

# New Hampshire Suicide Prevention



## Annual Report 2018

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 2018 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.

Our work 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 2018:

- Again selling out of seats at the NH Suicide Prevention Conference even after transitioning a larger venue in 2017.
- 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 as a result of a Zero Suicide Academy hosted by Exeter Hospital hosted the prior year.

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 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, we thank 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:

- An expanded section of data from the NH Violent Death Reporting System. (**pg. 52**).
- New suicide death data from the Centers for Disease Control.
- 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). The Connect Program assists 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 [www.theconnectprogram.org](http://www.theconnectprogram.org).

### **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 (NHVDRS), which is supported by CDC NVDRS grant funding. NHVDRS, which 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 NHNVDS program is tasked with compiling case level data on all violent deaths in NH, including suicides, homicides, opioids, accidents involving firearms, and police shootings. The NHVDRS program's work also entails disseminating information within NH, as well as to CDC Injury Prevention Division and other affiliates. Since its inception, NHVDRS has endeavored to engage entities focusing on suicide in NH, including: local suicide service providers, suicide prevention advocates, law enforcement, law makers and other interested groups. These groups

are making use of aggregate data reported by NHVDRS to enhance prevention efforts in the state.

## **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 abuse 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 comes 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 tenth 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 (<https://www.dhhs.nh.gov/dphs/bchs/spc>) 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 <http://zerosuicide.sprc.org/>. Accomplishments in NH related to Zero Suicide are featured below on pages 11-15. During 2018, 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 2018 to move forward the goals of the NH Suicide Prevention Plan included:

### Communications Subcommittee

- 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 (<http://reportingonsuicide.org/>) as well as the National Action Alliance's Framework for Successful Messaging: <http://suicidepreventionmessaging.org/>.

### Data Collection and Analysis Subcommittee

- Worked with multiple statewide partners to compile and analyze data covering calendar year 2017. The data were then included in the 2017 NH Suicide Prevention Annual Report and distributed statewide.
- Collaborated with the Analyst for the NH Violent Death Reporting System (NVDRS) to develop a section of NVDRS data for the NH Annual Suicide Prevention Report. Additionally, topics of interest for issue briefs based on NVDRS data were identified for publication in the future by the NVDRS Analyst.

### Military and Veterans Subcommittee

- Provided suicide prevention to various civilian community partners including:
  - Training on the Columbia-Suicide Severity Rating Scale and Safety Planning.
  - Applied Suicide Intervention Skills Training (ASIST) workshops hosted by the NH Army National Guard for military and civilian gatekeepers.
  - Connect Suicide Postvention training hosted by the NH Army National Guard for commanders, first sergeants, and/or their Suicide Intervention Officers (SIOs) in September.
  - The NH Army National Guard has begun using the Bystander Model "Engage Training" for suicide prevention.

- Alternative health care resources were identified to cover the gaps of coverages in NH for our Soldiers of the NH Army National Guard, their Family Members, and Veterans that reside in NH.
- Supported the work of the Manchester Mayor’s Challenge and the Governor’s Challenge to Prevention Suicide Among Veterans, Service Members, and Families.

### **Survivor of Suicide Loss Subcommittee**

- Provided support and technical assistance to 15 NH Loss Survivor Support Groups, including bi-monthly facilitator calls, and supported 8 American Foundation for Suicide Prevention (AFSP) International SOSL Day events around NH.
- Coordinated over 32 Survivor Voices speaking engagements and engaged new Adult Young Adult Survivor Voices Speakers.
- Ensured Loss Survivor participation in community events through targeted outreach.
  - Five 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 abuse 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 97-98 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 lessen the risk of suicide and promote support and postvention activities in the event of a suicide death.

YSPA has a number of educational activities as part of the meetings. Speakers or topics that were part of the 2018 meeting scheduled included: a representative from the Granite State Critical Incident Stress Debriefing Team, a firing range instructor and viewing of the New Hampshire Firearms Safety Coalition video that was made for firearm instructors to show in their classes, a representative from the New Hampshire Coalition Against Domestic and Sexual Violence speaking on the interface of suicide with domestic violence. There were also meetings where Participant Bios of meeting attendees were shared in order to learn more about “who is at the table” and the rich background they bring to the meetings.

Sadly, YSPA notes, as reflected elsewhere in the annual report, there was an increase in suicides of youth under the age of fourteen. Acknowledging that each statistic reflects the loss of a New Hampshire child or adolescent, there has been a greater emphasis on outreach and education with those who work with middle school age youth.

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, faith leaders, social service agencies and persons with lived experience. For more information on YSPA, please contact Elizabeth Fenner-Lukaitis: [Elizabeth.Fenner-Lukaitis@dhhs.nh.gov](mailto:Elizabeth.Fenner-Lukaitis@dhhs.nh.gov) or Elaine de Mello: [edemello@naminh.org](mailto:edemello@naminh.org).

## **The NH Suicide Survivor Network**

In 2018 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 soon be commencing.



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 2018 there were 32 presentations by loss survivors, including 15 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 (ISOS) Loss Day were held at 8 sites throughout NH on the last Saturday before Thanksgiving and gathered over 80 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 1000 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

### **Positive Outcomes and Testimonials**

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

This became a workshop that was put together for the 2015 NH Suicide Prevention Conference.

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 don't 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 lead 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.

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, Memorial Tree Lighting, 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 survivors of suicide loss in their work by encouraging each existing sub-committee on the council to include loss survivors on the membership. 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 2018 in collaboration with: Partnership for Public Health; Dartmouth College; VA Manchester; the Samaritans; and the Survivor Support Groups in NH.

### **SOS (Signs of Suicide Prevention Program)**

SOS is a nationally recognized, evidence based secondary school-based suicide prevention program that includes screening and education. This program was introduced to 10 new schools in NH. In collaboration with school districts and community organizations, 63 individuals received intensive suicide prevention training for sustainability, strengthening the safety net and awareness around youth suicide prevention. These efforts were led by the Connor's Climb Foundation, a New Hampshire based nonprofit with the mission to provide suicide prevention education to New Hampshire youth and the community. In addition, Connor's Climb led multiple upstream prevention efforts. Highlights include over 500 individuals participating in the Connor's Climb Foundation 5K and Family Walk, and over 400 attendees at the second annual Stick it to Stigma hockey game. Connor's Climb also provided over \$8,000 in scholarships and sponsorships directly supporting youth programming and suicide prevention educational training.

### **Zero Suicide 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 2018 include the following:

#### ***Community Mental Health Centers Implementing Zero Suicide***

2018 marked the first full year of the Zero Suicide initiative at **The Mental Health Center of Greater Manchester (MHCGM)**. Their core team of 7 clinical leaders who attended the 2017 Zero Suicide Academy helped to expand their Implementation Team to include representatives from both clinical and non-clinical staff areas throughout the Center. In February 2018, MHCGM's President/CEO made a call to action to all staff announcing Zero Suicide as a priority issue for the Center.

All staff were surveyed on their comfort and knowledge in assessing and managing suicide risk (yielding a 92% response rate) and trainings were designed and implemented based on this feedback. To date 96 Non-Clinical staff have participated in Connect training, 203 Clinical staff have been trained in the Foundations of Zero Suicide, 105 in CALM, 200 in Safety Planning, and 102 in the Columbia C-SSRS screening. MHCGM also provides DBT training to many staff 5 times per year (both internal and external to MHCGM). MHCGM will be hosting the Beck Institute in June 2019 to train on CBT-SP (Cognitive Behavioral Therapy for Suicide Prevention).

Additionally, many workflow enhancements were made to MHCGM's internal processes and electronic medical record to help identify, engage, transition and treat individuals at risk for suicide. An Intensive Transition Team was developed to help engage and transition individuals from the Emergency Departments to community supports including behavioral health, SUD treatment as well as primary care. In their first year of implementation, MHCGM has noted a 44% decrease in suicide deaths as compared with previous years. MHCGM is working toward

weaving the elements of Zero Suicide into the fabric of all operations, firmly believing that everyone has a role to play in suicide prevention.

**Seacoast Mental Health Center (SMHC)** has implemented Zero Suicide Orientation to all new employees which includes training on the brief Columbia Screening tool and role playing on “asking the question”. Implementation of the Columbia Screening tool is in place for all clients and is evaluated by SMHC Emergency Services Staff.

SMHC has developed the criteria for getting on and off a care Pathway and are in the process of securing the electronic system for notification of when clients are in the Pathway with protocols around what to do if clients are in the Pathway.

SMHC also requires mandatory Mental Health First Aid training for all staff with a brief refresher on an annual basis. Five staff at the center are trained as Mental Health First Aid trainers. All staff will get the live version of CALM (Counseling on Access to Lethal Means) and then will access the on-line version annually.

SMHC has formalized postvention processes for what is offered after an unexpected death of a client (suicide or other sudden death). This includes staff use of Compassion Leave for healing after death of a client; an ad hoc grief support group available to any staff after the death of a client; time with the team where the client was served to allow an opportunity for staff to talk about their feelings, share stories, support each other. SMHC is also working with their Employee Assistance Program (EAP) to ensure that there is a clinician who specializes in grief available for staff and have established a decision making process regarding staff attending memorial or funeral services and more formalized process protocols regarding outreach to the client’s family after the death of their loved one.

**West Central Behavioral Health (WCBH)** has implemented 2 important initiatives from Zero Suicide: The PHQ-9 for adults and adolescents is now administered at intake and then quarterly. The information is tracked in the center’s electronic medical record and can be monitored by clinicians and prescribers working with the client.

West Central Behavioral Health invested in sending a clinician to a train-the-trainer training to facilitate "Connect Suicide Intervention and Prevention" through NAMI NH in 2018. This clinician has conducted two on-site full day trainings (both Gatekeeper and Mental Health Professional) - 40 clinicians total participated in the Connect training to date at WCBH.

With regards to the seven core components of the Zero Suicide model, **Community Partners** reports:

Lead: There has been increased collaboration with other community agencies; for example, with ProHealth NH Integrated Care Grant recipient, “Let’s Talk Mental Health” series with Dover Schools, Community Care Team initiative, providing support and guidance as part of the DBHRT response team, and hosting Judge Broderick as speaker for the Community Partners Annual Meeting in November.

**Train:** Over the past year, Community Partners has provided several training opportunities for staff and community members with a focus on suicide prevention – Community Partners has hosted Bureau of Mental Health Services from the DHHS Division for Behavioral Health (BMHS) trainings with suicide prevention components related to Domestic Violence and Substance Use Disorders, CALM Training. Additionally, Mental Health First Aid Trainings are offered regularly for the community.

**Identify:** Community Partners is in the process of implementing the Columbia Suicide Severity Rating Scale.

**Transition:** Community Partners continues to work closely with area psychiatric inpatient and partial hospitalization programs to transition clients to community based care at our agency.

**Treat:** Community Partners continues to treat individuals using a wide array of evidence based practices. This past year Community Partners implemented The Modular Approach to Treatment for Children with Anxiety, Depression, Trauma and Conduct Problems (MATCH ADTC) model within its Youth and Family Services Department. MATCH ADTC is an evidence based practice that has been rolled out to all of the CMHC Children’s Departments over the past two years through the Bureau for Children’s Behavioral Health and the Judge Baker Children’s Center at Harvard.

### ***Hospitals Implementing Zero Suicide***

**Exeter Hospital, and its Affiliates Core Physicians and RVNA and Hospice** - Exeter Hospital awarded \$245,000 to local organizations through its Youth Suicide Prevention Initiative, with additional funds allocated to underwrite the statewide Zero Suicide Community of Practice, and sponsorship of suicide prevention events.

With funding from Exeter Hospital and Connections for Health Initiative, Core Physicians has made the commitment to embed Social Work and licensed counselor services as a pilot project in two Primary Care locations with the hope for expansion in 2020.

The Exeter Hospital Emergency Department front-line staff recently received focused training to reduce the stigma associated with behavioral health patients. As the improvement work continues, the Hospital is finalizing discussions to have a psychiatric Nurse Practitioner from Seacoast Mental Health to work both in the Emergency Department and on the inpatient units to improve the quality and continuity of care for behavioral health patients at Exeter Hospital. Core Physicians has made the commitment to screen all patients who walk through the doors and any Primary Care office, at least yearly, with the Patient Health Questionnaire (PHQ) +3. RVNA and Hospice also switched to the PHQ3 at intake.

Core Physicians has partnered with Seacoast Mental Health for multiple initiatives, including expanded suicide screening and co-locating treatment services in several of our primary care and pediatric practices.

The Exeter Hospital Emergency Department has worked diligently over recent years to improve their provision of care processes to assess and treat patients with suicidal ideation. The improvement work includes: physical environment enhancements for patients with suicidal ideation to ensure their safety, participation in a NH State Behavioral Health Learning Collaborative sponsored by the NH Foundation for Healthy Communities, and extensive collaboration with various regional hospitals to share best practices of assessing and treating patients with suicidal ideation.

**New Hampshire Hospital (NHH)** has implemented the following as part of their Zero Suicide efforts: A Suicide Risk Assessment Implementation Team (SRIT) was established with the goal of selecting an appropriate suicide risk assessment tool to be administered to all patients during the admission process to assess level of suicide risk. A combination of the Columbia Suicide Severity Rating Scale (CSSR-S) and the Suicide Assessment Five Step Evaluation and Triage (SAFE-T) have now been implemented hospital-wide. Safety Plans are being completed with all patients and are sent to outpatient providers for continuity of care.

With regards to training: Six New Hampshire Hospital staff became trained as Trainers in the Connect Mental Health Worker Provider training. New Hampshire Hospital also trained all existing Mental Health Workers in the Connect Suicide Prevention Program online in addition to Connect live training that is offered during the orientation process for new Mental Health Workers. A full-day Connect Suicide Prevention Training was offered for clinical staff; New Hampshire Hospital also hosted a Connect Postvention training for clinical staff. Additionally, New Hampshire Hospital hosted Dr. Shawn Shea who offered two sessions on Unlocking Suicidal Secrets and an Updated Approach to Risk Formulation.

### ***Managed Care Organizations Implementing Zero Suicide***

In August of 2018, **NH Healthy Families Managed Care** organization, held a Zero Suicide training initiative for their Care Management department. Led by Dr. Ursula Whiteside of the Zero Suicide Institute, staff and leadership at NH Healthy Families were trained on the Zero Suicide concept, assessment, and resources for people struggling with suicidal ideations or behaviors. NH Healthy Families collaborated with all 10 Community Mental Health centers throughout NH to establish protocols for warm transfer and linkage to community based providers for those identified in need. Through this training, the NH Healthy Families Care Management team has embraced a Zero Suicide culture, and practices this model during every interaction.

### ***Military and Veterans Groups Implementing Zero Suicide***

**The NH Army National Guard (NHARNG)** had three tenants of Zero Suicide incorporated into its Commander's Ready & Resilient Council (CR2C) Strategic Plan covering 2018-2020. Each subcommittee has these three tenants built into their goals and objectives. The Resilience and Data Collection subcommittees have recently created surveys to gauge the effectiveness of the Resilience and Suicide Prevention training the NHARNG teaches annually. Two metric surveys were created using existing events: The Commander's Unit Climate Profile (CUCP) and ASIST. The CUCP survey asked two specific questions involving suicide related areas. This

survey was able to provide data on possible high risk units that our subcommittee could address the CR2C with possible courses of actions to reduce these high risks. The Suicide Prevention Program Manager (SPPM) created a survey asking all gatekeepers taught over the last 2 years 10 questions since taking the training. The two main questions asked was over the last 6 months to a year how many times had they used ASIST to help persons at risk? Forty percent replied to the survey and at least 16 people were identified as having been helped.

There is now a plan to have Senior Leadership provide messages of support to the suicide prevention efforts and to have a new Public Service Announcement from The Adjutant General or the Assistant to The Adjutant General.

## Annual NH Suicide Prevention Conference

The 2018 NH Suicide Prevention Conference: “It’s Ok to Talk About It” once again attracted a wide range of attendees from virtually every sector of the community. Hosted by YSPA, SPC, NAMI NH and NH Public Health Networks, the conference started with a morning plenary by national mental health motivational speaker and suicide loss survivor, Dennis Gillan on The Journey Towards Recovery: Surviving the Suicide Loss of a Loved One. The event closed with a plenary “Partnering with Young Adults in Prevention”, by Ann Duckless and Deb Baird from NAMI New Hampshire.

### **Positive Outcomes and Testimonials**

“This Conference saved my life”

Feedback from an attendee at the Annual NH Suicide Prevention Conference

Workshops offered insights from persons with lived experience including young loss survivors and first responders. Other workshops educated the audience on mindfulness, self-care, and pertinent topics such as Compassion Fatigue with Trauma, grandparents raising grandchildren, mobilizing postvention in a community, suicide prevention for faith communities, and safe messaging.

### **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>

## 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 evidence based strategies in responding to individuals at risk for suicide and promoting healing and reducing risk after a suicide death.

In NH in 2018, 1475 participants were trained in Connect Prevention and 121 in Connect Postvention. 50 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, 260 new recruits also received training from Connect staff in suicide prevention and postvention as a standard part of their training curriculum.

Five Schools in NH also implemented the Connect Youth Leader program, training 110 high school youth and adult partners to lead this program for peers and teachers in their school and communities as a strong and vibrant protective factor. Recognizing the high risk for mental illness, substance misuse and suicide in young adults, the NH Bureau of Alcohol and Drug Service continued a partnership with NAMI NH to extend the Connect program to young adults aged 18-25, and the Connect Young Adult Leader program was rolled out again through the 13 Regional Public Health Networks in the state. Over 200 young adults were trained in this program in 2018; 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.

In collaboration with Granite State College, NAMI NH developed an online Connect Suicide Prevention training which is now available for school personnel, health care and mental health providers, and gatekeepers. The Connect Program staff were also providing training and consultation throughout the country in 2018 in numerous states and tribes, including Oregon, California, Alaska, Georgia, Minnesota, North Dakota, Ohio, Nebraska and Louisiana.

### 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.



### **Counseling on Access to Lethal Means - CALM**

CALM (Counseling on Access to Lethal Means) is a national best practice training that was developed in NH and has been utilized throughout the state and in dozens of other states around the U.S. The method of lethal means reduction is cited as an effective suicide prevention practice in the National Strategy for Suicide Prevention and has been offered to mental health and medical providers, schools, Crisis Response Teams and others around the country. SPRC – in collaboration with CALM developers – have recently updated their online version. A new version – Conversations on Access to Lethal Means – has been developed and is being tested that is geared towards the firearm community. This training is currently available at <http://bit.ly/2naXFaS>. For the first time, experienced CALM Trainers are being trained as Master Trainers to further sustain Means Reduction efforts.

#### **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.

### **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 abuse services to current Service Members, as fewer and fewer substance abuse 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. Since December of 2014 when launched, over 200 pets have been adopted.

### **The NH Gun Shop Project**

Specialized projects such as the NH Gun Shop Project continue to receive national attention in the media and journal articles. Many communities are replicating or adapting this project for local or statewide implementation. The NH Firearm Safety Coalition continues to meet and move this effort forward. Recent efforts in NH and among colleagues have focused on engaging firearm instructors to add Suicide Prevention content to their classes.

## 2018 Data

### **SPC/YSPA Data Subcommittee Membership Representation 2018-2019**

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 10 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, 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.

When reading this report it is important to note that two local sources of NH data were used. One main data source is 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. The other main data source is the Office of Chief Medical Examiner (OCME) for the State of NH. These two key data sources cover similar populations, but small differences in numbers and rates may occur due to differences in how the data is collected. The Vital Records data, as reported by the Centers for Disease Control (CDC), include suicide deaths of NH residents that occurred both inside and outside of the state. The OCME data includes all suicide deaths that occurred in NH regardless of where the individual resided and does not capture suicide deaths by NH residents that occurred outside of the state. Additional data sources were used for specific purposes that may have varying methods of collection. All of the charts and graphs in this report include citations of 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, 2018). Overall, NH is relatively homogeneous in terms of race and ethnicity, and has above average ratings for economic factors and education. NH is 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 rates for marijuana use in the past month (National Survey on Drug Use and Health, 2016-2017).

**Table 1**

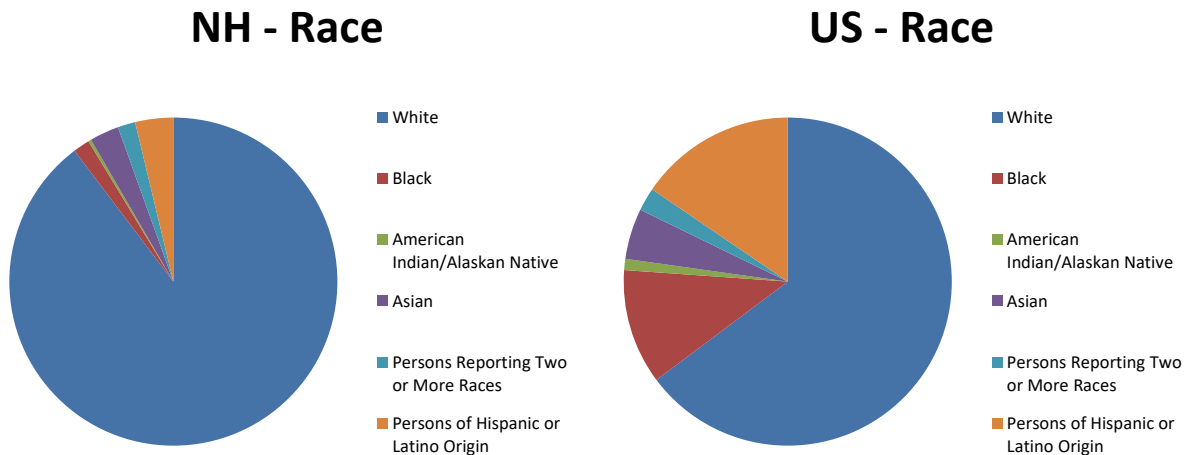
#### Race/Ethnicity.

	New Hampshire	United States
White	93.2%	76.5%
Black	1.7%	13.4%
American Indian/Alaskan Native	0.3%	1.3%
Asian	3.0%	5.9%
Persons Reporting Two or More Races	1.8%	2.7%
Persons of Hispanic or Latino Origin	3.9%	18.3%

Source: US Census Bureau 2018

**Figure 1**

#### NH and US Race/Ethnicity.



Source: US Census Bureau 2018

**Table 2**

**Age.**

	<b>New Hampshire</b>	<b>United States</b>
Under 18	19.0%	22%
18 to 24	9.3%	9%
25 to 44	23.9%	27%
45 to 64	29.7%	26%
65 to 74	10.8%	9%
75 and Up	7.3%	7%

Source: US Census Bureau 2018

**Table 3**

**Economic Factors.**

	<b>New Hampshire</b>	<b>United States</b>
Unemployed Residents	3.0%	4.1%
Persons Below Poverty Level	8.1%	14.6%
Persons Without Health Insurance	7.5%	10.5%
Per Capita Income (Yearly)	\$36,914	\$31,177
Median Household Income	\$71,305	\$57,652
Owner Occupied Homes	70.7%	63.8%
Median Home Value	\$244,900	\$193,500

Source: US Census Bureau American Community Survey 2013-2017

**Table 4**

**Education – population age 25 and older.**

	<b>New Hampshire</b>	<b>United States</b>
Less Than High School Graduate	7.1%	12.6%
High School Graduate or Associates Degree	56.8%	56.4%
Bachelor’s Degree or Higher	36.1%	30.9%

Source: US Census Bureau American Community Survey 2013-2017

**Table 5**

**Substance Use – Individuals Age 12 and Up.**

	<b>New Hampshire</b>	<b>United States</b>
Marijuana Use – Past Month	12.90%	9.23%
Alcohol Use – Past Month	63.12%	51.21%
Tobacco Use – Past Month	22.47%	22.99%

Source: National Survey on Drug Use and Health, 2016-2017

**Table 6**

**Mental Health Indicators – Individuals Age 18 and Up.**

	<b>New Hampshire</b>	<b>United States</b>
Serious Mental Illness – Past Year	5.28%	4.38%
Major Depressive Episode – Past Year	8.29%	6.89%
Had Thoughts of Suicide – Past Year	4.89%	4.19%

Source: National Survey on Drug Use and Health, 2016-2017

**The Big Picture: Suicide in NH and Nationally**

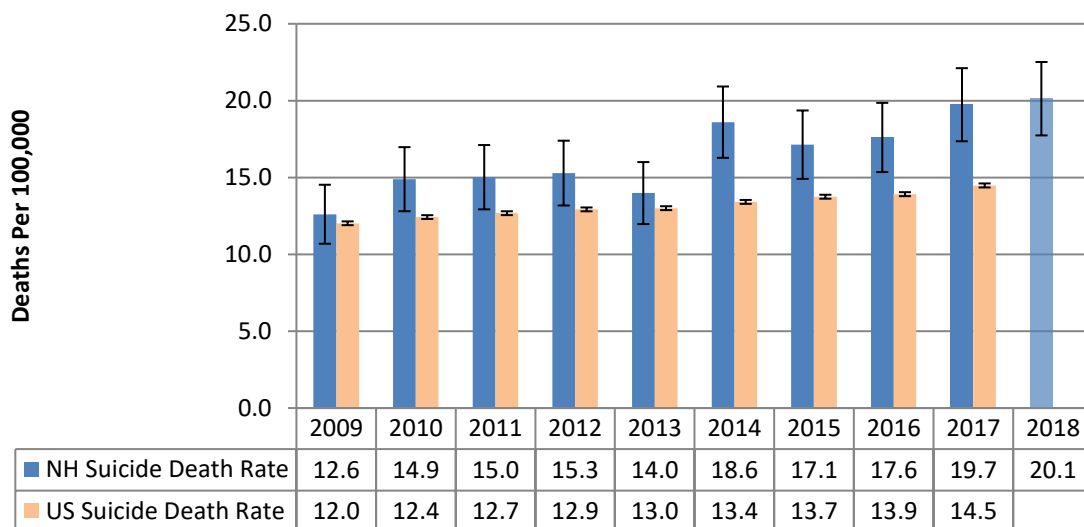
The Tables and Figures below depict various suicide related data. Some are specific to NH while others compare NH and national statistics.

**Figure 2** (below) 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. Such an extreme 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.

**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)**



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 2013-2017, suicide among those aged 15-34 was the second leading cause of death in NH and nationally. Suicide rates for individuals age 15-34 during 2013-2017 were behind only deaths due to unintentional injury; primarily motor vehicle crashes and unintentional overdose deaths in NH within this age group. 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.

**Table 7**

**10 Leading Causes of Death, New Hampshire, by Age Group, 2013 – 2017.**

Rank	Age Groups										All Ages
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Congenital Anomalies 37	Congenital Anomalies (*see note)	Malignant Neoplasms 10	Malignant Neoplasms 13	Unintentional Injury 316	Unintentional Injury 700	Unintentional Injury 519	Malignant Neoplasms 939	Malignant Neoplasms 2,604	Heart Disease 10,790	Malignant Neoplasms 13,690
2	Short Gestation 33	Homicide (*see note)	Homicide (*see note)	Unintentional Injury (*see note)	Suicide 142	Suicide 173	Malignant Neoplasms 214	Heart Disease 545	Heart Disease 1,298	Malignant Neoplasms 9,817	Heart Disease 12,821
3	Maternal Pregnancy Comp. 25	Unintentional Injury (*see note)	Unintentional Injury (*see note)	Suicide (*see note)	Heart Disease 19	Malignant Neoplasms 74	Suicide 185	Unintentional Injury 540	Unintentional Injury 409	Chronic Low. Respiratory Disease 3,011	Unintentional Injury 3,981
4	Circulatory System Disease 11	Influenza & Pneumonia (*see note)	Benign Neoplasms (*see note)	Benign Neoplasms (*see note)	Malignant Neoplasms 15	Heart Disease 43	Heart Disease 116	Suicide 265	Chronic Low. Respiratory Disease 366	Cerebro-vascular 2,117	Chronic Low. Respiratory Disease 3,492
5	Placenta Cord Membranes 11	Heart Disease (*see note)	Heart Disease (*see note)	Congenital Anomalies (*see note)	Homicide 12	Congenital Anomalies 12	Liver Disease 47	Liver Disease 155	Liver Disease 269	Alzheimer's Disease 2,010	Cerebro-vascular 2,376
6	Intrauterine Hypoxia (*see note)	Malignant Neoplasms (*see note)	Cerebro-vascular (*see note)	Chronic Low. Respiratory Disease (*see note)	Chronic Low. Respiratory Disease (*see note)	Liver Disease 11	Diabetes Mellitus 23	Diabetes Mellitus 98	Diabetes Mellitus 260	Unintentional Injury 1,477	Alzheimer's Disease 2,045
7	Respiratory Distress (*see note)	Benign Neoplasms (*see note)	Congenital Anomalies (*see note)	Influenza & Pneumonia (*see note)	Diabetes Mellitus (*see note)	Homicide 10	Chronic Low. Respiratory Disease 17	Chronic Low. Respiratory Disease 81	Suicide 209	Diabetes Mellitus 1,177	Diabetes Mellitus 1,574
8	Neonatal Hemorrhage (*see note)	Diabetes Mellitus (*see note)	(*see note)	Nephritis (*see note)	Congenital Anomalies (*see note)	Chronic Low. Respiratory Disease (*see note)	Homicide 16	Cerebro-vascular 73	Cerebro-vascular 157	Influenza & Pneumonia 1,024	Suicide 1,169
9	Necrotizing Enterocolitis (*see note)	(*see note)	(*see note)	Pneumonitis (*see note)	Cerebro-vascular (*see note)	Complicated Pregnancy (*see note)	Cerebro-vascular 14	Septicemia 31	Septicemia 87	Nephritis 769	Influenza & Pneumonia 1,128
10	SIDS (*see note)	(*see note)	(*see note)	(*see note)	Benign Neoplasms (*see note)	Diabetes Mellitus (*see note)	Congenital Anomalies (*see note)	Nephritis 27	Influenza & Pneumonia 67	Parkinson's Disease 667	Nephritis 866

**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. Overall, suicide constitutes a larger proportion of all traumatic deaths in NH than in the US as a whole.

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 8**  
**Crude Suicide Death Rates per 100,000 in NH & US, by age group, 2013-2017.**

	ALL AGES	YOUTH 10-17	YOUNG ADULTS 18-24	YOUTH AND YOUNG ADULTS 10-24
NH	<b>17.55</b>	3.89	<b>19.04</b>	<b>11.46</b>
US	13.73	4.38	14.36	9.20

	AGES 25 TO 39	AGES 40 TO 59	AGES 60 TO 74	OVER 75
NH	<b>22.70</b>	<b>25.20</b>	16.15	18.02
US	16.14	19.43	16.15	18.23

**Source:** CDC WISQARS

Adults age 40 to 59 had the highest suicide rates of all age groups identified above (25.20 NH, 19.43 US) from 2013-2017 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

In the 10 years from 2009-2018, 265 NH youth and young adults aged 10-24 have lost their lives to suicide. **Table 9** (pg. 26) depicts the most up-to-date information about these youth and young adults as reported by the OCME in NH and collected and aggregated by YSPA and NAMI NH. Males are much more likely to die by suicide in NH (82%) and nationwide. 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.

From 2004 to 2006 a decreasing trend among youth suicide deaths was noted. This trend reversed in 2007. This increase in youth suicide deaths is apparent when comparing the five year period from 2009-2013 to the following five year period from 2014-2018. From the first period to the second there was a 37% increase. When looking at this it is important to keep in mind that the total number of youth deaths are few in number, and a relatively small increase in the number of deaths can substantially impact the percent increase. Additionally, looking solely at the



number of deaths does not take into account increase in population size or the proportion of individuals within that age group in the state. The rates presented on the chart of deaths over rolling three-year intervals shown on **page 87** help to smooth out small year to year fluctuations, and also addresses population increases by presenting rates per 100,000.

Please note that **Table 9** (pg. 26) is based on OCME data. “Hanging/Asphyxiation” refers to all forms of suffocation (e.g. hanging, object covering nose and mouth) and “Drugs/Poison” refers to all suicide cases of drug-related deaths or ingested poisons. Suicides where carbon monoxide poisoning was the cause of death are reported in the “Other” section. These categories are slightly different from those used by the Center for Disease Control and Prevention (CDC), which places suicides by carbon monoxide into the “Poison” category (e.g., **Figure 25**).

### **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.

**Table 9****NH Youth (age 24 and under) Suicide Death Trend, by Gender, Age Group and Method, 2009-2018.**

Year	Total	Male	Female	≤ 19	20-24	Firearms	Hanging/ Asphyxiation	Drugs/ Poison	Other
2009	20	18	2	10	10	12	7	0	1
2010	24	22	2	11	13	11	11	2	0
2011	29	23	6	9	20	10	15	2	2
2012	18	15	3	8	10	10	7	0	1
2013	21	17	4	6	15	7	10	3	1
<b>2009- 2013 Sub Total</b>	112	95	17	44	68	50	50	7	5
<b>Percent of Sub- Total<sup>1</sup></b>	100%	85%	15%	39%	61%	45%	45%	6%	4%
2014	33	26	7	8	25	23	8	0	2
2015	19	16	3	7	12	7	10	1	1
2016	28	21	7	12	16	14	13	1	0
2017	38	33	5	12	26	18	15	2	3
2018	35	27	8	15	20	17	14	0	4
<b>2014 - 2018 Sub Total</b>	153	123	30	54	99	79	60	4	10
<b>Percent of Sub- Total<sup>1</sup></b>	100%	80%	20%	35%	65%	52%	39%	3%	7%
<b>Total</b>	265	218	47	98	167	129	110	11	15
<b>Percent of Total<sup>1</sup></b>	100%	82%	18%	37%	63%	49%	42%	4%	6%

**Produced by:** NAMI NH  
**Data Source:** NH OCME

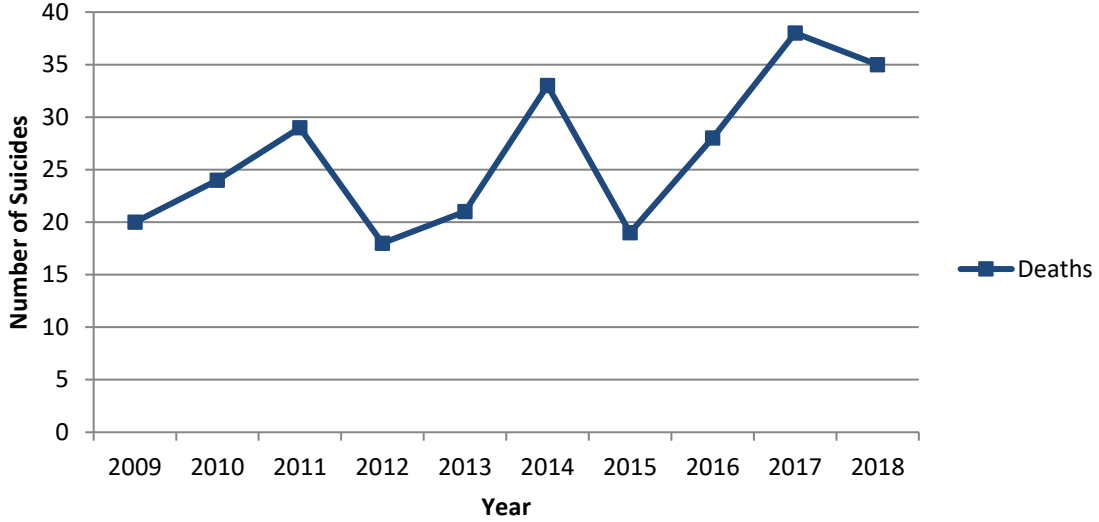
<sup>1</sup> Note: Rounding may cause percentages to not total to 100%

**Figure 3**

**NH Youth, Ages 10-24, Suicide Deaths.**

**New Hampshire Youth Suicides from 2009 to 2018**

Data Source: Office of the Chief Medical Examiner, NH

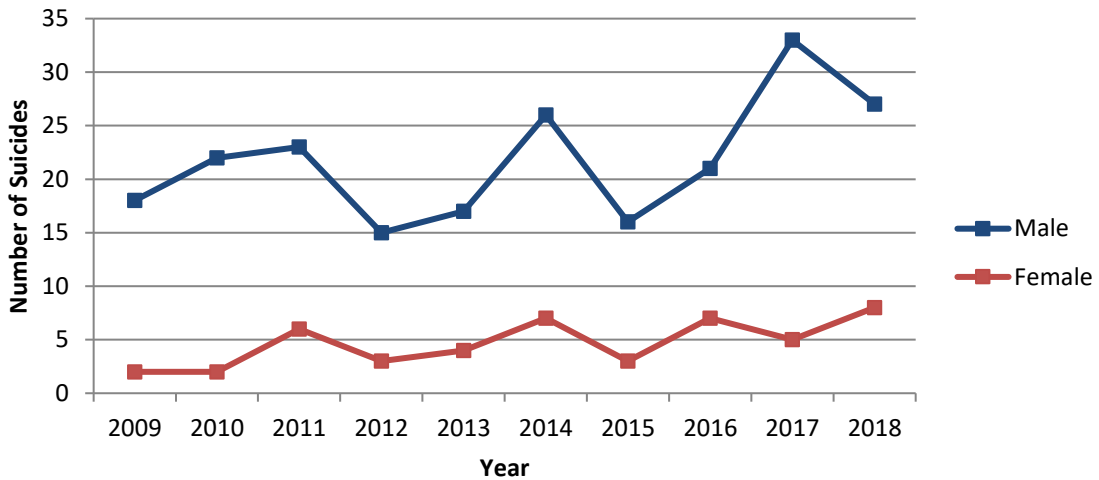


**Figure 4**

**NH Male Youth Suicide Deaths Decrease then Increase 2009-2018, While Female Youth Rates have Remained Relatively Stable.**

**New Hampshire Youth Suicides from 2009 to 2018 by Gender**

Data Source: Office of the Chief Medical Examiner, NH



## Older Adult Suicide in NH

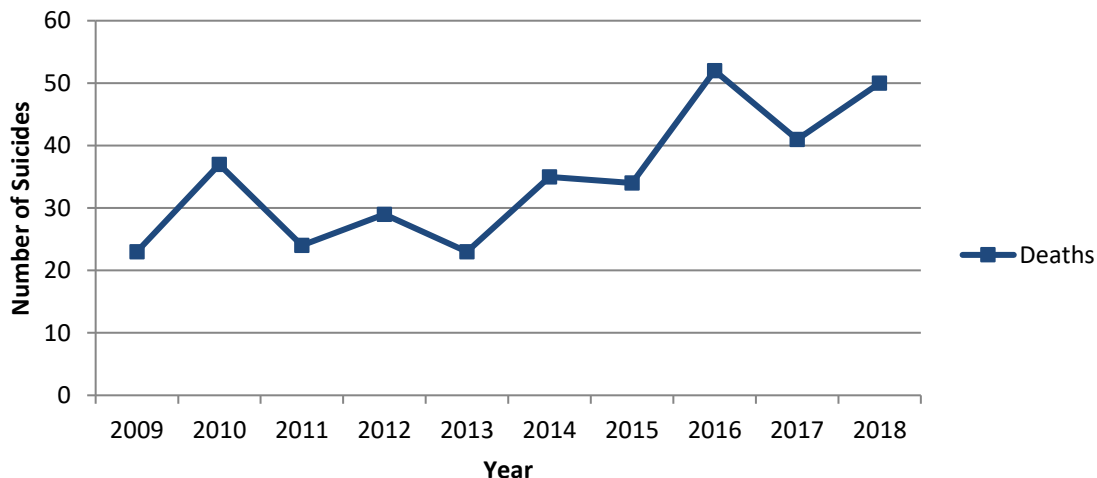
In light of the rapidly expanding number and proportion of older adults in New Hampshire's population, suicide in older adults is on course to become a growing public health concern. Added to the changing demographics is the rising prevalence of mental illness and substance disorders. Untreated mental 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>2</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.

**Figure 5**  
**NH Older Adults, Ages 65+, Suicide Deaths.**

### **New Hampshire Older Adult (Ages 65+) Suicides from 2009 to 2018**

Data Source: Office of the Chief Medical Examiner, NH



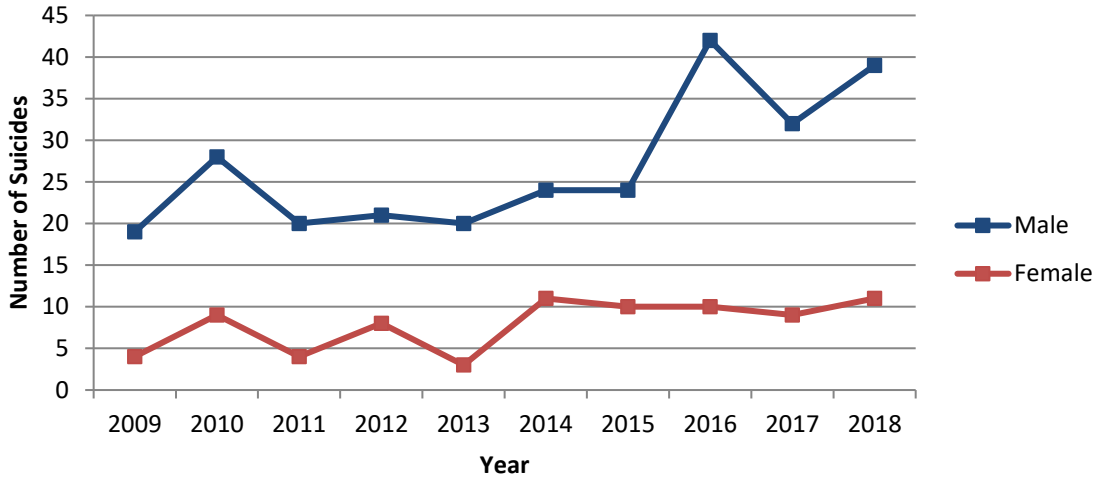
<sup>2</sup> Conwell Y. Suicide and suicide prevention in later life. Focus 2013; 11(1): 39–47.

[http://www.aoa.gov/AoA\\_Programs/HPW/Behavioral/docs2/Suicide%20Prevention%20Webinar%20Presentation%20Slides2.pdf#page=14](http://www.aoa.gov/AoA_Programs/HPW/Behavioral/docs2/Suicide%20Prevention%20Webinar%20Presentation%20Slides2.pdf#page=14)

**Figure 6**  
**The Number of Male and Female Older Adult Deaths are Relatively Stable from Year to Year.**

**New Hampshire Older Adult (Ages 65+) Suicides 2009 to 2018 by Gender**

Data Source: Office of the Chief Medical Examiner, NH



**Suicide Across the Lifespan in NH**

**Table 10** presents the most up-to-date data on individuals of all ages in NH as reported by the OCME. When comparing the period from 2009 to 2013 with the period from 2014 to 2018 there is a noticeable increase in the number deaths from one five year period to the next. The proportion of deaths by gender, age group, and method remained relatively consistent from one period to the next. The number of deaths by year have been plotted in **Figure 7** (pg. 31) and **Figure 8** (pg. 31).

**Table 10****NH All Ages Suicide Death Trend, by Gender, Age Group and Method, 2008-2017.**

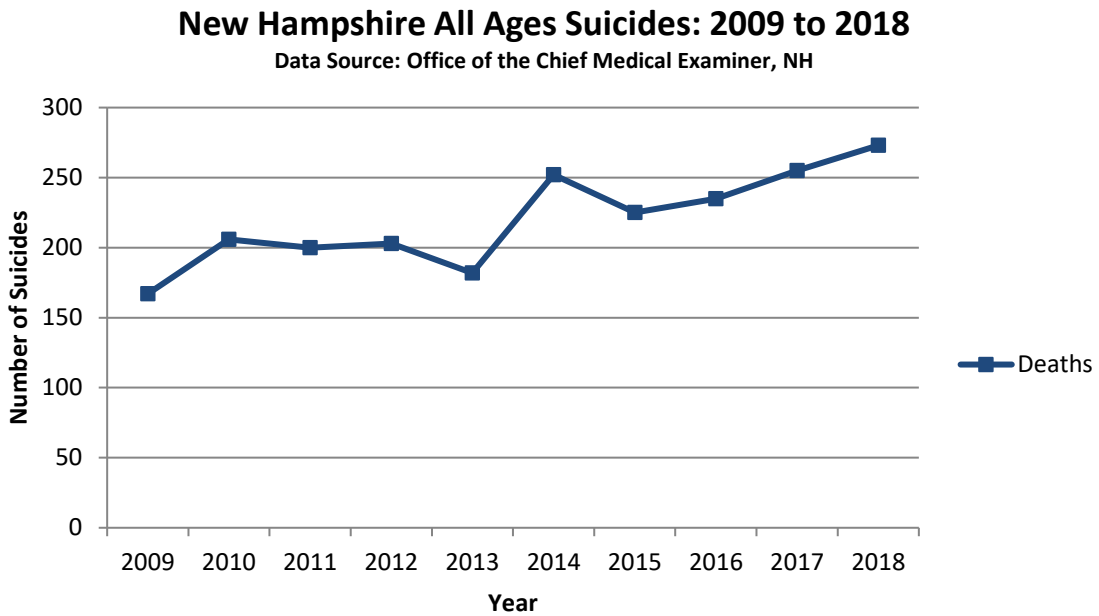
Year	Total	Male	Female	≤ 24	25-44	45-64	65+	Firearms	Hanging/ Asphyxiation	Drugs/ Poison	Other
<b>2009</b>	167	136	31	20	51	73	23	80	48	31	8
<b>2010</b>	206	159	47	24	56	89	37	103	49	40	14
<b>2011</b>	200	162	38	29	49	98	24	77	61	37	25
<b>2012</b>	203	160	43	18	60	96	29	97	56	29	21
<b>2013</b>	182	140	42	21	46	92	23	81	60	31	10
<b>2009- 2013 Sub Total</b>	958	757	201	112	262	448	136	438	274	168	78
<b>Percent of Sub Total<sup>3</sup></b>	100%	79%	21%	12%	27%	47%	14%	46%	29%	18%	8%
<b>2014</b>	252	192	60	33	83	100	36	112	70	42	28
<b>2015</b>	225	162	63	19	76	97	33	100	67	40	18
<b>2016</b>	235	173	62	28	76	78	52	121	62	34	17
<b>2017</b>	255	196	59	38	74	102	41	124	76	44	11
<b>2018</b>	273	219	54	35	66	122	50	132	86	29	26
<b>2014 - 2018 Sub Total<sup>5</sup></b>	1240	942	298	153	375	499	212	589	361	189	100
<b>Percent of Sub-Total</b>	100%	76%	24%	12%	30%	40%	17%	48%	29%	15%	8%
<b>Total</b>	2198	1699	499	265	637	947	348	1027	635	357	178
<b>Percent of Total<sup>4</sup></b>	100%	77%	23%	12%	29%	43%	16%	47%	29%	16%	8%

Produced by: NAMI NH

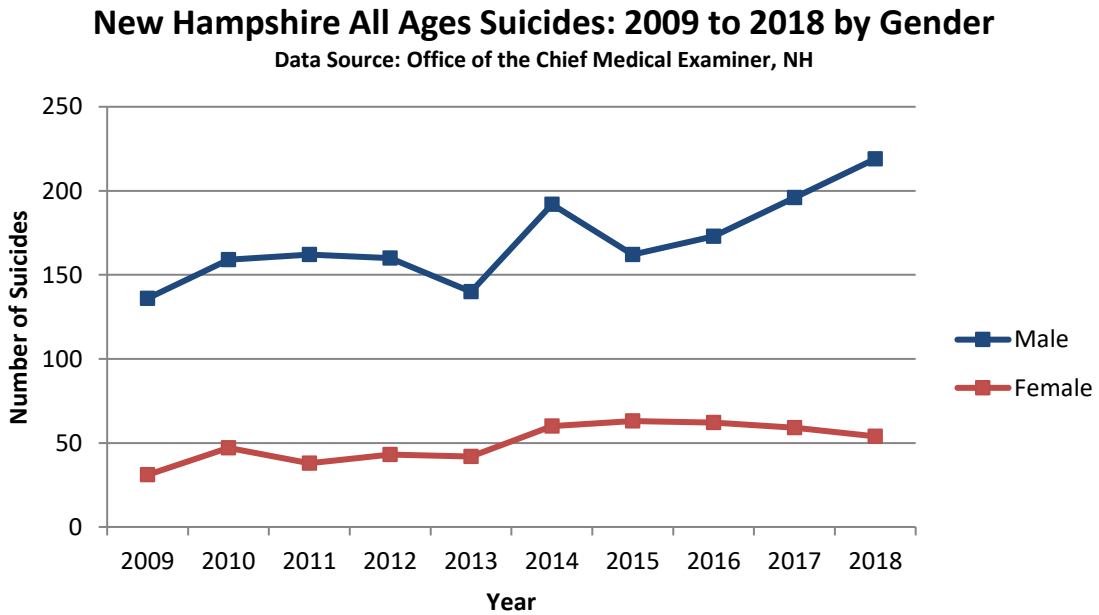
Data Source: NH OCME

<sup>3</sup>Note: Rounding may cause percentages to not total to 100%

**Figure 7**  
**NH Residents, All Ages, Suicide Deaths 2009 - 2018**



**Figure 8**  
**NH Male and Female Suicide Rates 2009 – 2018**



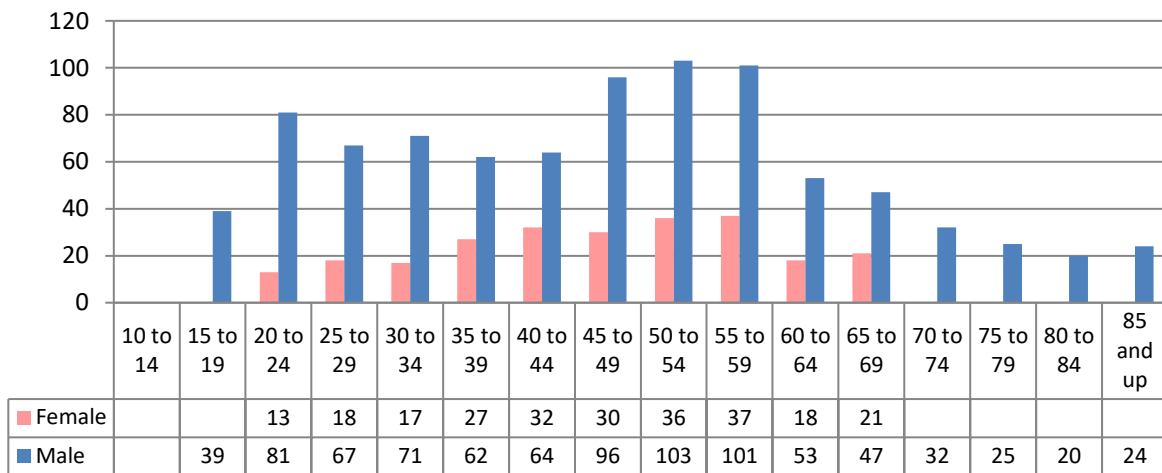
**Figure 9** (below) and **Figure 10** (pg. 33), respectively, display NH suicide deaths and suicide death rates for all ages by age groups and gender from 2013-2017. Rates are expressed as the number of suicide deaths per 100,000 people. Displayed together, these charts reveal how death rates correct 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 59. 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 9**

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

**New Hampshire Resident Suicide Deaths by Age Group, 2013-2017**

Data Source: CDC WISQARS\*



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

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.

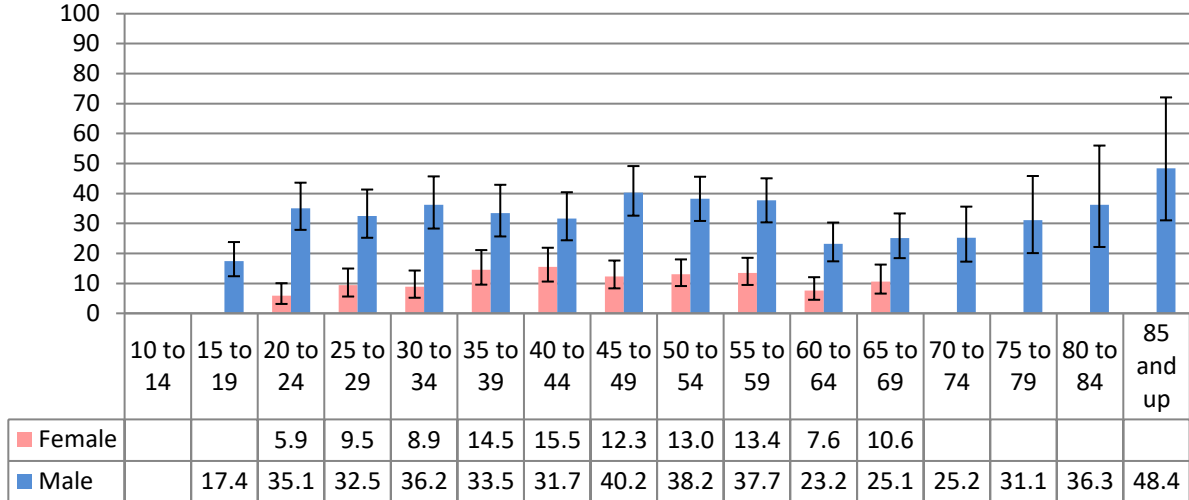


**Figure 10**

**Male NH residents over age 85 have the highest rate of suicide deaths, and male youth transition periods see the most significant changes in suicide rates, between ages 10-14 to 15-19.**

**New Hampshire Resident Suicide Death Rates (per 100,000)  
By Age Group, 2013-2017**

Data Source: CDC WISQARS\*



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

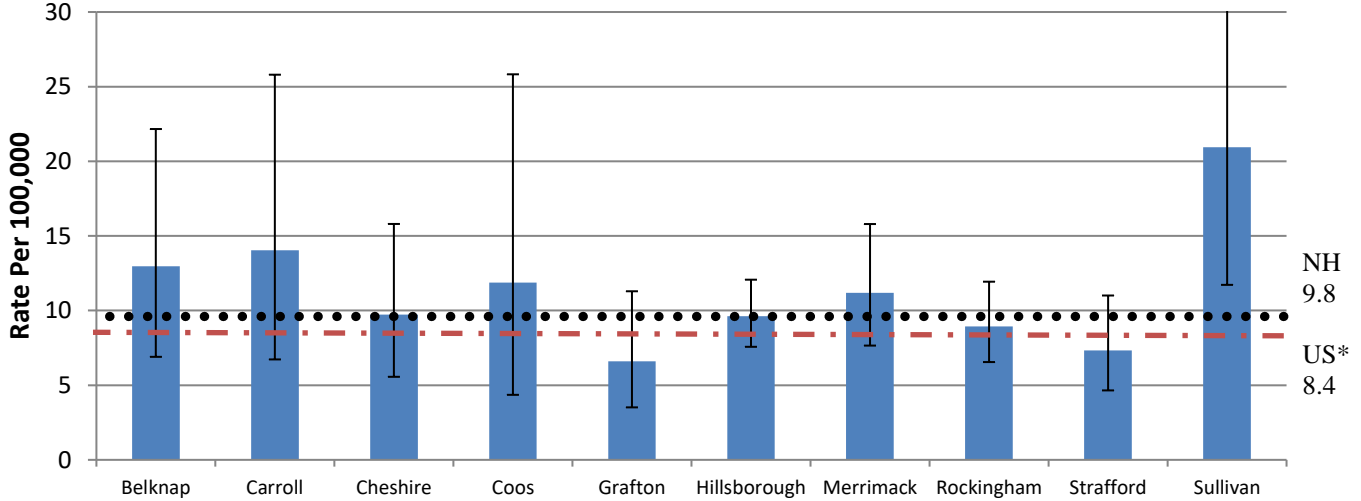
**Geographic Distribution of Suicide in NH**

The numbers and rates of suicide in NH are not evenly distributed throughout the state. **Figure 11** (pg. 34) shows youth and young adult suicide rates by county in NH. **Figure 12** (pg. 34) presents this data for NH residents of all ages. 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 rate for Rockingham County (all ages rate: 13.2 per 100,000) is significantly lower than the all ages suicide rates for Carroll County (all ages rate: 21.2 per 100,000), Coos County (all ages rate: 19.8), Merrimack County (all ages rate: 17.0), and Sullivan County (all ages rate: 19.9). It is also significantly below the overall NH rates (all ages rate: 15.6 per 100,000). For youth and young adults, the rate for Sullivan County (19.4 per 100,000) was significantly above the rate for Grafton county (youth age 10-24 rate: 6.6 per 100,000) and Strafford County (youth age 10-24 rate: 7.3), as well as being above the NH and US youth age 10-24 rates of 9.8 and 8.4 per 100,000 respectively. 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 13** (pg. 35) presents the suicide rates for all ages from 2009 to 2018 as a NH map broken down by county.

Figure 11

New Hampshire Youth Suicide Crude Death Rates by County  
Ages 10-24 2009-2018

Data Source: Office of Chief Medical Examiner, NH

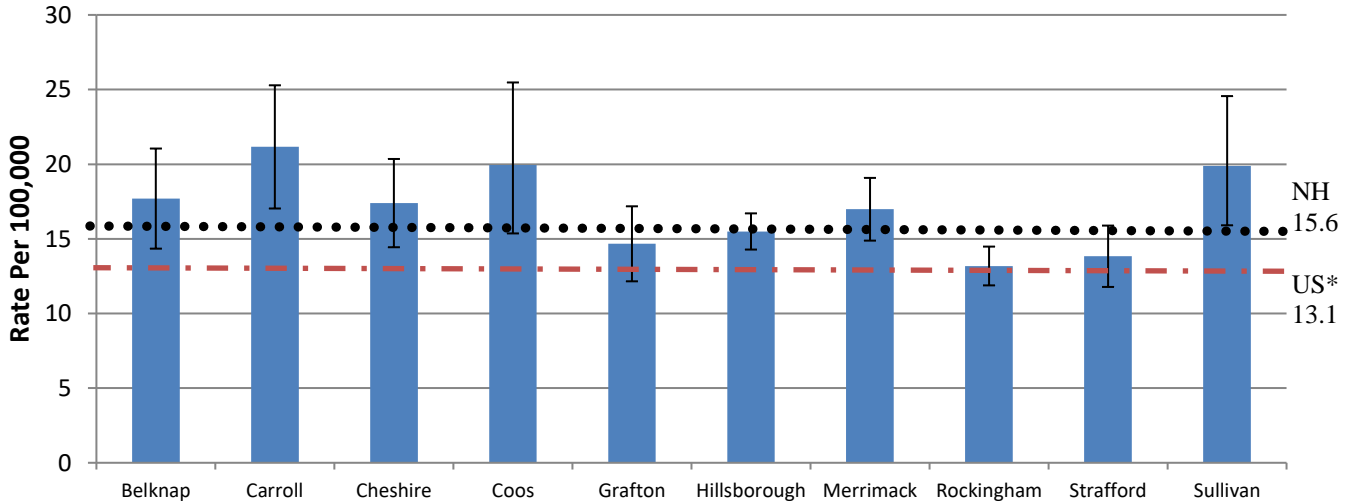


\*US Rate is only through 2017  
Source: CDC WISQARS

Figure 12

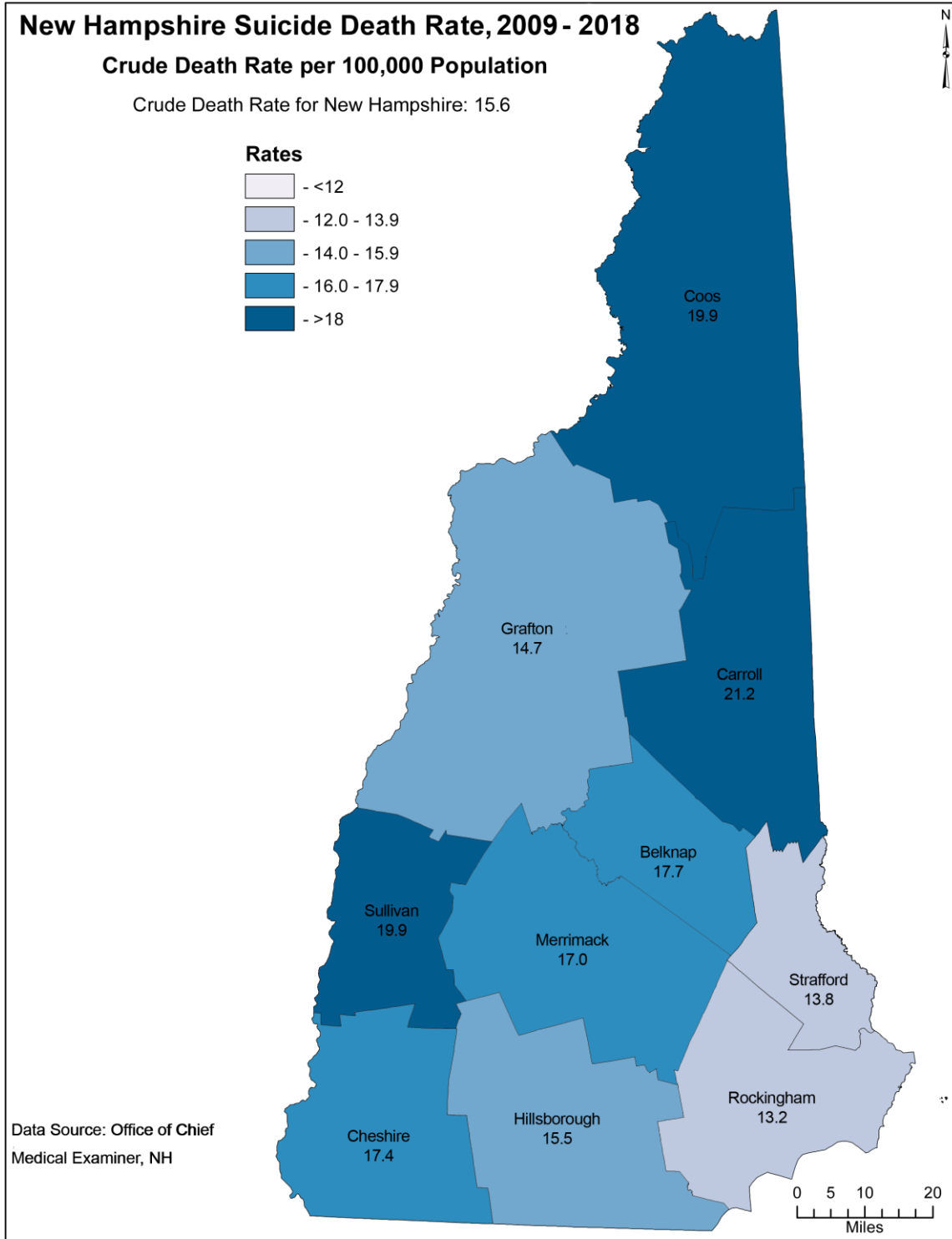
New Hampshire Resident Suicide Crude Death Rates by County  
All Ages 2009-2018

Data Source: Office of Chief Medical Examiner, NH



\*US Rate is only through 2017  
Source: CDC WISQARS

**Figure 13**  
**Map of NH suicide death rates**



## Suicide Behavior in NH: Gender Differences - Attempts and Deaths

### Youth and Gender

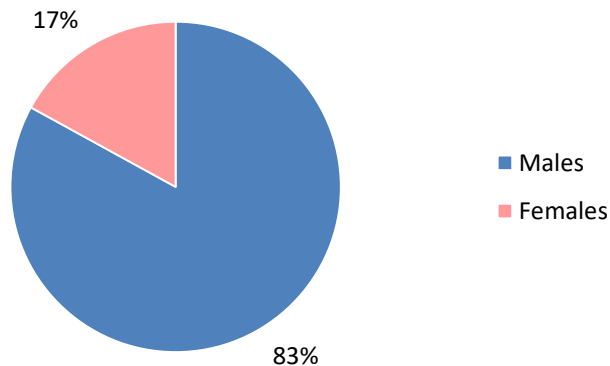
While males represent over 80% of the youth and young adult suicides from 2013-2017, the fact that males *die* by suicide at a higher rate than females may largely be due to males using more lethal means. See **Figures 14** (below) and **15** (pg. 37). In fact, females *attempt* suicide at a higher rate 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 2017 NH Youth Risk Behavior Survey (YRBS) reports approximately 1.8 times as many female youth attempt suicide as males each year (8.0 % of females and 4.6% of males). Emergency department (ED/ambulatory) data reveals a similar gender ratio, based on self-inflicted injury rates.<sup>4</sup>

**Figure 14**

**Four times as many male NH residents ages 10-24 died by suicide 2013-2017.**

**NH Resident Suicide Deaths by Gender 2013-2017, Ages 10-24, N=147**

Data Source: CDC WISQARS



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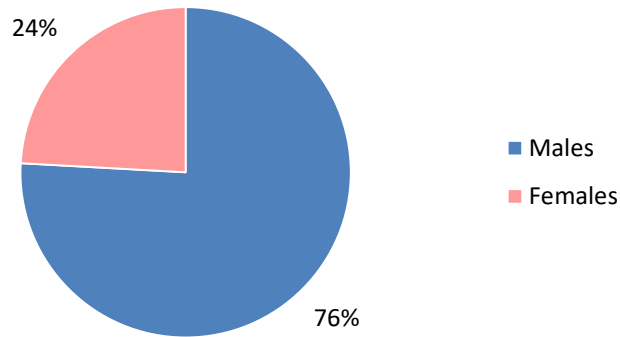
<sup>4</sup> Classifying an injury as self-inflicted is another way of stating that the injury was an instance of deliberate self-harm. Not all self-inflicted injuries necessarily represent suicide attempts. However, analysis of these injuries is the best currently available proxy for estimating suicide attempts.

**Figure 15**

**Three times more male than female NH residents of all ages died by suicide 2013-2017.**

**NH Resident Suicide Deaths by Gender 2013-2017, All Ages, N=1,169**

Data Source: CDC WISQARS



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 make a greater number of attempts than males – 1.1-1.8 times as often (**Figure 16, Figure 17, and Figure 18** – pgs. 38-39). 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.

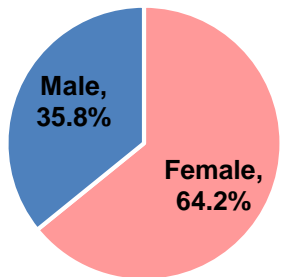
**Quick Facts/Talking Points**

- Males in NH die by suicide at a rate that is three times the rate for females (CDC WISQARS, 2017).
- Although males are more likely than females to die by suicide, females report attempting suicide at nearly twice the rate of males (NH YRBS, 2017)
- Suicides are preventable (WHO. Suicide prevention: a global imperative. Geneva, Switzerland: WHO Press; 2014).

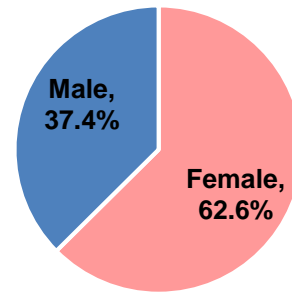
The EMS data presents the number of times individuals were treated and/or transported by an EMS provider where the individual had some type of self-inflicted injury. As with the hospital data, the EMS data looks at the number of visits/incidents, not unique individuals. The EMS data comes from a different 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 16**  
**A greater percentage of female than male NH residents attempted suicide, as seen in inpatient self-inflicted injuries 2012-2016.**

**NH Resident Inpatient Discharges for Self-Inflicted Injuries, by Gender, Ages 15-24 Years, 2012-2016**  
 Data Source: Injury Surveillance Program, NH DHHS  
 N=572

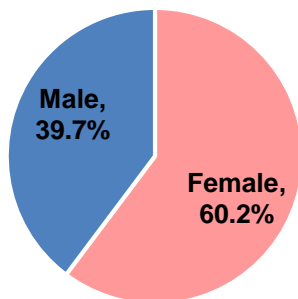


**NH Resident Emergency Department Discharges for Self-Inflicted Injuries, by Gender, Ages 15-24 Years, 2012-2016**  
 Data Source: Injury Surveillance Program, NH DHHS  
 N=3372

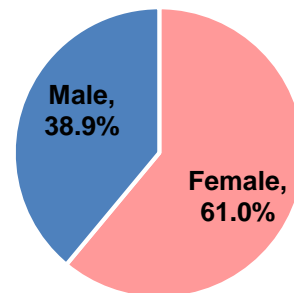


**Figure 17**  
**A greater percentage of female than male NH residents attempted suicide, as seen in ambulatory self-inflicted injuries 2012-2016.**

**NH Resident Inpatient Discharges for Self-Inflicted Injuries, by Gender, All Ages, 2012-2016**  
 Data Source: Injury Surveillance Program, NH DHHS  
 N=2785



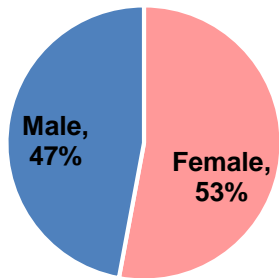
**NH Resident Emergency Department Discharges for Self-Inflicted Injuries, by Gender, All Ages, 2012-2016**  
 Data Source: Injury Surveillance Program, NH DHHS  
 N=8317



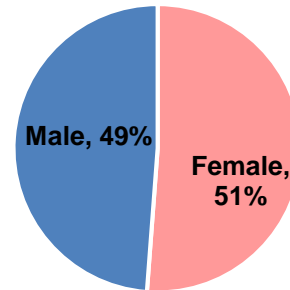
**Figure 18**

**A greater percentage of female than male NH residents attempted suicide, as seen by self-inflicted injuries treated by Emergency Medical Services self-inflicted injuries 2017.**

Self-Harm by Gender Ages 0-29, 2017-2018  
New Hampshire Department of Safety, Division of Fire  
Standards and Training and Emergency Medical  
Services  
N=1538



Self-Harm by Gender All Ages, 2017-2018  
New Hampshire Department of Safety, Division of Fire  
Standards and Training and Emergency Medical  
Services  
N=3481



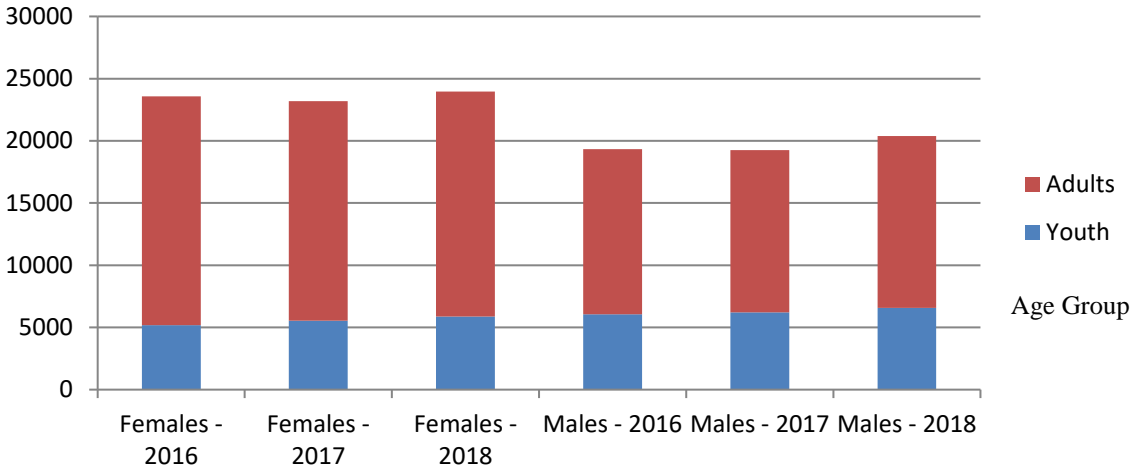
Gender differences exist not only for suicide attempts and deaths, but also for help-seeking behavior. A recent CDC report indicated that approximately half of individuals who take their own life had a mental health condition; the most common diagnoses being depression, anxiety and substance abuse disorders<sup>5</sup>. Yet a much smaller percentage were receiving treatment. In NH, over 44,000 people received treatment at one of the state’s ten Community Mental Health Centers (CMHC)<sup>6</sup>each year. In 2018, this works out to approximately 1 out of every 31 residents in the state. Of those individuals in treatment, approximately 54% of them were female and 46% were male. This is illustrated in **Figure 19** (pg. 39). 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.

<sup>5</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: <http://dx.doi.org/10.15585/mmwr.mm6722a1>.

<sup>6</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 services to individuals and families who meet certain criteria for services. More information on the centers is available from <http://www.dhhs.state.nh.us/dcbcs/bbh/centers.htm>

**Figure 19**  
**Individuals receiving treatment at NH Community Mental Health Centers presented by age and gender.**

**Individuals in Treatment at NH CMHC's  
 2016-2018 - Presented By Age Group and Gender**  
 Data Source: NH Bureau of Behavioral Health



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 1,703 admissions to New Hampshire Hospital (estimates based on New Hampshire Hospital admissions for fiscal years 2014 - 2018<sup>7</sup>). **Figure 20** (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

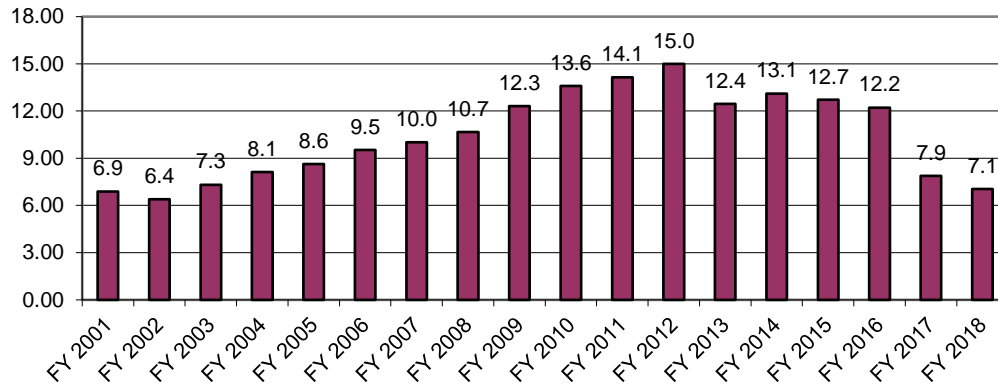
<sup>7</sup> The NH State Fiscal Year runs from July 1<sup>st</sup> of one calendar year through June 30<sup>th</sup> of the following calendar year (e.g., fiscal year 2018 ran from July 1<sup>st</sup> 2017 through June 30<sup>th</sup> 2018).



**Figure 20**

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

\*Patients mostly admitted to admission units and APC



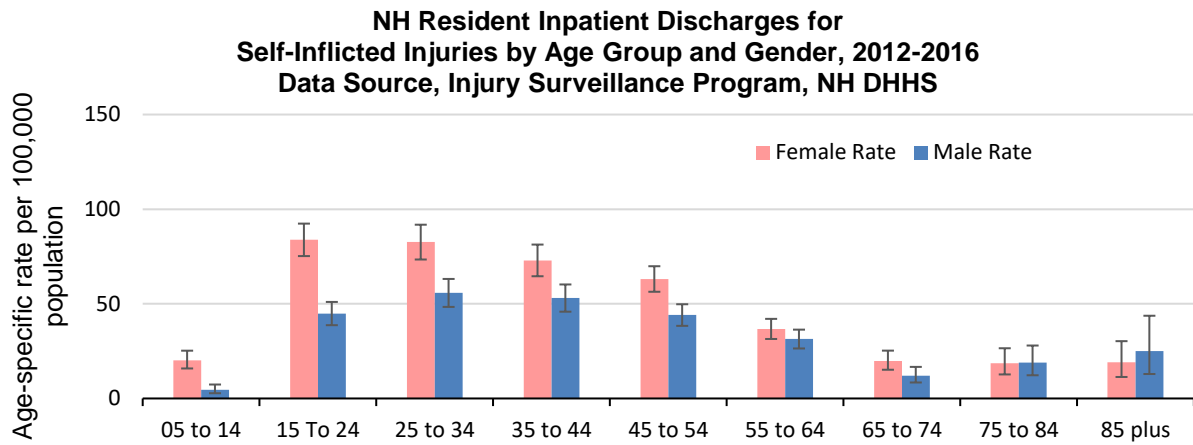
**Age, Gender and Self-inflicted Injury**

When the rates from 2012-2016 for NH resident inpatient hospitalizations/discharges and emergency department use for self-inflicted injuries are examined by gender and age group, the variability can be seen (**Figures 21 and 22** – pg. 42). 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 self-inflicted 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 21** pg. 42) 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 22** (pg. 42), 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 23** pg. 43), which includes individuals treated and/or transported by Emergency Medical Services for a self-inflicted injury, presents a similar picture to the hospital data. Males age 20 to 29 present the highest rates of self-inflicted injuries. Female rates are generally higher in most other age groups.

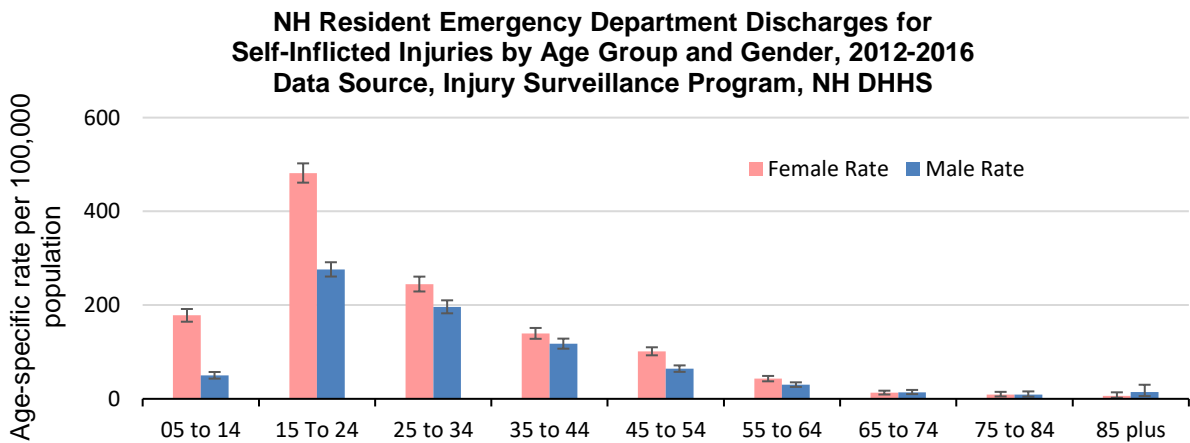
**Figure 21**

**NH female residents ages 15-24 and 25-34 show the highest rates of suicide attempts, higher than males of any age group.**



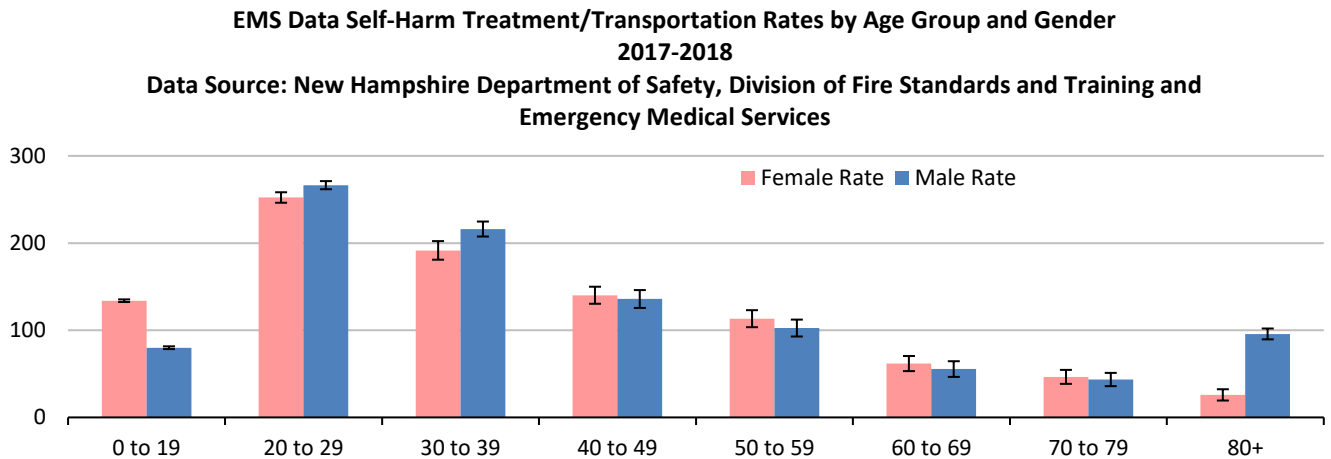
**Figure 22**

**NH female residents ages 15-24 show the highest rates of suicide attempts, with male rates also peaking at this age.**



**Figure 23**

**NH male residents ages 20-29 show the highest rates of suicide attempts followed closely by female rates from the same age group.**



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 receiving Crisis Intervention Team (CIT) Training 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, diffuse 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 2017, 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 3,600 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.

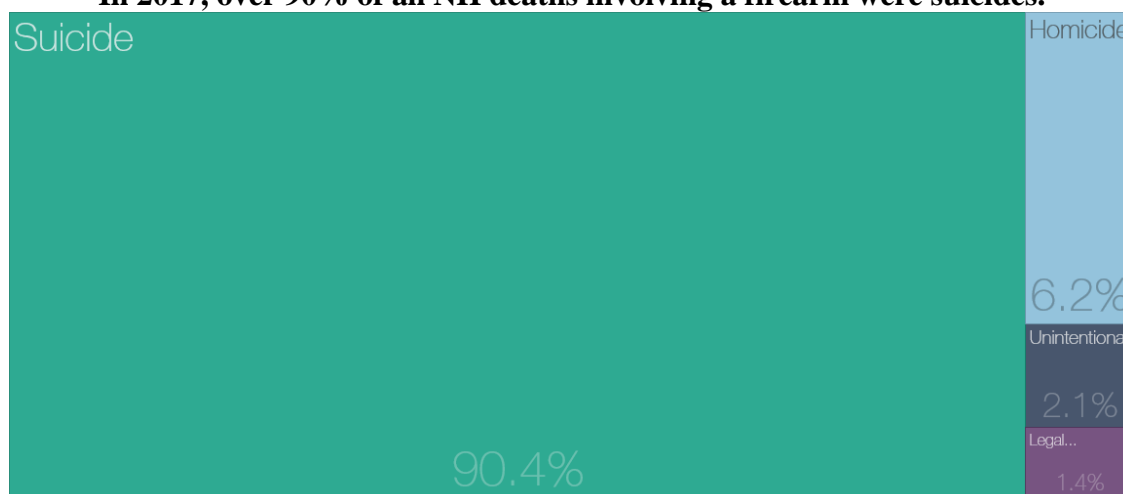
While the great majority of self-inflicted injuries<sup>8</sup> are not fatal, because of the larger incidence they directly and indirectly affect a greater number of people than do fatalities. A significant risk factor for suicide is a previous attempt: in one study 21-33% of people who die by suicide 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.

## 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 2013 and 2017, 57% used firearms compared to 16% of females (**Figure 25** – pg. 45). 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 75 for males, with more than 80% 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 24** below.

**Figure 24**

**In 2017, over 90% of all NH deaths involving a firearm were suicides.**



Data Source: CDC WISQARS, 2017

Suicide attempt methods have varying lethality. **Figure 26** (pg. 46) 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.

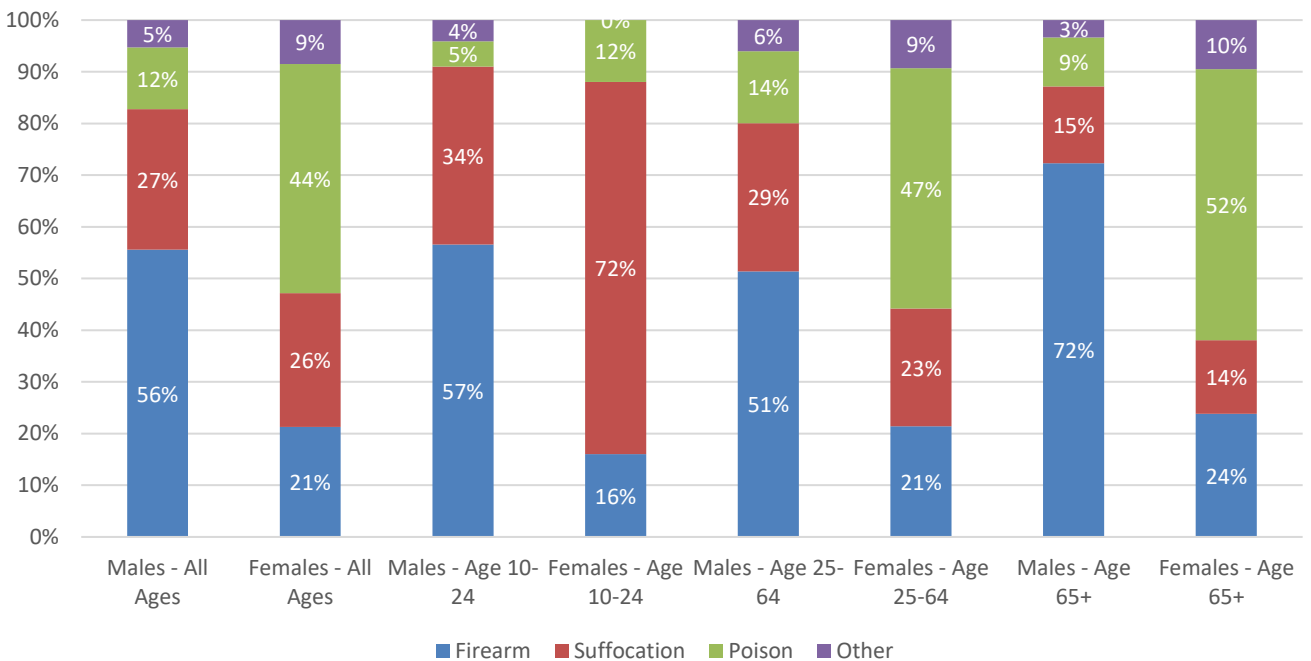
<sup>8</sup> Classifying an injury as self-inflicted is another way of stating that the injury was an instance of deliberate self-harm. Not all self-inflicted injuries necessarily represent suicide attempts. Analysis of these injuries, however, is the best currently available proxy for approximating suicide attempts.

**Figure 27** (pg. 46) 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 26** pg. 46) does not show this same proportion of cut/pierce injuries indicating that EMS providers may treat self-inflicted cut/pierce injuries without 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 28** – pg. 47).

**Figure 25**

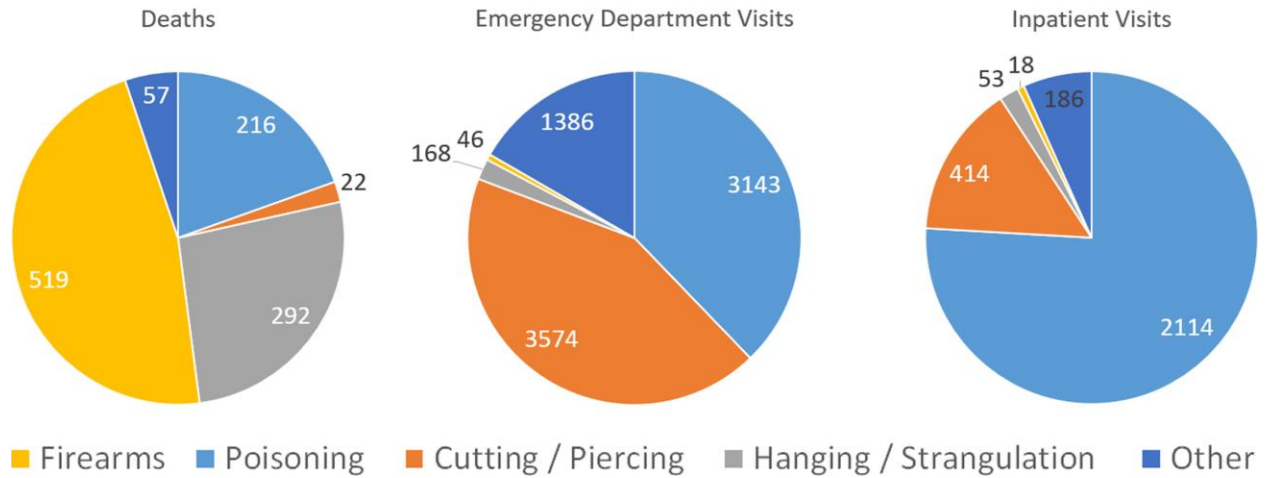
**Variation in Method of Completed Suicide Deaths by Gender and Age Group, 2013-2017.**

**Method Used in Completed Suicides, 2013-2017**

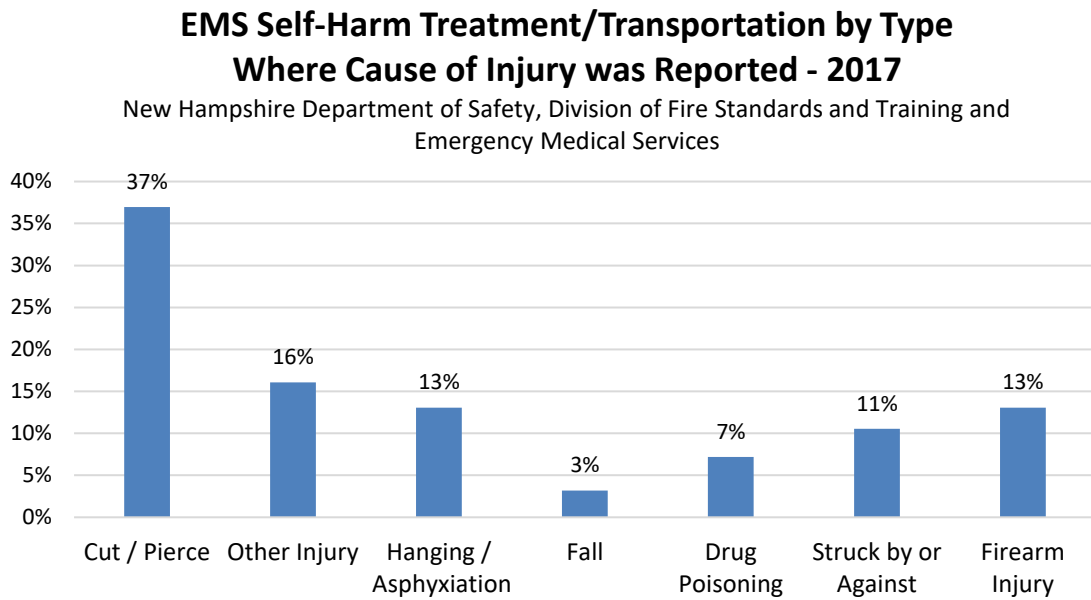


**Data Source:** CDC WISQARS

**Figure 26**  
**Count of Lethality of Means Used for Suicidal Behavior in NH, 2012-2016**  
**Data Source: Injury Surveillance Program, NH DHHS**



**Figure 27**  
**Percent of method of self-inflicted injuries treated/transported by EMS from 2017.**

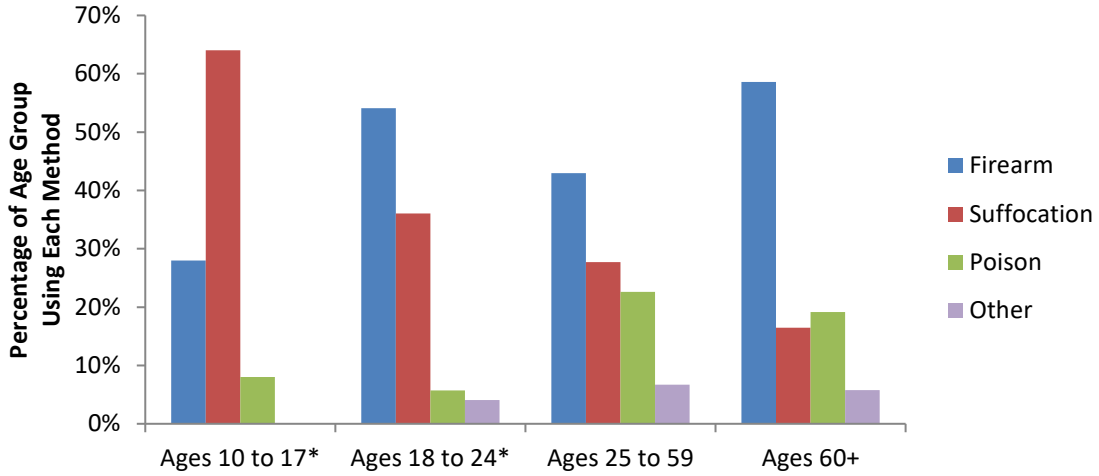


**Figure 28**

**Suicide methods used in NH vary by age group, as seen in 2013-2017.**

### Suicide Methods Used by Age Group NH Data, 2013-2017

Data Source: CDC WISQARS

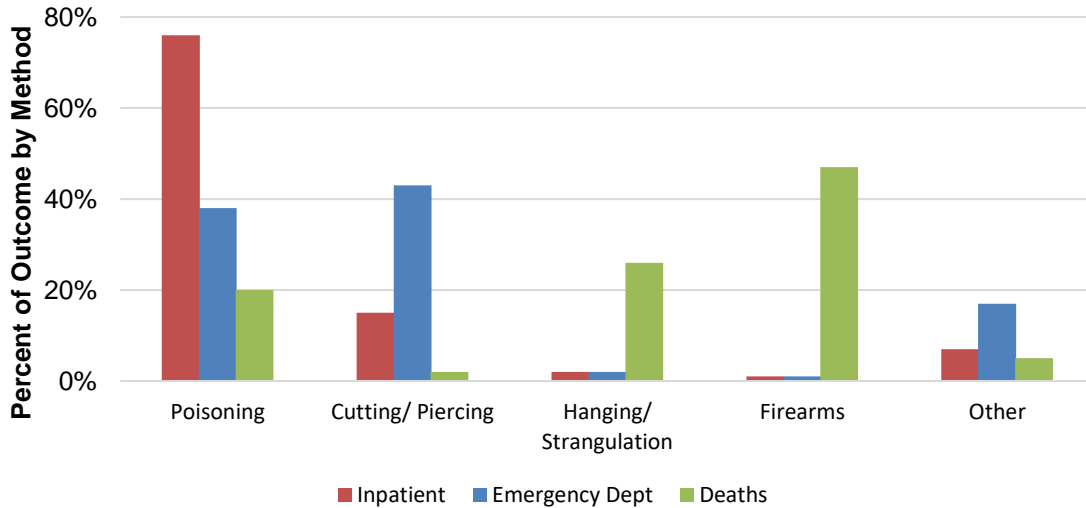


**Figure 29**

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

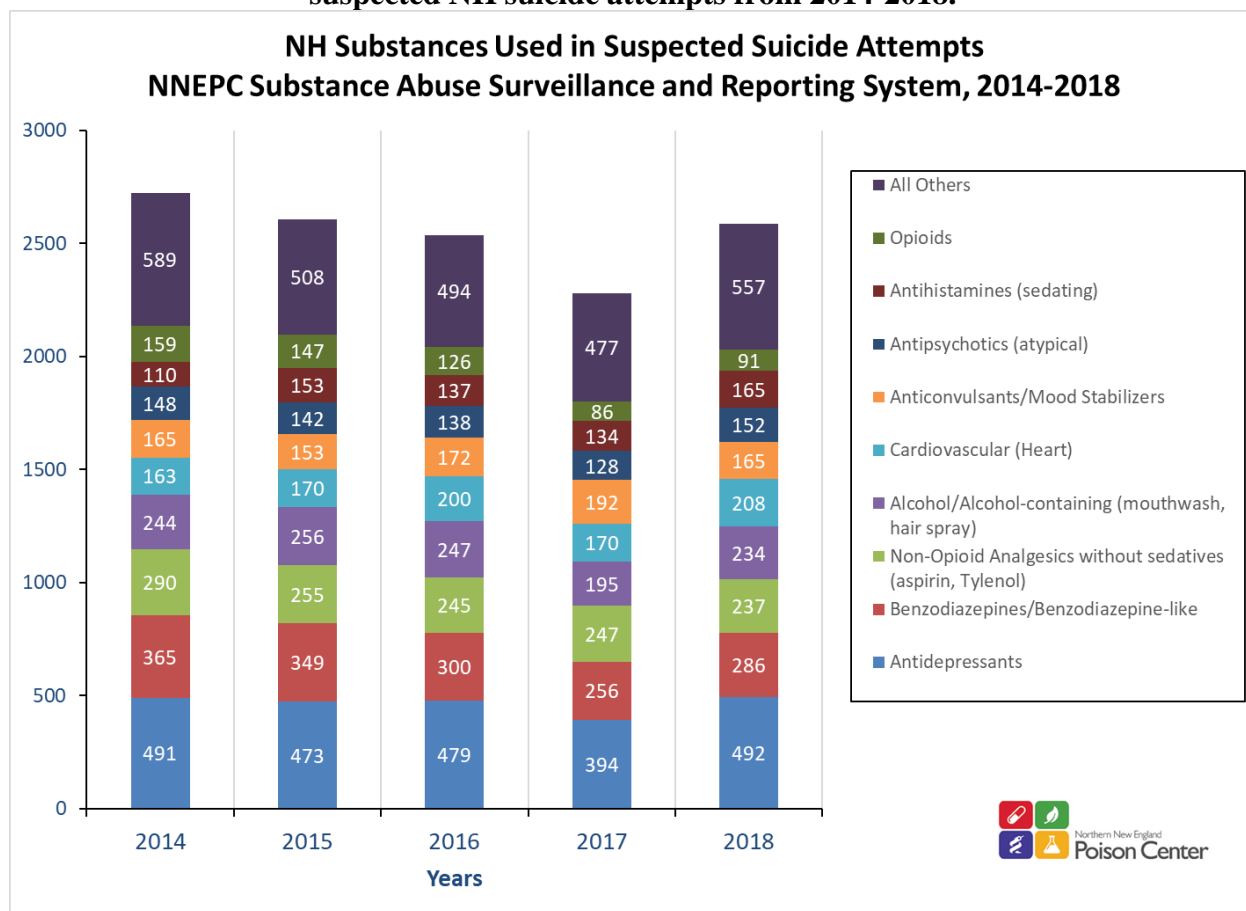
### Percent of Total Lethality of Means Used for Suicidal Behavior in NH, 2012-2016

Data Source: Injury Surveillance Program, NH DHHS



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 29** pg. 47). **Figure 30** (below) depicts the prevalence of the most common substances used in suspected suicide attempts in NH as collected by the NNEPC. The top two from 2014 through 2018 have been Antidepressants and Benzodiazepines.<sup>9</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.

**Figure 30**  
**Antidepressants and Benzodiazepines have been the top substances used in suspected NH suicide attempts from 2014-2018.**



<sup>9</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 - [SMITHC12@mmc.org](mailto:SMITHC12@mmc.org).



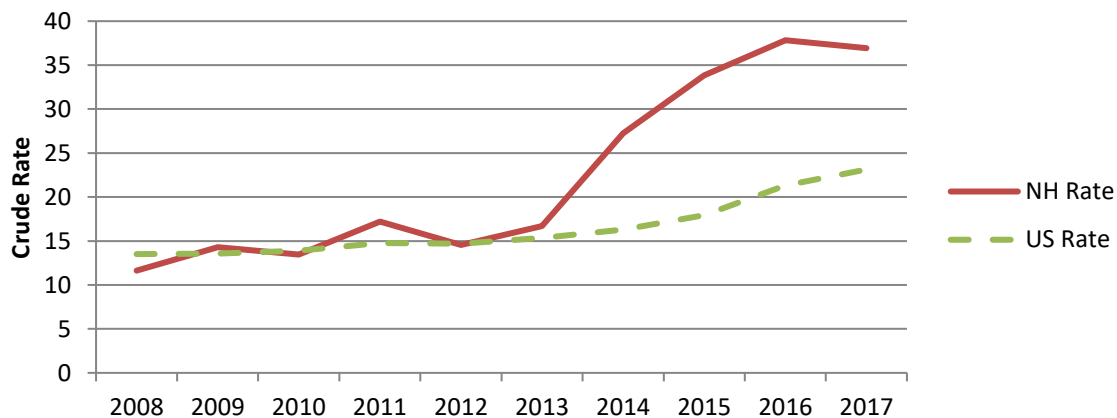
### Increasing Accidental Poisoning and Drug-Related Death Rates – Cause for Concern

As seen in **Figure 31** (below), the accidental poisoning and drug-related death rates in NH and the US as a whole have steadily increased from 2008 to 2017. During this time the US rate has increased by approximately 70 percent while the NH rate has increased more than 215 percent. 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 31**

**Poisoning/Drug-related death rates in NH increase by more than 215% from 2008 to 2017.**

### Poisoning/Overdose Death Rates 2008 - 2017



Data Source: CDC WISQARS

### Reducing Access to Lethal Means

Reducing access to lethal means is part of many suicide prevention goals and protocols, including the National Strategy for Suicide Prevention, NH’s Suicide Prevention Plan, the Gun Shop Project, *Connect* and CALM. While it has not been conclusively demonstrated that the efforts being undertaken in NH and nationally to reduce access to lethal means are responsible for the reductions in suicides using firearms. These reductions suggest that when access to a highly lethal means is reduced, there is little “means substitution” (seeking a different method of suicide). Means reduction may be an effective part of a comprehensive suicide prevention strategy.

## Linking At-Risk Individuals with Help

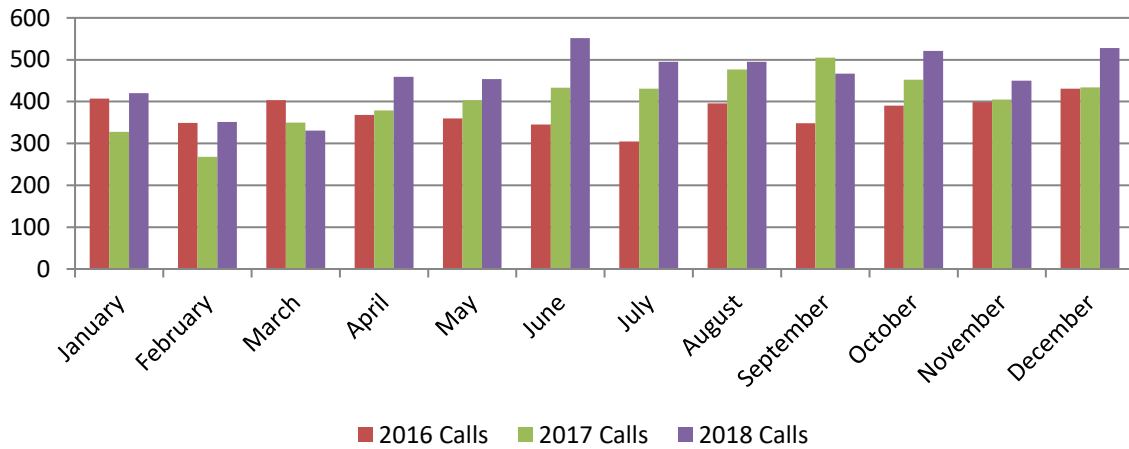
Crisis lines, such as the National Suicide Prevention Lifeline (NSPL) are vital to suicide prevention efforts in NH and nationally. In 2017, there were 3,913,210 calls made to the NSPL. 4,865 of these calls, or roughly 405 per month were received by the NH NSPL call center (see **Figure 32** below). 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 32**

**NH NSPL call center responded to an average of 405 calls per month in 2017.**

### Calls Volume for the NH NSPL Call Center 2016-2018



### **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 NH.

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

There were between 33,283 and 44,501 years of potential life lost<sup>10</sup> to suicide from 2013-2017 in NH (CDC WISQARS). Suicide's most obvious cost 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, 2017). 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, 2017). 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, 2017).

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<sup>10</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.

## NH Violent Deaths Reporting System (NH-VDRS), 2015 – 2017

**This NH-NVDRS Analysis as prepared by Djelloul Fourar-Laidi, Planning Analyst, NH-VDRS, NH Office of Medical Examiner, NH Department of Justice.**

**For information regarding NH-NVDR, to request data, or to request a presentation at a meeting or event, contact:**

- Djelloul Fourar-Laidi, Planning Analyst/NH-VDRS Project Manager, Office of Chief medical Examiner, NH Department of Justice, djelloul.fourar-laid@doj.nh.gov, 603-271-1235 x7.
- 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, 29 Hazen Drive, Concord, NH 03301, JoAnne.MilesHolmes@dhhs.nh.gov, 603-271-5384.
- Kim Fallon, Chief Forensic Investigator, Office of Chief Medical Examiner, kim.fallon@doj.nh.gov, (603) 271-1235 x4.

### **Summary:**

In New Hampshire, all deaths have to be reported by law to the Office of Chief Medical Examiner, as per RSA-611-B:11- B:12. The NH Department of Health and Human Services (DHHS) was awarded the National Violent death Reporting System (NVDRS) grant in 2014 for a five-year period. NH DHHS was recently awarded a three-year continuation of the NVDRS grant, 2019 to 2022. DHHS collaborates with the NH Department of Justice (DOJ) on implementation of the NH NVDRS (NH-VDRS) 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 database secured system consistent with all other 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. In addition, NH-VDRS doubles as the database for opioid overdose deaths. The accidental opioids overdose death data collection follows a different case definition than the NVDRS Project. The administration of the opioid surveillance grant falls under a different CDC group. The NH-VDRS at OCME works on all violent deaths including opioid accidental death data. All de-identified and required data collected for either project (on violent deaths or accidental deaths) are entered into the de-identified database system (NVDRS); and all reports and analyses are compliant with government reporting standards.

NH-VDRS data sources 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 police (Law Enforcement: LE) reports which include state, local and sheriff department reports.

For the third year in a row, NH-VDRS is producing an "NH Annual Suicide Data Report" to be co-located within the "NH Suicide Prevention Annual Report" co-authored by the NH Suicide Prevention Council, the NAMI New Hampshire and the NH Youth Suicide Prevention Assembly. The objective of this co-location is to maximize the outreach and to assist in

providing information to suicide prevention stakeholders in NH. To reach a wider audience, the report and analysis is posted online at: [theconnectprogram.org/articles/annual-reports/](http://theconnectprogram.org/articles/annual-reports/) and [www.dhhs.nh.gov/dphs/bchs/spc/index.htm](http://www.dhhs.nh.gov/dphs/bchs/spc/index.htm).

Furthermore, all stakeholders are encouraged to help disseminate the content of these analyses and reports to authorities, policy makers and analysts, so that these findings become reference documentation on suicide.

NH-VDRS is required to report the outcomes of the data on violent deaths as defined by CDC grant requirements. This analysis primarily focuses on direct outcomes. This analysis is informative and does not engage in policy analysis.

**Disclosure: This work's funding is from the Centers for Disease Control and Prevention Cooperative Agreement Number 6 NU17CE002610-04-02.**

### **Overview of Suicides in New Hampshire:**

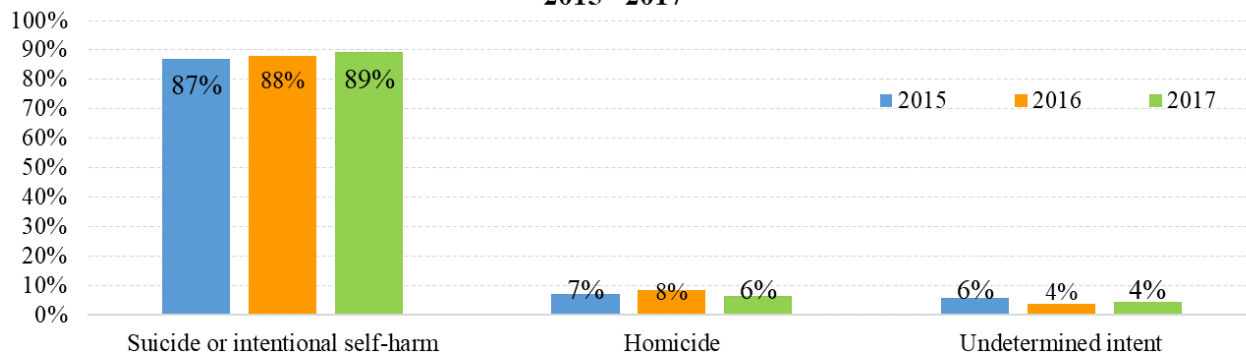
The last three years of data on suicide deaths in NH, 2015 – 2017, show a 1% increase each year. In reviewing this information, it is important for the reader to understand that there are other cases, for which the manner of death is undetermined, according to medical examiner decision on death certificates. CDC coding manual states that deaths of undetermined intent are included because this category includes deaths with some evidence of intent, but without enough to definitively classify the death as purposeful<sup>11</sup>. The percent of undetermined deaths for 2016 and 2017 remained leveled at 4%. The case definition for violent deaths considers only death data where the manner of death as noted on the death certificate as homicide, suicide, or any manner of firearm death, and confirmed by the medical examiner and law enforcement. **Figure 33** (pg. 54) shows all violent deaths: suicides, homicides (including police shootings) and undetermined deaths, in NH for the period 2015 - 2017.

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<sup>11</sup> <https://www.cdc.gov/violenceprevention/pdf/nvdrs/NVDRS-WebCodingManual.pdf>

**Figure 33**

**NH Manner of Violent\* Deaths  
2015 - 2017**



Source: CDC\_NH-VDRS\_dfl19  
\*-See Violent Death Definition page.

**Determining which cases were counted as suicides in NH**

Suicide death data is collected on all suicide victims who died in the state of New Hampshire. For the purpose of compliance with the CDC/NVDRS grant, the analysis in NH included all suicide victims who were residents of NH and died in NH; in addition, suicide victims resident in other states or countries and who died in NH were included. Please see **Figure 35** (pg. 55).

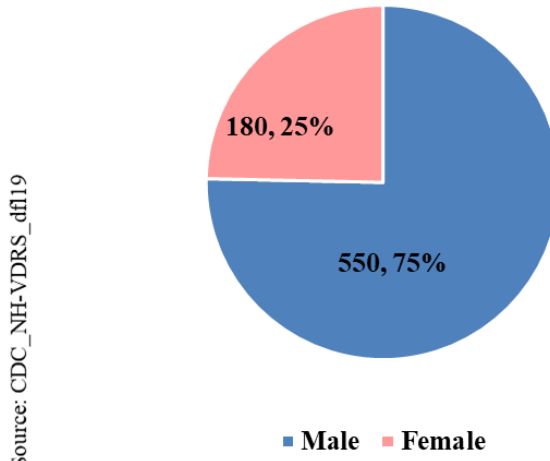
There are instances where focus was only on suicide victims who were NH residents. Such instances will be noted as they appear in this document. Suicide victims who are NH residents who died in other states are included in the NVDRS statistics in the state where they died. This ameliorates the issue of undercounting suicide victims nationally. Overall, the purpose of the collaborative work on violent deaths surveillance with CDC is to provide a full accounting of suicides nationally.

**Figure 34** (pg. 55) presents the aggregate percentage and number of suicides in NH for the period 2015-2017. This aggregation distribution is based on gender<sup>12</sup>. The number of male victims, for the period 2015-2017, are three times higher than female suicide victims. This pattern in general, is evident throughout this report. The total number of female suicides are constant year to year, in contrast to a continued increase in male suicides, (see **Figure 36** pg. 56).

<sup>12</sup> The use of gender is a default for Male & Female. The number of transgender cases is very small and it does not meet disclosure requirements.

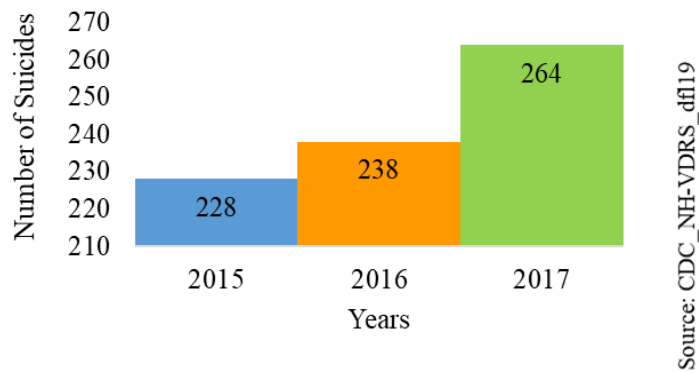
**Figure 34**

**Aggregate Suicides by Sex in NH: 2015-2017,  
NHVDRS**



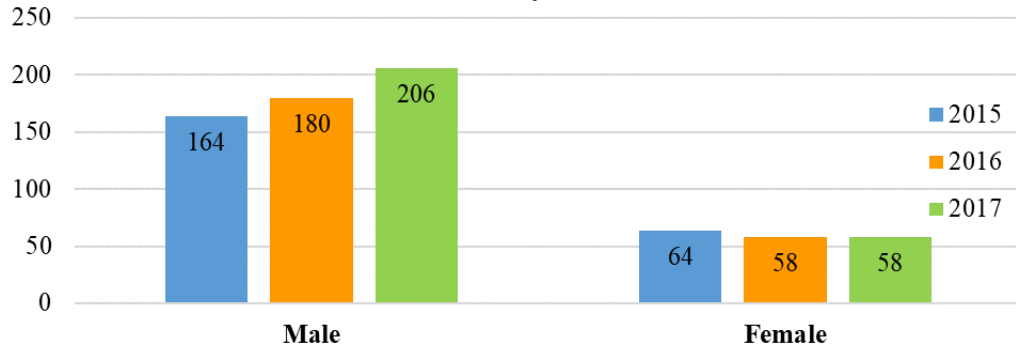
**Figure 35**

**NH Suicides:  
2015 -2017,  
an NHVDRS Perspective**



**Figure 36**

**NH Suicides by Sex: 2015-2017**

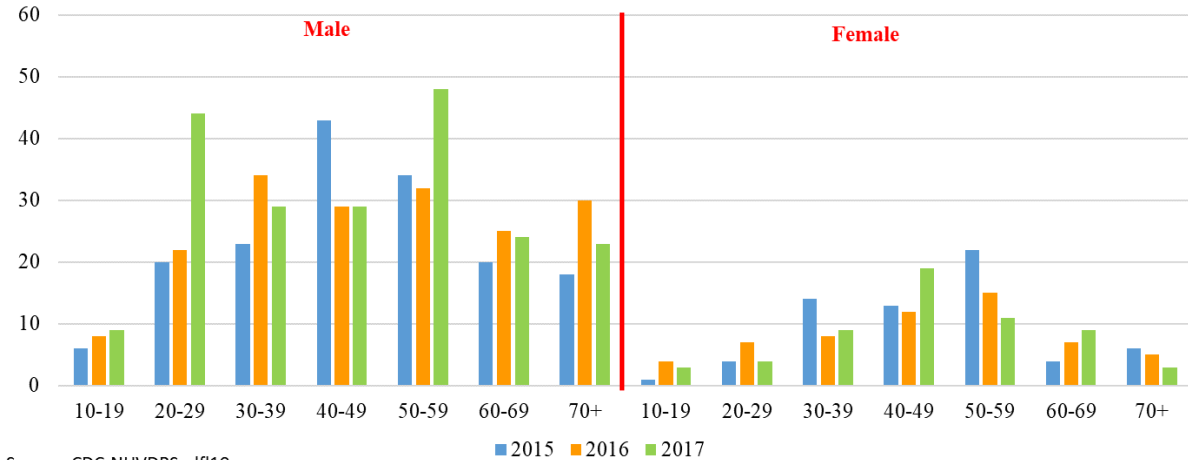


**Age Distribution of Suicides by Gender in NH:**

**Figure 37** (below) depicts one of the most compelling findings in this study. Those suicides among male victims in age groups 20-39 and 50-59, in 2017, are very indicative. For the same year, female victim suicide victims revealed an increase among the age groups 40-49 and 60-69. In addition, female suicide victims decreased for the age group 50-59 for the period 2015-2017. The number of suicides in age groups 20-39, represent a potential impact on the labor force. The effects from suicides among the age group of 20-39 indicate an impact on society.

**Figure 37**

**NH Suicides by Sex by Age Clusters: 2015-2017**  
**NHVDRS**



Source: CDC-NHVDRS\_df19



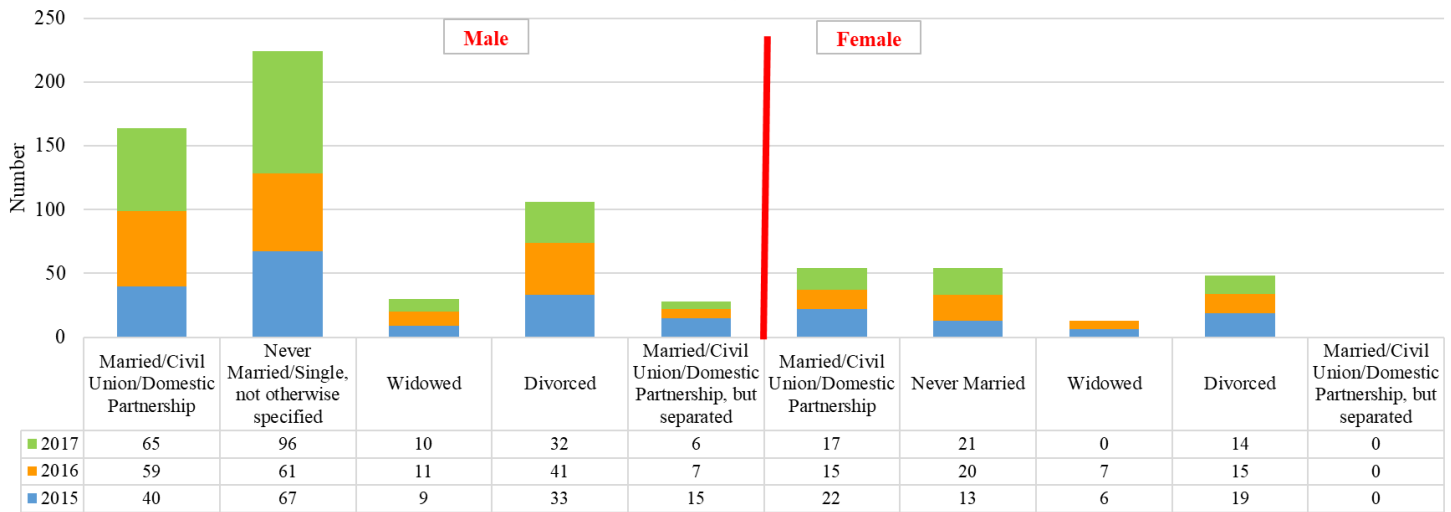
**Marital Status of Suicide Victims in NH:**

Upon closer examination of suicide deaths in the period 2015 – 2017, the highest increase, 15%, in suicides is among male suicide victims, who have never been married. The same is true, to lesser frequency for the same group of female suicide victims who had never been married. The next most prevalent occurred among males who had been divorced, in contrast to females, in the same period.

Please notice that the numbers in **Figure 38** (below) do not add up to the total numbers of suicides as disclosed earlier in **Figure 35** (pg. 55). Certain data is suppressed that did not meet disclosure requirements.

**Figure 38**

**NH Suicides by Sex by Marital Status\*  
2015-2017, NHVDRS**



\* - Some numbers are too small to disclose. -

Source: CDC-NH-VDRS-df19

For male suicide victims in younger age groups, suicide deaths are more prevalent for those males who did not have marital status (**Figure 38** above). The number of suicide for males who were either married or in a domestic relationship remained constant from 2016 to 2017, whereas those victims who were single or never married saw an increase from 2015 -2017.

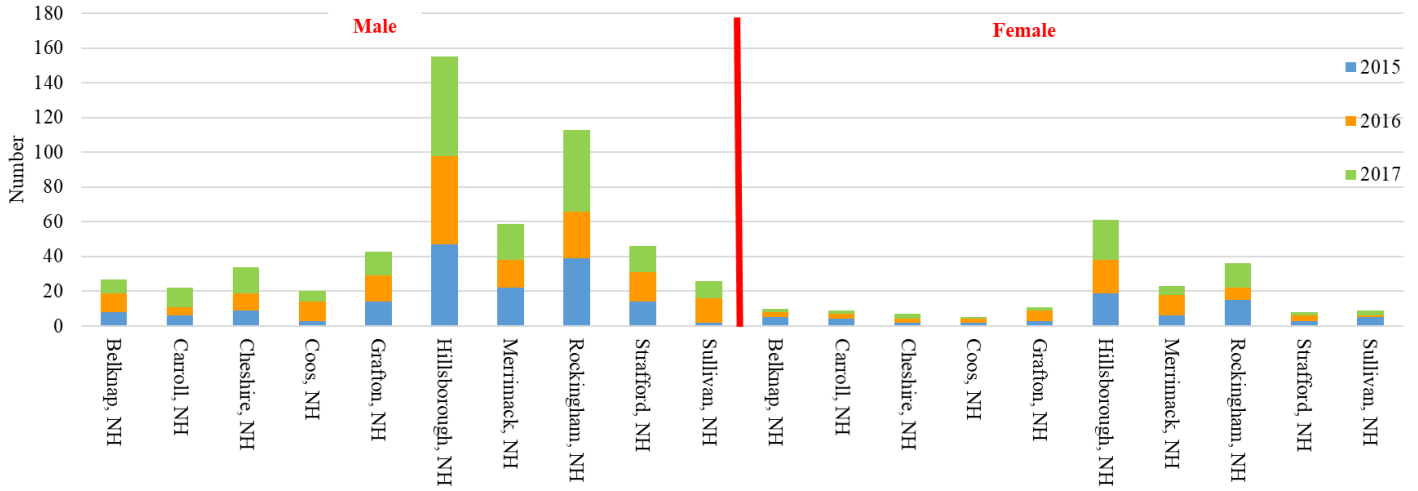
**Suicides throughout the Counties in NH:**

As indicated earlier, for technical and disclosure purposes, suicide deaths of NH residents who died out-of-state were not included in these findings. **Figure 39** (pg. 58) excludes out-of-state residents who died in NH.

Demographically, the higher number of suicides are in the most populated counties of NH. Northern counties are less populated; and their population spread is in rural settings.

**Figure 39**

**NH Suicides by Sex by County\*  
2015-2017, NHVDRS**



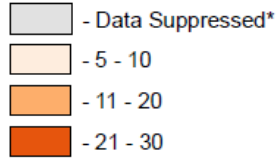
\* - Out-of\_State suicides values are too small to disclose  
source: CDC\_NH-VDRS\_dfl19

Based on the count of deaths, Hillsborough and Rockingham counties have the highest number of suicide deaths for male and to some degree females. These two counties are the most populous counties in NH. In addition, these two counties have more urban centers and industries than counties in the northern parts of the state. For the period of 2015 - 2017, these two counties accounted for 38% to 40% of suicides in NH among males. For females, in Hillsborough and Rockingham counties, the percentages were 15%, 11% and 14% for the same period. (See **Figure 39** above).

**Figures 40 and 41** (pgs. 59-60) show maps of suicides by county for females and males. The maps also include hospitals, community health centers, and suicides incidences. According to NH Department of Health and Human Services, there are ten community mental health centers. For some counties, the numbers are suppressed to meet disclosure standards.

Figure 40

## New Hampshire Female Suicides by County 2015 - 2017



\*Numbers less than five do not meet disclosure requirements.



Grant Support: Centers for Disease Control and Prevention, CDC-RFA-CE14-140205CONT18, National Violent Death Reporting System

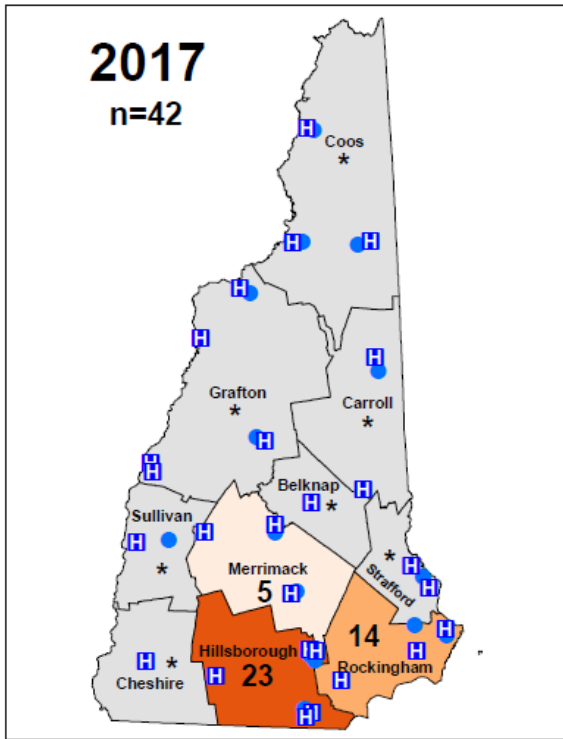
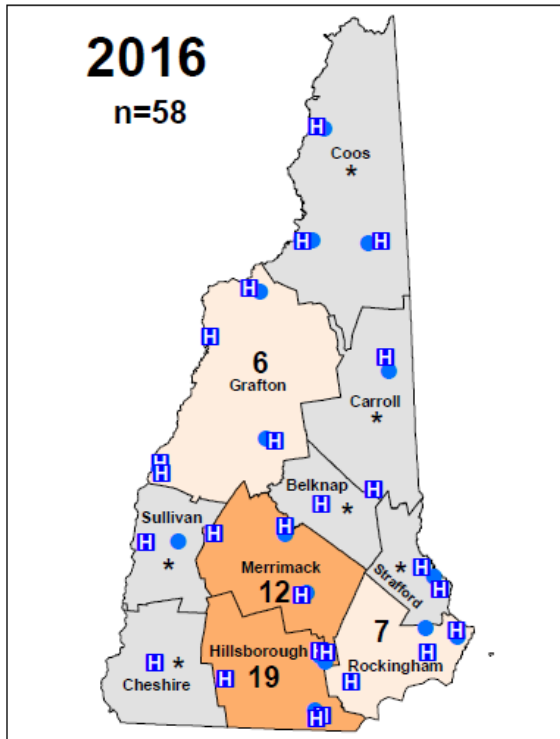
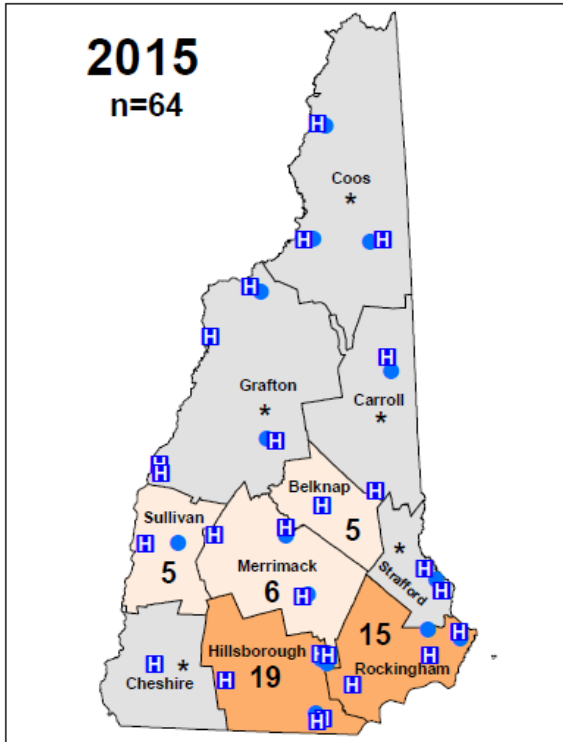
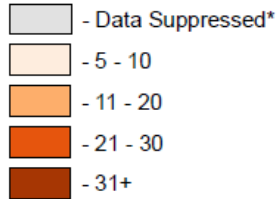




Figure 41

## New Hampshire Male Suicides by County 2015 - 2017

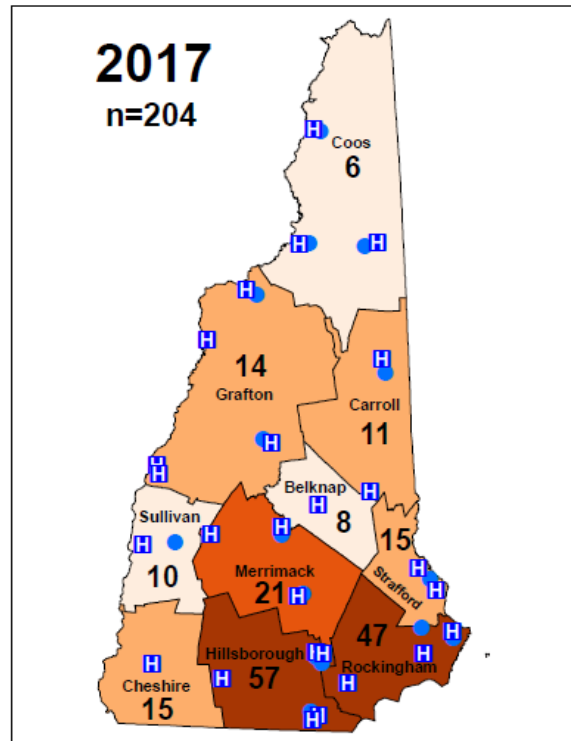
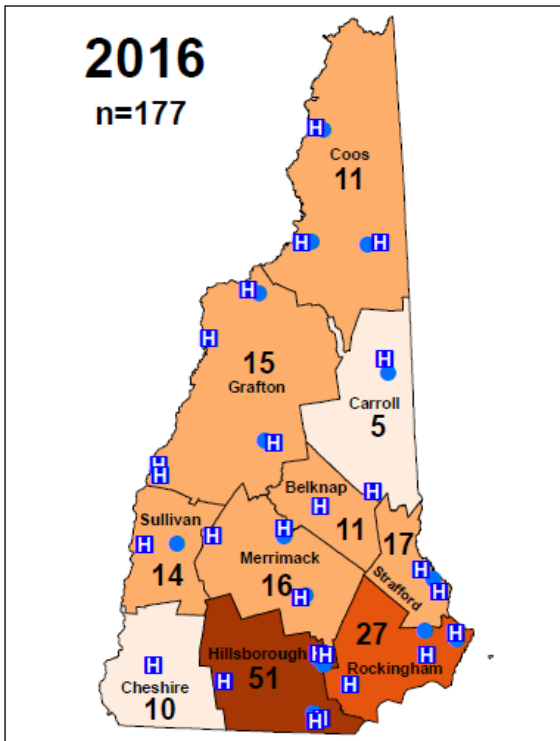
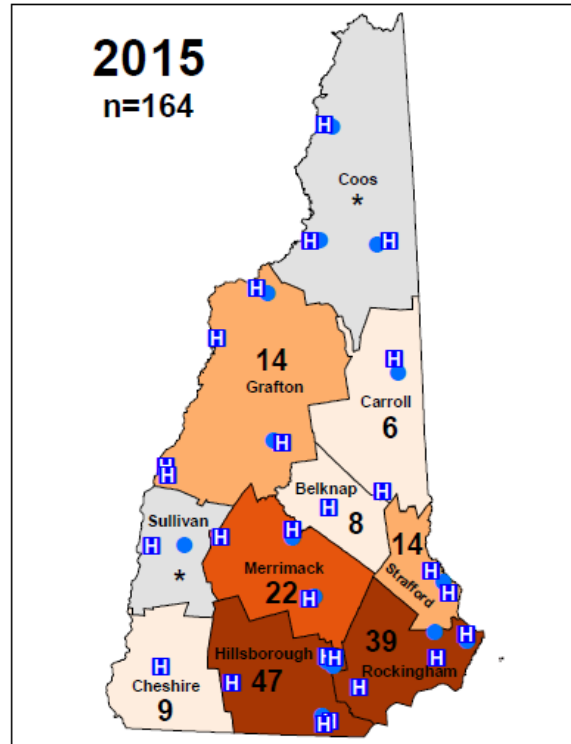


\*Numbers less than five do not meet disclosure requirements.

 - Hospital

 - Community Mental Health Center

Grant Support: Centers for Disease Control and Prevention,  
CDC-RFA-CE14-140205CONT18,  
National Violent Death Reporting System



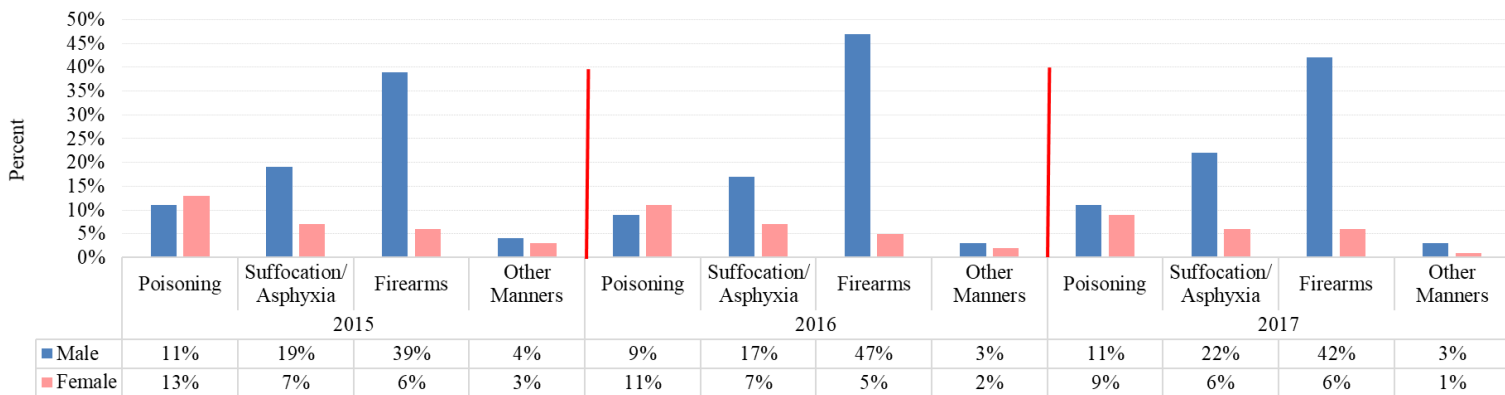
Data disclosure standards related to small numbers is used to protect families and their loved from constructive identification. Small counts are redacted to protect their privacy.

### Means Used by NH Suicide Victims

The prevalence of firearms use in suicides in NH surpasses the number of suicides by any other means. Data for 2017, however, shows a slight decrease in firearms suicide deaths 42% versus 47% by firearms in 2016, for males. In addition, 2017 showed a slight increase in suicide (22%) by suffocation/asphyxia compared to 19% and 17% respectively in 2015 and 2016.

**Figure 42**

**NH Suicides Rates: 2015 - 2017  
By Sex by Cause of Death Clusters**



Source: CDC\_NH-VDRS\_df19

Males used firearms more often for suicide than females through the period 2015-2017. (See **Figure 42** above).

In NH, the highest male suicide number for firearms by age are between ages 20 and 59 from a total of 59 in 2015 to 78 in 2017 (**Table 11** – pg. 62). The number of male suicides by suffocation/asphyxia also increased for this age group from a total of 34 in 2015 to 41 in 2017. For female suicides, the one clear pattern is in those ages 40-59, used poisoning more than any other female age group. (See **Table 11** – pg. 62).

**Table 11**

Suicides in NH, by Sex, by Age Clusters and Cause of Deaths 2015 - 2017													
		2015 = 228				2016 = 238				2017 = 264			
		Other Causes	Poisoning	Suffocation /Asphyxia	Firearms	Other Causes	Poisoning	Suffocation /Asphyxia	Firearms	Other Causes	Poisoning	Suffocation /Asphyxia	Firearms
Male	10-19	0	-	-	-	0	0	-	5	0	0	5	-
	20-29	-	-	9	8	0	-	7	14	-	5	12	24
	30-39	-	-	8	12	-	-	9	23	-	-	14	13
	40-49	-	10	9	20	-	-	7	16	0	7	6	16
	50-59	-	6	8	19	-	5	8	18	-	10	9	25
	60-69	-	0	7	11	-	-	-	17	-	-	9	11
	70+	0	-	-	14	-	6	5	18	-	-	-	17
Female	10-19	0	0	-	0	0	-	-	0	0	0	-	0
	20-29	0	-	-	-	0	0	-	-	0	-	-	0
	30-39	-	-	-	-	-	-	-	-	-	-	-	-
	40-49	-	8	-	-	-	6	-	-	0	11	-	6
	50-59	-	10	-	5	0	10	-	-	-	-	-	-
	60-69	-	0	-	-	-	-	-	-	-	5	-	-
	70+	0	-	-	-	0	-	-	-	0	-	0	-

Source: CDC-NH-VDRS-df119. " ": indicates values did not meet disclosure requirements.

**Suicide Risk Factors Experienced by NH Victims**

Among the various risk factors for suicide, in NH, depression and depressed mood figure prominently. In 2017, the percent of female suicide victims who had a depressed mood was about 15%; for male suicide victims with depressed mood the percent was about 41% (see **Table 12** below). Overall, there is a higher number of deaths from suicide for males than females. Depressive mood triggers are among the prime risk factors influencing suicides for both male and female victims<sup>13</sup>.

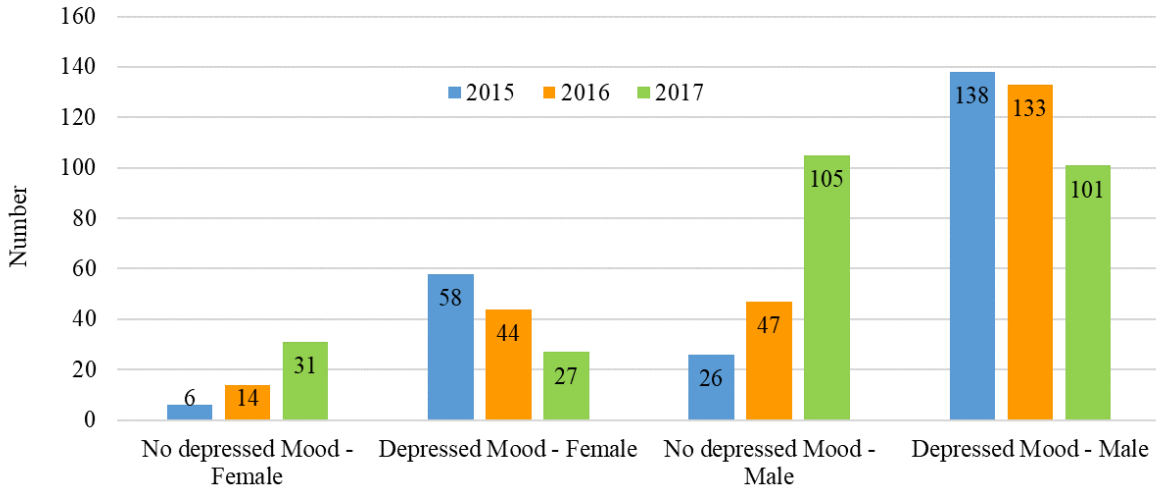
**Table 12**

NH Suicide Victims with Mental Health Problems and Depressed Mood			
	2015	2016	2017
<b>Female</b>	40%	33%	26%
No Depressed Mood	2%	6%	11%
Depressed Mood	38%	27%	15%
<b>Male</b>	60%	67%	74%
No Depressed Mood	2%	11%	34%
Depressed Mood	58%	56%	41%
<b>Grand Total</b>	100%	100%	100%

<sup>13</sup> Mood Disorders and Suicide, Andrew A. Nierenberg et al, [www.psychiatrist.com/jcp/article/pages/2001/v62s25/v62s2504.aspx](http://www.psychiatrist.com/jcp/article/pages/2001/v62s25/v62s2504.aspx) <https://www.mayoclinic.org/diseases-conditions/mood-disorders/symptoms-causes/syc-20365057>

**Figure 43**

**NH Suicides, 2015 - 2017  
by Sex and Depressed**



Source: CDC\_NH-VDRS\_dfl19

The history of mental illness and treatment are data elements that NH-VDRS collects from the medical examiner reports when available. Medical records use is limited only to certain cases where determination of the cause of death is complex and the pathologist requests documents from health providers. Inclusion of data related to mental health and treatment is challenging because medical and health records are not available for compilation in the NH-VDRS database. As shown in the table below, the percentage of male or female victims, with a history of mental illness treatment, is very small, in both 2015-2016 (**Table 13** below).

**Table 13**

<b>Percent of Suicide Victims by sex with History of Mental Illness Treatment in NH, 2015 -2017</b>			
	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Male</b>	5%	2%	12%
<b>Female</b>	1%	1%	5%

Source: CDC\_NH-VDRS\_dfl19

In 2017, the percentage of suicide victims with a history of mental illness increased for both males and females.

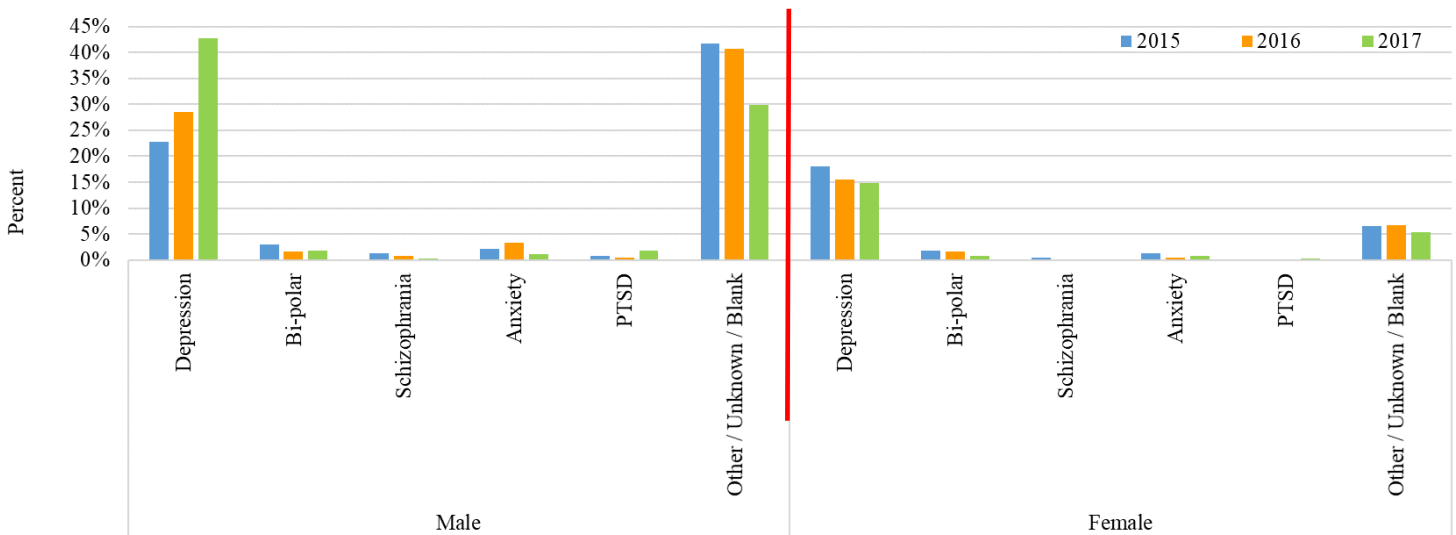
**Mental Health Diagnosis and Suicides in NH**

**Figure 44** (pg. 64) may look like a contradiction to **Table 13** (above). The fundamental difference is that **Table 13** (above) relates to a declaration by next of kin whether a suicide victim had a history of mental illness, whereas **Figure 44** (pg. 64) deals with mental health diagnoses. The mental health diagnoses are based on evidence at the scene such as prescribed medications to suicide victims; or if a suicide victim had a mental health provider (psychiatrist,

mental health counselor, etc.). Therefore, there are many suicide cases where there is no data available on mental health diagnoses. It is also true that in many cases, not all next of kin have up-to-date knowledge on their loved one’s mental health treatment and condition. This issue is more prevalent for male victims. In 2015, male victims’ data on mental health diagnosis shows about 25%, and in 2017, there was a significant increase and the percent for cases with mental health diagnosis rose to 43%. There has been substantial improvement for data collection on mental health diagnosis for male suicide. The percentage of male victims with reported or diagnosed depression rose at faster percent in 2017 compared to 2015 or 2016. In contrast, the percentage of female victims diagnosed with depression had been declining from 2015 to 2017.

Despite the fact that the quality of data has improved, there exists a challenge to acquiring mental health data on every suicide victim. That is indicated, in general, by a change, in percent, from 41% to 30%, in period 2015 - 2017, for unknown or blank data on mental health for male victims and indicates the challenges in acquiring such data.

**Figure 44**  
**NH Suicide Victims**  
**by Sex, by Mental\_Health\_Diagnosis,**  
**Period 2015 - 2017**



Source: CDC\_NH-VDRS\_dfl19

Depression and related mental health issues are still the prominent risk factor influencing suicide, as indicated in **Table 14** (pg. 65), for all victims of suicide. Often, questions are asked of next of kin, relatives and friends regarding the victim’s mental health condition.



**Table 14**

<b>NH Suicides History of Mental Illness &amp; Diagnoses: 2015 - 2017, (including Out-of-State)</b>			
	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Depression</b>	41%	44%	58%
<b>Bi-polar</b>	5%	3%	3%
<b>Schizophrenia</b>	2%	1%	0%
<b>Anxiety</b>	4%	4%	2%
<b>PTSD</b>	1%	0%	2%
<b>Other/unknown</b>	5%	4%	3%

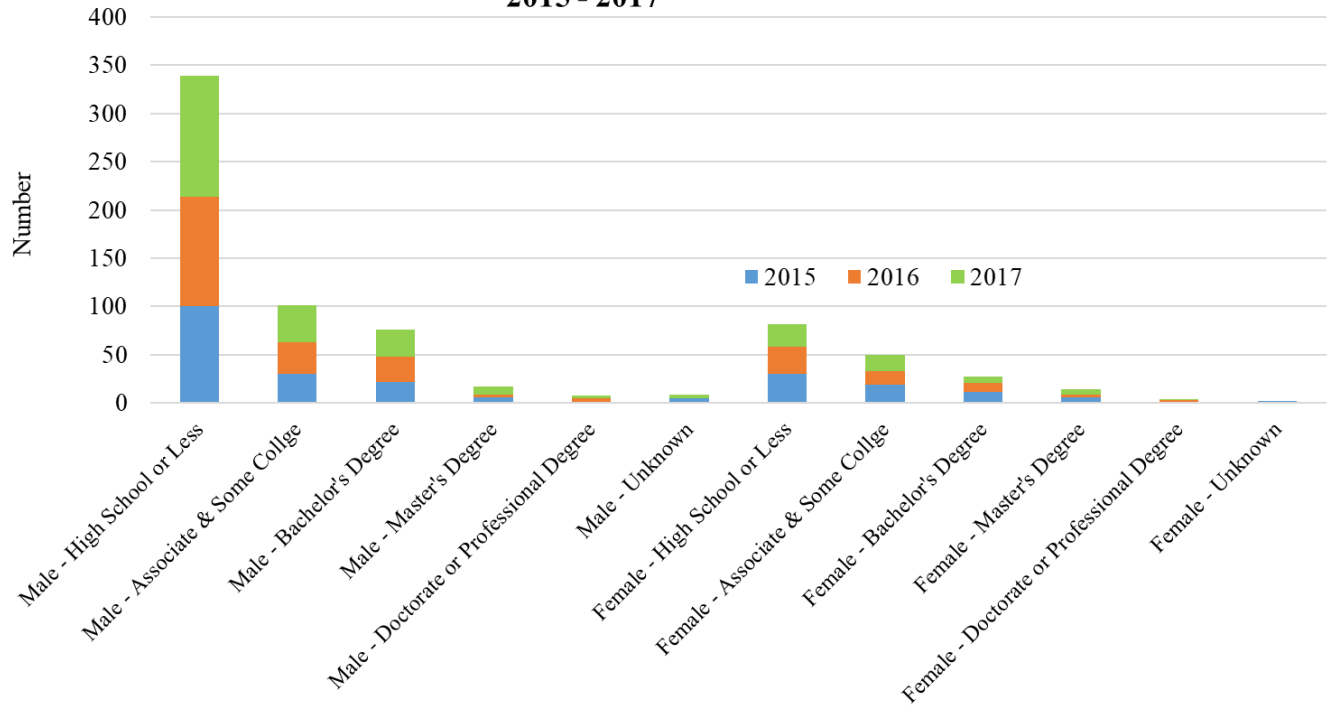
Source: CDC\_NHVDRS\_DFL2019

The findings in **Table 14** (above) are on mental health diagnoses as co-occurring influencing factors for suicide victims, regardless of gender. The data shows that depression is the leading mental health disorder suicide victims experienced in NH. The data cannot indicate if the increase in the percent of suicide victims who were diagnosed with depression from 2015 to 2017 is due to a true increase in the disorder diagnoses or due to other factors. For those diagnosed with mental health disorders, depression rose from 48% in 2015 to 58% in 2017. Death scene investigators have learned to document these mental health issues better and have also asked the question comprehensively; therefore, these mental health disorders are much better documented in more recent data collected.

#### **Suicides in NH and Educational Attainment**

For both male and female suicides there is a high prevalence of suicides that occurred among victims who had high school or less education. (**Figure 45** – pg. 66)). Males and females with the two levels of education (associate and bachelors) are less prominent than victims of suicide with less than a high school degree. Lack of educational attainment is yet another facet to suicide in NH. Lower educational attainment, especially for males is a prominent risk factor for suicide in the state. In addition, educational levels are part of the social determinants, which affect suicide, health overall and wellbeing.

**Figure 45**  
**NH Suicides by Educational Levels, by Sex\***  
**2015 - 2017**



Source: CDC\_NHVDRS\_df19

### Alcohol and Primary Cause of Death: Suicide

Despite the fact that the number of male suicides in NH is about three times higher than females, the percent of those who misused alcohol and completed suicide is relatively high for both males and females. (See **Table 15** below). The difference is that the percent of alcohol misuse among male' suicide victims in 2017 was 20%, compared to 14% in 2015. In 2017, 20% out of the 78% of male victims had significant alcohol, when they were autopsied or tested for alcohol presence.

**Table 15**

<b>NH Suicide Cause of Death and Risk factor: Alcohol 2105 -2017</b>			
	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Female</b>	<b>28%</b>	<b>24%</b>	<b>22%</b>
<i>No Alcohol/Unknown</i>	<i>24%</i>	<i>16%</i>	<i>18%</i>
All Poisoning	9%	6%	7%
Suffocation/Asphyxia	6%	5%	5%
Firearms	5%	4%	5%
All Others	3%	1	0%
<b>Positive Alcohol</b>	<b>4%</b>	<b>8%</b>	<b>4%</b>
All Poisoning	2%	5%	2%
Suffocation/Asphyxia	0%	2%	1%
Firearms	1%	1%	1%
All Others	0%	1%	0%
<b>Male</b>	<b>72%</b>	<b>76%</b>	<b>78%</b>
<i>No Alcohol/Unknown</i>	<i>58%</i>	<i>55%</i>	<i>58%</i>
All Poisoning	8%	5%	9%
Suffocation/Asphyxia	15%	15%	14%
Firearms	32%	32%	33%
All Others	3%	3%	2%
<b>Positive Alcohol</b>	<b>14%</b>	<b>20%</b>	<b>20%</b>
All Poisoning	1%	3%	2%
Suffocation/Asphyxia	4%	3%	8%
Firearms	7%	14%	9%
All Others	1%	0%	2%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

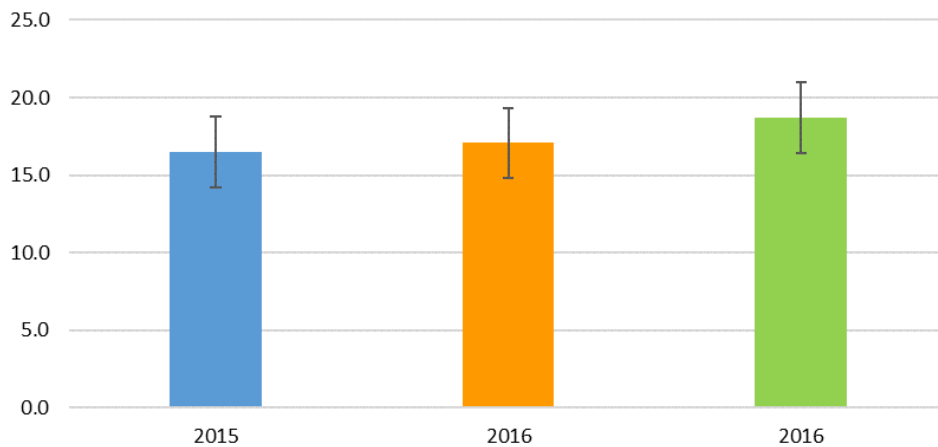
**Table 15** (above) shows that in 2015 to 2017, the percent of male suicide victims who used firearms increased from 32% to 33%. During the same period, male suicide victims who also used firearms in suicides with significant alcohol use showed percentages ranging from 7%, 14% and 9%, respectively. Female suicide victims' who used firearms remained constant at 1%. This contrasts with female' suicide victims who misused alcohol and completed suicide by means of poisoning was 4% in both 2015 and 2017, with marked increase to 8% in 2016.

**Suicide Standardized Death Rates<sup>14</sup> and Crude Rates for Period 2015 -2017 in NH**

When comparing death rates it is tempting to draw a direct conclusion. Statistically, the best way to make comparisons is to use standardized rates. In addition, comparing the proportion of suicide events to the population, which is known as the crude rate, also produces misleading results due to confounding when the populations are different in each geographical area. (Figure 46 below) shows that the standardized rates are increasing for the period 2015 – 2017. The confidence intervals overlap from year to year.

**Figure 46**

**The standardized Death Rates for NH Suicide  
2015-2017**



Source: CDC\_NH-VDRS\_dfl19

NH Standardized suicide death rates are similar to CDC rates.

**Table 16**

Suicide Injury Death Rates per 100,000, all Ages and all Sexes.								
Year	Total Numerator	Total Denominator	Standardized Rate	Lower 95% CI Standardized Rate	Upper 95% CI Standardized Rate	Crude Rate	Lower 95% CI Crude Rate	Upper 95% CI Crude Rate
2015	228	1,330,111	16.5	14.2	18.7	17.1	14.9	19.4
2016	238	1,334,795	17.1	14.8	19.3	17.8	15.6	20.1
2017	264	1,342,795	18.7	16.4	21.1	19.7	17.3	22.0

Source: CDC\_NH-VDRS\_dfl19

<sup>14</sup> Standardized/normalized data: this a statistical process that use common weights for two or more variables to enable a comparison. In effect, this process eliminate the unit of measurements so that the values of each variable are easily compared. This is the essence of normalization in its simplest form that was used in this report.

**Effects of Mental illness and Substance Misuse on NH Suicide Victims:**

Although alcohol is not included as a drug in the data collection according to the case definition, medical literature has adequately documented the effects of alcohol misuse on the user. NH-VDRS data indicates the combined effects of alcohol misuse with the effects of mental illness. Alcohol can be a co-contributor risk factor for suicide. Note that not all victims of suicide, in NH, had a mental health diagnosis (**Table 17** below).

Depressed mood is applied as a proxy for mental illness, when there is a co-occurrence of a history of mental health problems or a mention of depressed mood in the investigation. In **Table 15** (pg. 67), the real number of suicide victims who experienced mental health issues may have also experienced substance misuse; and to some extent had similar experiences with alcohol misuse. For clarification, the substance misuse level in **Table 15** (pg. 67) encompasses illicit and or non-illicit substances.

**Table 17**

<b>NH Suicides: 2015-2017; Victims with History of Mental Health Problems and Co-occurring Factors: Alcohol, Other Substance Abuse and Depressed Mood</b>				
<b>Substances and Mental Mood</b>		<b>2015</b>	<b>2016</b>	<b>2017</b>
No Alcohol Problems		106	93	130
	No Substance Abuse Other	97	84	115
	No Depressed-Mood	*	17	50
	Depressed-Mood	93	67	65
<b>Substance Abuse Other</b>		9	9	15
	No Depressed-Mood		*	5
	Depressed-Mood	9	7	10
<b>Alcohol Problems</b>		24	42	49
	No Substance Abuse Other	17	34	40
	No Depressed-Mood		*	21
	Depressed-Mood	17	32	19
<b>Substance Abuse Other</b>		7	8	9
	No Depressed-Mood		*	*
	Depressed-Mood	7	6	6

Source: CDC-NHVDRS, DFL19

\*- values not meeting disclosure requirements

Among suicide victims with a mental health history, the impact of alcohol misuse, increased from seven to nine victims, in the period 2015-2017. In addition, the combined effect of alcohol and substance misuse is also slowly increasing. The impact indicator of depressed mood was included to gauge the combined event when there was an existing history of mental illness expressed by suicide victims. Overall, most suicide victims had shown some alteration in their mood within the 48 hours before acting on their suicidal ideation. This study introduced

depressed mood as a simple surveillance indicator to gauge the mental state of victims in the forty-eight hour window before a suicide.

**Effects of Prior / History of Suicide Attempts, Intent Disclosure on Suicide by Gender:**

The percentages of suicide victims who had previously attempted suicide is declining slightly 21% to 12%, in the period 2015 to 2017, for male suicide victims; whereas the percentage of history of suicide attempts for female decreased for the same period 14% to 5%. This is a valuable indicator for those stakeholders in the suicide prevention practices. (Table 18 below)

The other percentages that may be of interest to stakeholders is of those cases not disclosing suicide intent. For instance, among suicide victims who had attempted suicide before in 2015 data, 15% did not disclose suicide intention. Two years later, 2017, 11% of victims who had attempted suicide previously, did not disclose suicide intention. Here the data shows that the percentage of suicide victims who do not inform their mental health providers or family members i.e. that these victims withheld their intentions of suicide and their suicidal ideation. Male suicide victims not disclosing their suicide intent increased especially among those victims who had no prior suicide attempts, rising from 40% in 2015 to 55% in both 2016 and 2017. On the other hand, females in that group of suicide victims remained stable around 13% for the period 2015 -2017.

In comparison, suicide victims who had not attempted suicide before, for both male and female, the percent of not disclosing suicide intent were less erratic, during the same period 2015-2017 (Table 18 below).

**Table 18**

<b>NH Suicide Deaths: 2015 - 2017;</b>			
<b>Gender, Suicide Attempt History and Suicide Intent Disclosure</b>			
	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Female</b>	28 %	24 %	22 %
<b>No Known History of Suicide Attempt(s)</b>	14 %	12 %	17 %
Suicide Intent Not Disclosed	13 %	10 %	13 %
Suicide Intent Disclosed	1 %	2 %	3 %
<b>History of Suicide Attempt(s)</b>	14 %	12 %	5 %
Suicide Intent Not Disclosed	9 %	11 %	4 %
Suicide Intent Disclosed	5 %	1 %	1 %
<b>Male</b>	72 %	76 %	78 %
<b>No Known History of Suicide Attempt(s)</b>	51 %	64 %	66 %
Suicide Intent Not Disclosed	40 %	55 %	55 %
Suicide Intent Disclosed	11 %	10 %	11 %
<b>History of Suicide Attempt(s)</b>	21 %	11 %	12 %
Suicide Intent Not Disclosed	15 %	10 %	11 %
Suicide Intent Disclosed	6 %	2 %	2 %
<b>Grand Total</b>	100 %	100%	100%

Source: CDC-NHVDRS, DFL19

There are still more suicide victims, males and females, who did not disclose their intent to complete suicide. When suicide victims do not share their “intent to die by suicide”, that becomes a red flag and for effective discussion, this report opted to defer such discussion to qualified mental health clinicians handling this issue of “not disclosing intent” of suicide with the victims during their clinical sessions, treatment and follow-up. In addition, those in the prevention field could focus on this issue of “not disclosed intent” as well. This step is crucial for saving lives; and it emphasizes the application of the principles of zero suicide initiatives in NH<sup>15</sup>. The issue of individual suffering from mental issues and having suicide ideation who “do not disclose suicide intent” at all stages of their journey is best to be addressed by mental health practitioners.

When it comes to victims who are loners<sup>16</sup>, older and had a minimum social circle, and older victims who lived in a remote area, the issue of “not disclosing intent” or suicide ideation compounds their risk factors of suicide. In NH, investigations of suicide incidents also revealed that isolation combined with mental health issues are another factor that are prevalent among older suicide victims living alone and in rural settings<sup>17</sup>.

### **NH Suicide Victims Experienced: Alcohol, Job and Financial Problems**

At NH-VDRS, in addition to the mental health issues and prior suicidal ideation for attempts, the combined effects of alcohol misuse, job problems and financial hardships that victims of suicide had experienced in NH were also investigated.

The number of male suicide victims who had no alcohol problems, no job issues and no financial hardship is significant as shown in **Table 19** (pg. 72). Therefore, the effect of alcohol misuse on suicide victims was explored from another point of view. This compilation shows a combined effect, in **Table 19** (pg. 72), of alcohol misuse, financial hardship, and job problems on both genders. These effects were separated between males and females. For male victims these combined effects are more noticeable with a higher level of increase from 8 to 21 victims, in period 2015 – 2017 respectively. These effects in female suicides are less frequent.

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<sup>15</sup> <https://www.dhhs.nh.gov/dphs/bchs/spc/suicide-prevention-events.htm>

<sup>16</sup> Loners: During suicide investigations often suicide victims are portrayed as loners. This criterion applies to those victims who have little social interaction and no social circles. In other instances, next of kin stated that victim was a loner and kept to himself or herself or avoided social interactions.

<sup>17</sup> There are further studies from CDC on risk factors for suicide in rural area, for reference on risk and protective factors, and National Suicide Prevention Lifeline see: [www.cdc.gov/violenceprevention/suicide/riskprotectivefactors.html](http://www.cdc.gov/violenceprevention/suicide/riskprotectivefactors.html).

**Table 19**

<b>NH Suicides by Sex and Co-Occurring Factors (Problems): Alcohol, Job, Financial</b>				
		<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Female</b>	No Alcohol Problems	55	39	47
	No Job Problems	48	32	41
	No Financial Problems	45	29	33
	Financial Problems	-	-	8
	Job Problems	7	7	6
	No Financial Problems	-	-	
	Financial Problems	-	5	6
	<b>Alcohol Problems</b>	<b>9</b>	<b>19</b>	<b>11</b>
	No Job Problems	6	14	8
	No Financial Problems	5	12	7
	Financial Problems	-	-	-
	<b>Job Problems</b>	-	<b>5</b>	-
	No Financial Problems	-	-	-
	Financial Problems	-	-	-
<b>Male</b>	No Alcohol Problems	133	132	152
	No Job Problems	108	104	133
	No Financial Problems	102	98	124
	Financial Problems	6	6	9
	Job Problems	25	28	19
	No Financial Problems	14	11	5
	Financial Problems	11	17	14
	<b>Alcohol Problems</b>	<b>31</b>	<b>48</b>	<b>54</b>
	No Job Problems	23	34	33
	No Financial Problems	19	30	31
	Financial Problems	-	-	-
	<b>Job Problems</b>	<b>8</b>	<b>14</b>	<b>21</b>
	No Financial Problems	-	-	-
	<b>Financial Problems</b>	<b>5</b>	<b>10</b>	<b>17</b>

Source: CDC\_NH-VDRS\_dfl19 "-": values

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.



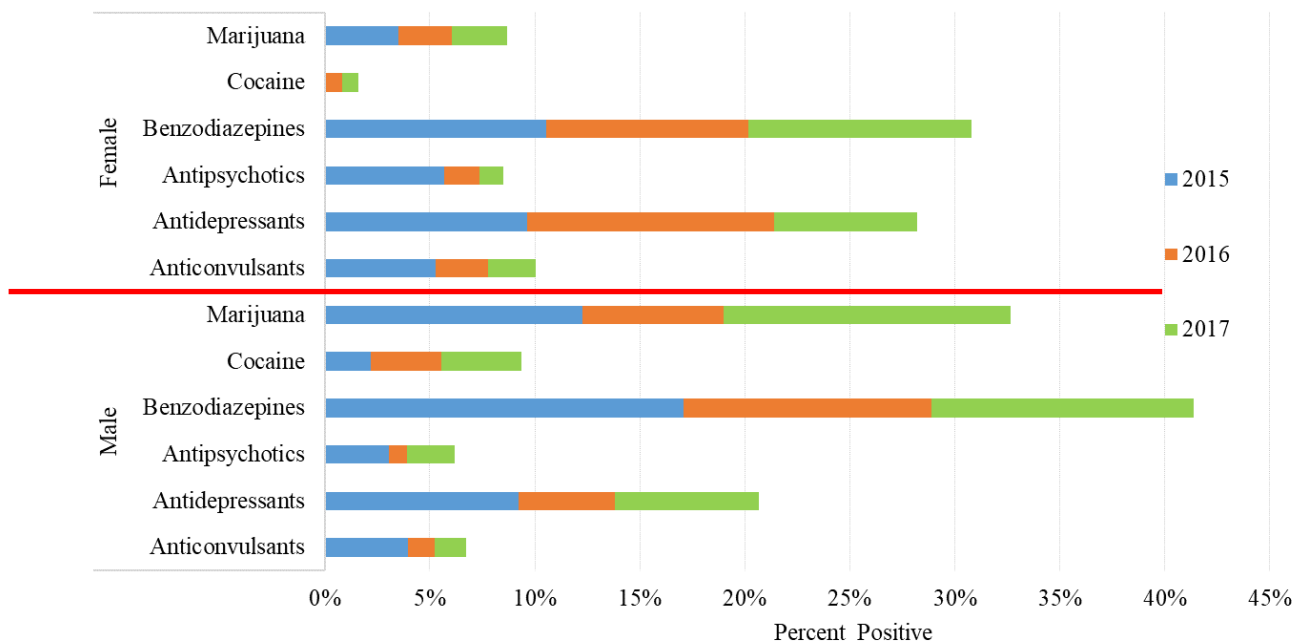
### NH Suicide Victims who Tested<sup>18</sup> Positive for Substance Categories

The results of toxicological reports include testing various specimen from suicide victims, at various points of the investigation or autopsy. The figure below depicts the categories of substances from toxicology reports from suicide victims. The toxicology test results are independent of each other.

Suicide victims who tested positive in this compilation of substance(s) used may or may not have died of such substance(s). The manner of death and the cause of death in **Table 11** (pg. 62) and in **Figure 42** (pg. 61) were presented above.

**Figure 47**

**NH Suicide Victims with Tested Positive Substance Categories\*, by Sex  
2015 - 2017**



Source: CDC\_NH-VDRS\_dfl19; \* independently tested

In **Figure 47** (above), for the period 2015-2017, substances that tested positive were mostly benzodiazepines, for both male suicide victims and females. One clear difference between male and female suicide victims manifests in the positive test percentages for marijuana. Males tested higher than females did for marijuana usage. The males’ percent for positive marijuana hovered around 12 %, while the females’ positive percent for marijuana remained about 2%. Antidepressant substances were significant for both male and female suicide victims. Despite the number of female suicide victims using antidepressants being lower than the males, females tested positive for anticonvulsants and antipsychotics proportionately higher than male suicide victims.

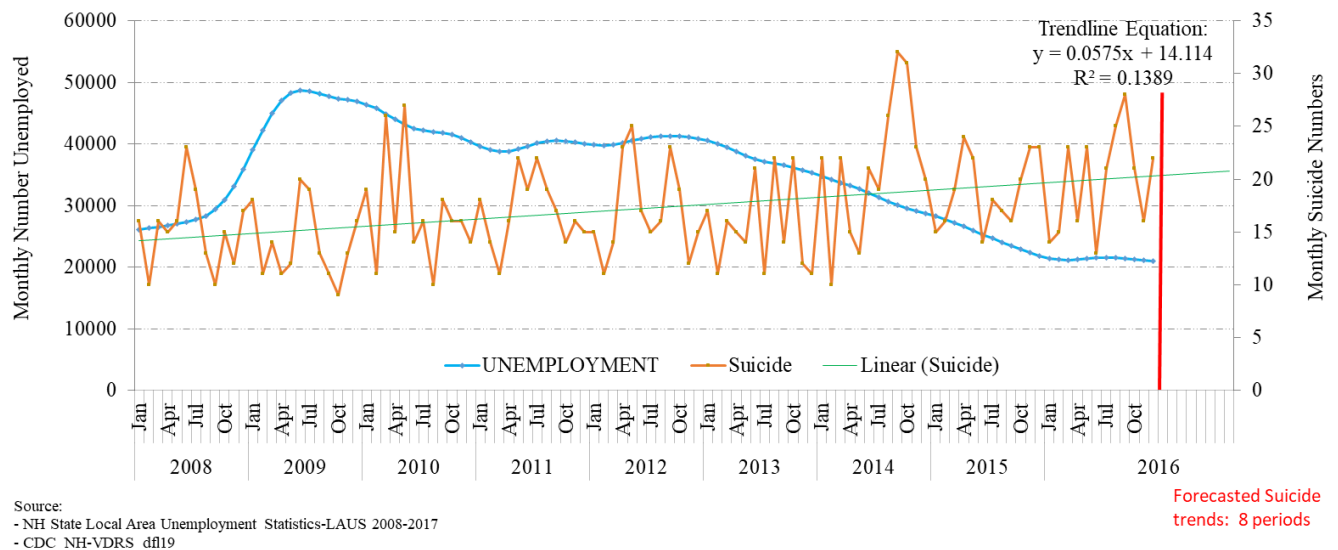
<sup>18</sup> The query used included substance positive test results. A victim may have tested positive for at least one substance.

## Discussion - Economic Factors' impact on Suicides in NH

Another aspect to explore in relation to suicide is unemployment in NH. The unemployment percent, based on data from NH Employment Security Local Area Unemployment Statistics (LAUS) data ([www.nhes.nh.gov/elmi/statistics/laus-data.htm](http://www.nhes.nh.gov/elmi/statistics/laus-data.htm)), has been below the national average and is historically holding low. (See **Figure 48** below).

**Figure 48**

**NH Unemployment & Suicide  
Monthly Total 2008-2016**

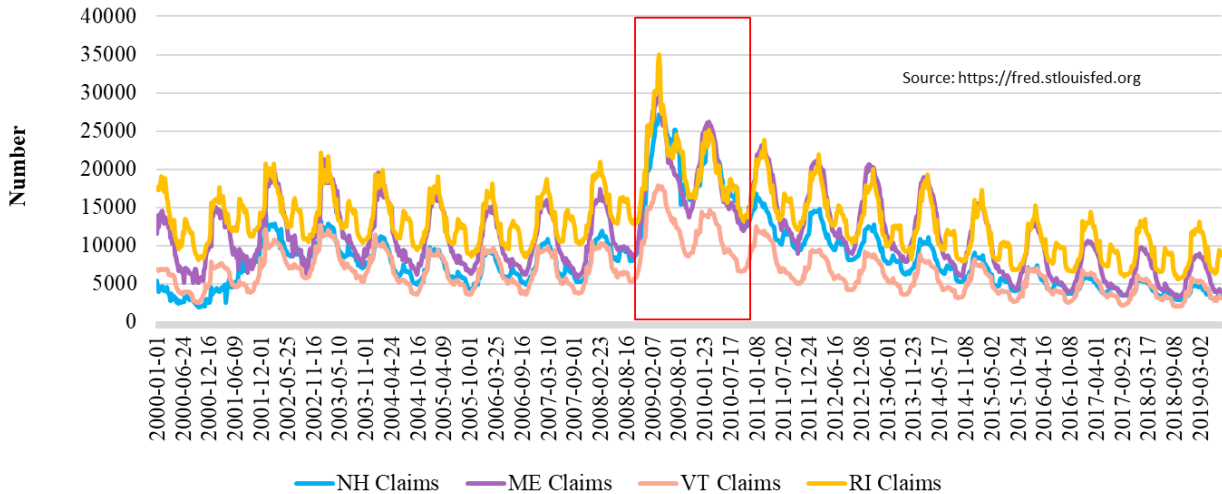


There was a decline in the number of declared unemployed in NH, according to LAUS data as shown in **Figure 48** (above), and other wage survey data from the Department of Labor Bureau of Labor Statistics (BLS) and the State Bureau of Economic Labor Market Information. The number of suicide victims with job troubles has continued to increase, regardless of other co-occurring stressors and factors. A better gauge would be to explore the effects based on the structure of unemployment and employment participation.

In addition, using data from the Federal Reserve Bank of St Louis [fred.stlouisfed.org/series/CCSA](http://fred.stlouisfed.org/series/CCSA), the seasonally adjusted monthly claims for insured unemployed data for NH claims were compared to other small northern New England states. Throughout the period after the last economic recession, November 2008, unemployment claims in NH remained lower than Maine and Rhode Island claims; and NH unemployment claims matched Vermont unemployment claims up to January 2019. The exception was for the period immediately after the recession of 2008 (2008-2011). (**Figure 49** – pg. 75). Access to unemployment claims and other benefits in the state are a safety net for individuals experiencing financial difficulties. **Figure 49** (pg. 75) introduces the issue of a safety net for vulnerable individuals who have precipitant factors to financial troubles, in conjunction with other risk factors that may lead to suicide.

**Figure 49**

**Continued Claims (Insured Unemployed) Seasonally Adjusted (CCSA) for: ME, NH, RI, VT**



**Suicide among Veterans in New Hampshire:**

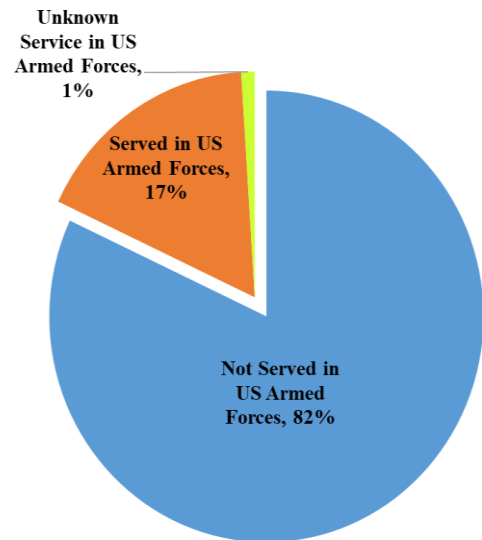
For the purpose of disclosure, NH-VDRS collects data on veterans only from standard surveillance data sources. The data collection, as presented earlier, is based on medical examiner data, death certificates and law enforcement reports. There is no data used that is sourced from any branch of the military. Information reports pertinent to victims of suicide who have military affiliation is not seamless; there is a disconnect between pre-discharge and post discharge information.

The combined percent for veteran suicide in NH from 2015 -2017 is 17% of all suicide victims who died in the state in this period. For the same period, about 1% of the suicide victims did not have information about whether they were affiliated with military service or not.

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 suicide victims who are currently active and those who have been discharged.

**Figure 50**

**Aggregate Suicides in NH: 2015-2017 by Military Status**



Source: CDC\_NH-VDRS\_dfl19

**Figure 50** (pg. 75) is an aggregate visualization for military status among suicide victims in NH, which also includes victims who were not NH residents but died of suicide while in NH.

**NH Veteran Suicides based on Sex, Marital, and Military Status:**

Males make up the majority of the suicide victims affiliated with the military. In the period 2015 -2017, the percent of male suicide victims with military affiliation was as low as 16% and 18% at the peak in 2016.

**Table 20**

<b>NH Suicides by Sex, Militar Status, and Marital Status: 2015 -2017</b>			
	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Female</b>	<b>28 %</b>	<b>24 %</b>	<b>22 %</b>
<b>Not Served in US Armed Forces</b>	<b>28 %</b>	<b>24 %</b>	<b>22 %</b>
Married/Civil Union/Domestic Partnership	10 %	6 %	6 %
Never Married/Single, not otherwise specified	6 %	8 %	9 %
Widowed	3 %	3 %	*
Divorced/separated	9 %	6 %	6 %
Unknown	*	0 %	0 %
<b>Served in US Armed Forces</b>	<b>*</b>	<b>*</b>	<b>0 %</b>
Divorced	*	*	0 %
<b>Male</b>	<b>72 %</b>	<b>76 %</b>	<b>78 %</b>
<b>Not Served in US Armed Forces</b>	<b>54 %</b>	<b>56 %</b>	<b>61 %</b>
Married/Civil Union/Domestic Partnership	11 %	16 %	16 %
Never Married/Single, not otherwise specified	26 %	24 %	31 %
Widowed	2 %	*	2 %
Divorced/ separated	15 %	13 %	10 %
Unknown	0 %	*	*
<b>Served in US Armed Forces</b>	<b>16 %</b>	<b>18 %</b>	<b>16 %</b>
Married/Civil Union/Domestic Partnership	6 %	7 %	8 %
Never Married/Single, not otherwise specified	3 %	*	3 %
Widowed	*	3 %	2 %
Divorced/separated	5 %	7 %	3 %
<b>Unknown Served in US Armed Forces</b>	<b>*</b>	<b>2 %</b>	<b>*</b>
Divorced/Married/Civil Union/ Domestic Partnership	*	*	0 %
Never Married/Single, not otherwise specified	0 %	*	0 %
Unknown	0 %	0 %	*
<b>Grand Total</b>	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>

Source: CDC\_NH-VDRS\_dfl19

\*: does not meet disclosure requirements.

The highest percent of suicide in military affiliated victims is among those males who were married, in a civil union, or in a domestic partnership; this percent is increasing at a slower pace compared to the same category for those who did not serve in the military. In this cluster of suicide victims with military affiliation, there are direct effects on families and especially children.

Suicides have serious consequences on children, which most analysts classify as Adverse Childhood Experiences (ACEs)<sup>19</sup>. Accentuation of suicide's consequences are prominent among the cluster of suicide victims who are married or have partners and have children. NH-VDRS currently is seeking to add the data on ACEs to the data collection.<sup>20</sup>

### **Cause of Death for NH Suicide Victims with Military Status:**

As may be expected, the most prominent cause of death for suicide victims affiliated with the military is the use of firearms. Some advocate support the prevention measure introduced in Israel for the military staff to leave their service weapons in the garrison/barracks<sup>21</sup>. This measure may not be as effective in the US as it is in Israel. In the US, suicide victims affiliated with the military and/or not on active duty may also be gun collectors who used their own firearms and not service firearms. For the period 2015 - 2017, the percent of male suicide victims with military status who used firearms ranged between 11% and 12 %.

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<sup>19</sup> Childhood Exposure to a Parental Suicide Attempt and Risk for Substance Use Disorders, Kimberly H. McManama O'Brien et al, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4407682/>  
Associations of adverse childhood experiences and suicidal behaviors in adulthood in a U.S. nationally representative sample, Thompson MP, [www.ncbi.nlm.nih.gov/pmc/articles/PMC4407682/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4407682/)

<sup>20</sup> Adverse Childhood Experiences and Suicide Attempts <https://www.sprc.org/news/adverse-childhood-experiences-suicide-attempts>

<sup>21</sup> Suicide in Military: <https://www.sprc.org/news/suicide-prevention-israeli-military>

**Table 21**

<b>Military Status &amp; Cause of Deaths - NH Suicides: 2015-2017</b>			
	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Not Served in US Armed Forces</b>	<b>82 %</b>	<b>80 %</b>	<b>83 %</b>
<b>Female</b>	<b>28 %</b>	<b>24 %</b>	<b>22 %</b>
Unspecified Manner/Undetermined	2 %	0 %	0 %
Poisoning	11 %	11 %	9 %
Hanging/Suffocation	7 %	7 %	6 %
Drowning	2 %	0 %	1 %
Firearms	6 %	5 %	6 %
Other Manners	1 %	2 %	0 %
<b>Male</b>	<b>54 %</b>	<b>56 %</b>	<b>61 %</b>
Unspecified Manner/Undetermined	0 %	0 %	0 %
Poisoning	8 %	6 %	8 %
Hanging/Suffocation	17 %	13 %	20 %
Drowning	0 %	0 %	0 %
Firearms	26 %	34 %	30 %
Other Manners	3 %	2 %	3 %
<b>Served in US Armed Forces</b>	<b>17 %</b>	<b>18 %</b>	<b>16 %</b>
<b>Female</b>	<b>0 %</b>	<b>0 %</b>	<b>0 %</b>
Firearms	0 %	0 %	0 %
<b>Male</b>	<b>16 %</b>	<b>18 %</b>	<b>16 %</b>
Unspecified Manner/Undetermined	1 %	0 %	0 %
Poisoning	1 %	2 %	2 %
Hanging/Suffocation	2 %	3 %	2 %
Firearms	11 %	11 %	12 %
Other Manners	0 %	1 %	0 %
<b>Unknown Service in US Armed Forces</b>	<b>1 %</b>	<b>2 %</b>	<b>0 %</b>
<b>Male</b>	<b>1 %</b>	<b>2 %</b>	<b>0 %</b>
Poisoning	0 %	1 %	0 %
Hanging/Suffocation	0 %	0 %	0 %
Firearms	1 %	1 %	0 %
<b>Grand Total</b>	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>

Source: CDC\_NHVDRS\_df119

See **Table 22** (below), Causes of Deaths for Military Affiliated Suicides.

**Table 22**

<b>Military Status &amp; Cause of Deaths - NH Suicides: 2015 -2017</b>			
	<b>2015</b>	<b>2016</b>	<b>2017</b>
Not Served in US Armed Forces	82 %	80 %	83 %
Served in US Armed Forces	17 %	18 %	16 %
Unspecified Manner/Undetermined	2 %	2 %	0 %
Poisoning	1 %	2 %	2 %
Hanging/Suffocation	2 %	3 %	2 %
Firearms	11 %	11 %	12 %
Other Manners	0 %	1 %	0 %
Unknown Service in US Armed Forces	1 %	2 %	0 %

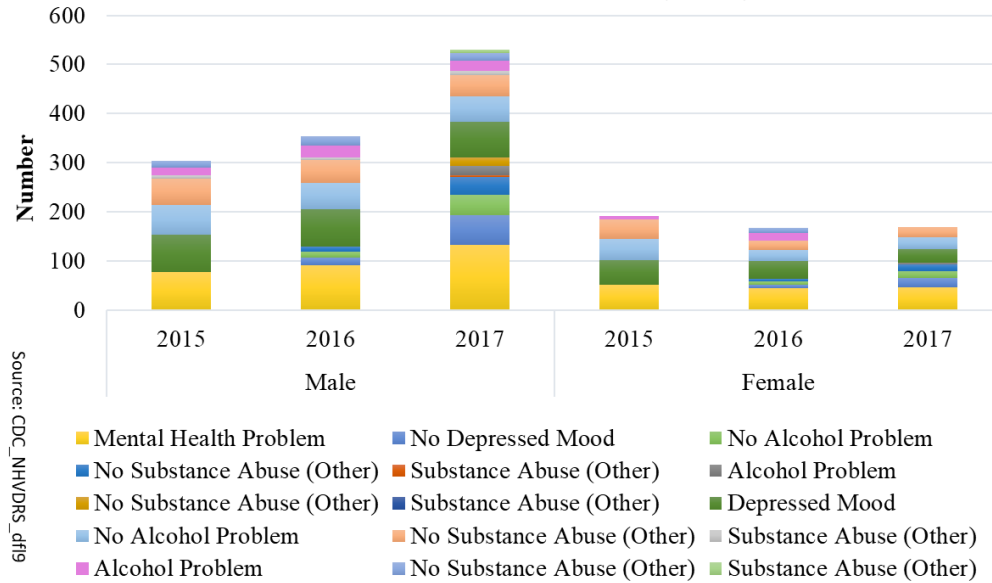
Source: CDC\_NHVDRS\_dfl19

**Mental Health Issues and Risk Factors for NH Suicide Victims with Military Status:**

**Figure 51** (pg. 80) shows all suicide victims in NH who had experienced mental health problems and indicated that their mood was depressed prior to their death, as well as having alcohol and substance misuse issues. The mental health issues are mostly prominent among male suicide victims. The same observation holds true for male suicide victims with depressed moods in addition to alcohol problems for the period 2015- 2017. The levels have increased from 2015 to 2017. In 2015, there were 78 male suicide victims with mental health issues, which increased to 133 victims in 2017. **Figure 51** (pg. 80) is presented to contrast results in **Table 23** (pg. 81) below.

**Figure 51**

**NH Suicides 2015-2017  
by Mental health Problems, Depressed Mood, Alcohol  
Problems, & Substances Abuse (Other).**



**Table 23** (pg. 81), includes all suicide victims who had mental health problems compared to suicide victims with military status, versus suicide victims who had no military affiliation. It was important to investigate the co-occurrence of these variables in conjunction with the other risk factors: depressed mood and alcohol; and substance misuse problems. For better visuals and utility purposes, the data is aggregated for suicide victims with no military status.



**Table 23**

<b>NH Suicide Victims by sex and Military Status who had: Mental Health Problems, Depressed Mood, Alcohol and Substance Abuse: 2015 -2017</b>				
		<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Female</b>	<b>No Military Status</b>	51	44	46
	<b>Militar Status</b>	*		
	Depressed-Mood	*		
	No Alcohol Problems	*		
	No Substance Abuse (Other)	*		
<b>Male</b>	<b>No Military Status</b>	60	68	105
	<b>Militar Status</b>	17	21	28
	No Depressed-Mood		*	10
	No Alcohol Problems		*	7
	No Substance Abuse (Other)		*	7
	Substance Abuse (Other)		*	
	Alcohol Problems		*	*
	No Substance Abuse (Other)		*	*
	Depressed-Mood	17	17	18
	No Alcohol Problems	16	13	14
	No Substance Abuse (Other)	14	13	14
	Substance Abuse (Other)	*		
	Alcohol Problems	*	*	*
	No Substance Abuse (Other)	*	*	*
	<b>Military Status Unknown</b>	*	*	
	Depressed-Mood	*	*	
	No Alcohol Problems		*	
	No Substance Abuse (Other)		*	
	Alcohol Problems	*		
	No Substance Abuse (Other)	*		
	<b>Grand Total</b>	130	135	179

Source: CDC-NH-VDRS\_dfl19

\*: does not meet disclosure requirements

**Suicide Victims in Their Own Voice:**

Suicide victims often leave suicide notes behind. These notes can be varied in content and intent and generally fall into two categories. Sometimes, a victim who planned a suicide also writes or

types a suicide note in advance. To describe this category of notes, the details encompassed the planning that the victim(s) had done in preparation for when their suicide was completed. In addition, this group of victims mostly leave instructions for their loved ones on how to resolve financial, estate, burial, and other affairs. Most of the time, this group includes older adults, who were diagnosed with a terminal illness. Other victims had faced potential jail time or experienced financial ruins.

The other category of notes includes hastily written notes or typed messages on computers/tablets/iPad or on cell phones. This category shows a range of emotions and sometimes rage. These victims address mostly the primary complaint/obstacle the victim faced. Furthermore, these victims show greater impulse in their decision and they often had experienced a recent hardship, which was a trigger for their actions to complete suicide. The crisis triggering the hardship often times involved relationships difficulties such as a break-up, divorce or other marital problems.

**Table 24**

<b>NH Suicides: Percent of Victims Who Left Notes, 2015 - 2017</b>				
	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>Average</b>
<b>Female</b>	<b>28 %</b>	<b>24 %</b>	<b>22 %</b>	<b>25 %</b>
No Suicide Note Left	15 %	11 %	10 %	12 %
Suicide Note Left	13 %	13 %	12 %	12 %
<b>Male</b>	<b>72 %</b>	<b>76 %</b>	<b>78 %</b>	<b>75 %</b>
No Suicide Note Left	47 %	43 %	53 %	48 %
Suicide Note Left	25 %	33 %	25 %	28 %
Grand Total	100 %	100 %	100 %	100 %

\* CDC\_NH-VDRS\_df119

The number of male suicides on average is 75% of all NH suicides for the period 2015-2017. While female suicides for the same period were 25% of all NH suicides. On average, 28% of male suicides left notes, which is about twice the percent of females who left notes (12%), for the period 2015 - 2017.

**Notes summary:**

NH-VDRS is working with suicide prevention stakeholders and policy makers to disseminate information on current facts regarding suicides in NH. In the meantime, NH-VDRS also seeks to engage all data sources including those on prevention that could shed further light on suicide. The NH-VDRS staff welcomes invitations for participation, in events and activities benefiting suicide prevention and helping those affected by suicide.

**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>

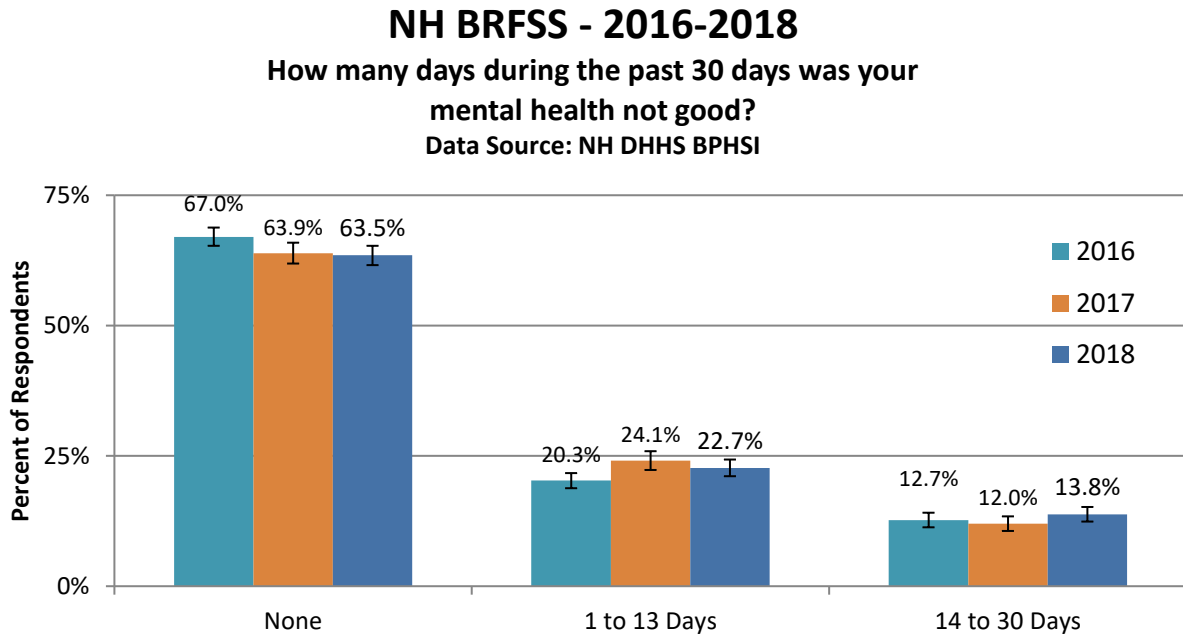
## Additional Data Sources

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

The Behavioral Risk Factor Surveillance System (BRFSS), a survey conducted with a representative sample of state residents, includes a the question asking “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 52** (below).

**Figure 52**

**NH BRFSS – Number of Days Mental Health Was Not Good - NH Residents Age 18 and Over.**



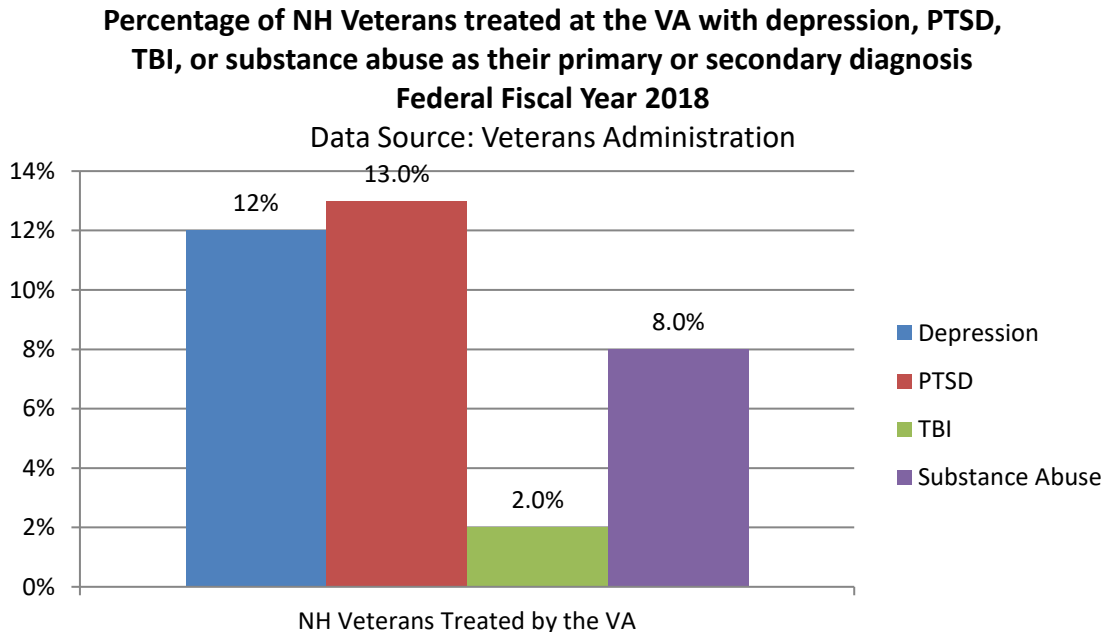
### Data from the NH National Guard

From 2013 through 2017 the NH Army National Guard recorded a total of 55 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, 22% were from individuals under the age of 22, 42% were age 22-26, 11% were age 27-31, 7% were age 32-36, and 11% were age 37-41. The remaining 9% were age 42 and above (total may not equal 100% due to rounding). Sixty percent of the incidents were by non-deployed personnel, veterans, or dependents of National Guard personnel. Of the incidents recorded, 91% were by males and 9% were by females (males may be disproportionately represented among NH National Guard compared with the general population).

## Data on NH Veterans from the Veterans Administration (VA)

The VA provides care to many of the Veterans in the State of NH. During the 2018 Federal Fiscal Year (October 1, 2017 – September 30, 2018), the VA provided care to 25,808 individuals in NH. The percentage of these individuals treated for depression, post-traumatic stress disorder (PTSD), traumatic brain injuries (TBI), and substance abuse are presented in **Figure 53** below.

**Figure 53**



## Data from the NH Department of Corrections

The New Hampshire Department of Corrections reported that there have been no deaths by suicide in any of their facilities for the past four years. There are approximately 2,500 residents (includes all facilities), with 483 individuals admitted to Department of Corrections facilities in 2018. 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 are placed on a 24-hour observation level that includes continuing assessment by mental health professionals.

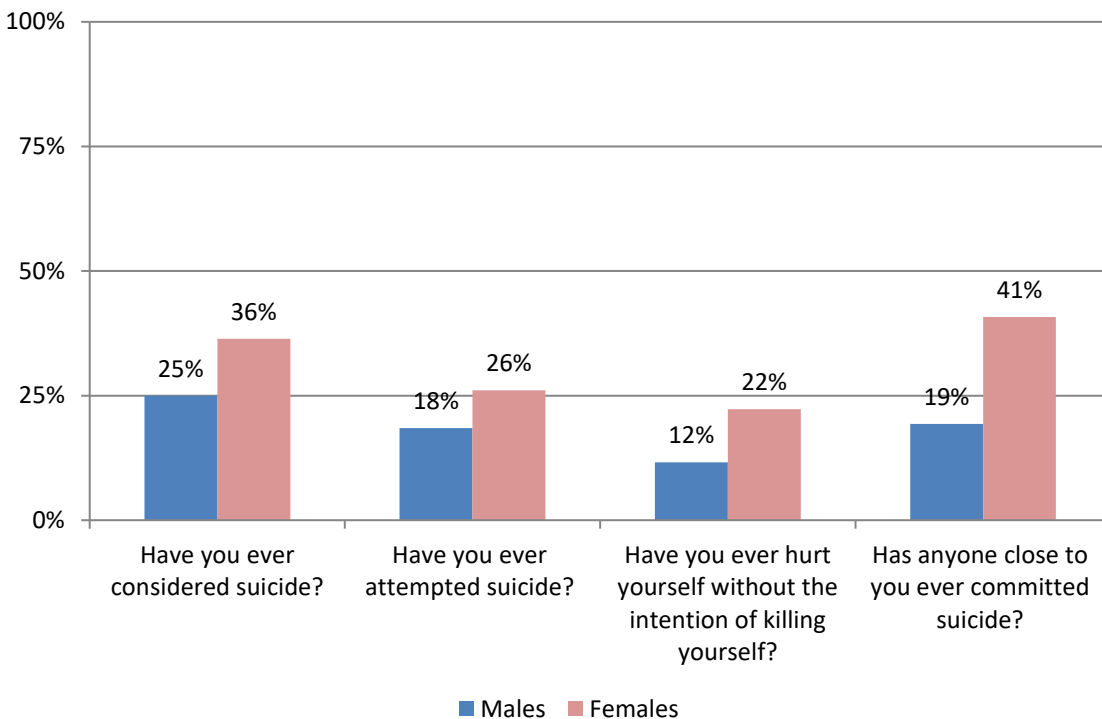
Corrections staff receive ongoing training quarterly suicide prevention trainings conducted for the corrections officers on the Special Housing Unit (SHU) and Reception and Diagnostics Unit (R & D), as well as annual online trainings and assessments. All new Department of Corrections employees, both uniformed and non-uniformed, receive four hours of suicide prevention and mental health training as part of the comprehensive orientation program.

From January 1, 2016 to November 15, 2016<sup>22</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>23</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 54** (below) displays the percentage of intakes indicating suicidal ideation and/or attempts by gender.

**Figure 54**

**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>22</sup> NH Department of Corrections switched Electronic Medical Records on November 16, 2016. Equivalent data after November 16, 2016 are not yet available.

<sup>23</sup> This information should be interpreted cautiously as it is self-reported at a single point in time.

## 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 individuals and organizations, a greater increase in NH suicide rates may have occurred.

**Figure 55** (pg. 87) presents NH suicide death rates for youth and young adults aged 10-24 in rolling three-year intervals from 2008 to 2017. **Figure 55** (pg. 87) shows several small fluctuations. However, these changes are not statistically significant from interval to interval. The rolling three-year intervals for NH residents of all ages combined does show a significant difference between the first interval (2008-2010) and the final three intervals (2013-2015, 2014-2016, and 2015-2017), with the first interval being significantly lower. (**Figure 56** – pg. 87).

### 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](http://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. (Instead of) 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

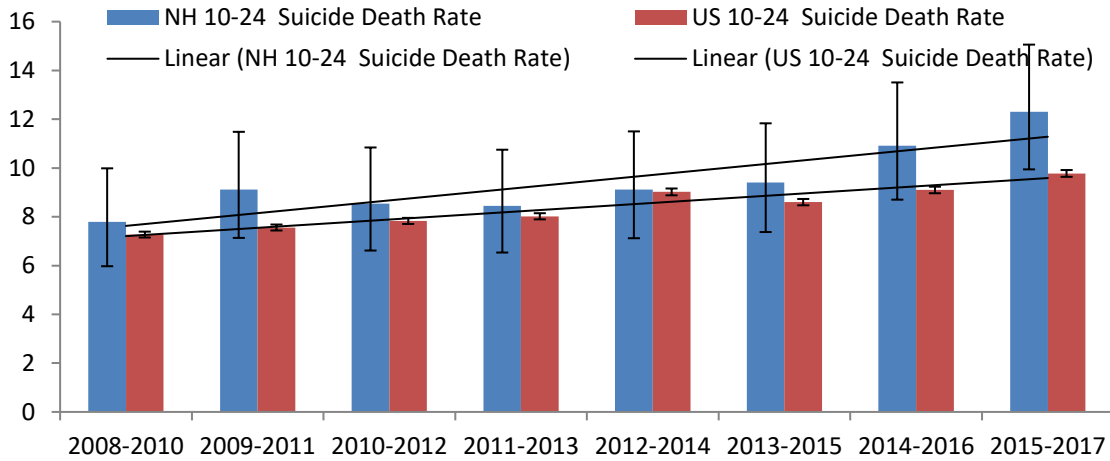
**Figure 55**

**Suicide rates among 10-24 year old NH residents have increased from 2008-2017.**

**NH Resident Suicide Death Rates for Rolling 3-Year Intervals**

**Ages 10 to 24**

**Data Source: CDC WISQARS, 2008-2017**



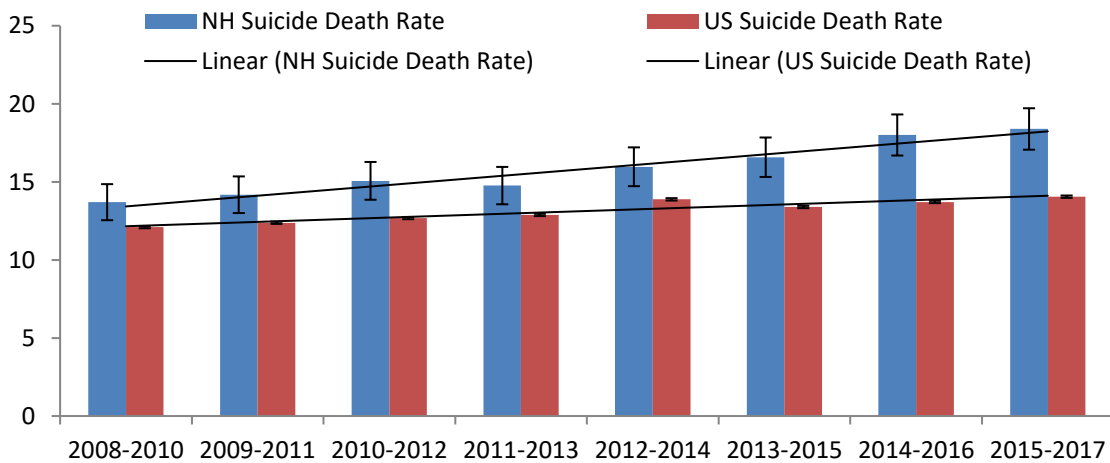
**Figure 56**

**The suicide death rate for people of all ages in NH has increased over the last 10 years.**

**NH Resident Suicide Death Rates for Rolling 3-Year Intervals**

**All Ages**

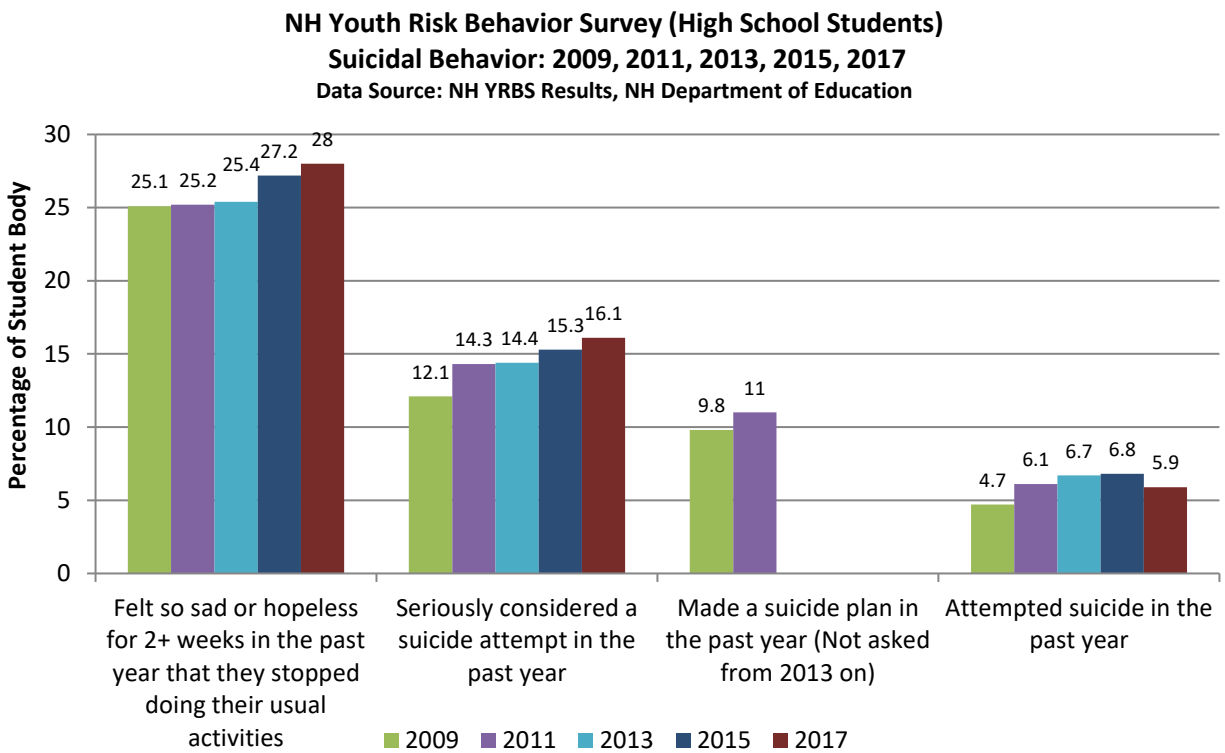
**Data Source: CDC WISQARS, 2008-2017**



**Figure 57** (below) presents the results of the NH YRBS from 2009, 2011, 2013, 2015, and 2017. 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 2009 and 2017. In 2017, 1 in 6 youth surveyed reported having seriously considered attempting suicide in the past year, while 1 in 17 reported actually having made an attempt.

**Figure 57**

**Depression among high school youth remains at about one fourth of the population despite decreases in suicide attempts and suicidal ideation from 2009 to 2017.**



The NH YRBS item addressing whether students have made a suicide plan in the past year was last asked in 2011. This was removed due to the similarity to the question asking whether youth had seriously considered a suicide attempt during the past year. 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). The results of that new question indicate that 17.1% of NH high school age youth (8.4% of males and 24.9% of females) report intentionally hurting themselves without the intent to die during the past year (NH YRBS, 2017).



## 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 3** of this report shows the number of youth and young adult suicides over a 10-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 14**) of this report shows the percent of male and female youths and young adults in NH that died by suicide from 2013 to 2017.
- **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 9 and 10**) in this report show the number of suicide deaths by age group in NH from 2013 to 2017 and the rate of suicide deaths by age group in NH from 2013 to 2017.

### 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 3**, the line chart of youth suicides in NH over the past ten years has a different scale on each axis. On the x-axis (the bottom) are years which range from 2009 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 12**). In that chart you can see that the error bars for Carroll County, Coos County, Merrimack County, and Sullivan County do not overlap the bar for Rockingham County. From this we are able to determine that the rates of suicide in Carroll County, Coos County, Merrimack County, and Sullivan County are significantly different from those 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 (i.e., 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 percent 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
Behavioral Risk Factor Surveillance System	BRFSS
Centers for Disease Control and Prevention	CDC
Crisis Intervention Team	CIT
Community Mental Health Center	CMHC
Counseling on Access to Lethal Means	CALM
Department of Health and Human Services	DHHS
Electronic Data Warehouse	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

d<sub>i</sub> = number of events in age group i

P<sub>i</sub> = population in age group i

S<sub>i</sub> = proportion of the standard population in age group i

This is a weighted sum of Poisson random variables, with the weights being (S<sub>i</sub> / p<sub>i</sub>).

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

## 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

$$R \pm z (SE)$$

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 compiled, and de-identified 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

$$\text{S.E.} = \sqrt{\frac{w_j^2 n_j}{p_j^2}}$$

## 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?**

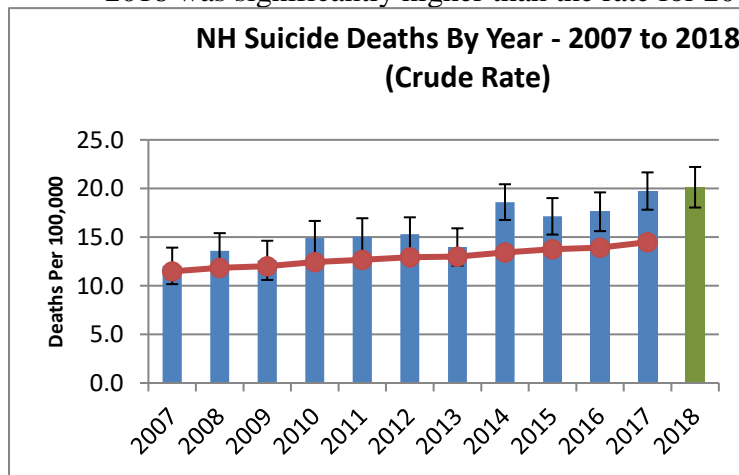
**A:** It is best to focus on data from a full year or multiple years rather than periods of just a few months. Over brief periods these numbers are too volatile to draw accurate conclusions from them.

**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 2007 do not overlap with the 2014 through 2018 confidence intervals, meaning that the rate for 2014 - 2018 was significantly higher than the rate for 2007.



\*2007-2017 = CDC Data, 2018 = NH Data\*

Change in Rate per 100,000 from Year to Year	
2007-2008	12.04 to 13.60 ( <b>Up</b> 13%)
2008-2009	13.60 to 12.61 ( <b>Down</b> 7%)
2009-2010	12.61 to 14.89 ( <b>Up</b> 18%)
2010-2011	14.89 to 15.02 ( <b>Up</b> 1%)
2011-2012	15.02 to 15.29 ( <b>Up</b> 2%)
2012-2013	15.29 to 13.99 ( <b>Down</b> 9%)
2013-2014	13.99 to 18.60 ( <b>Up</b> 33%)
2014-2015	18.60 to 17.14 ( <b>Down</b> 8%)
2015-2016	17.14 to 17.61 ( <b>Up</b> 3%)
2016-2017	17.61 to 19.73 ( <b>Up</b> 12%)
2017-2018	19.73 to 20.13 ( <b>Up</b> 2%)

**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?**

**A:** 10 Leading Causes of Death, New Hampshire, by Age Group, 2013 – 2017

Rank	Age Groups										All Ages
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Congenital Anomalies 37	Congenital Anomalies ---	Malignant Neoplasms 10	Malignant Neoplasms 13	Unintentional Injury 316	Unintentional Injury 700	Unintentional Injury 519	Malignant Neoplasms 939	Malignant Neoplasms 2,604	Heart Disease 10,790	Malignant Neoplasms 13,690
2	Short Gestation 33	Homicide ---	Homicide ---	Unintentional Injury ---	Suicide 142	Suicide 173	Malignant Neoplasms 214	Heart Disease 545	Heart Disease 1,298	Malignant Neoplasms 9,817	Heart Disease 12,821
3	Maternal Pregnancy Comp. 25	Unintentional Injury ---	Unintentional Injury ---	Suicide ---	Heart Disease 19	Malignant Neoplasms 74	Suicide 185	Unintentional Injury 540	Unintentional Injury 409	Chronic Low Respiratory Disease 3,011	Unintentional Injury 3,981
4	Circulatory System Disease 11	Influenza & Pneumonia ---	Benign Neoplasms ---	Benign Neoplasms ---	Malignant Neoplasms 15	Heart Disease 43	Heart Disease 116	Suicide 265	Chronic Low Respiratory Disease 366	Cerebrovascular 2,117	Chronic Low Respiratory Disease 3,492
5	Placenta Cord Membranes 11	Heart Disease ---	Heart Disease ---	Congenital Anomalies ---	Homicide 12	Congenital Anomalies 12	Liver Disease 47	Liver Disease 155	Liver Disease 269	Alzheimer's Disease 2,010	Cerebrovascular 2,376
6	Intrauterine Hypoxia ---	Malignant Neoplasms ---	Cerebrovascular ---	Chronic Low Respiratory Disease ---	Chronic Low Respiratory Disease ---	Liver Disease 11	Diabetes Mellitus 23	Diabetes Mellitus 98	Diabetes Mellitus 260	Unintentional Injury 1,477	Alzheimer's Disease 2,045
7	Respiratory Distress ---	Benign Neoplasms ---	Congenital Anomalies ---	Influenza & Pneumonia ---	Diabetes Mellitus ---	Homicide 10	Chronic Low Respiratory Disease 17	Chronic Low Respiratory Disease 81	Suicide 209	Diabetes Mellitus 1,177	Diabetes Mellitus 1,574
8	Neonatal Hemorrhage ---	Diabetes Mellitus ---	---	Nephritis ---	Congenital Anomalies ---	Chronic Low Respiratory Disease ---	Homicide 16	Cerebrovascular 73	Cerebrovascular 157	Influenza & Pneumonia 1,024	Suicide 1,169
9	Necrotizing Enterocolitis ---	---	---	Pneumonitis ---	Cerebrovascular ---	Complicated Pregnancy ---	Cerebrovascular 14	Septicemia 31	Septicemia 87	Nephritis 769	Influenza & Pneumonia 1,128
10	SIDS ---	---	---	---	Benign Neoplasms ---	Diabetes Mellitus ---	Congenital Anomalies ---	Nephritis 27	Influenza & Pneumonia 67	Parkinson's Disease 667	Nephritis 866

Source: CDC WISQARS, 2013-2017

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



## Contacts and Meeting Information

### **State Suicide Prevention Council**

Primary Contact: Russell Conte – [Russell.Conte@dos.nh.gov](mailto:Russell.Conte@dos.nh.gov)

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](mailto: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](mailto:edemello@naminh.org)

### **NH Suicide Survivor Network**

Primary Contact: Deb Baird – [dbaird@naminh.org](mailto:dbaird@naminh.org)

### **Suicide Prevention Council Subcommittees**

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

Co-chairs: Rhonda Siegel – [rsiegel@dhhs.state.nh.us](mailto:rsiegel@dhhs.state.nh.us)

Mary Forsythe-Taber – [mft@mih4u.org](mailto:mft@mih4u.org)

Meets 2<sup>nd</sup> Wednesday of the month 1:00 pm – 3:00 pm  
DHHS, 29 Hazen Drive, Concord

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

Chair: Patrick Roberts – [proberts@naminh.org](mailto:proberts@naminh.org)

Meets 4<sup>th</sup> Friday 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 – [Amy.Cook@dhhs.nh.gov](mailto:Amy.Cook@dhhs.nh.gov)

Beth Alves - [Beth.Alves@va.gov](mailto:Beth.Alves@va.gov)

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](mailto:james.mackay@mygait.com)

Meeting schedule to be determined

**State Suicide Prevention Conference Meetings**

Primary Contact: Deb Baird – [dbaird@naminh.org](mailto:dbaird@naminh.org)

Contact Deb Baird for current meeting schedule and location

**Suicide Fatality Review**

Chair: Dr. Paul Brown

Attendance is by invitation only

**Survivors of Suicide Loss**

Co-Chairs: Susan Morrison – [SOSL4NHSPC@gmail.com](mailto:SOSL4NHSPC@gmail.com)

Deb Baird – [dbaird@naminh.org](mailto:dbaird@naminh.org)

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 [www.theconnectprogram.org](http://www.theconnectprogram.org) 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: [www.suicidepreventionlifeline.org/](http://www.suicidepreventionlifeline.org/)
  - \* 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: <http://www.dhhs.state.nh.us/dcbcs/bbh/centers.htm>

Disaster Behavioral Health Response Teams: <http://www.dhhs.nh.gov/esu/dbhrtnh.htm>

NAMI New Hampshire: [www.NAMINH.org](http://www.NAMINH.org), 603-225-5359

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

Fenway Peer Listening Line: 1-800-399-PEER [www.fenwayhealth.org](http://www.fenwayhealth.org)

GLBT National Hotline (M-F 4-12 pm; Sat. 12-5 pm): 1-888-843-4564 [www.glnh.org](http://www.glnh.org)

GLBT National Youth Talkline (M-F 8-12 pm): 1-800-246-PRIDE (7743) Email: [youth@GLBTNationalHelpCenter.org](mailto:youth@GLBTNationalHelpCenter.org)

SPRC Library: [www.sprc.org/library\\_resources/sprc](http://www.sprc.org/library_resources/sprc)

Trevor Helpline (24/7): 1-866-4u-TREVOR (488-7386) [www.thetrevorproject.org](http://www.thetrevorproject.org)

### Military Resources

Military One Source: [www.militaryonesource.mil](http://www.militaryonesource.mil)

Tragedy Assistance Program for Survivors (TAPS): [www.taps.org](http://www.taps.org)

US Department of Veterans Affairs: [www.va.gov](http://www.va.gov)

Veterans Crisis Line: 1-800-273-8255 (press 1 after connecting)

### National Organizations

American Association of Suicidology: [www.suicidology.org](http://www.suicidology.org)

American Foundation for Suicide Prevention: [www.afsp.org](http://www.afsp.org)

National Action Alliance for Suicide Prevention: [actionallianceforsuicideprevention.org](http://actionallianceforsuicideprevention.org)

National Alliance on Mental Illness: [www.nami.org](http://www.nami.org)

Suicide Prevention Resource Center: [www.sprc.org](http://www.sprc.org)

### Older Adults

NH Fact Sheet on Suicide and Aging: [bit.ly/2nuLd5O](http://bit.ly/2nuLd5O)

SPRC Older Adult Suicide Prevention Resources: [www.sprc.org/populations/older-adults](http://www.sprc.org/populations/older-adults)

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

Obtaining Prevention Materials:

Visit their website: [store.samhsa.gov/](http://store.samhsa.gov/) (includes downloadable materials)

Call: 1-877-SAMHSA-7 (1-877-726-4727) or Email: [samhsainfo@samhsa.hhs.gov](mailto:samhsainfo@samhsa.hhs.gov)

Treatment Provider Locator:

SAMHSA maintains a searchable list of mental health and substance abuse providers. You can use it to find a local provider by going to [www.samhsa.gov/treatment/](http://www.samhsa.gov/treatment/)

## 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: [www.allianceofhope.org](http://www.allianceofhope.org)

American Foundation for Suicide Prevention: [afsp.org](http://afsp.org)

Compassionate Friends: [www.compassionatefriends.org](http://www.compassionatefriends.org)

The *Connect* Program: <https://theconnectprogram.org/find-support/coping-with-suicide-loss>

Friends for Survival: [www.friendsforsurvival.org](http://www.friendsforsurvival.org)

Grief After Suicide: [bit.ly/suicidegriefsupport](http://bit.ly/suicidegriefsupport)

Heartbeat: [www.heartbeaturvivorsaftersuicide.org](http://www.heartbeaturvivorsaftersuicide.org)

Parents, Family and Friends of Suicide Loss: [www.pos-ffos.com](http://www.pos-ffos.com)

SAVE (Suicide Awareness Voices of Education): [www.save.org/coping](http://www.save.org/coping)

Survivors of Suicide Loss: [www.survivorsofsuicide.com](http://www.survivorsofsuicide.com)

Suicide: Finding Hope: [www.suicidefindinghope.com](http://www.suicidefindinghope.com)

### Discussion Forums

Help for People Left Behind: [forums.grieving.com](http://forums.grieving.com)

Suicide's Survivors: [bit.ly/legacy-suicidesurvivors](http://bit.ly/legacy-suicidesurvivors)

### Booklets

Coping with the Loss of a Friend or Loved One: [bit.ly/save-coping-withloss](http://bit.ly/save-coping-withloss)

Financial Guide: [bit.ly/2n0iwgK](http://bit.ly/2n0iwgK)

Handbook for Survivors of Suicide: [bit.ly/2lnGUsm](http://bit.ly/2lnGUsm)

Hope and Healing after Suicide: [bit.ly/2n0cxsE](http://bit.ly/2n0cxsE)

Resource and Healing Guide: [bit.ly/2nyiEVg](http://bit.ly/2nyiEVg)

#### 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>