Figures 10** and **11**) in this report show the number of suicide deaths by age group in NH from 2015 to 2018 and the rate of suicide deaths by age group in NH from 2015 to 2018.

#### **Common Parts of a Chart**

- **Title:** The title will generally be found at the top of the chart and should describe the data that are being presented. Depending on the chart this may list the variables and/or the time period. Also, all charts in this report list the data source used.
- Scales/Labels: The scales/labels are generally found on the bottom and left side of the chart. The scale/label on the bottom shows what is being measured on the x-axis (horizontal axis) and the scale/label on the left side shows what is being measured on the y-axis (vertical axis). For example, in Figure 4, the line chart of youth suicides in NH over the past four years has a different scale on each axis. On the x-axis (the bottom) are years which range from 2015 to 2018. On the y-axis (the side) the scale is the number of youth suicides, which ranges from 0 to 40.
- **Legend/Key:** Some charts include a legend/key to explain what different colors, shapes, dotted/solid lines mean. The location of this may vary depending on the type of chart and where space is available on the page.
- Error Bars/Confidence Intervals: Error bars/confidence intervals represent the range that the actual value may fall within. There is some degree of uncertainty when calculating values such as rates due to statistical error (captured by the confidence intervals) and data quality issues (which there is no real way to estimate). The width of the error bar/confidence interval indicates the level of uncertainty. A wider bar denotes more uncertainty and may indicate more data is needed. A smaller bar indicates a greater level of confidence in the results. When error bars/confidence intervals overlap in a chart, one cannot state with certainty whether there is a significant difference between the

values. Error bars can be seen on several of the charts in this document, including the NH crude death rate chart (**Figure 13**). In that chart you can see that the error bar for Merrimack County does not overlap the bar for Rockingham County. From this we are able to determine that the rate of suicide in Merrimack County is significantly different from the rate in Rockingham County.

#### **Frequently Used Scales**

- **Standard:** What is being referred to here as standard is a numbered scale that gives the actual value of the variable(s) being presented in the chart (e.g., the number of youth and young adult suicides in a given year).
- **Rate:** A scale using a rate is saying how common something is in relation to a standard value. This report uses rates per 100,000. Therefore, a youth and young adult suicide rate of 10 would mean that there are likely to be 10 suicides by youth or young adults for every 100,000 youths or young adults in the population. Rates are approximations based on past data and do not guarantee the same trend will or will not continue.
- **Percent:** A scale using percent is expressing a certain proportion of the variable falls into one category (i.e., 25% of youth is equivalent to 25 out of 100 youth).

#### **Interpreting Information from Charts**

- Can different charts be compared? Yes, but only under certain circumstances. Different charts should only be compared if they were generated using the same dataset and related variables. Depending on the charts there may be other factors that prevent you from directly comparing them. When in doubt, attempt to contact the person who made the chart or someone with access to the data used to generate the chart.
- Data is generated in a variety of ways and therefore it is not always consistent. For example, in NH the OCME is charged with keeping records of all deaths that occur in the state, regardless of where the person lived. Thus, a Vermont resident who dies in a NH hospital would be included in OCME data. On the other hand, the Bureau of Vital Records collects data on the deaths of NH residents regardless of where the death occurs. So, a NH resident who dies in Massachusetts would be included in Vital Records statistics. Therefore, these two data sets will have small differences. Neither is wrong. They simply measure different things.

# **Glossary of Terms**

# Acronyms

American Foundation for Suicide Prevention	AFSP
Army National Guard	ARNG
•	BRFSS
Behavioral Risk Factor Surveillance System Centers for Disease Control and Prevention	DKF35 CDC
Crisis Intervention Team	CIT
	CMHC
Community Mental Health Center	CMHC
Counseling on Access to Lethal Means	-
Department of Health and Human Services Electronic Data Warehouse	DHHS
	EDW
Emergency Departments	ED
Garrett Lee Smith	GLS
Health Insurance Portability and Accountability Act	HIPAA
Health Statistics and Data Management	HSDM
International Classification of Diseases 10 <sup>th</sup> Revision	ICD-10
National Alliance on Mental Illness New Hampshire	NAMI NH
National Suicide Prevention Lifeline	NSPL
National Violent Death Reporting System	NVDRS
New Hampshire Violent Death Reporting System	NH-VDRS
Northern New England Poison Center	NNEPC
Office of Economic Planning	OEP
Office of the Chief Medical Examiner	OCME
Post-Traumatic Stress Disorder	PTSD
Substance Abuse and Mental Health Services Administration	SAMHSA
Suicide Prevention Council	SPC
Suicide Prevention Program	SPP
Suicide Prevention Resource Center	SPRC
Survivor of Suicide Loss	SOSL
Traumatic Brain Injury	TBI
Veterans Administration	VA
Web-based Injury Statistics Query and Reporting System	WISQARS
Youth Risk Behavior Survey	YRBS
Youth Suicide Prevention Assembly	YSPA

#### Age Adjustment and Rates

When possible, rates in this document are age-adjusted to the 2010 US standard population. This allows the comparison of rates among populations having different age distributions by standardizing the age-specific rates in each population to one standard population. Age-adjusted rates refer to the number of events that would be expected per 100,000 persons in a selected population if that population had the same age distribution as a standard population. Age-adjusted rates were calculated using the direct method as follows:

Where,

m = number of age groups

di= number of events in age group i

Pi= population in age group i

$$\hat{R} = \sum_{i=1}^{m} s_i (d_i/p_i) = \sum_{i=1}^{m} w_i d_i$$

Si= proportion of the standard population in age group i

This is a weighted sum of Poisson random variables, with the weights being (Si /pi).

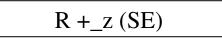
#### Age Specific Rate/Crude Rates

The age-specific rate or crude rate is the number of individuals with the same health issue per year within a specific age group, divided by the estimated number of individuals of that age living in the same geographic area at the midpoint of the year.

#### **Confidence Intervals (Ci)**

The standard error can be used to evaluate statistically significant differences between two rates by calculating the confidence interval. If the interval produced for one rate does not overlap the interval for another, the probability that the rates are statistically different is 95% or higher.

The formula used is: Where, R=age-adjusted rate of one population z = 1.96 for 95% confidence limits SE= standard error as calculated below



A confidence interval is a range of values within which the true rate is expected to fall. If the confidence intervals of two groups (such as NH and the US) overlap, then any difference between the two rates is not statistically significant. All rates in this report are calculated at a 95% confidence level.

#### **Data Collection**

The BRFSS is a telephone survey conducted annually by the health departments of all 50 states, including NH. The survey is conducted with assistance from the federal CDC. The BRFSS is the largest continuously conducted telephone health survey in the world and is the primary source of information for states and the nation on the health-related behaviors of adults. The BRFSS has been conducted in NH since 1987. HSDM develops the annual questionnaire, plans survey protocol, locates financial support and monitors data collection progress and quality with the

assistance of CDC. HSDM employs a contractor for telephone data collection. Survey data are submitted monthly to CDC by the contractor for cleaning and processing and then returned to HSDM for analysis and reporting.

Death Certificate Data is collected by the Department of Vital Records in NH and provided to the HSDM through a Memorandum of Understanding. Death Certificate Data is available to the HSDM through the state Electronic Data Warehouse (EDW), a secure data server.

Hospital Discharge Data for inpatient and emergency department care is complied, and deidentified at the Maine Health Information Center, delivered to the Office of Medicaid Business and Policy for further cleaning, then available to the HSDM through the state EDW.

State and county population estimates for NH data are provided by HSDM, Bureau of Disease Control and Health Statistics, Division of Public Health Services, and NH DHHS. Population data are based on US Census data apportioned to towns using NH Office of Economic Planning (OEP) estimates and projections, and further apportioned to age groups and gender using Claritas Corporation estimates and projections to the town, age group, and gender levels. Data add up to US Census data at the county level between 1990 and 2005 but do not add to OEP or Claritas data at smaller geographic levels.

#### **Data Confidentiality**

The data provided in this report adheres to the NH DHHS "Guidelines for Release of Public Health Data" and the Health Insurance Portability and Accountability Act (HIPAA). Data are aggregated in-to groups large enough to prevent constructive identification of individuals who were discharged for hospitals or who are deceased.

#### Graphs

Graphs have varying scales depending on the range of the data displayed. Therefore, caution should be exercised when comparing such graphs.

#### Incidence

Incidence refers to the number or rate of new cases in a population. Incidence rate is the probability of developing a particular disease or injury occurring during a given period of time; the numerator is the number of new cases during the specified time period and the denominator is the population at risk during the period. Rates are age-adjusted to 2010 US standard population. Some of the rates also include age-specific rates. Rates based on 10 or fewer cases are not calculated, as they are not reliable.

#### **Death Rate**

Death rate is the number of deaths per 100,000 in a certain region in a certain time period and is based on International Classification of Diseases 10<sup>th</sup> Revision (ICD-10). Cause of death before 1999 was coded according to ICD-9; beginning with deaths in 1999, ICD-10 was used.

# **Reliability of Rates**

Several important notes should be kept in mind when examining rates. Rates based on small numbers of events (e.g. less than 10 events) can show considerable variation. This limits the usefulness of these rates in comparisons and estimations of future occurrences. Unadjusted rates (age-specific or crude rates) are not reliable for drawing definitive conclusions when making comparisons because they do not take factors such as age distribution among populations into account. Age-adjusted rates offer a more refined measurement when comparing events over geographic areas or time periods. When a difference in rates appears to be significant, care should be exercised in attributing the difference to any particular factor or set of factors. Many variables may influence rate differences. Interpretation of a rate difference requires substantial data and exacting analysis.

#### **Small Numbers**

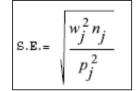
With very small counts, it is often difficult to distinguish between random fluctuation and meaningful change. According to the National Center for Health Statistics, considerable caution must be observed in interpreting the data when the number of events is small (perhaps less than 100) and the probability of such an event is small (such as being diagnosed with a rare disease). The limited number of years of data in the registry and the small population of the state require policies and procedures to prevent the unintentional identification of individuals. Data on rare events, and other variables that could potentially identify individuals, are not published.

#### **Standard Errors**

The standard errors of the rates were calculated using the following formula:

Where,

- w j = fraction of the standard population in age category
- n j = number of cases in that age category
- p = person-years denominator



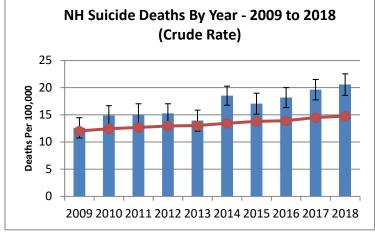
## Frequently Asked Questions about NH Suicide Data

#### **Q:** Statistical significance of suicide deaths vs. significance in the community.

A: Statistical significance, which this document focuses on, is used to look at whether the change in the number of suicide deaths from one time period to another has truly increased/decreased, or whether the difference is potentially due to chance. In general in NH a small number of additional deaths are unlikely to result in a statistically significant change. However, the significance of even a single death in a family or a community is tremendous. When discussing "significance" it is best to be clear about whether the focus is on measurable changes or the practical impact on a family or community.

# **Q:** Have there been more suicide deaths in NH during "*X*" months of this year compared with previous years?

- A: It is best to focus on data from a full year or multiple years rather than periods of just a few months. Over brief periods these numbers are too volatile to draw accurate conclusions from them.
- **Q:** If there is an increase during part of a year does this mean that there will be a greater number of suicide deaths during the remainder of the year when compared with previous years?
- A: Not necessarily. Even though there may have been a greater number of deaths during part of a given year, this does not indicate that there will be a greater number of deaths for the remainder of the year. Until the end of the year it is not possible to say whether the overall number of suicide deaths will be higher or lower than previous years.
- **Q:** Has NH ever had a large change in suicide deaths from one year to the next?
- A: As a small state, NH has a substantial degree of variability in the suicide deaths in a given year. It is not at all uncommon for the number (and rate) of suicide deaths in NH to vary by as much as 33% (up or down) from the previous year see chart and table below. Significant differences are indicated by non-overlapping confidence intervals (the brackets overlaid on the bars in the chart). For example, the confidence intervals for 2009 do not overlap with the 2014 through 2018 confidence intervals, meaning that the rate for 2014 2018 was significantly higher than the rate for 2009.



\*Data Source: CDC WISQARS – 2009-2018\*

Change in Rate per 100,000 from Year to Year						
2009-2010	12.61 to 14.89 ( <b>Up</b> 18%)					
2010-2011	14.89 to 15.00 ( <b>Up</b> 1%)					
2011-2012	15.00 to 15.26 ( <b>Up</b> 2%)					
2012-2013	15.26 to 13.95 ( <b>Down</b> 9%)					
2013-2014	13.95 to 18.53 ( <b>Up</b> 33%)					
2014-2015	18.53 to 17.06 ( <b>Down</b> 8%)					
2015-2016	17.06 to 18.18 (Up 7%)					
2016-2017	18.18 to 19.63 ( <b>Up</b> 8%)					
2017-2018	19.63 to 20.57 ( <b>Up</b> 5%)					

# **Q:** What are the differences between the Centers for Disease Control (CDC) data and NH data on suicide deaths?

A: The CDC data includes all deaths of NH residents regardless of whether they occurred in the state or elsewhere. The NH data comes directly from the Office of Chief Medical Examiner (OCME) and includes all suicide deaths that have occurred in the state, even if the death was of a non-resident. Also, CDC data are often not released until 12-24 months after the end of a calendar year (e.g., 2017 data were released in mid-2019). Preliminary NH data are available within months of a calendar year ending.

#### **Q:** What is the difference between a rate and a count?

A: A count simply shows the number of incidents that have taken place during a given period of time (e.g., 100 deaths in a one year period). A rate is a way of showing the prevalence of something among the population. For example, saying that there are 10 deaths resulting from "x" per 100,000 means that in a given population approximately 10 out of every 100,000 individuals have been found to die as a result of "x".

# **Q:** Has "X" (e.g., the recession) caused the increase/decrease in the number of suicide deaths in a specific year?

A: Suicide is a complex issue, and it is not possible to say that a single factor is the direct cause of these deaths. For instance from 2013 to 2014, the number of deaths were up over 33% followed by an 8% decrease from 2014 to 2015; we are still unable to identify the underlying cause of these fluctuations and whether any of those deaths are attributable to the same cause.

#### **Q:** How do the number of suicide deaths compare to other causes of death in the state?

	Age Groups										
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Short Gestation 37	Congenital Anomalies 	Malignant Neoplasms 	Malignant Neoplasms 14	Unintentional Injury 322	Unintentional Injury 795	Unintentional Injury 601	Malignant Neoplasms 891	Malignant Neoplasms 2,641	Heart Disease 11,102	Malignant Neoplasms 13,817
2	Congenital Anomalies 33	Unintentional Injury 	Unintentional Injury 	Suicide 	Suicide 154	Suicide 183	Malignant Neoplasms 210	Unintentional Injury 594	Heart Disease 1,320	Malignant Neoplasms 9,973	Heart Disease 13,173
3	Maternal Pregnancy Comp. 19	Homicide 	Homicide 	Unintentional Injury 	Heart Disease 18	Malignant Neoplasms 60	Suicide 198	Heart Disease 562	Unintentional Injury 447	Chronic Low. Respiratory Disease 3,069	Unintentional Injury 4,321
4	Placenta Cord Membranes 12	Influenza & Pneumonia 	Benign Neoplasms 	Congenital Anomalies 	Malignant Neoplasms 14	Heart Disease 51	Heart Disease 113	Suicide 281	Chronic Low. Respiratory Disease 393	Cerebro- vascular 2,158	Chronic Low. Respiratory Disease 3,580
5	Circulatory System Disease 10	Malignant Neoplasms 	Heart Disease 	Benign Neoplasms 	Homicide 12	Liver Disease 13	Liver Disease 53	Liver Disease 169	Liver Disease 295	Alzheimer's Disease 2,147	Cerebro- vascular 2,434
6	Respiratory Distress 	Diabetes Mellitus 	Cerebro- vascular 	Chronic Low. Respiratory Disease 	Chronic Low. Respiratory Disease 	Homicide 10	Diabetes Mellitus 24	Diabetes Mellitus 97	Diabetes Mellitus 253	Unintentional hjury 1,539	Alzheimer's Disease 2,181
7	Intrauterine Hypoxia 		Congenital Anomalies 	Influenza & Pneumonia 	Congenital Anomalies 	Cerebro- vascular 	Homicide 20	Chronic Low. Respiratory Disease 87	Suicide 219	Diabetes Mellitus 1,196	Diabetes Mellitus 1,583
8	SIDS 			Nephritis 	Diabetes Mellitus 	Congenital Anomalies 	Chronic Low. Respiratory Disease 17	Cerebro- vascular 72	Cerebro- vascular 170	Influenza & Pneumonia 1,066	Suicide 1,263
9	Bacterial Sepsis			Pneumonitis 	Cerebro- vascular 	Chronic Low. Respiratory Disease 	Cerebro- vascular 15	Septicemia 34	Septicemia 91	Nephritis 776	Influenza & Pneumonia 1,167
10	Three Tied 				Benign Neoplasms 	Complicated Pregnancy 	Congenital Anomalies 11	Congenital Anomalies 24	Nephritis 78	Parkinson's Disease 729	Nephritis 882

#### A: 10 Leading Causes of Death, New Hampshire, by Age Group, 2014 – 2018

Data Source: CDC WISQARS, 2014-2018

---Note: Beginning with 2008 data, the CDC has suppressed state-level counts for categories with fewer than ten deaths

# **Contacts and Meeting Information**

Please note that the 2020 and 2021 meeting schedules and formats may vary due to COVID-19. Contact the identified individual(s) below to confirm meeting the details if you would like to attend.

#### **State Suicide Prevention Council**

Chair: Russell Conte – <u>Russell.Conte@dos.nh.gov</u> Vice Chairs: Candace Porter - <u>candice.porter@connorsclimb.org</u> Mary Forsythe-Taber – mft@mih4u.org

Meets 2<sup>nd</sup> Monday – Every **other** month 10:00 am – 12:00 pm DHHS, 29 Hazen Drive, Concord

#### Youth Suicide Prevention Assembly

Primary Contact: Elaine de Mello - edemello@naminh.org

Meets 2<sup>nd</sup> Thursday of the month 10:00 – 12:30 am Brown Building, DHHS, Concord

#### **Connect Program of NAMI NH**

Primary Contact: Elaine de Mello – edemello@naminh.org

#### **Suicide Prevention Council Subcommittees**

#### **Communications & Public Education**

Co-chairs: Rhonda Siegel – <u>rsiegel@dhhs.state.nh.us</u> Mary Forsythe-Taber – <u>mft@mih4u.org</u>

Meets  $2^{nd}$  Wednesday of the month 1:00 pm – 3:00 pm DHHS, 29 Hazen Drive, Concord

#### **Data Collection & Analysis**

Chair: Patrick Roberts - proberts@naminh.org

Meets  $4^{th}$  Wednesday of the Feb., May, Aug., and Oct. 9:30 - 11:30 am NAMI NH, 85 North State Street, Concord

#### Law Enforcement

Chair: Trooper Seth Gahr

Meeting schedule to be determined

#### **Military & Veterans**

Co-Chairs: Amy Cook – <u>Amy.Cook@dhhs.nh.gov</u> Beth Alves - <u>Beth.Alves@va.gov</u>

Meets 1<sup>st</sup> Wednesday of the Month 2:00 – 3:30 pm NH Hospital Association, 125 Airport Road, Concord

#### **Public Policy**

Chair: James Mackay - james.mackay@mygait.com

Meeting schedule to be determined

#### **State Suicide Prevention Conference Meetings**

Primary Contact: Elaine de Mello – <u>edemello@naminh.org</u>

Contact Elaine de Mello for current meeting schedule and location

#### **Suicide Fatality Review**

Chair: Dr. Paul Brown

Attendance is by invitation only

#### **Survivors of Suicide Loss**

Co-Chairs: Deb Baird – <u>dbaird0688@gmail.com</u> Shamera Simpson – <u>ssimpson@afsp.org</u>

Meets 4<sup>th</sup> Wednesday of the Month 6:00 pm – 7:30 pm All meetings held via conference call

# Recognize the Warning Signs for Suicide to Save Lives!

Sometimes it can be difficult to tell warning signs from "normal" behavior especially in adolescents. Ask yourself, *is the behavior I am seeing very different for this particular person?* Also, recognize that sometimes those who are depressed can appear angry, irritable, and/or hostile in addition to withdrawn and quiet.

Warning signs:

- Talking about or threatening to hurt or kill oneself
- Seeking firearms, drugs, or other lethal means for killing oneself
- Talking or writing about death, dying, or suicide
- Direct Statements or Less Direct Statements of Suicidal Intent: (Examples: "I'm just going to end it all" or "Everything would be easier if I wasn't around.")
- Feeling hopeless
- Feeling rage or uncontrollable anger or seeking revenge
- Feeling trapped like there's no way out
- Dramatic mood changes
- Seeing no reason for living or having no sense of purpose in life
- Acting reckless or engaging in risky activities
- Increasing alcohol or drug use
- Withdrawing from friends, family, and society
- Feeling anxious or agitated
- Being unable to sleep, or sleeping all the time

For a more complete list of warning signs and more information on suicide prevention, please consult the *Connect* website at <u>www.theconnectprogram.org</u> and click on Resources.

*If you see warning signs and/or are otherwise worried that this person:* 

## Connect with Your Loved One, Connect Them to Help

- 1) Ask directly about their suicidal feelings. Talking about suicide is the first step to preventing suicide!
- 2) Let them know you care.
- 3) Keep them away from anything that may cause harm such as guns, pills, ropes, knives, vehicles.
- 4) Stay with them until a parent or professional is involved.
- 5) Offer a message of hope Let them know you will assist them in getting help.
- 6) Connect them with help:
  - \* National Suicide Prevention Lifeline (24/7) 1-800-273-TALK (8255) (press "1" for veterans)
  - \* The Lifeline also offers text based chat through their website: <u>www.suicidepreventionlifeline.org/</u>
  - Head rest For teens and adults (24/7) 1-800-639-6095 or your local mental health center



\* For an emergency, **dial 911**.

# **Mental Health and Suicide Prevention Resources**

#### **General Resources:**

#### **Local Resources**

Community Mental Health Centers: <u>http://www.dhhs.state.nh.us/dcbcs/bbh/centers.htm</u> Disaster Behavioral Health Response Teams: <u>http://www.dhhs.nh.gov/esu/dbhrtnh.htm</u> NAMI New Hampshire: <u>www.NAMINH.org</u>, 603-225-5359

#### Gay, Lesbian Bisexual, and Transgender (GLBT) Resources

Fenway Peer Listening Line: 1-800-399-PEER <u>www.fenwayhealth.org</u> GLBT National Hotline (M-F 4-12 pm; Sat. 12-5 pm): 1-888-843-4564 <u>www.glnh.org</u> GLBT National Youth Talkline (M-F 8-12 pm): 1-800-246-PRIDE (7743) Email: <u>youth@GLBTNationalHelpCenter.org</u> SPRC Library: <u>www.sprc.org/library\_resources/sprc</u> Trevor Helpline (24/7): 1-866-4u-TREVOR (488-7386) <u>www.thetrevorproject.org</u>

#### **Military Resources**

Military One Source: <u>www.militaryonesource.mil</u> Tragedy Assistance Program for Survivors (TAPS): <u>www.taps.org</u> US Department of Veterans Affairs: <u>www.va.gov</u> Veterans Crisis Line: 1-800-273-8255 (press 1 after connecting)

#### **National Organizations**

American Association of Suicidology: <u>www.suicidology.org</u> American Foundation for Suicide Prevention: <u>www.afsp.org</u> National Action Alliance for Suicide Prevention: <u>actionallianceforsuicideprevention.org</u> National Alliance on Mental Illness: <u>www.nami.org</u> Suicide Prevention Resource Center: <u>www.sprc.org</u>

#### **Older Adults**

NH Fact Sheet on Suicide and Aging: <u>bit.ly/2nuLd50</u> SPRC Older Adult Suicide Prevention Resources: <u>www.sprc.org/populations/older-adults</u>

#### Substance Abuse and Mental Health Services Administration (SAMHSA)

**Obtaining Prevention Materials:** 

Visit their website: <a href="mailto:store.samhsa.gov/">store.samhsa.gov/</a> (includes downloadable materials)

Call: 1-877-SAMHSA-7 (1-877-726-4727) or Email: <u>samhsainfo@samhsa.hhs.gov</u> Treatment Provider Locator:

SAMHSA maintains a searchable list of mental health and substance use disorder providers. You can use it to find a local provider by going to <u>www.samhsa.gov/find-treatment</u>

### **Resources for Survivors of Suicide Loss / Individuals Bereaved by Suicide:**

#### **National Helplines**

Compassionate Friends: 1-877-696-0010 Friends for Survival: 1-800-646-7322

#### Websites

Alliance of Hope for Suicide Survivors: <u>www.allianceofhope.org</u> American Foundation for Suicide Prevention: <u>afsp.org</u> Compassionate Friends: <u>www.compassionatefriends.org</u> The *Connect* Program: <u>https://theconnectprogram.org/find-support/coping-with-suicide-loss</u> Friends for Survival: <u>www.friendsforsurvival.org</u> Grief After Suicide: <u>bit.ly/suicidegriefsupport</u> Heartbeat: <u>www.heartbeatsurvivorsaftersuicide.org</u> Parents, Family and Friends of Suicide Loss: <u>www.pos-ffos.com</u> SAVE (Suicide Awareness Voices of Education): <u>www.save.org/coping</u> Survivors of Suicide Loss: <u>www.survivorsofsuicide.com</u> Suicide: Finding Hope: www.suicidefindinghope.com

#### **Discussion Forums**

Help for People Left Behind: <u>forums.grieving.com</u> Suicide's Survivors: <u>bit.ly/legacy-suicidesurvivors</u>

#### **Booklets**

Coping with the Loss of a Friend or Loved One: <u>bit.ly/save-coping-withloss</u> Handbook for Survivors of Suicide: <u>bit.ly/2lnGUsm</u> Hope and Healing after Suicide: <u>bit.ly/2n0cxsE</u> Resource and Healing Guide: <u>bit.ly/2nyiEVg</u>

#### Have you found this report to be useful?

Please share your feedback through the survey linked below so that this report can be even better in the future.

https://www.surveymonkey.com/r/2NMF8K2