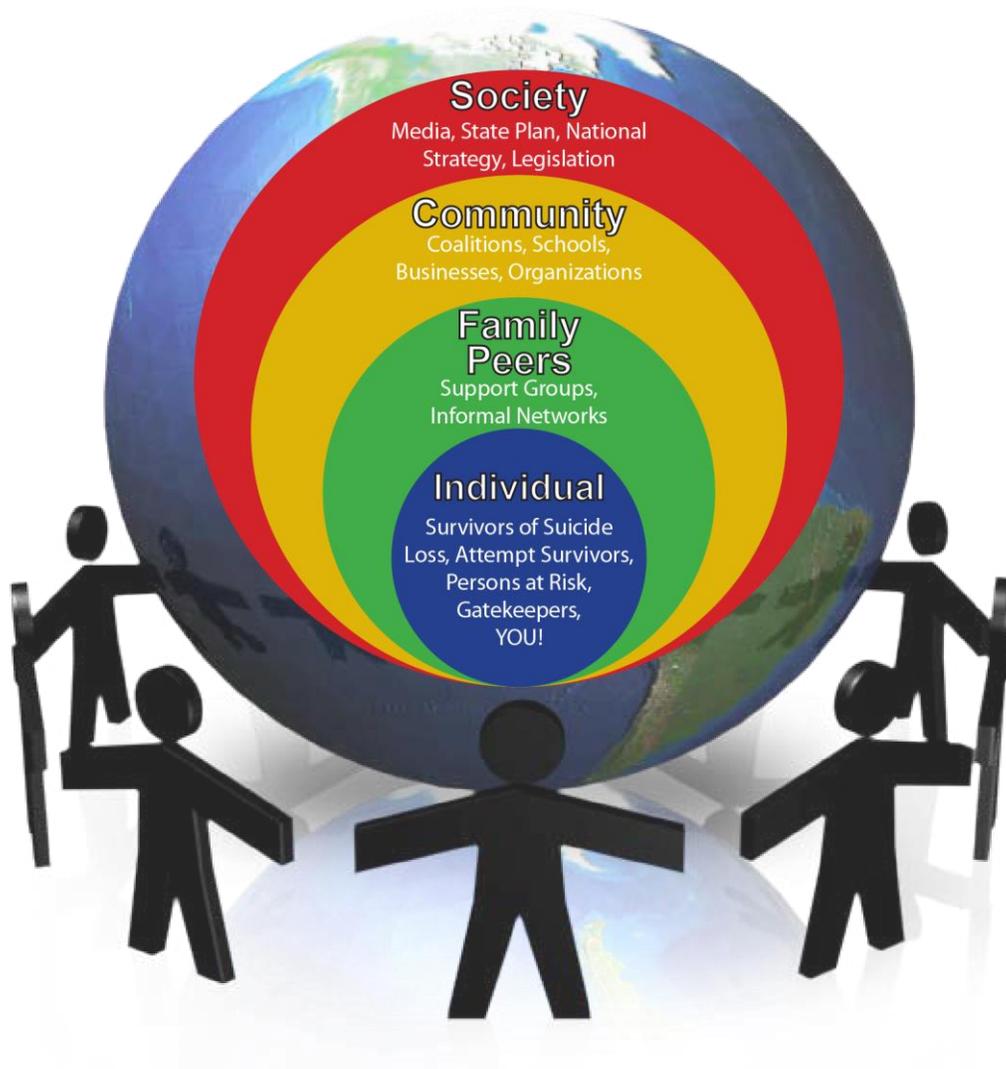


New Hampshire Suicide Prevention



Annual Report 2017

This report was produced by the National Alliance on Mental Illness – NH (NAMI NH), State Suicide Prevention Council (SPC) and Youth Suicide Prevention Assembly (YSPA).

Any individual or organization may freely copy and distribute this report. Electronic copies are available at www.TheConnectProgram.org/annual-reports.

Table of Contents

Introduction	3
What's New in This Year's Report?	3
Primary Partners	4
Accomplishments of Suicide Prevention Efforts in NH	6
State Suicide Prevention Council	6
Youth Suicide Prevention Assembly.....	8
The NH Suicide Survivor Network.....	9
Other Statewide Initiatives	11
Campus Youth Suicide Prevention and Early Intervention Grant Program.....	14
Annual NH Suicide Prevention Conference.....	14
NH Grown National Initiatives	15
2017 Data	16
Introduction	16
Demographic Profile of New Hampshire.....	17
The Big Picture: Suicide in NH and Nationally	19
Youth and Young Adult Suicide in NH	22
Older Adult Suicide in NH	26
Suicide Across the Lifespan in NH	27
Suicide Behavior in NH: Gender Differences	34
Suicide in NH: Methods	42
Reducing Access to Lethal Means	47
Linking At-Risk Individuals with Help	48
Costs of Suicide and Suicidal Behavior	48
National Violent Death Reporting System.....	49
Additional Data Sources	71
NH Behavioral Risk Factor Surveillance System.....	71
NH National Guard	71
Veterans Health Administration.....	72
NH Department of Corrections	73
Suicide Rates in NH.....	74
Reading Tables and Figures	77
Glossary of Terms	79
Reliability of Rates	82
Frequently Asked Questions about NH Suicide Data	83
Contacts and Meeting Information	85
Recognize the Warning Signs of Suicide	87
Mental Health and Suicide Prevention Resources	88

Introduction

The 2017 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 2017:

- After selling out again in 2016 the NH Suicide Prevention Conference transitioned to a larger venue for 2017.
- In 2017, Exeter Hospital hosted a Zero Suicide Academy and included representatives from the health and behavioral health care field, Department of Corrections, Department of Safety, and military organizations.

Many achievements will be described further throughout this report. It is critical to NH in the next few years that we 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. 49**).
- 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 NH and the Connect Suicide Prevention Program

The National Alliance on Mental Illness (NAMI NH), 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 Youth Suicide Prevention Assembly and the State Suicide Prevention Council 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.

NH Office of Chief Medical Examiner

The NH 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.

NH Violent Deaths Reporting System

In 2015, NH partnered with the Center 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, 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; Cross-Training and Professional 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 SB 390, 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 24 years old. 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 age groups.

Accomplishments of Suicide Prevention Efforts in NH

State Suicide Prevention Council

This year marked the ninth anniversary of NH's Suicide Prevention Council (SPC) since its legislative inception. 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/>. During 2017, 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 2017 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/>.
- Promoted the recommendations and safe messaging with college students at Plymouth State University, Colby Sawyer College, and the University of New Hampshire. During the 2016-2017 academic year, there was an overall 50% increase in the average scores reported on a post session survey of student understanding of how to report on suicides based on media recommendations.

Data Collection and Analysis Subcommittee

- Worked with multiple statewide partners to compile and analyze data covering calendar year 2016. The data were then included in the 2016 NH Suicide Prevention Annual Report and distributed statewide.
- Collaborated with the Analyst for the NH Violent Death Reporting System (NVRDS) 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:
 - Presenting the Veterans Administrations' SAVE training to 137 human resource representatives from local communities of the Nashua, Keene, and Portsmouth HR Charters of NH.
 - Representatives from the VA, Vet Center and the NH Army National Guard provided a holistic block of training covering PTSD, sexual assault, suicide

- prevention and resilience training at combined training event for the Manchester Police Department's Negotiation Team.
- 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.
- 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.

Survivor of Suicide Loss Subcommittee

- Provided support and technical assistance to 15 NH Loss Survivor Support Groups, including bi-monthly facilitator calls, and supported 10 American Foundation for Suicide Prevention (AFSP) International SOSL Day events around NH.
- Coordinated over 40 Survivor Voices speaking engagements and engaged new Adult Young Adult Survivor Voices Speakers.
- Ensured Loss Survivor participation in community events through targeted outreach.
 - Over 25 identified Loss Survivors participated in the NH Annual Suicide Prevention Conference.
 - The Team SOS (Survivors of Suicide) participated at the NAMI 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 85-86 of this report.

The Youth Suicide Prevention Assembly (YSPA)

The Youth Suicide Prevention Assembly (YSPA) meets monthly in Concord to review cases of youth suicides of individuals age 24 and under in order to identify trends and insights into suicide prevention. YSPA also utilizes monthly meeting for networking, learning about resources, and having formal presentations on a wide variety of related topics.

YSPA continued to highlight educational components in the monthly meetings via speakers who discussed suicide-related risk factors and other key topics which arose through case reviews. Highlights from 2017 included presentations by a representative from the Bureau of Drug and Alcohol Services regarding data obtained from focus groups of YSPA-age individuals. The data highlighted some of the issues affecting that age group and was helpful to put into context the risk and protective factors with this population. Members of the Laconia Police Department, along with a Survivor of Suicide Loss, did a presentation for YSPA regarding their protocols for responding to a suicide death. A representative from the Department of Education spoke of the role of trauma and how it can impact learning and interpersonal skills. An article written by (retired) pediatrician, Dr. Wendy Gladstone summarizing a study of the risk siblings' face following the death of a sibling (by any method) was a focus of discussion. "Participant Bios", where a meeting attendee shares their personal story of how they came to be involved in suicide prevention continued as a focus for a few of the meetings.

YSPA held its annual "retreat" where the Mission Statement and brochure were updated to reflect current practices. This is the opportunity for the "A" in YSPA ("Assembly") to make the meetings the most valuable and informative for attendees.

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 or Elaine de Mello: edemello@naminh.org.

The NH Suicide Survivor Network

In 2017 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 Adults (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 2017 there were 42 presentations by loss

survivors. The very first Survivor Voices Young Adult Speaker Training was held and included 6 participants ranging in age from 16 to 22. These Young Adult Speakers first shared their stories at the State Suicide Prevention Conference in November 2017.

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 10 sites throughout NH on the last Saturday before Thanksgiving and gathered over 100 loss survivors together in healing, support and understanding.

The annual NH Survivor of Suicide Loss Newsletters were distributed throughout the state, with hard copies made available at trainings, loss survivor speaking presentations, the State Suicide Prevention Conference, health fairs, libraries, hospitals, healthcare facilities, mental health centers, funeral homes, churches and faith based organizations, and in the Survivors of Suicide Loss Resource Packet. The newsletter was also distributed electronically to many email lists. More and more loss survivors in NH are becoming involved in advocacy and fundraising efforts for various local and national suicide prevention organizations and initiatives. NH loss survivors volunteered over 1327 hours in 2017. This included displaying the three quilts that were lovingly crafted by NH survivors of suicide loss in memory of their loved ones lost to suicide. The quilts were displayed along with loss survivor resources at many of these events such as the NAMI NH Walk, several AFSP “Out

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.

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

Overall infrastructure around suicide prevention, intervention and postvention has been strengthened statewide as noted by the many communities and schools who now consult with each other to implement best practices with support from state and national expertise. Capacity is also evident through a growing network of loss survivors, trainers and regions who are prepared to take initiative around advocacy and education and/or respond at the time of a crisis in an appropriate and coordinated manner. Further evidence that a culture of best practices has been established has been noted by the fairly consistent way that media has been responsible in reporting on suicide and utilized national media guidelines in their reporting styles and seeking consultation with suicide prevention experts in NH. Numerous articles and media series occurred over the year providing education and resources about mental health, substance use and suicide prevention.

A three year statewide federal suicide prevention grant that focused on youth ages 10-24 in NH concluded September 30, 2016. Many of the activities supported by this grant continue to be sustained and developing, including the following:

An aftercare liaison position was established at the state psychiatric hospital to work closely with youth through the age of 24 who were admitted for suicide risk. This liaison worked closely with these individuals and their support system to provide psycho education around mental illness and suicide risk, engage them in safety planning, link them with NAMI NH and other resources, and arrange for a smooth transition back into the community. Through a holistic, collaborative approach, the aftercare liaison could help to ensure a successful recovery after hospitalization for up to 90 days post discharge. While evaluation is still underway, the project was able to avert several adverse incidents. This liaison position has been retained as a permanent position with the hospital since the grant expired and has served as a model for other hospitals around the country.

During the period of the grant NH Hospital also established a suicide prevention task force to look at implementing best practices throughout the hospital through a Zero Suicide approach. Included in their strategies was to bring the Connect Suicide Prevention training into the orientation program for all new mental health workers at the hospital, expand on the use of safety plans for patients admitted for suicide risk, and include suicide prevention information in all discharge packets. The NH Hospital suicide prevention task force continues to meet monthly in an effort to continue comprehensive implementation of best practices throughout the facility.

Regional Public Health Networks continued to prioritize suicide prevention efforts in concert with other prevention efforts and key areas of need, such as addressing substance misuse and the opioid crisis. Recognizing the intersection of suicide risk, substance misuse, and mental health issues especially among young adults, NAMI NH partnered with the Bureau of Drug and Alcohol Abuse and the Regional Public Health Networks to implement a Connect Young Adult Prevention program. The program trained young adult trainers between the ages of 18 and 25 years old in substance use, mental health, and suicide risks in order to provide leadership and education to their peers in reducing the impact and negative outcomes associated with these issues. By the end of 2017, trainings had occurred in 13 public health regions around the state, with a plan to implement one more training in each of the 13 regions by July 2018.

High school youth and young adults served in other leadership roles in the state. In addition to continuing to provide suicide prevention training in regions across the state through the Connect Youth Leader training, several of the trained youth from high schools spoke at public forums and vigils around the state to help promote suicide prevention education and healing to communities impacted by the tragedy of youth suicide.

Six youths and young adults were trained as speakers in NAMI NH's Survivor Voices program for suicide loss survivors. The program was tailored for younger speakers who have since become active in sharing their stories through schools, special events and the annual suicide prevention conference. Their powerful testimony and role modeling has been a healing force for individuals, families and communities affected by suicide in NH.

Offered by the National Guard, the two day ASIST (Applied Suicide Intervention Skills Training) training continues to be available to military members and civilians across NH, expanding the repertoire of tools and skills of citizens across the state to respond to persons at risk.

Every year the NH Army National Guard recognizes September as Suicide Prevention Awareness Month and conducts suicide postvention training. Suicide postvention is the 3rd phase of the suicide prevention program in accordance with Army Regulation 600-63: Army Health Promotion. Phase I is suicide awareness prevention: using Ask, Care, Escort (ACE) training model. Phase II is suicide intervention: using the ASIST model. Phase III is suicide postvention: using NAMI NH's Connect Training model. The annual goal is to provide all commanders, their first sergeants and their designated Suicide Intervention Officers (SIOs) training in all three phases of the suicide prevention program to enable them to create and manage their commander's suicide prevention policy.

Postvention provides the tools to better prepare individuals on what to expect after a suicide death and what steps are needed to be done quickly and safely to prevent contagion and other high risk behaviors from happening to the family members and peers of the fallen service member. In 2017, 33 Service Members attended the Connect Postvention Training.

SOS (Signs of Suicide Prevention Program), a nationally recognized, evidence based secondary school-based suicide prevention program that includes screening and education, was introduced to 15 new schools in NH in 2017. Eighteen individuals participated in the 2-day SOS Certified Training Institute. An additional 26 individuals completed a half-day SOS training for sustainability, strengthening the safety net and awareness around youth suicide prevention in the school systems across the state. These efforts were supported 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 6th annual Connor's Climb Foundation 5K and Family Walk, and over 600 attendees at the first annual Stick it to Stigma hockey game.

AFSP's (American Foundation for Suicide Prevention) 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 in 2017 in collaboration with: Partnership for Public Health; Dartmouth College; VA Manchester; Southern New Hampshire University; the Samaritans; and the Survivor Support Groups in NH.

AFSP NH brought two new programs to the community. In November, 38 clergy and lay-ministers were trained in the Soul Shop Suicide Prevention Program at St. Paul's Episcopal Church in Concord. A Research Connection program was offered at Dartmouth-Hitchcock

Medical Center in December. James W. Murrrough M.D., PhD presented “What’s New in the Medical Treatment of Depression and Suicide Risk”.

Advocacy is at the heart of AFSP’s mission to save lives and bring hope to those affected by suicide, and those pushing for grassroots change are invaluable in that effort. More than 100 Field Advocates in the Granite State worked closely with the national Public Policy Team and the NH Chapter to help build strong, meaningful working relationships with elected officials at all levels of government. This included participating in a state advocacy day meet and greet where advocates interacted with 110 legislators and aides to discuss suicide prevention efforts important in the state of NH.

AFSP conducted five (5) Out of the Darkness Community Walks in 2017 in the communities of Concord, Portsmouth, Nashua, Laconia and Keene as well as two (2) Campus Walks at Southern New Hampshire University in Manchester and Dartmouth College in Hanover. Over 1,500 individuals participated in these Walks to raise funds that allow AFSP to invest in new research, create educational programs, advocate for public policy, and support survivors of suicide loss. From funds raised, AFSP was able to hold a variety of Gatekeeper suicide prevention trainings including Talk Saves Lives for Firearms Owners in Exeter; SafeTALK trainings in Manchester and Londonderry; Youth-Mental Health First Aid in collaboration with UNH Cooperative Extension in Nashua, New London, Brentwood, Derry and Somersworth. Hundreds of attendees benefitted from these research-based trainings.

In 2017, Exeter Hospital hosted a Zero Suicide Academy which was well attended by NH representatives from the health and behavioral health care field as well as Department of Corrections, Department of Safety, and military organizations. A Zero Suicide Community of Practice followed the Zero Suicide Academy and the work rolled out through this initiative continues to be implemented across the state.

Campus Youth Suicide Prevention and Early Intervention Grant Program (Garrett Lee Smith Grant)

University of NH (UNH):

UNH was granted a no-cost extension in order to achieve the aims of a grant sponsored by the Substance Abuse and Mental Health Services Administration (SAMSHA). The focus of the grant is to extend the suicide prevention efforts on campus and to establish a sustainable suicide prevention program. Trainings have been created to prepare staff, educators, and students to recognize signs of psychological distress and to help connect individuals in need with appropriate services. These trainings have been provided in collaboration with the Campus Suicide Prevention Committee (CSPC), Psychological and Counseling Services (PACS), and numerous other campus partners.

Annual NH Suicide Prevention Conference

NH's 2017 Suicide Prevention Conference: "Connections Matter" 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 NH's own internationally recognized speaker and expert Dr. Shawn Shea on The Human Matrix: Preventing Suicide by Creating Resiliency. The event closed with a plenary "Live Through This" led by national speaker: Dese'Rae L. Stage.

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 technology and mental health, young adult leadership, and safe messaging.

Positive Outcomes and Testimonials

"This Conference saved my life"

Feedback from an attendee at the Annual NH Suicide Prevention Conference

NH Grown National Initiatives

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 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 first responders, medical providers, schools and families in NH and across the U.S. The CALM training is available online through the SPRC website and a specialized program for first responders is in development.

Positive Outcomes and Testimonials

"Before I had the [Connect] training, I wouldn't have known what to do and would have probably done nothing. Because of the training, I got involved right away and I knew where to turn to get support and resources immediately."

Tammy Levesque, Lakes Region Partnership for Public Health on responding to a suicide in her region

Specialized projects such as the NH Gun Shop Project continue to receive national attention in the media and journal articles. Many states have joined in to replicate or otherwise utilize the project across the U.S. The NH Firearm Safety Coalition continues to meet and move this effort forward. In 2017 the group worked to finalize a suicide prevention video for gun owners and piloted this through firing range instructors.

NAMI NH's Connect Suicide Prevention Program has been recognized as a national best practice and model for a comprehensive, systemic approach around 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 Youth Suicide Prevention Assembly and the State Suicide Prevention Council with implementation and 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.

Over 50 individuals were trained as Connect Prevention, Postvention, Young Adult, and Youth Leader Trainers in 2017. These individuals were trained throughout NH and represent schools, campuses, law enforcement, social services, mental health and public health networks and homeless liaisons. Connect Trainings of Trainers were conducted with leaders from many of these sectors to extend the program throughout systems and communities across NH.

The Connect Suicide Prevention and Postvention program also continues to expand its geographical reach with consultation, trainings and workshops. As of the end of 2017, the Connect Suicide Prevention training has had a presence in 43 US states, as well as the British Isles, Canada, and the Pacific Islands.

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/L9D8BFY>

2017 Data

SPC/YSPA Data Subcommittee Membership Representation 2017-2018

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 the 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 9 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, 2017). 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 2nd highest rate in the US for alcohol use in the past month and the 8th highest rates for marijuana use in the past month (National Survey on Drug Use and Health, 2015-2016).

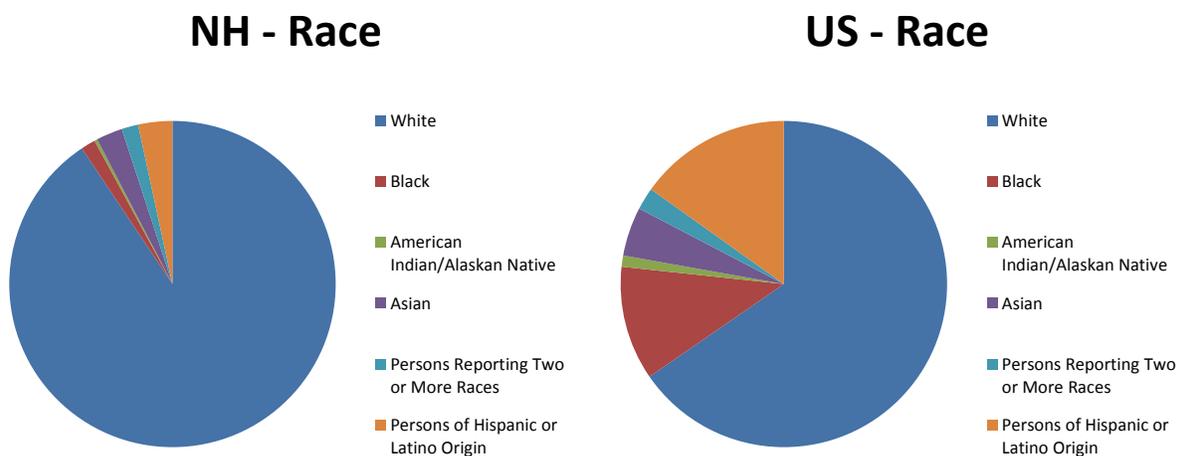
Table 1

Race/Ethnicity.

	New Hampshire	United States
White	93.8%	76.9%
Black	1.5%	13.3%
American Indian/Alaskan Native	0.3%	1.3%
Asian	2.7%	5.7%
Persons Reporting Two or More Races	1.7%	2.6%
Persons of Hispanic or Latino Origin	3.5%	17.8%

Source: US Census Bureau 2017

Figure 1
NH and US Race/Ethnicity.



Source: US Census Bureau 2017

Table 2

Age.

	New Hampshire	United States
Under 18	19.5%	22.8%
18 to 24	9.7%	9.8%
25 to 44	23.6%	26.4%
45 to 64	31.4%	26.5%
65 to 74	9.2%	8.3%
75 and Up	6.6%	6.2%

Source: US Census Bureau 2017

Table 3

Economic Factors.

	New Hampshire	United States
Unemployed Residents	2.6%	3.9%
Persons Below Poverty Level	7.3%	12.7%
Persons Without Health Insurance	7.1%	10.1%
Per Capita Income (Yearly)	\$35,264	\$29,829
Median Household Income	\$68,485	\$55,322
Owner Occupied Homes	70.7%	63.6%
Median Home Value	\$239,700	\$184,700

Sources: US Census Bureau American Community Survey 2017

Table 4

Education – population age 25 and older.

	New Hampshire	United States
Less Than High School Graduate	7.4%	13.0%
High School Graduate or Associates Degree	57.1%	56.7%
Bachelor’s Degree or Higher	35.5%	30.3%

Source: US Census Bureau American Community Survey 2017

Table 5

Substance Use – Individuals Age 12 and Up.

	New Hampshire	United States
Marijuana Use – Past Month	12.06%	8.60%
Alcohol Use – Past Month	63.54%	51.21%
Tobacco Use – Past Month	24.31%	23.72%

Source: National Survey on Drug Use and Health, 2015-2016

Table 6

Mental Health Indicators – Individuals Age 18 and Up.

	New Hampshire	United States
Serious Mental Illness – Past Year	5.07%	4.13%
Major Depressive Episode – Past Year	7.98%	6.70%
Had Thoughts of Suicide – Past Year	5.01% ¹	4.04%

Source: National Survey on Drug Use and Health, 2015-2016

The Big Picture: Suicide in NH and Nationally

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

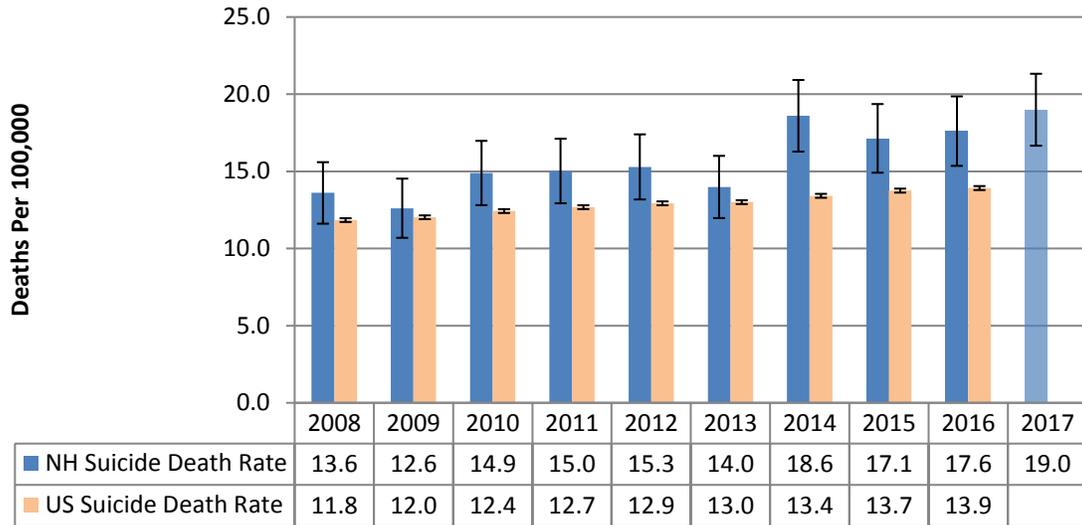
Figure 2 (pg. 20) presents the suicide rate in NH and the US for the past ten years. The rate in NH has varied from year to year, due to its small size, while the US rate has remained more consistent. Even though the NH rate has varied, until 2014 there had been no statistically significant differences from one year to the next since at least 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 is 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 level reached in 2014 has continued through 2017.

¹ A 2016 report found an increase in reported thoughts of suicide from 2013-2014 among NH residents between the ages of 18 and 24 - http://www.samhsa.gov/data/sites/default/files/report_2387/ShortReport-2387.pdf.

Figure 2

Crude Suicide Death Rates per 100,000 in NH by Year 2008-2017.

NH and US Suicide Deaths By Year - 2008 to 2017 (Crude Rate)



Source: 2008-2016 – CDC Data; 2017 – NH OCME Data

Table 7 (pg. 21) displays the 10 leading causes of death for people of different age groups in NH. From 2012-2016, suicide among those aged 15-34 was the second leading cause of death for NH and nationally. Suicide rates for individuals age 15-34 during 2012-2016 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 8th leading cause of death in NH, and the 10th leading cause of death nationally.

Table 7
10 Leading Causes of Death, New Hampshire, by Age Group, 2012 – 2016.

Rank	Age Groups										All Ages
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Short Gestation 38	Unintentional Injury 10	Malignant Neoplasms 10	Malignant Neoplasms 14	Unintentional Injury 299	Unintentional Injury 591	Unintentional Injury 465	Malignant Neoplasms 979	Malignant Neoplasms 2,597	Heart Disease 10,426	Malignant Neoplasms 13,590
2	Congenital Abnormalities 35	Congenital Anomalies (*see note)	Unintentional Injury (*see note)	Suicide (*see note)	Suicide 115	Suicide 158	Malignant Neoplasms 209	Heart Disease 562	Heart Disease 1,250	Malignant Neoplasms 9,684	Heart Disease 12,424
3	Maternal Pregnancy Comp. 28	Homicide (*see note)	Homicide (*see note)	Unintentional Injury (*see note)	Heart Disease 19	Malignant Neoplasms 74	Suicide 178	Unintentional Injury 486	Unintentional Injury 373	Chronic Low. Respiratory Disease 2,964	Chronic Low. Respiratory Disease 3,647
4	Placenta Cord Membranes 15	Influenza and Pneumonia (*see note)	Heart Disease (*see note)	Benign Neoplasms (*see note)	Malignant Neoplasms 17	Heart Disease 43	Heart Disease 114	Suicide 270	Chronic Low. Respiratory Disease 338	Cerebro-vascular 2,066	Unintentional Injury 3,411
5	Circulatory System Disease 11	Malignant Neoplasms (*see note)	Benign Neoplasms (*see note)	Congenital Anomalies (*see note)	Homicide 10	Congenital Anomalies 15	Liver Disease 46	Liver Disease 157	Liver Disease 257	Alzheimer's Disease 1,963	Cerebro-vascular 2,319
6	SIDS (*see note)	Heart Disease (*see note)	Cerebro-vascular (*see note)	Influenza and Pneumonia (*see note)	Diabetes Mellitus (*see note)	Liver Disease 11	Diabetes Mellitus 22	Diabetes Mellitus 96	Diabetes Mellitus 257	Unintentional Injury 1,408	Alzheimer's Disease 2,001
7	Necrotizing Enterocolitis (*see note)	Benign Neoplasms (*see note)	Congenital Abnormalities (*see note)	Nephritis (*see note)	Congenital Abnormalities (*see note)	Diabetes Mellitus (*see note)	Homicide 16	Chronic Low. Respiratory Disease 83	Suicide 202	Diabetes Mellitus 1,118	Diabetes Mellitus 1,509
8	Neonatal Hemorrhage (*see note)		Suicide (*see note)		Cerebro-vascular (*see note)	Homicide (*see note)	Cerebro-vascular 15	Cerebro-vascular 65	Cerebro-vascular 159	Influenza & Pneumonia 1,022	Suicide 1,106
9	Respiratory Distress (*see note)				Benign Neoplasms (*see note)	Chronic Low Respiratory Disease (*see note)	Chronic Low Respiratory Disease 13	Nephritis 24	Septicemia 81	Nephritis 759	Influenza and Pneumonia 1,102
10	Intrauterine Hypoxia or Unintentional Injury (*see note)				Chronic Low Respiratory Disease (*see note)	Complicated Pregnancy (*see note)	Congenital Abnormalities (*see note)	Septicemia 22	Viral Hepatitis 69	Parkinson's Disease 617	Nephritis 858

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 10 suicides. This ratio is in sharp contrast to national statistics, which show fewer than 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, 2012-2016.

	ALL AGES	YOUTH 10-17	YOUNG ADULTS 18-24	YOUTH AND YOUNG ADULTS 10-24
NH	16.6	4.15	15.02	9.54
US	13.42	4.02	13.65	9.6

	AGES 25 TO 39	AGES 40 TO 59	AGES 60 TO 74	OVER 75
NH	20.43	24.54	16.09	17.34
US	16.75	19.23	16.18	18.44

Source: CDC WISQARS

Adults age 40 to 59 had the highest suicide rates of all age groups identified above (24.54 NH, 19.23 US) from 2012-2016 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 2008-2017, 245 NH youth and young adults aged 10-24 have lost their lives to suicide. **Table 9** (pg. 24) 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 (81%) and nationwide. Hanging and firearms were the most frequently used methods in NH among youth and young adult 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 2008-2012 to the following five year period from 2013-2017. From the first period to the second there was a 31% 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. The rates presented on the chart of deaths over rolling three-year intervals shown on **page 75** 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. 24) 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 24**).

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, 2008-2017.

Year	Total	Male	Female	≤ 19	20-24	Firearms	Hanging/ Asphyxiation	Drugs/ Poison	Other
2008	15	10	5	8	7	5	9	1	0
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
2008- 2012 Sub Total	106	88	18	46	60	48	49	5	4
Percent of Sub- Total²	100%	83%	17%	43%	57%	45%	46%	5%	4%
2013	21	17	4	6	15	7	10	3	1
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
2013 - 2017 Sub Total	139	113	26	45	94	69	56	7	7
Percent of Sub- Total¹	100%	81%	19%	32%	68%	50%	40%	5%	5%
Total	245	201	44	91	154	118	105	12	11
Percent of Total¹	100%	82%	18%	38%	62%	48%	42%	5%	5%

Produced by: NAMI NH
Data Source: NH OCME

² Note: Rounding may cause percentages to not total to 100%

Figure 3

NH Youth, Ages 10-24, Suicide Deaths.

New Hampshire Youth Suicides from 2008 to 2017

Data Source: Office of the Chief Medical Examiner, NH

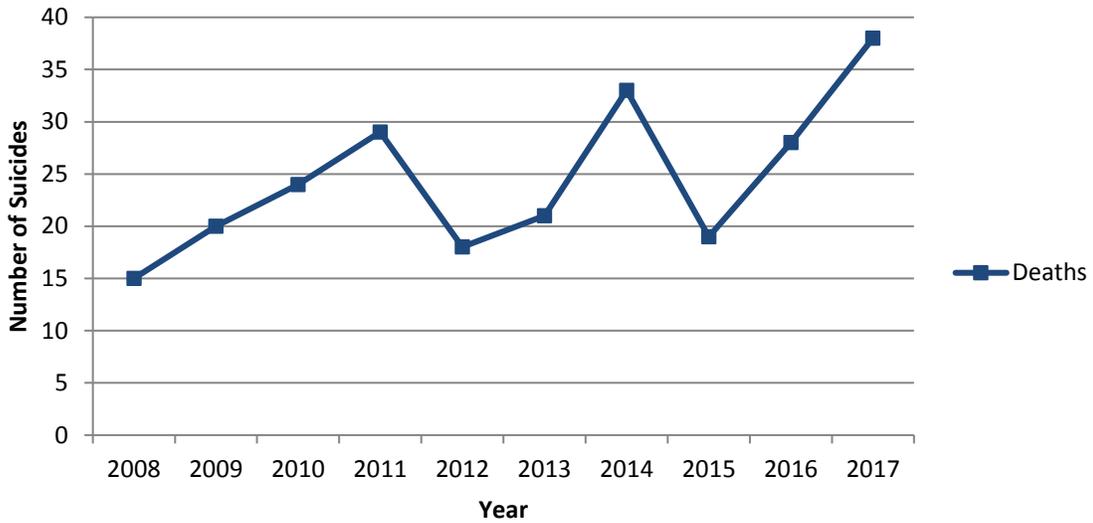
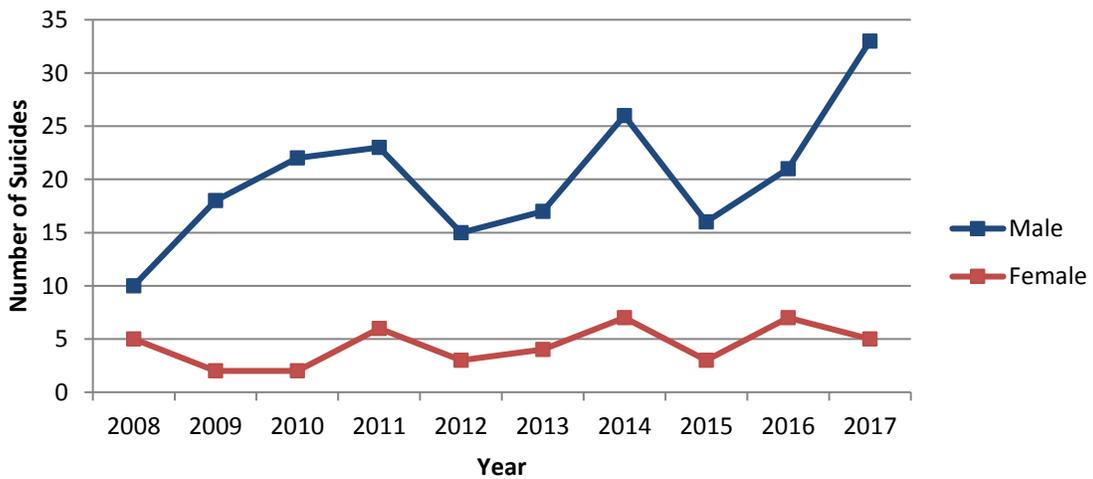


Figure 4

NH Male Youth Suicide Deaths Decrease then Increase 2008-2017, While Female Youth Rates have Remained Relatively Stable.

New Hampshire Youth Suicides from 2008 to 2017 by Gender

Data Source: Office of the Chief Medical Examiner, NH



Older Adult Suicide in NH

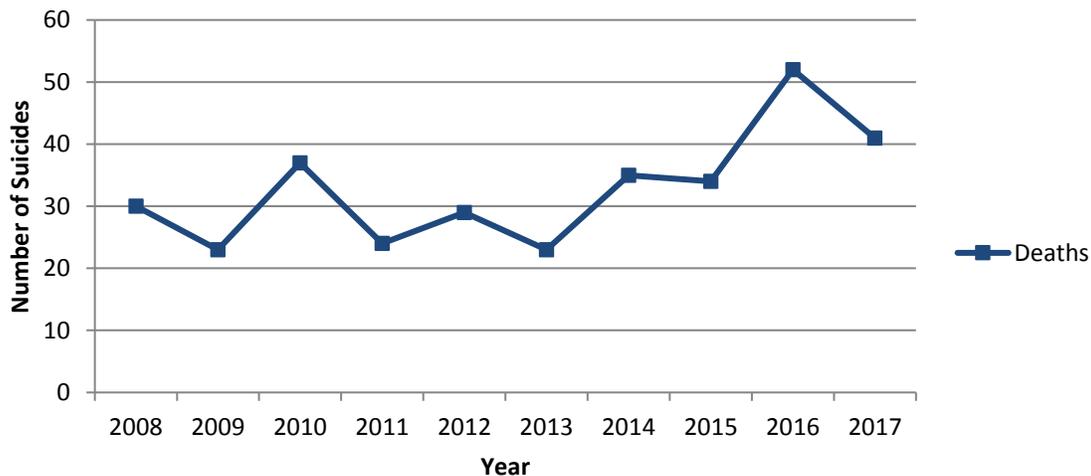
In light of the rapidly expanding number and proportion of older adults in New Hampshire's population, suicide in older adults is on course to become a growing public health concern. Added to the changing demographics is the rising prevalence of mental illness and substance disorders. Untreated mental 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.³

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 2008 to 2017

Data Source: Office of the Chief Medical Examiner, NH



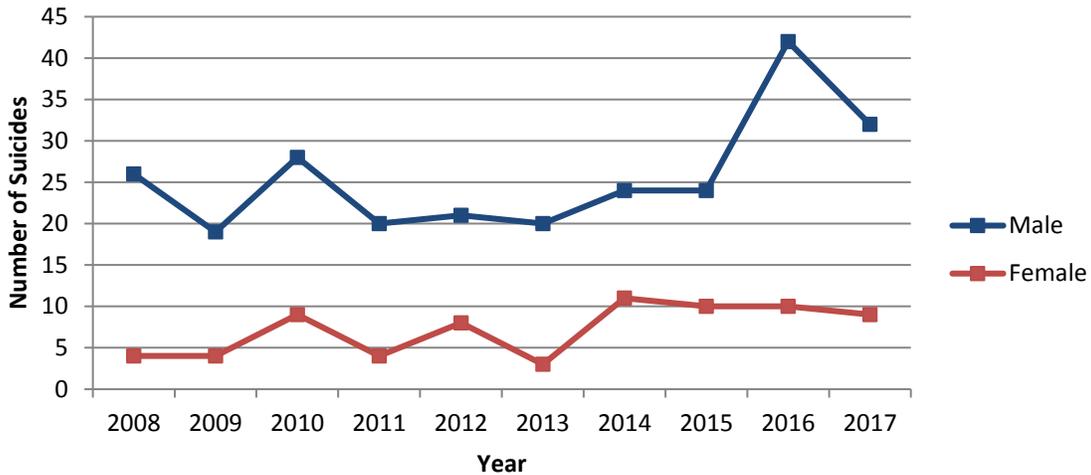
³ Conwell Y. Suicide and suicide prevention in later life. Focus 2013; 11(1): 39–47.

http://www.aoa.gov/AoA_Programs/HPW/Behavioral/docs2/Suicide%20Prevention%20Webinar%20Presentation%20Slides2.pdf#page=14

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 2008 to 2017 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 2008 to 2012 with the period from 2013 to 2017 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. 29) and **Figure 8** (pg. 29).

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
2008	175	135	40	15	64	66	30	86	42	20	27
2009	167	136	31	20	51	73	23	80	48	31	8
2010	206	159	47	24	56	89	37	103	49	40	14
2011	200	162	38	29	49	98	24	77	61	37	25
2012	203	160	43	18	60	96	29	97	56	29	21
2008- 2012 Sub Total	951	752	199	106	280	422	143	443	256	157	95
Percent of Sub Total⁴	100%	79%	21%	11%	29%	44%	15%	47%	27%	17%	10%
2013	182	140	42	21	46	92	23	81	60	31	10
2014	252	192	60	33	83	100	36	112	70	42	28
2015	225	162	63	19	76	97	33	100	67	40	18
2016	235	173	62	28	76	78	52	121	62	34	17
2017	255	196	59	38	74	102	41	124	76	44	11
2013 - 2017 Sub Total⁵	1149	863	286	139	355	469	185	538	335	191	84
Percent of Sub-Total	100%	75%	25%	12%	31%	41%	16%	47%	29%	17%	7%
Total	2100	1615	485	245	635	891	328	981	591	348	179
Percent of Total⁵	100%	77%	23%	12%	30%	42%	16%	47%	28%	17%	9%

Produced by: NAMI NH
Data Source: NH OCME

⁴Note: Rounding may cause percentages to not total to 100%

Figure 7
NH Residents, All Ages, Suicide Deaths 2008 - 2017

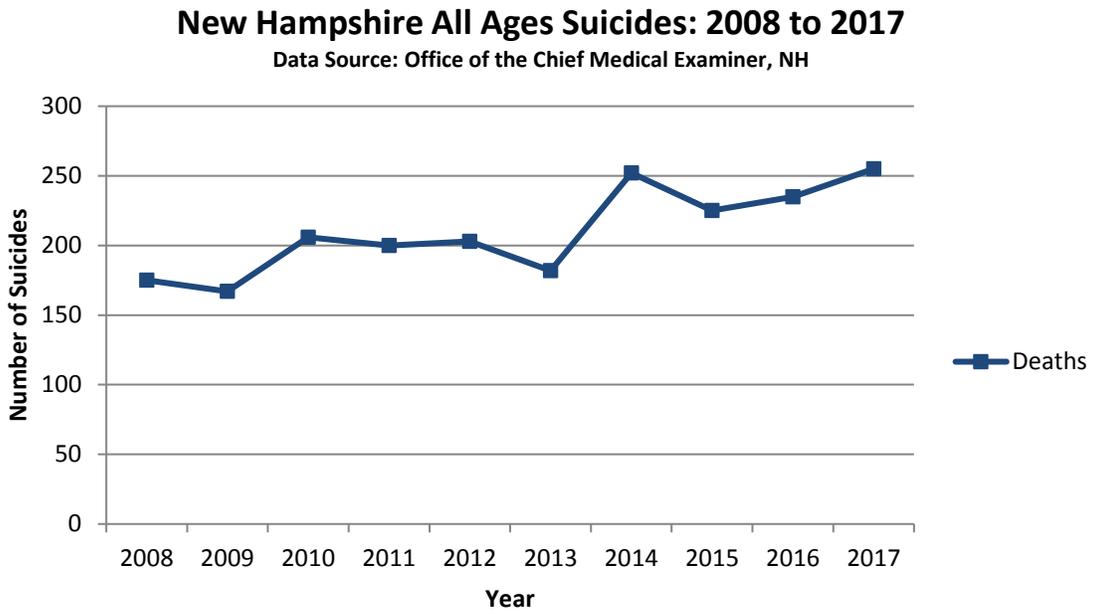


Figure 8
NH Male and Female Suicide Rates 2008 – 2017

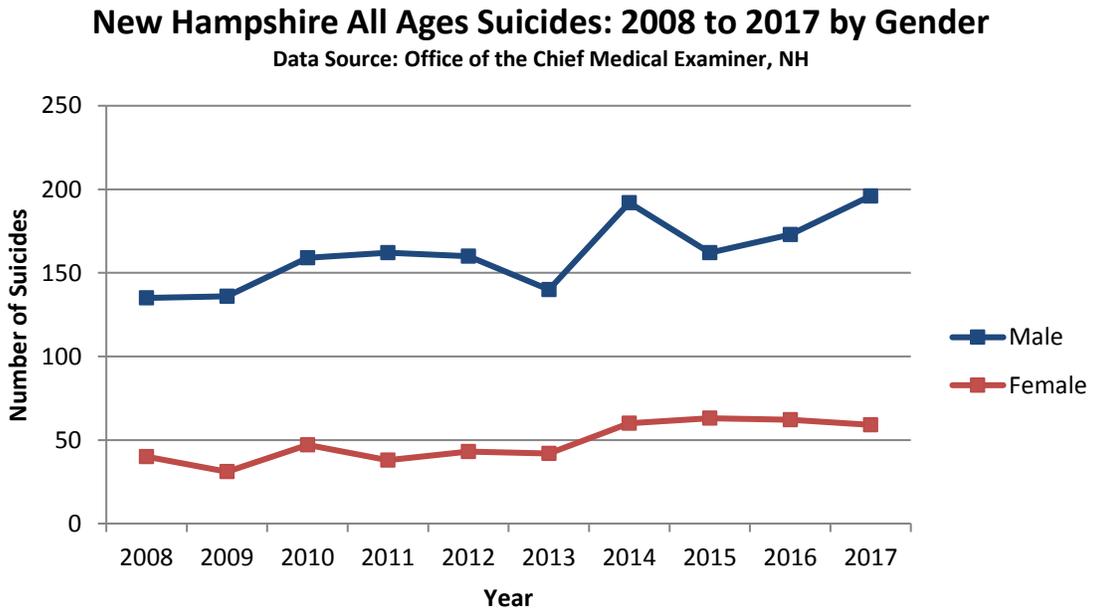


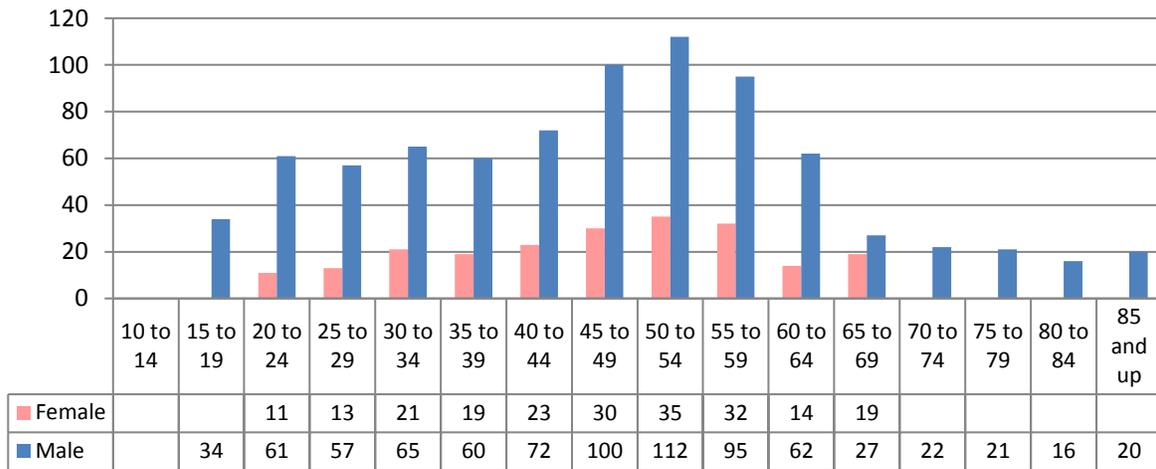
Figure 9 (below) and **Figure 10** (pg. 31), respectively, display NH suicide deaths and suicide death rates for all ages by age groups and gender from 2012-2016. Rates are expressed as the number of suicide deaths per 100,000 people. Displayed together, these charts reveal how death rates correct for differences in the size of each age group. While the highest number of suicide deaths occur in the 45 and 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, 2012-2016

Data Source: CDC WISQARS*



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

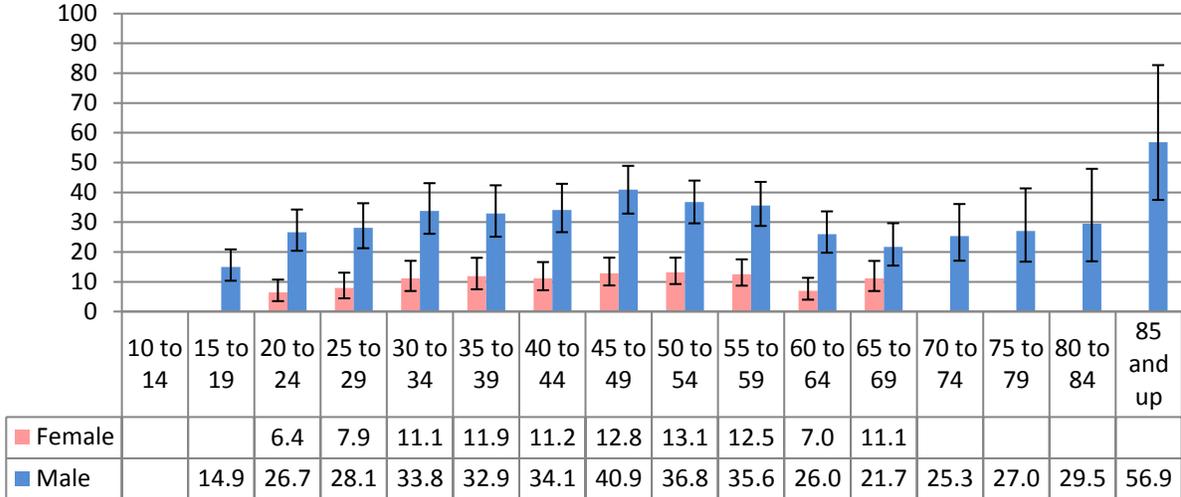
Suicide death rates are also important in determining vulnerable age groups and age-related transitions. The suicide death rate in males rises rapidly from ages 10-14 to 15-19 and then again from ages 15-19 to 20-24, pointing to a rise in vulnerability during the transitions from early adolescence to 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, 2012-2016**

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

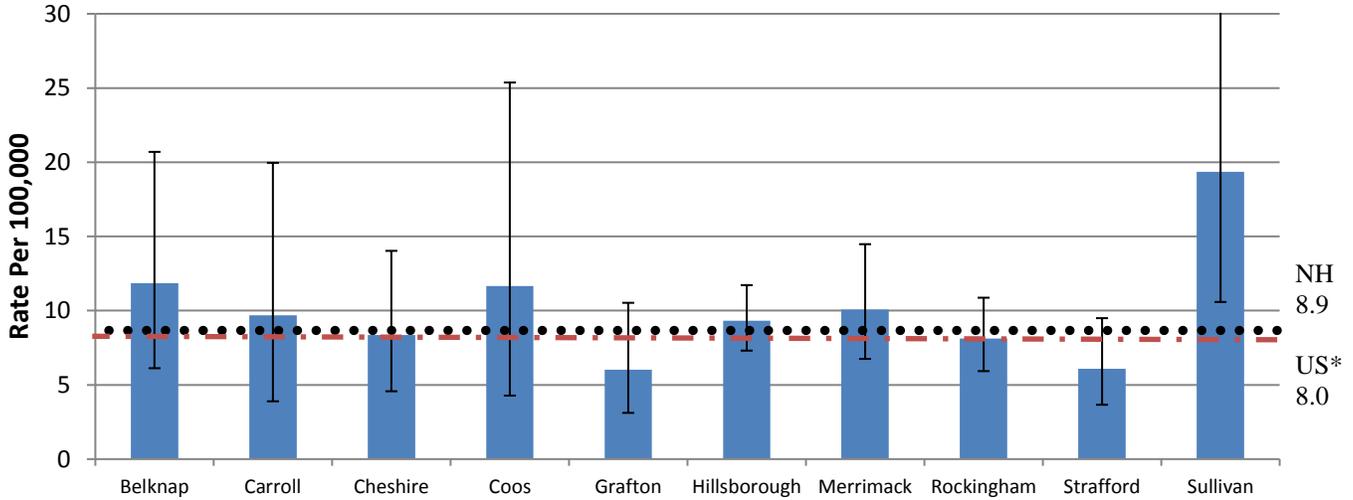
Geographic Distribution of Suicide in NH

The numbers and rates of suicide in NH are not evenly distributed throughout the state. **Figure 11** (pg. 32) shows youth and young adult suicide rates by county in NH. **Figure 12** (pg. 32) 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: 12.6 per 100,000) is significantly lower than the all ages suicide rates for Carroll County (all ages rate: 19.5 per 100,000), Coos County (all ages rate: 20.5), Hillsborough County (all ages rate: 15.3), and Sullivan County (all ages rate: 18.5). It is also significantly below the overall NH rates (all ages rate: 15.0 per 100,000). For youth and young adults, the rate for Sullivan County (19.4 per 100,000) was significantly above the rate for Strafford County (6.1 per 100,000), as well as being above the NH and US rates of 8.9 and 8.0 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. 33) presents the suicide rates for all ages from 2007 to 2016 as a NH map broken down by county.

Figure 11

New Hampshire Youth Suicide Crude Death Rates by County
Ages 10-24 2008-2017

Data Source: Office of Chief Medical Examiner, NH



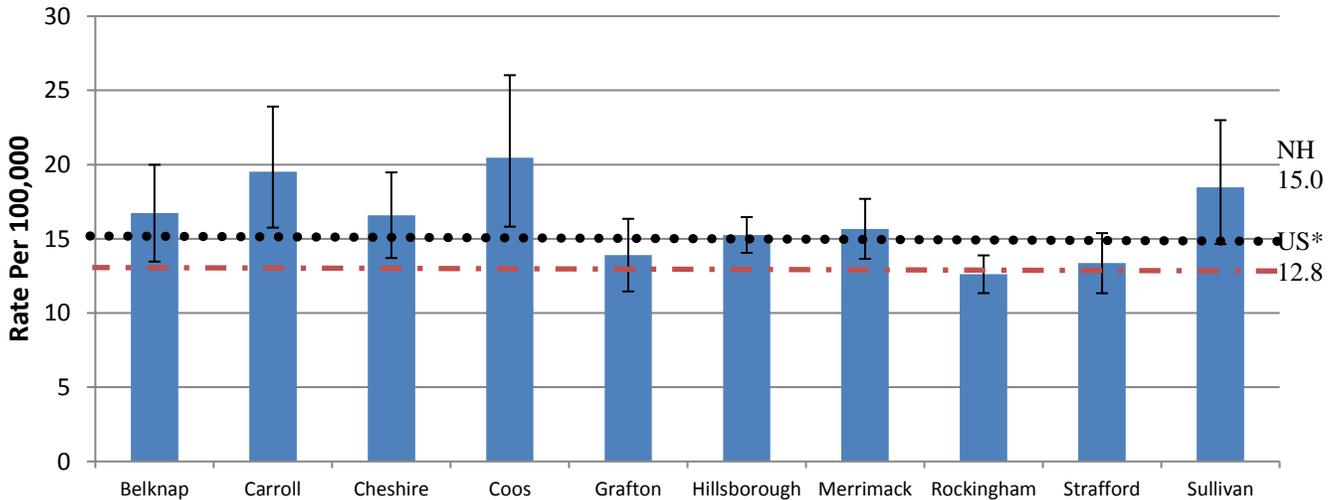
*US Rate is only through 2016

Source: CDC WISQARS

Figure 12

New Hampshire Resident Suicide Crude Death Rates by County
All Ages 2008-2017

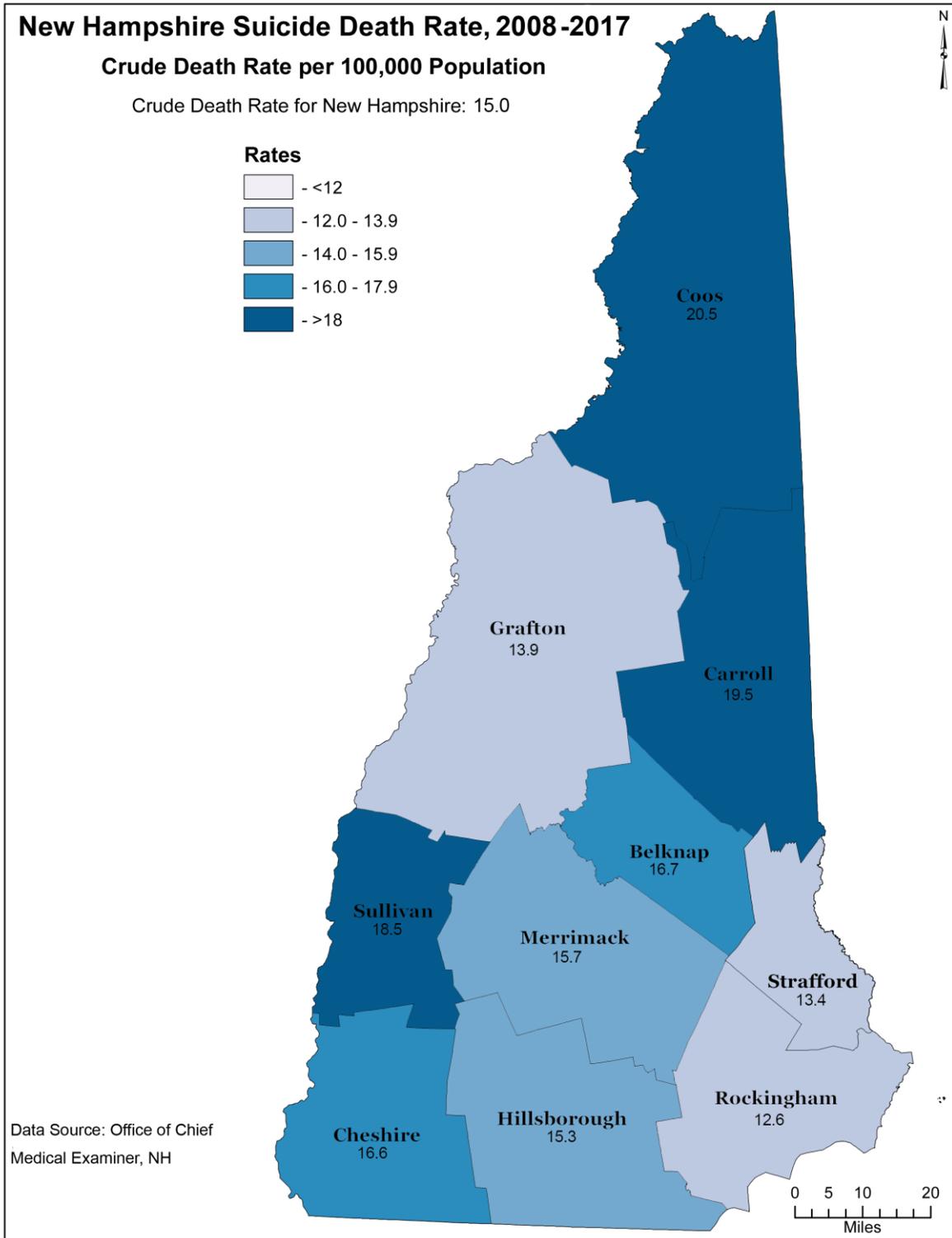
Data Source: Office of Chief Medical Examiner, NH



*US Rate is only through 2016

Source: CDC WISQARS

Figure 13
Map of NH suicide death rates



Suicide Behavior in NH: Gender Differences - Attempts and Deaths

Youth and Gender

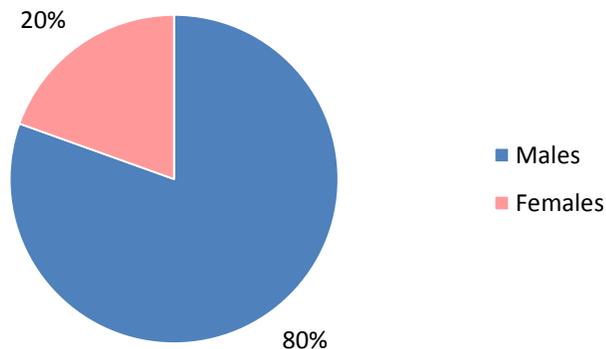
While males represent just over 80% of the youth and young adult suicides from 2012-2016, the fact that males *die* by suicide at a higher rate than females may largely be due to males using more lethal means. See **Figures 14** (below) and **15** (pg. 35). In fact, females *attempt* suicide at a higher rate than males. When examining how many NH youth and young adults ages 15-24 were hospitalized and then discharged for self-inflicted injuries in 2012-2014, it is shown that 65% of the 430 inpatient discharges represent females, while only 35% 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.⁵

Figure 14

Four times as many male NH residents ages 10-24 died by suicide 2012-2016.

NH Resident Suicide Deaths by Gender 2012-2016, Ages 10-24, N=123

Data Source: CDC WISQARS



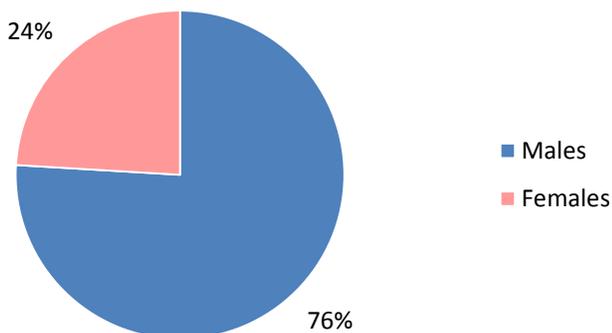
⁵ Classifying an injury as self-inflicted is another way of stating that the injury was an instance of deliberate self-harm. Not all self-inflicted injuries necessarily represent suicide attempts. However, analysis of these injuries is the best currently available proxy for estimating suicide attempts.

Figure 15

Three times more male than female NH residents of all ages died by suicide 2012-2016.

NH Resident Suicide Deaths by Gender 2012-2016, All Ages, N=1,106

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, females do make a greater number of attempts than males – 1.3-1.9 times as often (**Figure 16, Figure 17, and Figure 18** – pgs. 36-37). This report refers to three types of data; Emergency Department Discharges, Inpatient Discharges, and individuals treated/transported by Emergency Medical Services (EMS). Emergency Department (ED) data includes patients who came to the ED and stayed at the hospital for less than 24 hours (also called Ambulatory Discharges). Inpatient data refers to patients who were admitted to the hospital for more than 24 hours. If a patient goes to an ED and is admitted for inpatient services, they are removed from 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 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.

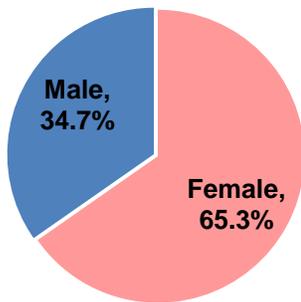
Quick Facts/Talking Points

- Males in NH die by suicide at a rate that is three times the rate for females (CDC WISQARS, 2016).
- 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 2012-2014.

NH Resident Inpatient Discharges for Self-Inflicted Injuries, by Gender, Ages 15-24 Years, 2012-2014
Data Source: Injury Surveillance Program, NH DHHS
N=430



NH Resident Emergency Department Discharges for Self-Inflicted Injuries, by Gender, Ages 15-24 Years, 2012-2014
Data Source: Injury Surveillance Program, NH DHHS
N=2418

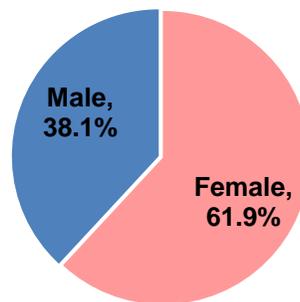
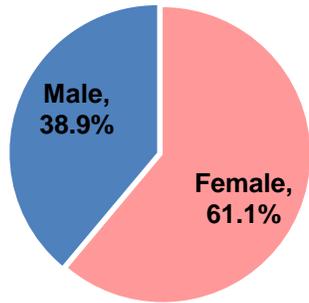


Figure 17

A greater percentage of female than male NH residents attempted suicide, as seen in ambulatory self-inflicted injuries 2012-2014.

NH Resident Inpatient Discharges for Self-Inflicted Injuries, by Gender, All Ages, 2012-2014
Data Source: Injury Surveillance Program, NH DHHS
N=2161



NH Resident Emergency Department Discharges for Self-Inflicted Injuries, by Gender, All Ages, 2012-2014
Data Source: Injury Surveillance Program, NH DHHS
N=6085

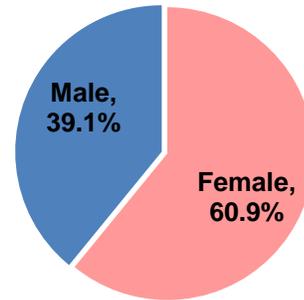
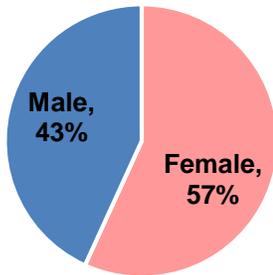


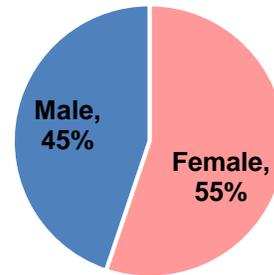
Figure 18

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
New Hampshire Department of Safety, Division of Fire Standards and Training and Emergency Medical Services
N=521



Self-Harm by Gender All Ages, 2017
New Hampshire Department of Safety, Division of Fire Standards and Training and Emergency Medical Services
N=1173



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 disorders⁶. Yet a much smaller percentage were receiving treatment. In NH,

⁶ 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>.

over 40,000 people received treatment at one of the state’s ten Community Mental Health Centers (CMHC)⁷ each year. In 2017, this works out to approximately 1 out of every 32 residents in the state. Of those individuals in treatment, approximately 55% of them were female and 45% were male. This is illustrated in **Figure 19** (below). Without additional data it is not possible to say how these numbers relate to the connection between these treatment figures and the greater number of suicide deaths among males and/or the greater number of suicide attempts reported among females.

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

Individuals in Treatment at NH CMHC's
2015-2017 - Presented By Age Group and Gender
Data Source: NH Bureau of Behavioral Health



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

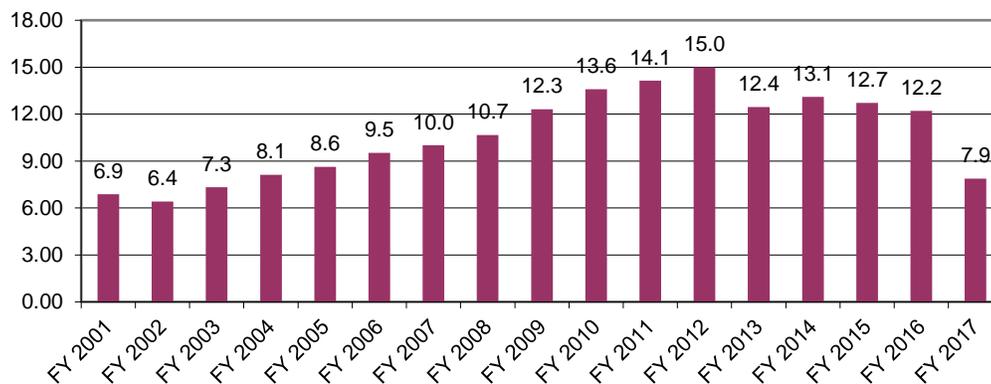
⁷ Community Mental Health Centers are private not-for-profit agencies that have contracted with the NH Department of Health and Human Services, Bureau of Behavioral Health, to provide publicly funded mental health services to individuals and families who meet certain criteria for services. More information on the centers is available from <http://www.dhhs.state.nh.us/dcbcs/bbh/centers.htm>

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 1,860 admissions to New Hampshire Hospital (estimates based on New Hampshire Hospital admissions for fiscal years 2013 - 2017⁸). The gender differences for individuals receiving treatment at New Hampshire Hospital are much smaller than for those receiving treatment for depression through the CMHCs. The admissions are approximately an even split between females and males. Although the number of admissions were comparable for males and females, this does not guarantee that severity of the cases or lengths of stay were similar. **Figure 20** (below) presents the number of admissions per bed at New Hampshire Hospital.

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 2012-2014 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** – pgs. 40-41). As above, these data refer to number of visits; therefore, individuals may be counted more than once 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, yet for ages 80 and up the rates are nearly identical. For females aged 35-34, the rate of those being discharged from inpatient care (**Figure 21** pg. 40) is 110/100,000, nearly two times the rate for males of the same age. The peak age for males is between 35 and 44 for

⁸ The NH State Fiscal Year runs from July 1st of one calendar year through June 30th of the following calendar year (e.g., fiscal year 2017 ran from July 1st 2016 through June 30th 2017).

self-inflicted injuries requiring hospitalizations. Again, ED usage rates, depicted in **Figure 22** (pg. 41), 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 569/100,000, about 51 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 335/100,000. 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 (2418) is 5.6 times greater than the number of inpatient discharges for this population. Since 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. 41), 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 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.

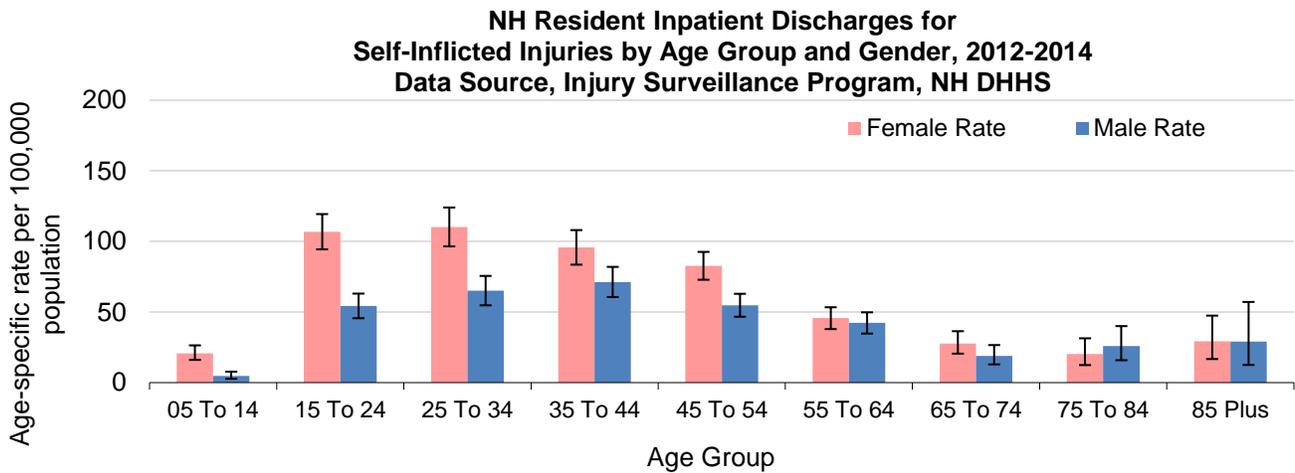


Figure 22

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

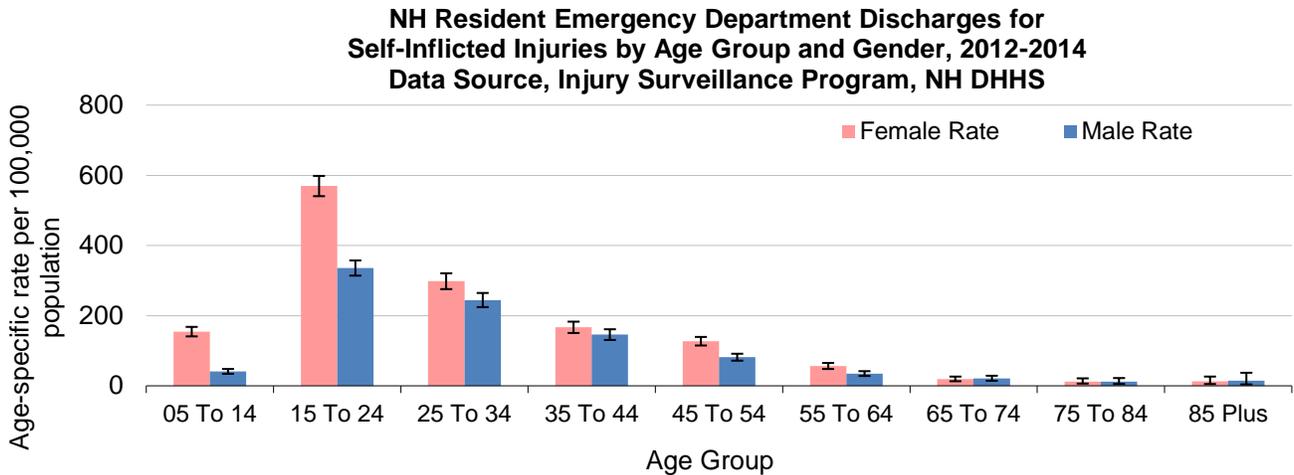
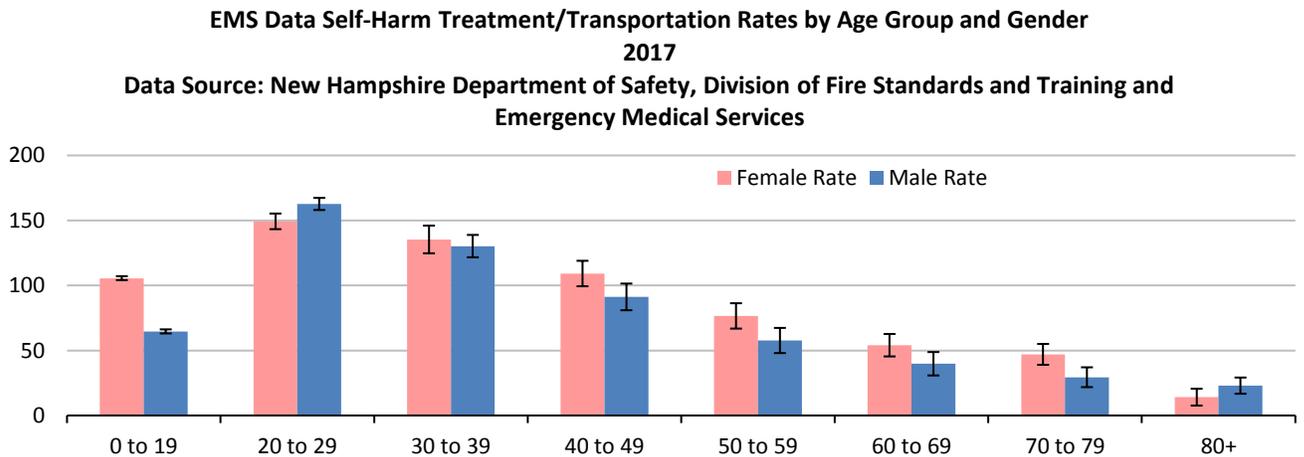


Figure 23

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.

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.

Positive Outcomes and Testimonials

I am a business owner and mom who cares about people and the community where I live. I became a *Connect* Trainer to help people in my community know when someone needs help and know what to do. When I lead a *Connect* Suicide Prevention Seminar I have to make sure that I'm mentally prepared because I don't know who will be attending or what their experience is with suicide or mental illness. Afterwards, I feel pretty good. Seminar participants contact me and tell me about something that happened the next day that they might not have noticed or not known what to say, but now they did. Wow, maybe I did make a difference in someone's life!

Sharon Eng: Parent, Business Owner, and Rotary Member

While the great majority of self-inflicted injuries⁹ 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, 50% used firearms compared to 17% of females (**Figure 24** – pg. 43). 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.

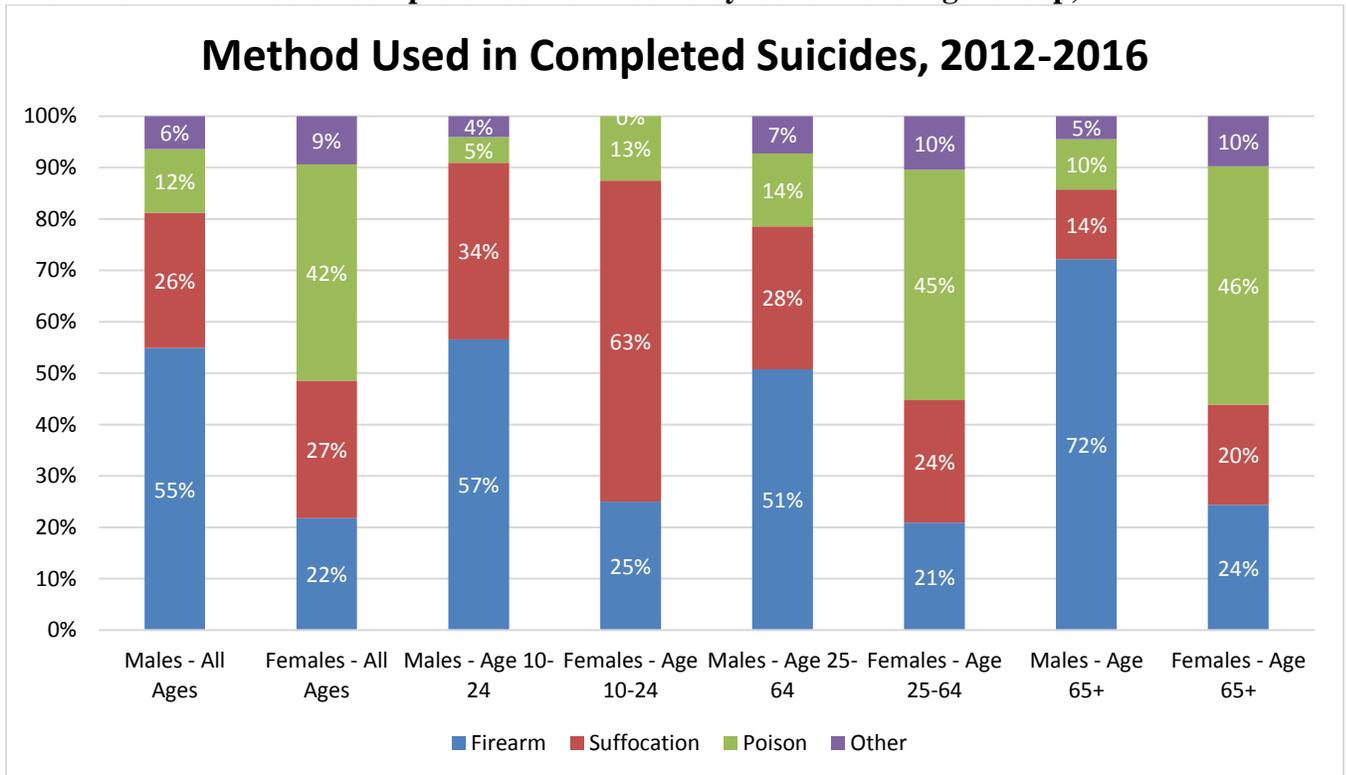
Suicide attempt methods have varying lethality. **Figure 25** (pg. 44) compares firearms, hanging, poisoning, and cutting/piercing in terms of the percentage of various outcomes (emergency department visit, inpatient admission, or death) for each method. Approximately 80% of self-injuries using a firearm 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,

⁹ 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.

intervention efforts that reduce access to firearms and other highly lethal means may be effective to reduce suicide among those at risk for suicide. Particularly for those who are more likely to be impulsive. Firearms remain the most commonly used method of suicide throughout the lifespan in NH. **Figure 26** (pg. 44) 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 25** pg. 44) 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 27** – pg. 45).

Figure 24

Variation in Method of Completed Suicide Deaths by Gender and Age Group, 2012-2016.



Data Source: CDC WISQARS

Figure 25
Count of Lethality of Means Used for Suicidal Behavior in NH, 2012-2014
Data Source: Injury Surveillance Program, NH DHHS

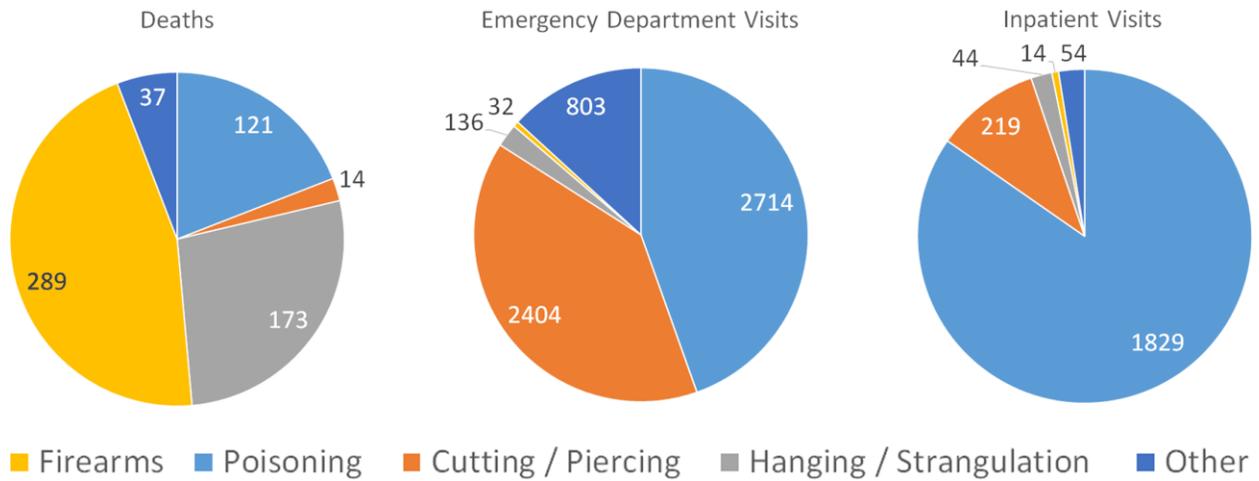


Figure 26
Percent of method of self-inflicted injuries treated/transported by EMS from 2017.

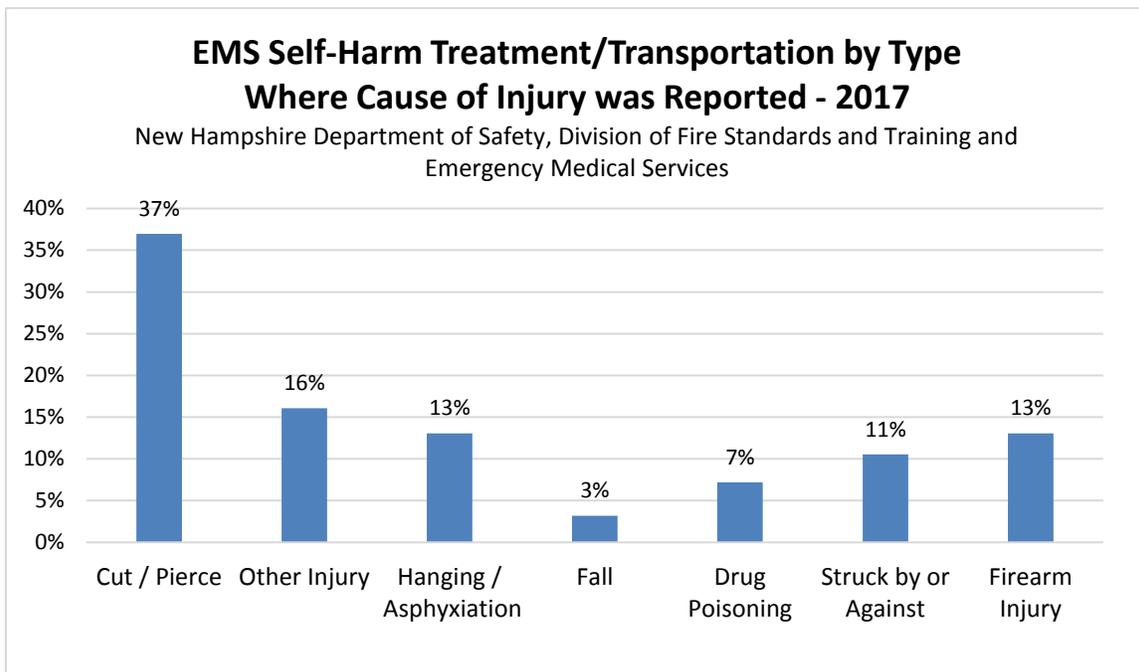


Figure 27

Suicide methods used in NH vary by age group, as seen in 2012-2016.

Suicide Methods Used by Age Group NH Data, 2012-2016

Data Source: CDC WISQARS

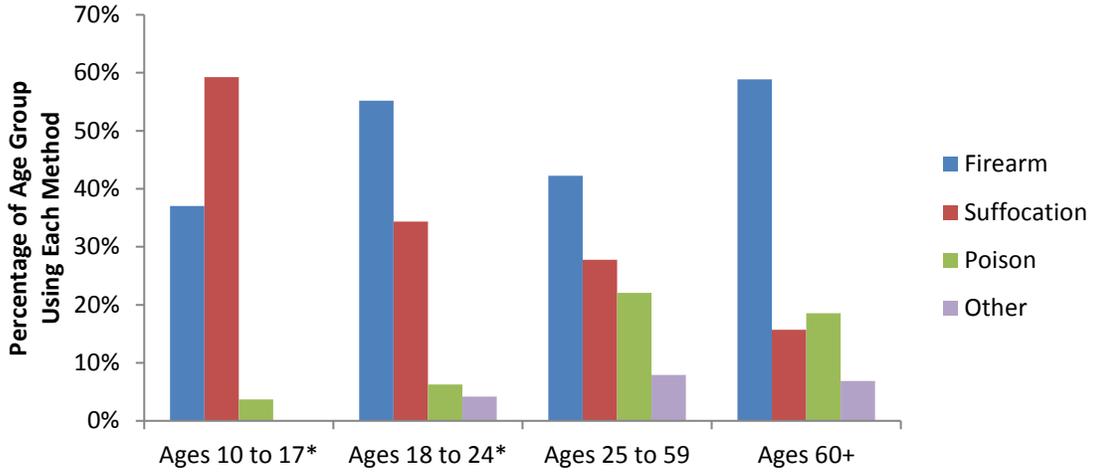
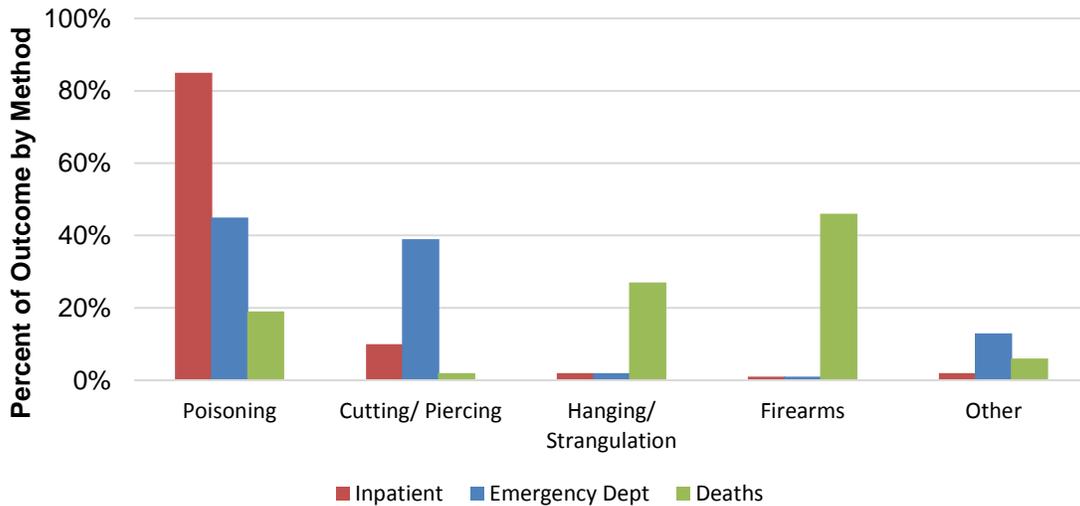


Figure 28

Poisoning is the most frequent method of suicide attempt, as seen in hospital discharge data 2012-2014.

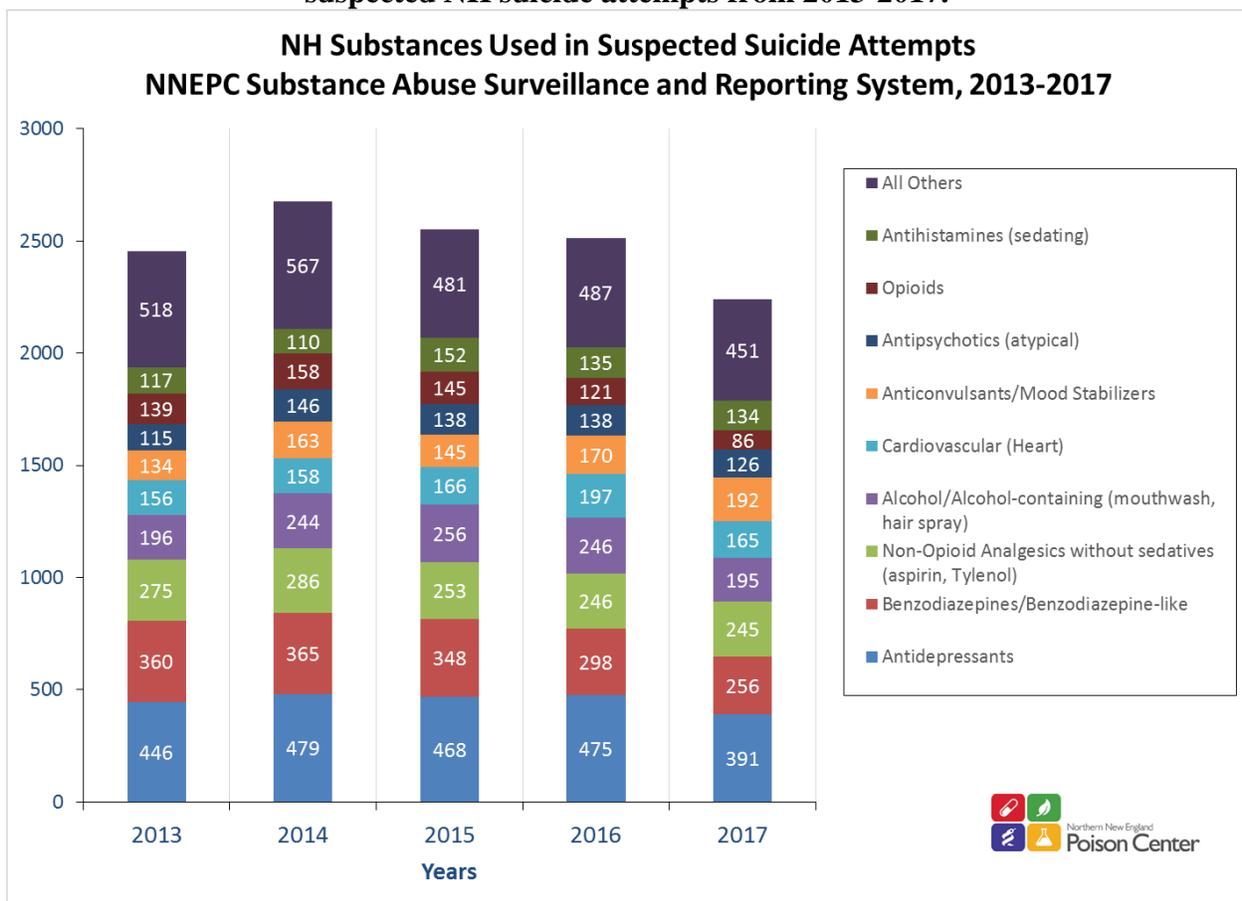
Percent of Total Lethality of Means Used for Suicidal Behavior in NH, 2012-2014

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 28** pg. 45). **Figure 29** (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 2013 through 2017 have been Antidepressants and Benzodiazepines.¹⁰ A recent trend noted by the NNEPC is an increase in the use of cardiovascular medications which can have severe clinical effects.

Figure 29
Antidepressants and Benzodiazepines have been the top substances used in suspected NH suicide attempts from 2013-2017.



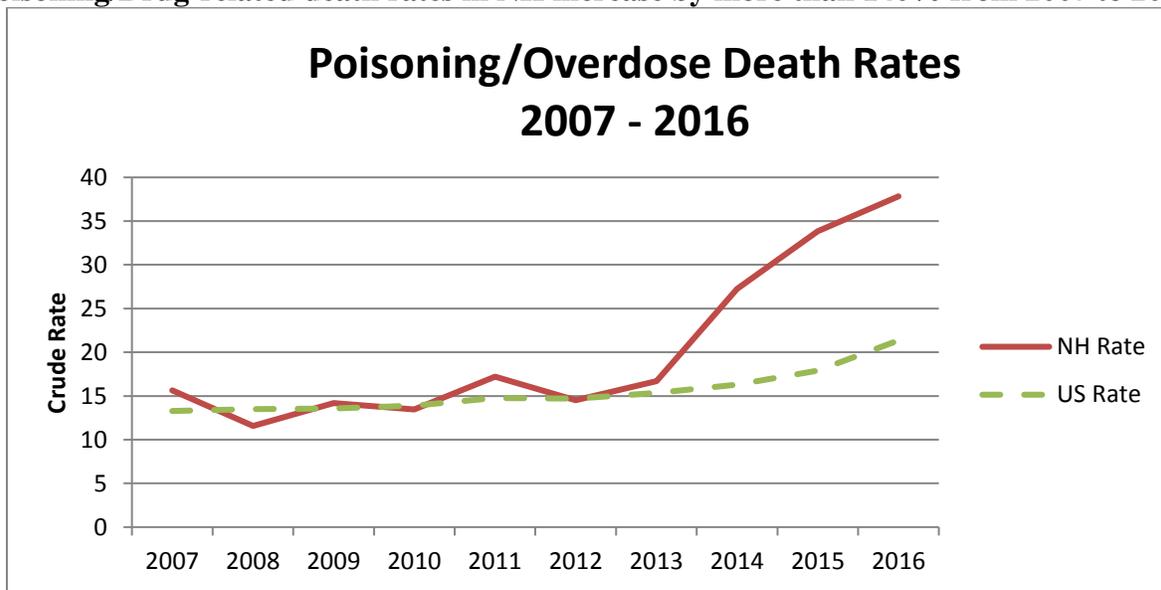
¹⁰ The suspected suicide attempt cases presented were determined by self-report or the report of an individual acting on behalf of the patient (e.g., a health care professional), or a NNEPC staff assessment.

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

As seen in **Figure 30** (below), the accidental poisoning and drug-related death rates in NH and the US as a whole have steadily increased from 2007 to 2016. During this time the US rate has increased by nearly 45 percent while the NH rate has increased more than 160 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 30

Poisoning/Drug-related death rates in NH increase by more than 140% from 2007 to 2016.



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.

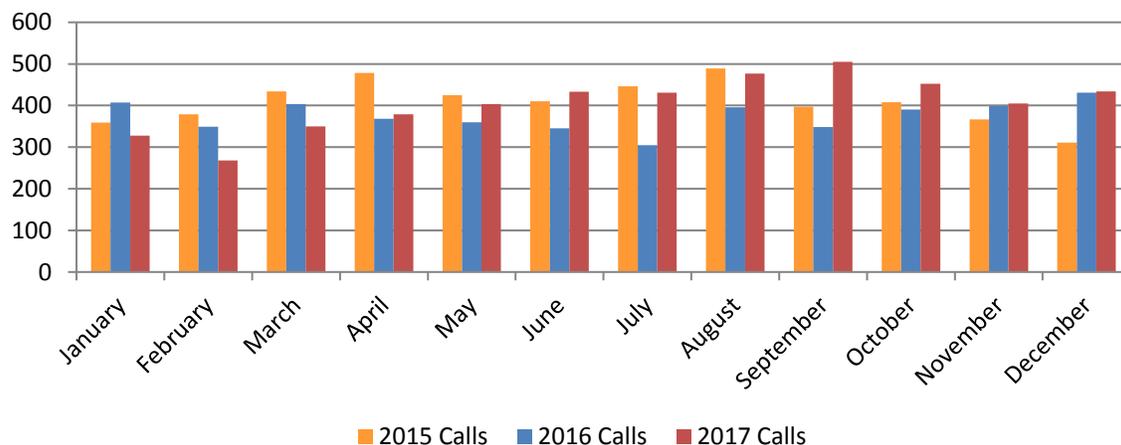
Linking At-Risk Individuals with Help

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 31** 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 31

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

Calls Volume for the NH NSPL Call Center 2015-2017



Costs of Suicide and Suicidal Behavior

There were between 31,020 and 41,607 years of potential life lost¹¹ to suicide from 2012-2016 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, 2016). In NH,

¹¹ 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.

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, 2016). 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, 2016).

NH Violent Deaths Reporting System (NH-VDRS), 2015 – 2016

This Analysis of Major Stressors and Contributing Factors to Violent Deaths (Suicide) was prepared by Djelloul Fourar-Laïdi, Planning Analyst, NH-VDRS, NH Office of Medical Examiner, NH Department of Justice; Joanne Miles Holmes, Injury Prevention Program Manager, Maternal and Child Health Section, Division of Public Health Services, NH Department of Health and Human Services; and Kim Fallon, Chief Forensic Investigator Office of Chief Medical Examiner, NH Department of Justice.

Summary

Suicides in New Hampshire have always been reported to the Office of Chief Medical Examiner. In 2015, NH partnered with the Center 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. However, there are states that have been conducting such work with the CDC for over 20 years. The surveillance program in NH is known as the NH Violent Death Reporting System (NHVDRS), which is supported by CDC NVDRS grant funding.

NHVDRS has engaged numerous local stakeholders working in the area of suicides in the state. Although NH data sources are still limited, the data analyst tasked with this project at the Office of Chief Medical Examiner (OCME) endeavors to incorporate new and relevant data sources, and is seeking access to these data sources through legal statutes.

As mandated by the CDC grant, NHVDRS seeks to engage entities focusing on suicides such as: local suicide service providers, suicide prevention advocates, law enforcement, law makers and other interested groups. The NHVDRS program's work also entails disseminating information to these entities, CDC Injury Prevention Division and other affiliates.

Currently, NHVDRS is doubling as the NVDRS database for suicides, homicides, firearms accidents, and other manners of death as well as a database for the State Unintentional Drug Overdose Reporting System (SUDORS) under the Enhanced State Surveillance of Opioid-Involved Morbidity and Mortality Grant (ESOOS). The SUDORS program began in NH in September 2016.

The focus of this report and analysis will be solely on suicide deaths in NH. By this definition, NHVDRS is accountable for reporting on all suicide deaths under the jurisdiction of the state of

New Hampshire, which also includes suicide deaths of victims who resided out of state and died in NH; and excludes NH suicide victims who died out of state.

The analysis in this report shall shed light on suicide risk factors and relate other metrics. These measures are based on data sources from death certificates, toxicology reports, assistant deputy medical examiner (ADME) reports and law enforcement reports.

The NHVDRS program seeks to enhance the NVDRS database by encompassing additional data sources, as legal authority and capacity allows, which will improve on reporting and help in drawing a clearer picture on suicides circumstances to assist all stakeholders. For example, data from the Prescription Drug Monitoring Program (PDMP) would provide important details regarding medications used by the victim in completed suicides and whether the victim was in treatment for mental health issues. Access to PDMP data was recently granted to OCME via an interagency Memorandum of Understanding.

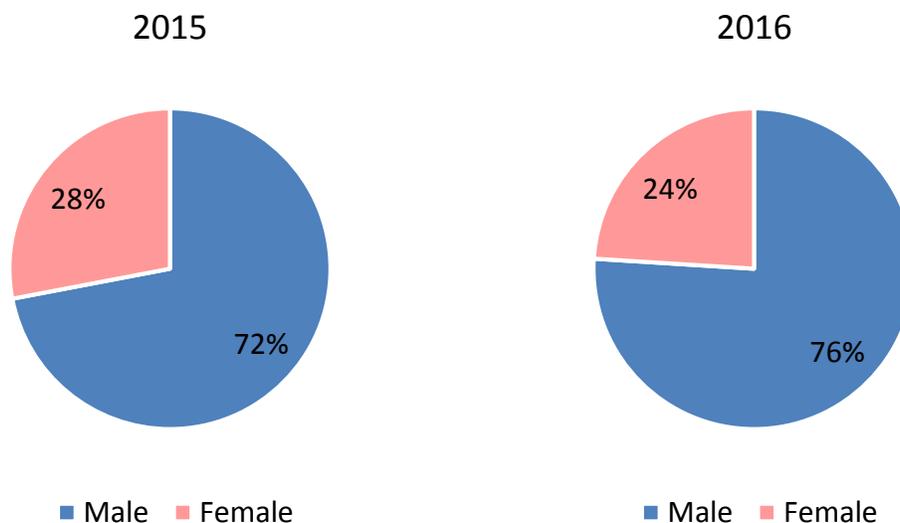
Disclosure: This work was funded by Centers for Disease Control and Prevention Cooperative Agreement Number 6 NU17CE002610-04-02.

Suicides in New Hampshire by Gender for Periods of Surveillance, 2015-2016

The incidence of female suicides decreased between 2015 and 2016. There was an increase in suicide incidences among males during this period. There were suicide incidences for victims who identified as transgender, lesbian or bi-sexual. The notation of sexual orientation in the data was limited and the counts were too low to report. To present the detailed numbers, percentages, or rates, there are disclosure clauses which required small numbers suppression.

In 2015, there were 228 suicides that were validated through the NHVDRS systems. In 2016, NHVDRS confirmed 237 suicides that were finalized in validation by the CDC in the NVDRS. Ratios of suicides in NH by gender for this surveillance periods, are depicted in **Figure 32** below.

Figure 32



Basic Metrics Regarding Violent Deaths in NH:

In NH, for years 2015 and 2016, the annual percentage change in the number of victims of homicides and suicides increased by 21% and 4%, respectively. These figures are based on death certificate manner of death and the determination by the Medical Examiner.

Table 11

Manner of Death			
	2015	2016	Total
Homicide	19	26	42
Suicide	228	237	465
Total	247	260	507

Through the CDC NVDRS, data were compiled after being de-identified from the sources cited earlier. A recent authorization was granted to OCME to use the state Prescription Drug Monitoring Program’s (PDMP) data in NH’s analysis and to enhance the NVDRS and SUDORS surveillance programs.

Marital Status and Sex of Suicide Victims:

For the years 2015 and 2016, the variability in the number of suicides in NH, with respect to marital status and sex of the victims, had marginal change. The most significant change among the sexes and categories of suicide victims is a 25% increase, in 2016, for the cluster of married/civil union/domestic male victims, see **Table 12** below. Notice that the change in suicides among single/never married female is 8% more in 2016¹².

Table 12

Suicide Deaths Marital Status and Gender			
	2015	2016	Total
Divorced/Separated	69	64	133
Female	21	16	37
Male	48	48	96
Married/Civil Union/ Domestic Partnership	62	74	136
Female	22	15	37
Male	40	59	99
Single - Never Married	81	80	161
Female	14	20	34
Male	67	60	127
Widowed	15	18	33
Female	6	7	13
Male	9	11	20
Unknown	-	^	^
Female	-	-	^
Male	-	^	^
Total	228	237	465

(^): Suppressed value

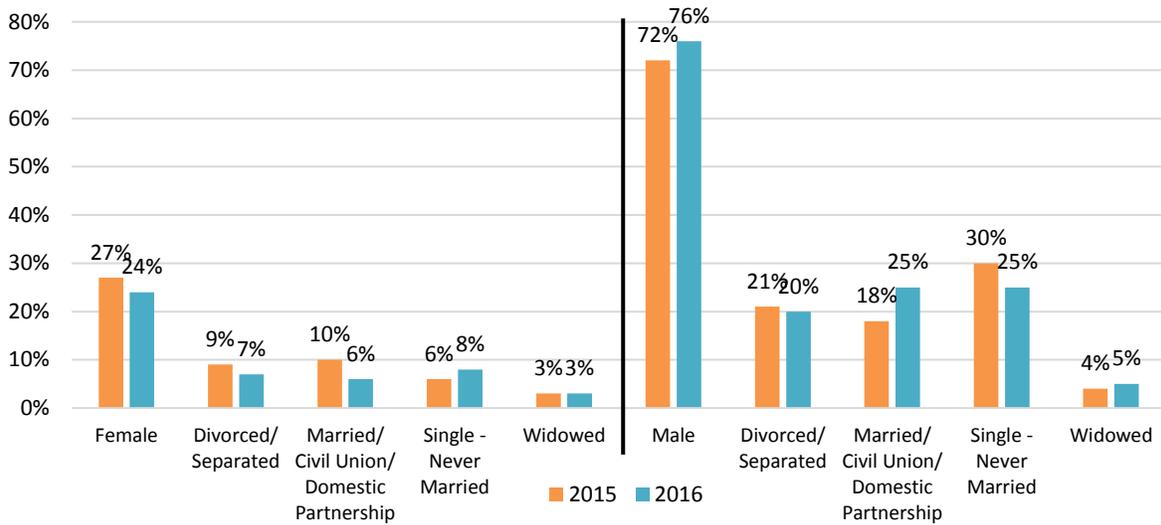
(-): No value

The proportion of male suicide victims to female suicide victims in 2015 and 2016 is 72% and 76% respectively. Compared to female suicide victims, male suicides are much higher (see **Figure 33** pg. 53).

¹² Due to small numbers, the percentage change is higher.

Figure 33

NH Suicide Rates, Gender & Marital Status - 2015-2016



Suicides by Age Groups.

In New Hampshire suicide trends mirror the national trend (<https://www.cdc.gov/vitalsigns/suicide/index.html>). These trends point to the most vulnerable clusters of the population, who are susceptible to suicide.

Table 13

Suicide Deaths		
Suicide Attempt History, Intent Disclosure, and Gender		
	2015	2016
Female	28%	24%
<i>History of Suicide Attempt(s)</i>	12%	9%
Suicide Intent Disclosed	4%	0%
Suicide Intent Not Disclosed	8%	9%
<i>No Known History of Suicide Attempt(s)</i>	16%	15%
Suicide Intent Disclosed	1%	1%
Suicide Intent Not Disclosed	15%	14%
Male	72%	76%
<i>History of Suicide Attempt(s)</i>	19%	10%
Suicide Intent Disclosed	5%	1%
Suicide Intent Not Disclosed	14%	9%
<i>No Known History of Suicide Attempt(s)</i>	53%	65%
Suicide Intent Disclosed	9%	8%
Suicide Intent Not Disclosed	44%	57%

One of the most vulnerable groups are those victims who had a history of suicide attempts and survived as well as those victims who had disclosed to someone else that they were considering suicide. Those who disclose their suicide intent are especially at risk if they keep repeating their intent. The more recent they repeat their intent, the more at risk they are if no one takes action to provide help and guidance. A closer look at **Table 13** (pg. 53) shows that fewer victims had disclosed their intent of suicide, especially in 2016.

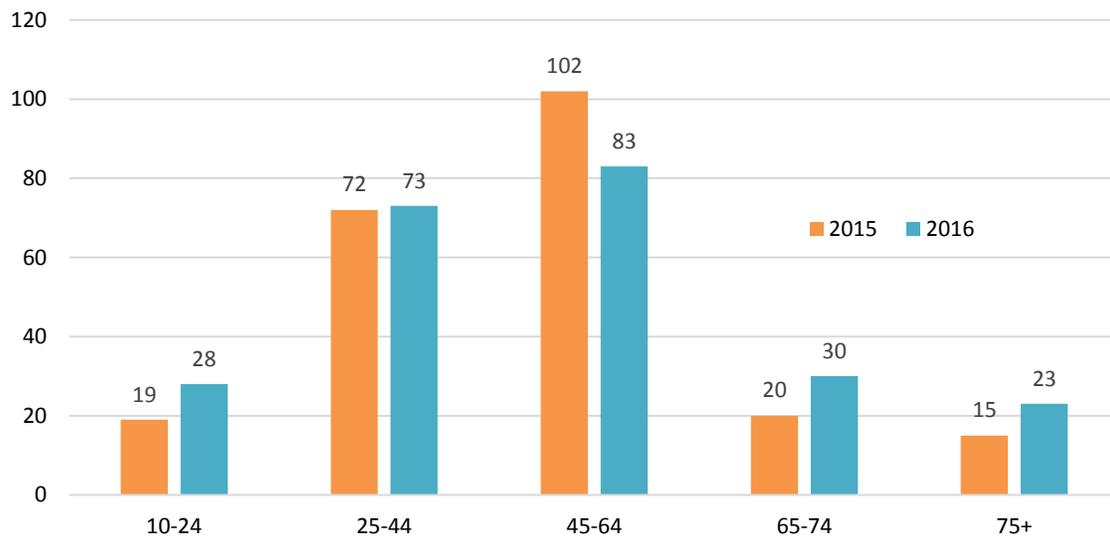
In New Hampshire, if a two year trend holds true, this at risk group will be making positive strides towards the Zero Suicide Strategy of prevention.

(<https://www.cdc.gov/violenceprevention/pdf/suicidetechnicalpackage.pdf>) and (<http://zerosuicide.sprc.org/resources>). (Please see **Table 13** pg. 53).

When considering age clusters of suicide victims, the highest increase in suicides (4%) occurred in the 10-24 age groups and those older than 65, when comparing (2015 – 2016) suicides (**Figure 34**); and considering 2015 as the base year. The rate of change in suicides, for all genders in the age groups (25-44) and (45-64), had remained constant or declined, (0%, -8%), respectively. This is a positive step, which is supporting preventive measures of suicides in the full Annual Suicide Report.

Figure 34

NH Suicides by Age Group* - 2015-2016



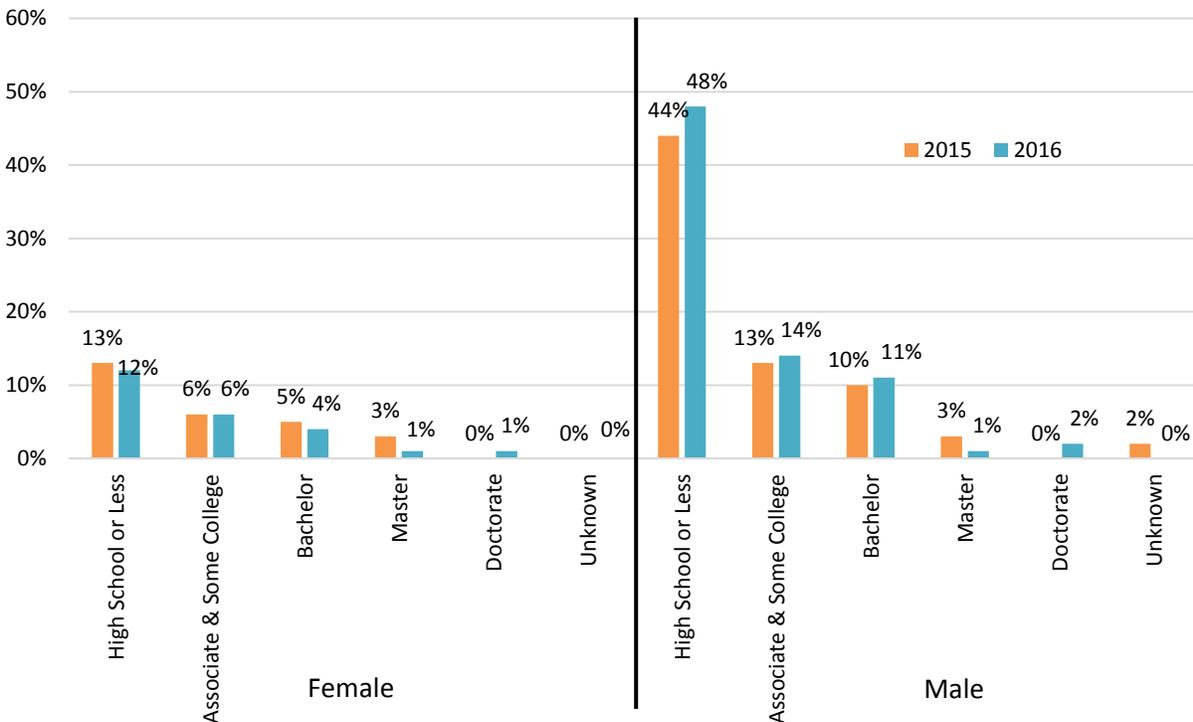
NHVDERS, according to the CDC case definition, does not report on suicide deaths of decedents whose age is less than 10 years.

Educational Attainment a Risk Factor for Suicides in New Hampshire

When it comes to considering educational attainment for suicide victims in New Hampshire, findings show that those who had accomplished GED/High School or less were among the highest at risk for suicide among the male population in the state. More than 60% of suicides are of males who had less than a college education.

Figure 35

NH Suicide Rates - Education Level by Gender* - 2015-2016



NHVDRS does not have access to data regarding the knowledge, skills and abilities (KSA's) for suicide victims to make a more informed corollary analysis. Educational attainment is based on information found in the death certificate data, which is a product of the Division of Vital Records Administration. Vital Records are administered by the Department of State in New Hampshire and their data is accessed through a password protected data query system at the DHHS Injury Prevention Program.

In **Figure 35** (above), data were aggregated for high school or less to include all levels of school attainment up to high school, as well as no education. The data were also aggregated for the category of associate & some college, which encompass educational attainment for years leading up to completion of an associate degree, as well as any college years before graduation.

Employment/unemployment and educational attainment data are based on the ADME's report when documented, or from funeral directors who add information to the death certificates into the database for Vital Records. This information is collected as reported by the suicide victim's survivors. The relationship between actual educational attainment and actual

employment/unemployment would benefit from further verification for validation. Unfortunately, no information is available for validation purposes regarding employment/educational attainment from wage data or other related databases, so this information on the death certificates or in the ADME reports is broadly accepted to be correct as reported by the survivor.

Suicide Incidence Rates in New Hampshire for Victims with Military Affiliation

There is a national concern regarding suicides among those who had served or are currently serving in the military. New Hampshire echoes the same concern regarding veterans' suicide, and addresses it with a suicide prevention program through the NH Army National Guard¹³.

Based on Census population estimates (1,330,134 people) for New Hampshire for 2015, suicide incidence rates per 100,000 people in the state, for 2015 – 2016, indicate that male victims in general used firearms as a means to carry out their suicides regardless of their military affiliation. Female suicide victims used mostly poisoning substances, other than illicit opioids, to complete their suicide intentions. Significant changes are underlined in **Table 14** (pg. 57).

¹³ <https://www.cdc.gov/vitalsigns/suicide/index.html>, and https://www.cdc.gov/mmwr/volumes/67/wr/mm6722a1.htm?s_cid=mm6722a1

Table 14

Suicide Incidence Rate Military Status & Cause of Death				
	2015	2016	2017*	2018**
No Military Service	14.1	14.2	16.3	8.8
<i>Female</i>	<u>4.7</u>	<u>4.3</u>	<u>4.4</u>	<u>2.0</u>
Poisoning	4.7	4.3	4.4	2.0
Handing/Suffocation	1.1	1.2	1.1	0.9
Drowning	0.3	0.0	0.2	0.0
Firearms	1.0	0.8	1.1	0.6
Smoke Inhalation	0.0	0.0	0.1	0.0
Sharp Object	0.1	0.0	0.0	0.0
Jumping from Heights	0.1	0.2	0.0	0.1
Jumping in Front of Moving Object/Crashing	0.0	0.1	0.0	0.0
<i>Male</i>	9.3	9.9	12.0	6.8
Unspecified Manner	0.1	0.1	0.1	0.1
Poisoning	1.4	1.1	1.6	0.8
Handing/Suffocation	<u>2.9</u>	<u>2.4</u>	<u>3.9</u>	<u>2.2</u>
Drowning	0.1	0.1	0.1	0.0
Firearms	<u>4.5</u>	<u>6.0</u>	<u>5.9</u>	<u>3.4</u>
Smoke Inhalation	0.1	0.0	0.0	0.0
Sharp Object	0.2	0.2	0.2	0.2
Jumping from Heights	0.1	0.1	0.2	0.1
Jumping in Front of Moving Object/Crashing	0.1	0.1	0.1	0.1
Unknown Military Status	0.2	0.4	0.1	0.1
<i>Female</i>	0.0	0.0	0.0	0.1
Firearms	0.0	0.0	0.0	0.1
<i>Male</i>	0.2	0.4	0.1	0.0
Poisoning	0.1	0.2	0.1	0.0
Handing/Suffocation	0.0	0.1	0.0	0.0
Firearms	0.2	0.2	0.0	0.0
Served/Serving Military	2.9	3.2	3.3	2.0
<i>Female</i>	0.1	0.1	0.0	0.2
Firearms	0.1	0.1	0.0	0.1
Sharp Object	0.0	0.0	0.0	0.1
<i>Male</i>	2.8	3.2	3.3	1.8
Unspecified Manner	0.1	0.0	0.0	0.0
Poisoning	0.2	0.3	0.5	0.1
Handing/Suffocation	0.4	0.6	0.5	0.3
Firearms	<u>2.0</u>	<u>2.1</u>	<u>2.3</u>	<u>1.4</u>
Smoke Inhalation	0.0	0.0	0.1	0.0
Sharp Object	0.1	0.2	0.0	0.0
Jumping from Heights	0.0	0.0	0.0	0.1

Although there is the added filter of military affiliate of suicide victims, see **Table 14** (pg. 57), the result did not change much for male suicide victims for using firearms regardless of their military affiliation. These are suicide incidence rates per 100,000 adjusted to the NH population for each grouping.

Suicide Risk Factors in NH

Depression and Primary Cause of Death: Suicide

In New Hampshire there are suicide risk factors that did not reflect national trends¹⁴, especially when it comes to mental illness and specifically depression or depressed moods.

In 2015 and 2016, 83% and 71% respectively, of suicide death victims had suffered from depression or reported having depressed moods. The positive indication from this high rate of suicides is that the percentage change from base year (2015) is decreasing.

Also of importance is the conditional occurrence of suicides among those who had mental health issues (depression/depressed mood) and how these victims carried out their suicidal intents. There are instances where suicide victims did not display any signs of depression. However, undiagnosed depression may have been a risk factor. That conditional fact is again centered on the use of firearms (35% and 36% respectively).

Table 15

NH Suicide Risk Factor Depression and Depressed Mood			
	2015	2016	Percent Change 2015 to 2016
No Depression	17%	30%	14%
Had Depression	83%	71%	-11%
All Poisoning	23%	14%	-8%
Hanging	21%	16%	-4%
Drowning	1%	0%	-1%
Firearms	35%	36%	3%
Smoke Inhalation	0%	0%	0%
Sharp Object	2%	1%	0%
Jumping from Heights	1%	1%	0%
Jumping in Front of Moving Object	0%	0%	0%
Total	100%	100%	

¹⁴ <https://www.cdc.gov/vitalsigns/suicide/index.html>, and https://www.cdc.gov/mmwr/volumes/67/wr/mm6722a1.htm?s_cid=mm6722a1

Another critical indicator to note is the rate of change in suicides for those who had no depression/depressed mood, which rose from 2015 to 2016 by about 14%.

Alcohol and Primary Cause of Death: Suicide

Another conditional rate for suicide victims is the risk factor of alcohol abuse or overuse during the critical moments individuals faced suicidal ideation or contemplated suicide. Yet again, the co-occurring risk factors under these circumstances are the mix of alcohol and firearms, which rank as top risk factors for suicides in New Hampshire for all victims.

Table 16

NH Suicide Risk Factor Alcohol		
Toxicology Alcohol Result	2015	2016
Positive Alcohol Result	72	81
All Poisoning	29%	21%
Hanging	15%	23%
Drowning	3%	0%
Firearms	49%	52%
Smoke Inhalation	1%	0%
Sharp Object	3%	1%
Jumping from Heights	0%	2%
No Alcohol/Unknown	156	155
Total	228	236

The data about alcohol is based on toxicology reports. The results of these toxicology reports are from suicide victims who had specimens sent for toxicological analysis. Data regarding alcohol was gathered when a field investigation was conducted.

About one third of suicide victims in NH had a positive toxicology screen for alcohol. Therefore, the issue of alcohol also needs to be addressed when considering suicide prevention measures.

Suicide Victims with Mental Health Conditions on Anti-Depressants.

Most medical experts state that anti-depressants are used to help alleviate symptoms of depression and curb the ideation of suicide. However, families and friends of suicide victims often recount that their loved one suffered from depression and their medication was not working or they stopped taking it for one reason or another.

Table 17

NH Suicide Deaths - Mental Health Diagnosis and Presence of Antidepressants by Gender - 2015-2016		
	2015	2016
Female	28%	24%
<i>Anxiety Disorder</i>	1%	0%
Present	0%	0%
Unknown	1%	0%
<i>Bipolar Disorder</i>	2%	1%
Present	1%	1%
Unknown	1%	0%
<i>Depression/Dysthymia</i>	18%	14%
Present	7%	8%
Unknown	11%	5%
<i>Other Mental Health Diagnosis</i>	2%	3%
Present	0%	0%
No Information	5%	6%
Male	72%	76%
<i>Anxiety Disorder</i>	2%	3%
Present	0%	0%
Unknown	2%	3%
<i>Bipolar Disorder</i>	3%	1%
Present	1%	0%
Unknown	1%	1%
<i>Depression/Dysthymia</i>	22%	22%
Present	7%	3%
Unknown	16%	19%
<i>Other Mental Health Diagnosis</i>	1%	1%
<i>Post-traumatic Stress Disorder</i>	1%	0%
<i>Schizophrenia</i>	1%	1%
Present	0%	0%
Unknown	1%	2%
<i>No Information</i>	42%	46%

The Suicide Prevention Resource Center (SPRC) recommends a comprehensive approach to suicide prevention (<https://www.sprc.org/effective-prevention/comprehensive-approach>). “A key element of suicide prevention is ensuring that individuals with suicide risk have timely access to evidence-based treatments, suicide prevention interventions, and coordinated systems of care. Suicide prevention interventions such as safety planning and evidence-based treatments and therapies delivered by trained providers can lead to significant improvement and recovery. SPRC encourages health and behavioral health care systems to adopt the Zero Suicide Framework¹⁵ for integrating these approaches into their systems. Reducing financial, cultural, and logistical barriers to care is another important strategy for ensuring access to effective mental health and suicide care treatment.” Medication alone may not be effective in the treatment of depression and suicidal ideation.

The data regarding mental illness can be difficult to obtain when medical examiners conduct their inquiries of family members, next of kin or partners in the midst of their loss. Often such information was either not shared by suicide victims or the information was not up to date. Please see **Table 17** (pg. 60) when considering a comparison of suicide victims by sex and presence of anti-depressants, where there existed depression. These rates indicate that they are the same, as highlighted (magenta). There were 41 female suicide victims who suffered from depression or depressed mood and 51 males, who suffered from the same mental condition in 2015.

There is a real gap regarding the information on mental health. There are a number of suicide victims where there was no further information regarding their mental health diagnoses or access to mental health care. In 2015 and 2016, for male suicide victims there were 42% and 46 % respectively; and for female suicide victims there were 5% and 6% respectively.

Risk Factors From Mixing Cannabinoids and Mental Health Conditions:

Another deadly combination of risk factors that suicide victims face is the use of cannabinoids and alcohol or other substances. A number of suicide victims often use, at varying frequency, cannabinoids while they have mental illness. Such usage could be during periods when these suicide victims were experiencing a mental health crisis.

¹⁵ <http://zerosuicide.sprc.org/>

Table 18

NH Suicide Deaths - Presence of Marijuana/Cannabinoids and Mental Health Diagnosis by Gender - 2015-2016		
	2015	2016
Female	64	58
<i>Present</i>	8	6
Bipolar Disorder	^	-
Depression/Dysthymia	7	^
No Information	-	^
<i>Not Tested/No Information</i>	56	52
Anxiety Disorder	^	^
Bipolar Disorder	^	^
Depression/Dysthymia	34	28
Other	^	^
No Information	15	19
Male	164	179
<i>Present</i>	26	11
Anxiety Disorder	-	^
Bipolar Disorder	^	-
Depression/Dysthymia	10	^
Post-Traumatic Stress Disorder	^	-
No Information	16	11
<i>Not Tested/No Information</i>	397	108
Anxiety Disorder	5	7
Bipolar Disorder	164	^
Depression/Dysthymia	^	^
No Information	228	101
Other	^	^
Post-Traumatic Stress Disorder	^	^
Schizophrenia	^	^
Grand Total	228	237

(^): Suppressed value

(-): No value

The data above is based on results from toxicology reports. In some cases the medical examiner's office does not test specimens from suicide victims due to extenuating circumstances. Also, there are various reasons for not testing for cannabinoids, such as when the body of the victim is in decomposition, and it is not possible to extract specimens. Still the combined percentages for positive tests of cannabinoids for all suicide victims were 15% and 7% in 2015 and 2016 respectively. When considering these percentages, which represent only two years of data, we urge caution.

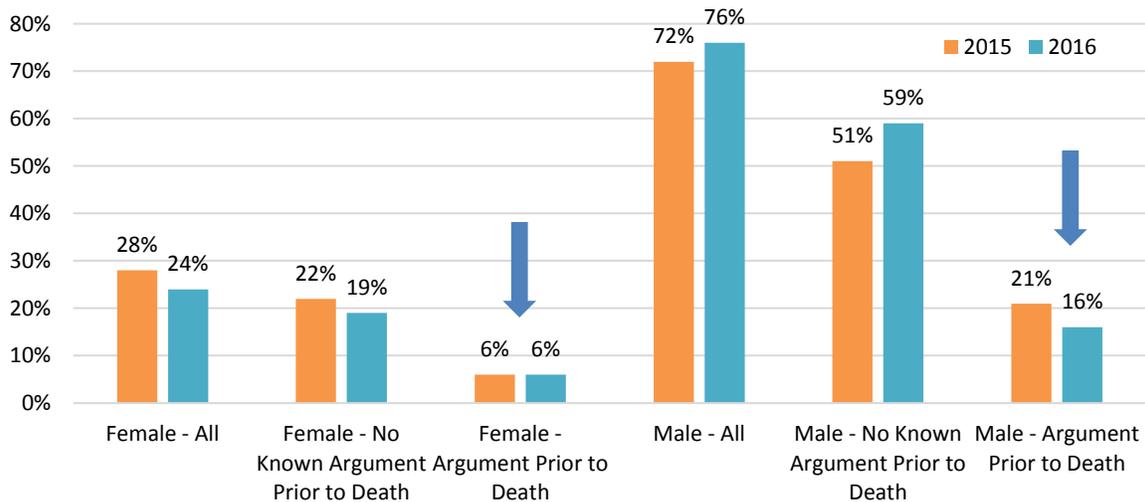
Two Risk Factors that Manifest Prominently among Suicide Victims:

Arguments

There were often arguments that suicide victims engaged in that were with partners, family members, acquaintances or others. The timing of the argument and act of suicide may take place at the same time, days after the argument or within two weeks. The intensity of the argument and frequency also varied. There are instances where the argument was very intense and the suicide act took place right at that time. In other instances the argument dragged on for days and it was followed by suicide. In **Figure 36** (below), male suicide victims had experienced more incidents of arguments that resulted in suicides than females in 2015 and 2016. For every female suicide victim who had a relationship argument there were almost 3.5 more male suicide victims with the same risk factor from an irreparable relationship.

Figure 36

NH Suicide Deaths With Arguments Prior to Death by Gender
- 2015-2016

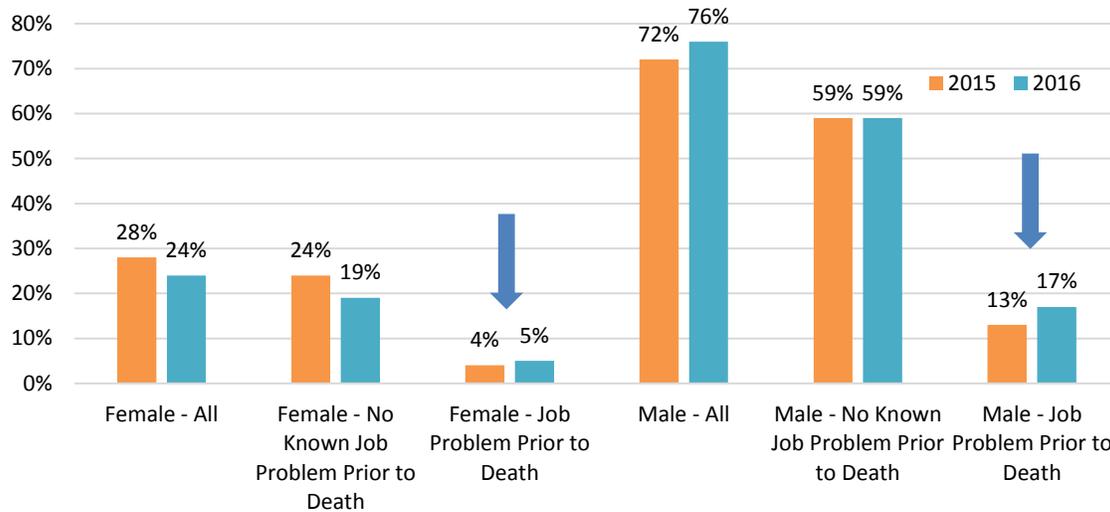


Job Problems

The factor of job problems in relation to suicides is of concern despite the fact that there are only two years of data. Also of importance is the distinction between job problems by gender. Due to small number disclosure limitations, it is not possible to separate the percentages by other gender clustering.

Figure 37

NH Suicide Deaths With Job Problems Prior to Death by Gender - 2015-2016



Job problem factors were reported by partners, family members or co-workers, if they were informed by the victims to such job troubles. Of equal relevance is codification of occupation of suicide victims. Reported occupations are not always based on Standard Occupations Codes (SOC-codes) or The North American Industry Classification System (NAICS codes). Therefore, this is a risk factor that could be tracked rigorously if access to other data sources could be authorized.

Job problems are one of the risk factors which are highly aggravated during economic downturns and economic re-alignment. Economic re-alignment occurs when businesses acquire new technology that emerges quickly and there is little transition/adaptation for the workforce, and the skills acquisition for the workforce lags behind for the period that follows. Such is the case during the dot com era, as well as after the economic depression that began in 2008.

Table 19

NH Suicide Deaths - Presence of Job Problems by Gender		
	2015	2016
Female	28%	24%
No Know Job Problem Prior to Death	24%	19%
Job Problem Prior to Death Reported	4%	5%
Male	72%	76%
No Know Job Problem Prior to Death	59%	58%
Job Problem Prior to Death Reported	13%	17%

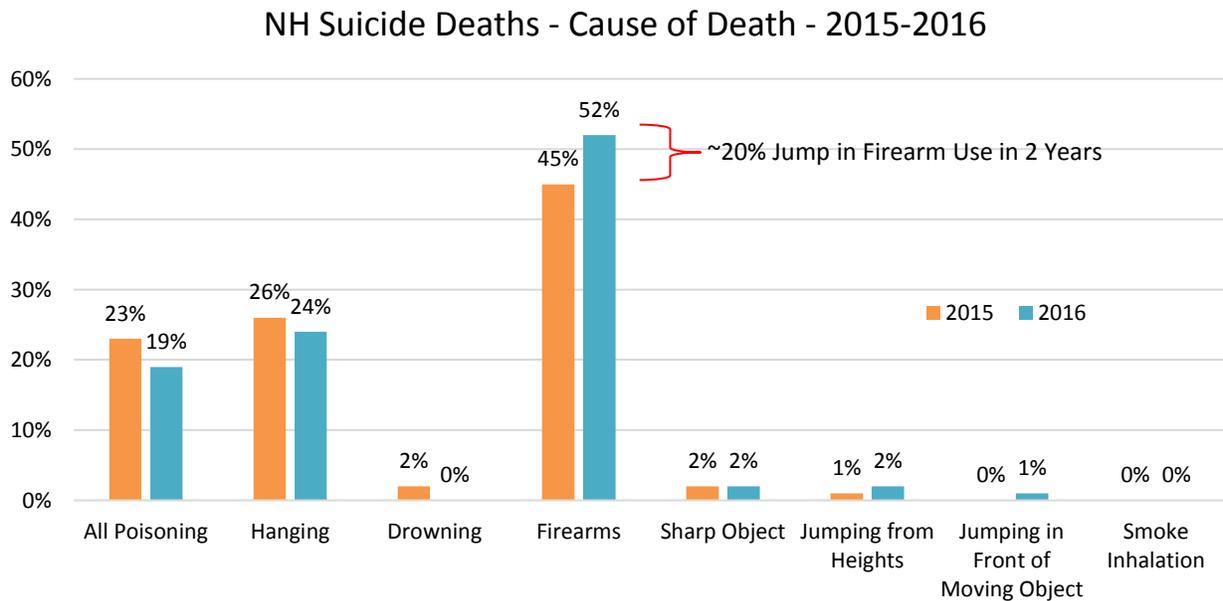
In general, job problems as a risk factor for suicide is still not fully explored in the realm of suicidology studies. However, there are many news facts that link suicide to the loss of employment. Further studies regarding the effects of employment stability on suicide and vice versa are important to review.

One of the recent studies was conducted at the National Center for Biotechnology Information, U.S. National Library of Medicine, by Chungah Kim and Youngtae Cho:
[\(https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5451921/\)](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5451921/)

In New Hampshire - Most Suicides are Carried out by Firearms

To visualize the impact of firearms on suicides among males see **Figure 38** (below).

Figure 38



For the surveillance period 2015 – 2016, it is clear that most suicide victims used firearms to complete their suicide. In further details, firearms are the most frequent and most lethal means of death for male suicide victims.

Suicidal Thoughts and Mental illness:

More often than not, suicide victims who act on suicidal thoughts suffer from mental illness as well.

Of all the female suicide victims in 2015 – 2016 there were 64 and 58 respectively; and of these numbers there were 13% and 6% who had prior suicidal thoughts and had mental conditions. For the same period, male suicide victims were 164 and 179. Of these numbers there were 23% and 9% afflicted with previous suicidal thoughts who suffered mental illness as well, and completed suicides after displaying suicidal ideation. See **Figure 39** and **Table 20** (below).

Figure 39

NH Suicide Deaths With History of Suicidal Thoughts by Gender - 2015-2016

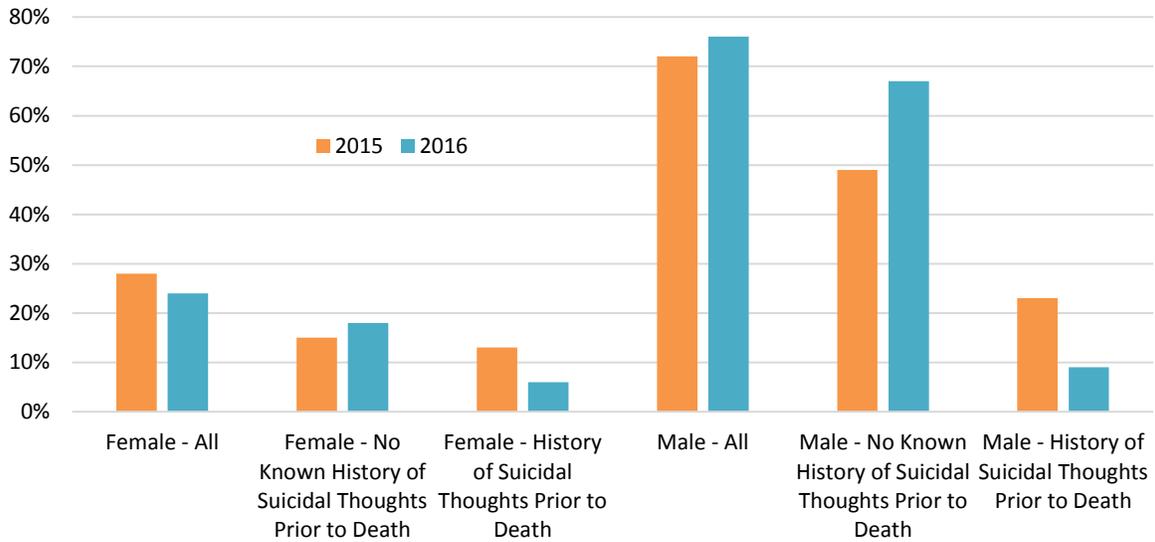


Table 20

NH Suicide Deaths - History of Suicidal Thoughts by Gender and Mental Health Diagnosis - 2015-2016		
	2015	2016
Female	13%	6%
Anxiety, Bipolar Disorder, or Schizophrenia	2%	1%
Depression/Dysthymia	9%	4%
Other Mental Health Diagnosis	2%	1%
Male	23%	9%
Anxiety Disorder	3%	0%
Depression/Dysthymia	10%	5%
Other Mental Health Diagnosis	11%	4%

Prevalent Substances Suicide Victims Ingested, Based on Toxicology Reports

Benzodiazepines.

Often suicide victims have ingested benzodiazepines either to cause their own death or they were taking such substances to treat a mental illness.

Table 21

NH Suicide Deaths - Presence of Benzodiazepines by Gender - 2015-2016		
	2015	2016
Female	28%	6%
Benzodiazepines Present	11%	1%
Not Tested/No Information	18%	4%
Male	72%	9%
Benzodiazepines Present	17%	0%
Not Tested/No Information	55%	5%

Anticonvulsants

Anticonvulsants include: Clonazepam, Diazepam, Gabapentin, and others. These substances were most likely ingested by suicide victims who acted on their suicidal ideation to harm themselves. There is a possibility that these substances were ingested by suicide victims as part of their medical regiment.

Table 22

NH Suicide Deaths - Presence of Anticonvulsants by Gender - 2015-2016		
	2015	2016
Female	28%	24%
Anticonvulsants Present	5%	3%
Not Tested/No Information	23%	22%
Male	72%	76%
Anticonvulsants Present	4%	1%
Not Tested/No Information	68%	74%

Opiates

Opiates are a large class of substances, which encompass both prescription drugs and illicit substances. The lines can be blurred when it comes to opiates, since there is a diversion of prescription substances that end up in the illicit arena. Another dangerous practice is when suicide victims unlawfully take prescription drugs from family and friends. This act manifests itself in various scenarios. The suicide victim uses potent medications that were prescribed to another family member without their knowledge. Other times, suicide victims had old medications in the medicine cabinet that were prescribed to them months or more than a year earlier and take them to harm themselves.

Table 23

NH Suicide Deaths - Presence of Opiates by Gender - 2015-2016		
	2015	2016
Female	28%	24%
Opiates Present	8%	6%
Not Tested/No Information	20%	18%
Male	72%	76%
Opiates Present	11%	8%
Not Tested/No Information	61%	68%

Physical Health Problems

Some suicide victims act on their suicidal ideation when they face physical health problems. This risk factor is especially present among suicide victims who are older. Often older victims receive a new diagnosis for a non-curable disease and the prospect of living with the disease becomes daunting. This is also true when the victim has little social support and there is degradation in their standard of living.

Table 24

NH Suicide Deaths - Presence of Physical Health Problems by Gender		
	2015	2016
Female	28%	24%
No Know Physical Health Problems Prior to Death	24%	20%
Physical Health Problem Prior to Death Reported	4%	5%
Male	72%	76%
No Know Physical Health Problems Prior to Death	61%	59%
Physical Health Problem Prior to Death Reported	11%	17%

There are instances when a suicide victim makes the decision to complete a suicide based on the fear of further suffering that usually is coupled with disease. In other instances, the suicide victim is faced with a terminal illness, and believes that suicide will spare their family from suffering.

Physical health problems and suicides are best studied in conjunction with social and health practices and outreach activities. These activities are also subject to the geographical location of the victim and proximity to these services, which additionally introduce complexities that suicide victims face.

Physical health problems, as a risk factor, are not exclusively associated with older suicide victims or one gender over the other. Suicidal ideation at times occurs either after a diagnosis or after a period of living with a disease that limit a victim's physical abilities. Often times, there was a period of therapy that did not produce the expected results victims were looking for. The point is not to place any blame on the service provider or disparage any profession. The data is gathered from family, friends, next of kin or coworkers, who attested to physical health problems as a factor for why suicide victims acted on harming themselves.

Suicide Effects.

Suicide affects many aspects of society. Primarily suicide impacts people close to the victim. Suicide victim relationships could be either: husband, wife, mother or father, or other family members. In other relationship settings, there are children. For suicide victims in a relationship where there are children most often the impact on children is felt on many levels: mental, psychological and economical.

For NVDRS currently, there is no robust data source that we could access to inform the stakeholders and policy makers on this subject. Suicide effects on children are another risk factor which could be perpetuated forward if not addressed sooner and soundly based on evidence and data.

Conclusion

NHVDRS has engaged with the NH Suicide Prevention Council. The data analyst at OCME, through the NHVDRS program produces data, reports and analysis that are shared with the NH Suicide Prevention Council according to the disclosure clauses for DOJ/DHHS. Further, NHVDRS is active in the dissemination of information and is an active participant in the Suicide Prevention Council. NHVDRS works jointly with select members on the in depth reviews of suicide cases by the Forensic Case Review Committee. To help advocates of suicide victims, NHVDRS has been working with State lawmakers in addressing critical issues of prevention and reporting regarding suicides in the State of New Hampshire.

NVDRS is a CDC surveillance grant program that the State of New Hampshire applied for in 2014. The program is administered by the Injury Prevention Program at DHHS. Data collection, analysis and reporting, and partner outreach are performed by the NHVDRS analyst employed by OCME, under a memorandum of agreement with DHHS and OCME, which is under the jurisdiction of the Department of Justice.

The Department of Health and Human Services Injury Prevention Program has administrative oversight as the grant holder. The Injury Prevention Program at DHHS, with the help of the NHVDRS analyst at OCME and other partners, now also manages a second grant: Enhanced State Surveillance of Opioid-Involved Morbidity and Mortality, which focuses on accidental and undetermined morbidity and mortality data collection and dissemination. Data on deaths related to opioid overdosing is collected utilizing the NVDRS site.

The scope of NHVDRS is limited because OCME does not have authority to access certain databases stewarded by other state programs. Other limitations are due to a lack of resources and staff capacity. The NHVDRS program data highlights critical risk factors and specific variables that can enlighten the work and efforts of stakeholders engaged in the wide spectrum of suicide prevention and postvention.

In New Hampshire, the OCME is the central authority which determines manners of deaths. This makes death records and data more robust than if there were more than one authority. In contrast, some other states have various authorities: county coroners, and multiple medical examiners. This centrality in managing death records is a catalyst not only for reporting and analyses on suicides, but also enhances the information provided to stakeholders and lawmakers on gaps for efforts on suicide prevention and services provided.

NHVDRS, being housed at the Office of Chief Medical Examiner, is well situated to address the complex issues of resources and capacity: the OCME has the authority to access and review the types of reports required to fulfill the NVDRS grant data collection process and the NHVDRS Abstractor is able to engage the various stakeholders involved in addressing suicides. NHVDRS will be able to produce benchmark metrics that will measure outcomes for these stakeholders.

Disclaimer: Only 2015 and 2016 data are validated by CDC. 2017 and 2018 data are still in progress.

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/L9D8BFY>

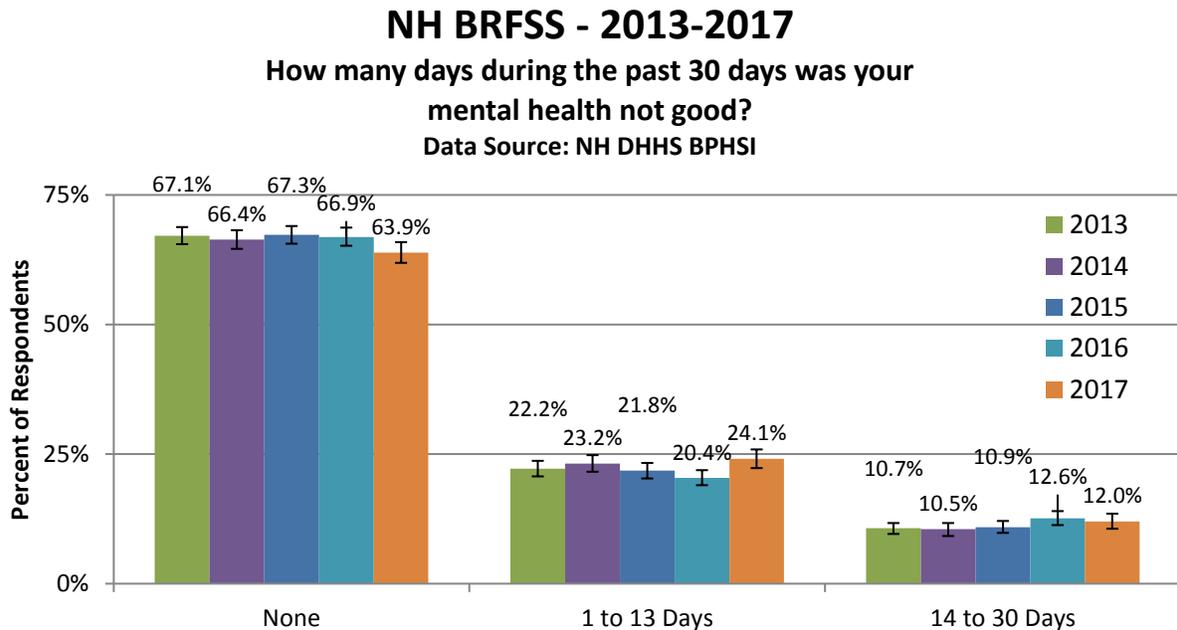
Additional Data Sources

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 “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 depression. The results from this item are included in **Figure 40** (below).

Figure 40

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 National Guard recorded a total of 73 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, 23% were from individuals under the age of 22 and 40% were age 22-26, 11% were age 27-31, 7% were age 32-36, and 8% were age 37-41. The remaining 11% were age 42 and above. Fifty-five percent of the incidents were by non-deployed personnel, veterans, or dependents of National Guard personnel. Of the incidents recorded, 92% were by males and 8% 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)

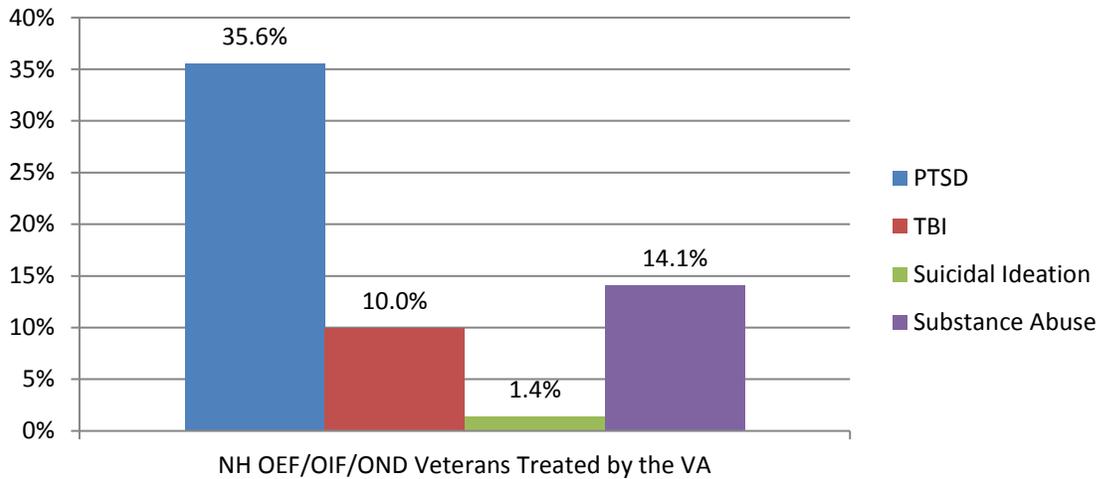
The VA provides care to many of the Veterans in the State of NH including those recently returned from Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND). Of the NH Veterans who served in OEF/OIF/OND, approximately 3,200 are treated at the VA each year. The percentage of these individuals treated for post-traumatic stress disorder (PTSD), traumatic brain injuries (TBI), suicidal ideation, and substance abuse are presented in **Figure 41** below.

Figure 41

More than one in four NH OEF/OIF/OND Veterans treated at the VA have a primary or secondary diagnosis of PTSD.

Percentage of NH OEF/OIF/OND Veterans treated at the VA with PTSD, TBI, suicidal ideation, or substance abuse as their primary or secondary diagnosis Federal Fiscal Years 2013 - 2015

Data Source: Veterans Administration



Data from the NH Department of Corrections

From January 1, 2016 to November 15, 2016¹⁶ 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 attempt¹⁷. 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 42** (pg. 74) displays the percentage of intakes indicating suicidal ideation and/or attempts by gender. In 2017, there were zero deaths due to suicide in the NH Prison System (facilities operated by the NH Department of Corrections).

Positive Outcomes and Testimonials

Safe Messaging and Media Guidelines:

Work has been done continuously across the state to educate the public and media about safe messaging, a national best practice standard (www.sprc.org/library/SafeMessagingfinal.pdf). Safe messaging has become part of the standard for statewide and regional meetings, part of suicide prevention trainings, a guide for health promotion materials and essentially part of the culture in NH. Media Guidelines have been disseminated to media outlets across the state, and journalism students in several universities in NH have received training in the Media Guidelines and how to safely write about suicide. The Communications/Media Sub-Committee of the SPC provides feedback to media outlets and suicide prevention experts in the state to guide public information that is produced through consultation, media contributions and feedback. The results of these efforts became evident after the tragic death of Robin Williams. (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.”

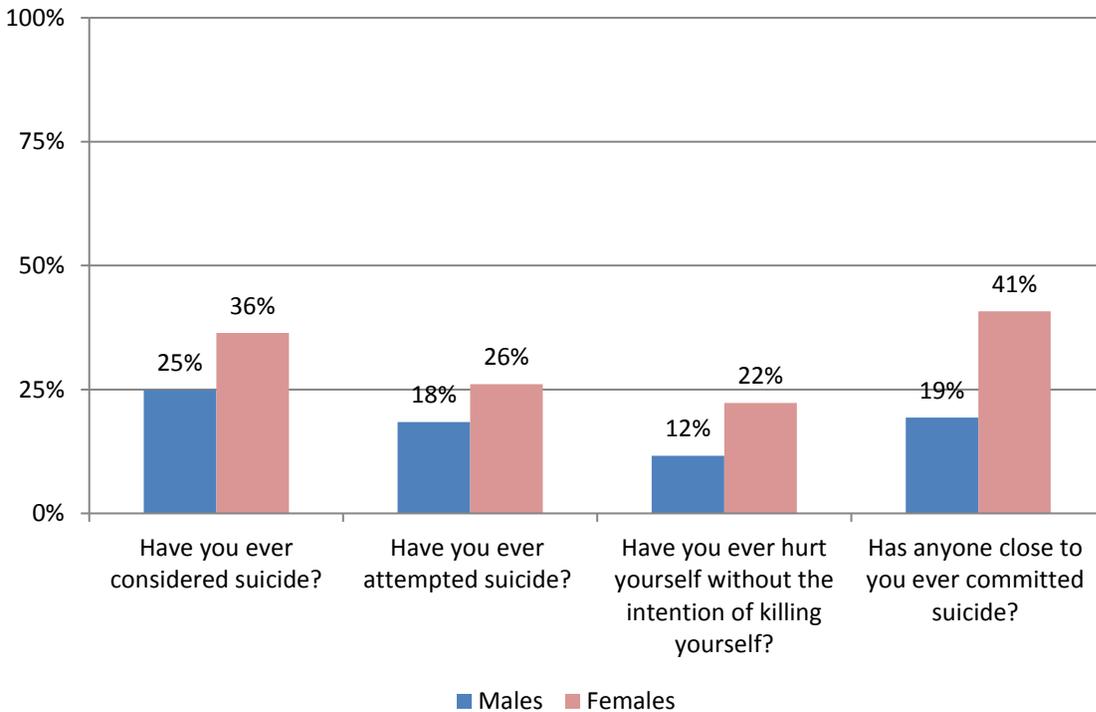
Elaine de Mello
Supervisor of Training and Prevention Services
NAMI New Hampshire

¹⁶ NH Department of Corrections switched EMR on November 16, 2016.

¹⁷ This information should be interpreted cautiously as it is self-reported at a single point in time.

Figure 42
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



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 the 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 43 (pg. 75) presents NH suicide death rates for youth and young adults aged 10-24 in rolling three-year intervals from 2007 to 2016. **Figure 43** 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 (2006-2008) and the final three intervals (2012-2014, 2013-2015, and 2014-2016), with the first interval being significantly lower. (**Figure 44** – pg. 75).

Figure 43

Suicide rates among 10-24 year old NH residents have increased from 2007-2016.

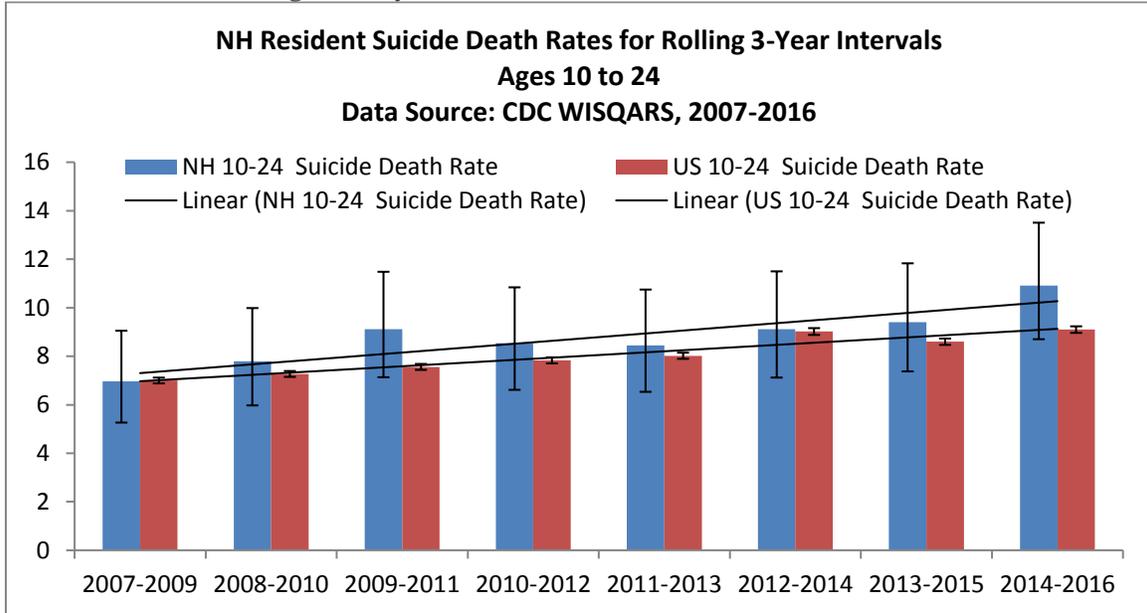


Figure 44

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

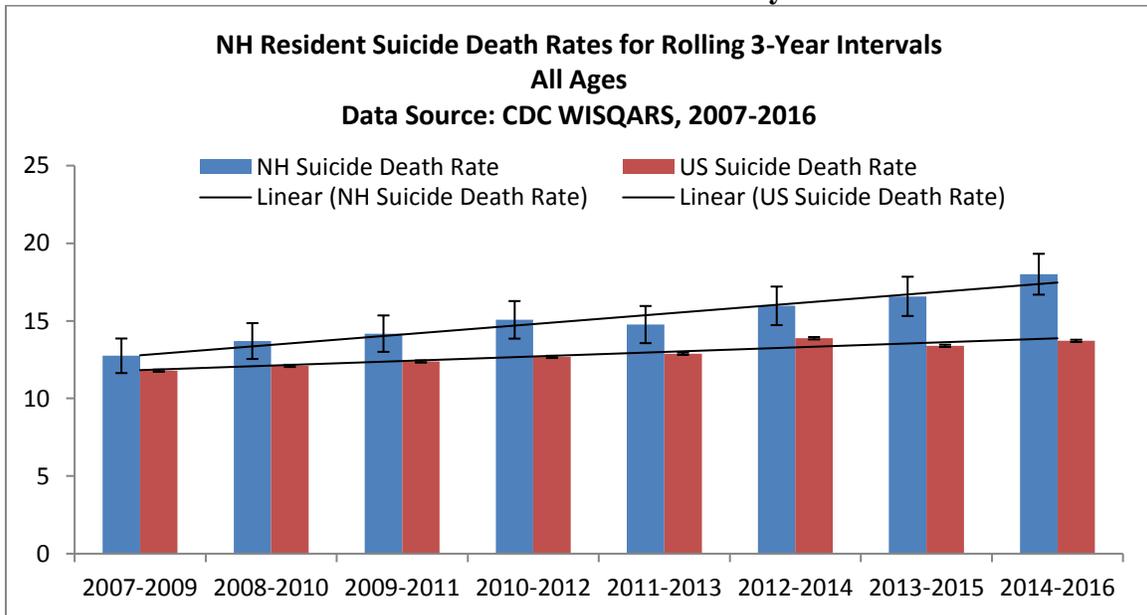
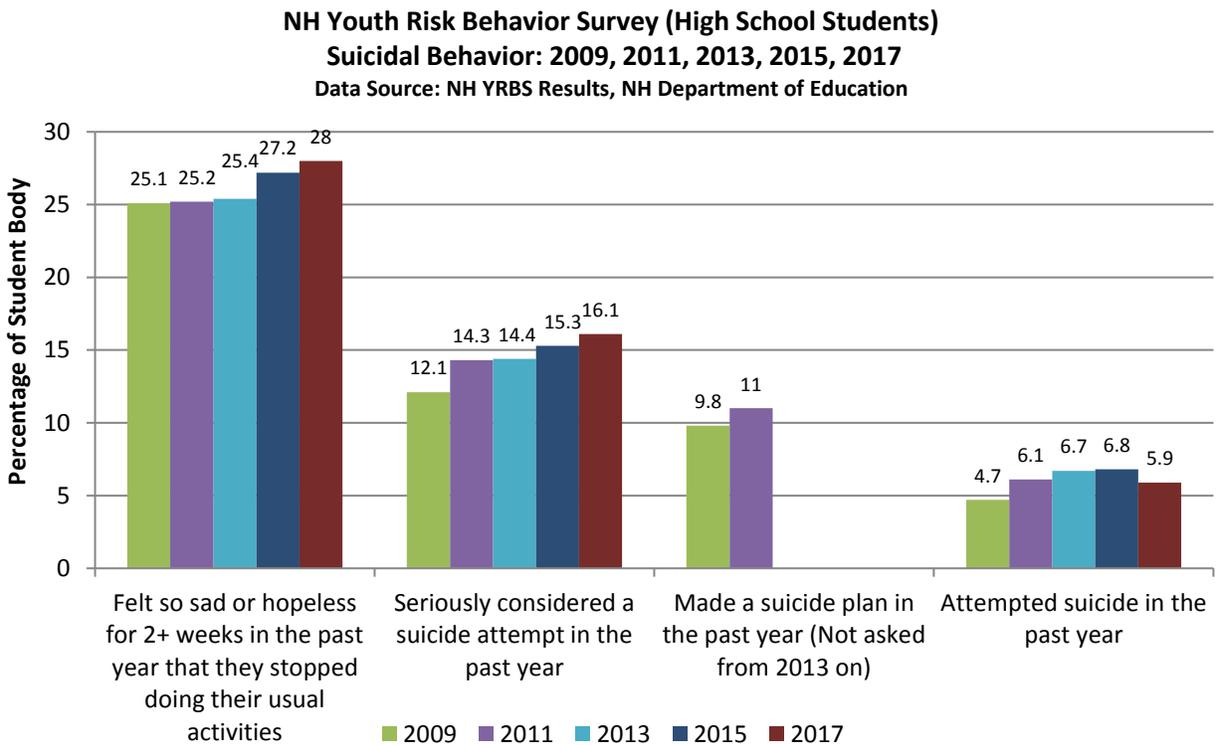


Figure 45 (below) presents the results of the NH YRBS from 2009, 2011, 2013, 2015, and 2017. The percentage of high school youth in NH who felt sad or hopeless for 2+ weeks in the past year and the percentage of youth who seriously considered a suicide attempt in the past year have both increased between 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 45

Depression among high school youth remains at about one fourth of the population despite decreases in suicide attempts and suicidal ideation from 2007 to 2015.



The NH YRBS item addressing whether students have made a suicide plan in the past year was last asked in 2011. This was done 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 2012 to 2016.
- **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 2012 to 2016 and the rate of suicide deaths by age group in NH from 2012 to 2016.

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 2008 to 2017. On the y-axis (the side) the scale is the number of youth suicides, which ranges from 0 to 35.
- **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 and Coos County do not overlap the bar for Rockingham County. From this we are able to determine that the rates of suicide in Carroll County and Coos 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
Assessing and Managing Suicide Risk	AMSR
Behavioral Risk Factor Surveillance System	BRFSS
Centers for Disease Control and Prevention	CDC
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 th Revision	ICD-10
National Alliance on Mental Illness New Hampshire	NAMI NH
National Suicide Prevention Lifeline	NSPL
Northern New England Poison Center	NNEPC
Office of Economic Planning	OEP
Office of the Chief Medical Examiner	OCME
Operation Enduring Freedom	OEF
Operation Iraqi Freedom	OIF
Operation New Dawn	OND
Post-Traumatic Stress Disorder	PTSD
Substance Abuse and Mental Health Services Administration	SAMHSA
Substance Abuse Program	SAP
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

All 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_i = number of events in age group i

P_i = population in age group i

S_i = proportion of the standard population in age group i

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

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

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 10th 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

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

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 due to random 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?

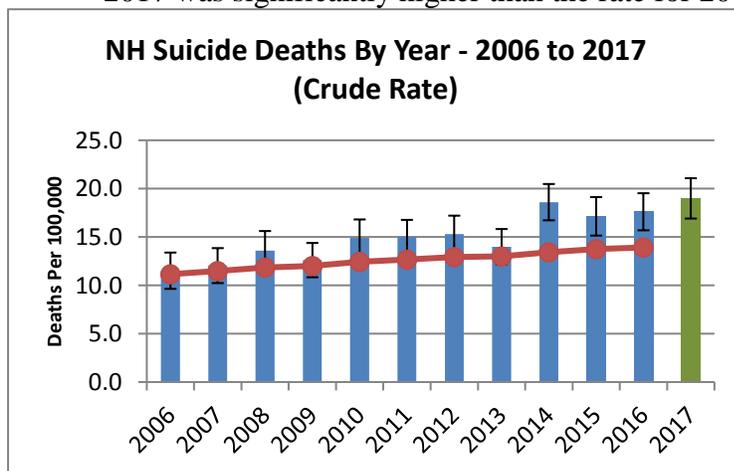
A: It is best to focus on data from a full year or multiple years rather than periods of just a few months. Over brief periods these numbers are too volatile to draw accurate conclusions from them.

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 2006 do not overlap with the 2014 through 2017 confidence intervals, meaning that the rate for 2014 - 2017 was significantly higher than the rate for 2006.



2006-2016 = CDC Data, 2017 = NH Data

Change in Rate per 100,000 from Year to Year	
2006-2007	11.51 to 12.04 (Up 5%)
2007-2008	12.04 to 13.60 (Up 13%)
2008-2009	13.60 to 12.61 (Down 7%)
2009-2010	12.61 to 14.89 (Up 18%)
2010-2011	14.89 to 15.02 (Up 1%)
2011-2012	15.02 to 15.29 (Up 2%)
2012-2013	15.29 to 13.99 (Down 9%)
2013-2014	13.99 to 18.60 (Up 33%)
2014-2015	18.60 to 17.14 (Down 8%)
2015-2016	17.14 to 17.61 (Up 3%)
2016-2017	17.61 to 18.99 (Up 8%)

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., 2007 data were released in mid-2010). The 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 2004 to 2005, the number of deaths were up over 20% followed by an 8% decrease from 2005 to 2006; 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, 2012 – 2016

	Age Groups										
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Short Gestation 38	Unintentional Injury 10	Malignant Neoplasms 10	Malignant Neoplasms 14	Unintentional Injury 299	Unintentional Injury 591	Unintentional Injury 465	Malignant Neoplasms 979	Malignant Neoplasms 2,597	Heart Disease 10,426	Malignant Neoplasms 13,590
2	Congenital Anomalies 35	Congenital Anomalies ---	Unintentional Injury ---	Suicide ---	Suicide 115	Suicide 158	Malignant Neoplasms 209	Heart Disease 562	Heart Disease 1,250	Malignant Neoplasms 9,684	Heart Disease 12,424
3	Maternal Pregnancy Comp. 28	Homicide ---	Homicide ---	Unintentional Injury ---	Heart Disease 19	Malignant Neoplasms 74	Suicide 178	Unintentional Injury 486	Unintentional Injury 373	Chronic Low Respiratory Disease 2,964	Unintentional Injury 3,647
4	Placenta Cord Membranes 15	Influenza & Pneumonia ---	Heart Disease ---	Benign Neoplasms ---	Malignant Neoplasms 17	Heart Disease 43	Heart Disease 114	Suicide 270	Chronic Low Respiratory Disease 338	Cerebrovascular 2,066	Chronic Low Respiratory Disease 3,411
5	Circulatory System Disease 11	Malignant Neoplasms ---	Benign Neoplasms ---	Congenital Anomalies ---	Homicide 10	Congenital Anomalies 15	Liver Disease 46	Liver Disease 157	Diabetes Mellitus 257	Alzheimer's Disease 1,963	Cerebrovascular 2,319
6	SIDS ---	Heart Disease ---	Cerebrovascular ---	Influenza & Pneumonia ---	Diabetes Mellitus ---	Liver Disease 11	Diabetes Mellitus 22	Diabetes Mellitus 96	Liver Disease 257	Unintentional Injury 1,408	Alzheimer's Disease 2,001
7	Necrotizing Enterocolitis ---	Benign Neoplasms ---	Congenital Anomalies ---	Nephritis ---	Congenital Anomalies ---	Diabetes Mellitus ---	Homicide 16	Chronic Low Respiratory Disease 83	Suicide 202	Diabetes Mellitus 1,118	Diabetes Mellitus 1,509
8	Neonatal Hemorrhage ---	---	Suicide ---	---	Cerebrovascular ---	Homicide ---	Cerebrovascular 15	Cerebrovascular 65	Cerebrovascular 159	Influenza & Pneumonia 1,002	Suicide 1,106
9	Respiratory Distress ---	---	---	---	Benign Neoplasms ---	Chronic Low Respiratory Disease ---	Chronic Low Respiratory Disease 13	Nephritis 24	Septicemia 81	Nephritis 759	Influenza & Pneumonia 1,102
10	Two Tied ---	---	---	---	Chronic Low Respiratory Disease ---	Complicated Pregnancy ---	Congenital Anomalies ---	Septicemia 22	Viral Hepatitis 69	Parkinson's Disease 617	Nephritis 858

Source: CDC WISQARS, 2012-2016

---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: Dan Potenza – Daniel.Potenza@doc.nh.gov

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

Youth Suicide Prevention Assembly

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

Meets 2nd 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

NH Suicide Survivor Network

Primary Contact: Deb Baird – dbaird@naminh.org

Suicide Prevention Council Subcommittees

Communications & Public Education

Chair: Rhonda Siegel – rsiegel@dhhs.state.nh.us

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

Cross Training & Professional Education

Activity currently suspended

Data Collection & Analysis

Chair: Patrick Roberts – proberts@naminh.org

Meets 4th 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: Dale Garrow – dale.garrow@accenturefederal.com

Beth Alves - Beth.Alves@va.gov

Meets 1st Wednesday of the Month 2:30 – 4:00 pm
Manchester Vet Center, Hooksett, NH

Public Policy

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

Meeting schedule to be determined

State Suicide Prevention Conference Meetings

Primary Contact: Mary Forsythe-Taber– mft@mih4u.org

Contact Mary Forsythe-Taber 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

Deb Baird – dbaird@naminh.org

Meets 4th 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.

These warning signs can also be applied to adults:

- 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 <http://www.theconnectprogram.org> and click on Understanding Suicide.

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: <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, 603-225-5359

Gay, Lesbian Bisexual, and Transgender (GLBT) Resources

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

Military Resources

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

National Organizations

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

Older Adults

NH Fact Sheet on Suicide and Aging: bit.ly/1KqsBH3
SPRC Older Adult Suicide Prevention Resources: bit.ly/1Jod4n3

Substance Abuse and Mental Health Services Administration (SAMHSA)

Obtaining Prevention Materials:

Visit their website: store.samhsa.gov/home (includes downloadable materials)

Call: 1-877-SAMHSA-7 (1-877-726-4727) or Email: 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/

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

American Foundation for Suicide Prevention: bit.ly/afsp-survivors

Compassionate Friends: www.compassionatefriends.org

The *Connect* Program: <http://www.theconnectprogram.org/survivors>

Friends for Survival: www.friendsforsurvival.org

Grief After Suicide: bit.ly/suicidegriefsupport

Heartbeat: heartbeatsurvivorsaftersuicide.org

Parents, Family and Friends of Suicide Loss: www.pos-ffos.com

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

Survivors of Suicide Loss: www.survivorsofsuicide.com

Suicide: Finding Hope: www.suicidefindinghope.com

Discussion Forums

Parents of Suicides and Friends & Families of Suicides: www.suicidegrief.com

Help for People Left Behind: bit.ly/grieving-suicidesurvivors

Suicide's Survivors: bit.ly/legacy-suicidesurvivors

Booklets

Coping with the Loss of a Friend or Loved One: bit.ly/save-copingwithloss

Financial Guide: www.afsp.org/financialguide

Handbook for Survivors of Suicide: bit.ly/aas-store

Hope and Healing after Suicide: bit.ly/camh-hopehealing

Resource and Healing Guide: bit.ly/afsp-surviving-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/L9D8BFY>