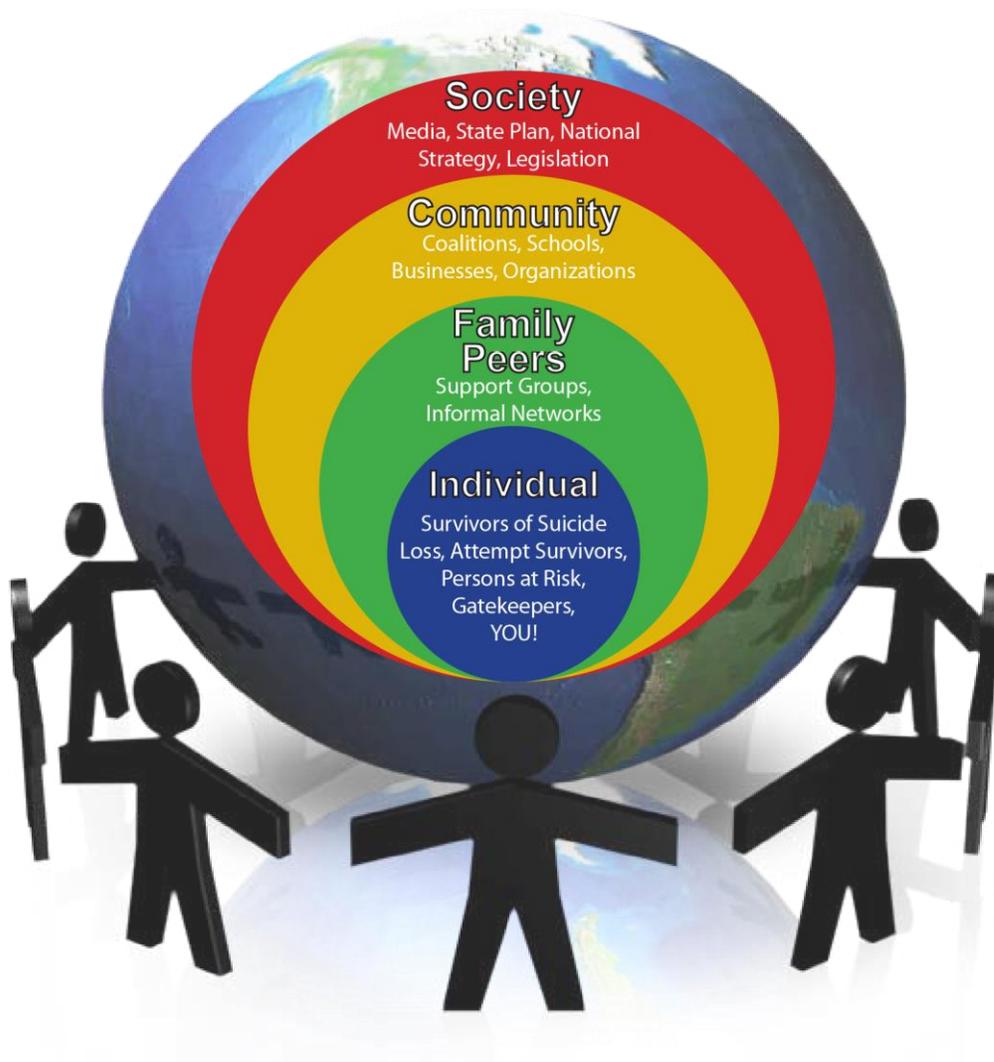


New Hampshire Suicide Prevention



Annual Report 2012

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).

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Table of Contents

Introduction	3
Primary Partners	4
2012 Accomplishments	5
State Suicide Prevention Council	5
Youth Suicide Prevention Assembly.....	6
The NH Suicide Survivor Network	7
State and Tribal Youth Suicide Prevention and Early Intervention Grant Program.....	8
Campus Youth Suicide Prevention and Early Intervention Grant Program.....	9
Annual NH Suicide Prevention Conference	9
Local Coalitions: Suicide Prevention at a Grassroots Level	9
State and National Attention on NH Initiatives	10
2012 Data	12
Introduction	12
What’s New in This Year’s Report?	13
Demographic Profile of New Hampshire	13
The Big Picture: Suicide in NH and Nationally	15
Youth and Young Adult Suicide in NH	18
Suicide Across the Lifespan in NH	22
Suicide Behavior in NH: Gender Differences	28
Suicide in NH: Methods	35
Reducing Access to Lethal Means	40
Linking At-Risk Individuals with Help	40
Costs of Suicide and Suicidal Behavior	41
Additional Data Sources	
NH Baseline Survey on Attitudes.....	42
Suicide Prevention Council Communications Subcommittee Media Review.....	43
NH Behavioral Risk Factor Surveillance System.....	44
NH National Guard	45
Veterans Health Administration.....	46
NH Department of Corrections	46
Suicide Rates in NH	47
Chart Reading Basics	51
Glossary of Terms	53
Reliability of Rates	56
Frequently Asked Questions about NH Suicide Data	57
Contacts and Meeting Information	59
Recognize the Warning Signs of Suicide	61

Introduction

The 2012 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 systems as well as into communities, schools, organizations and individual lives.

Evidence of this includes some of the following accomplishments from calendar year 2012:

- The 2012 Suicide Prevention Conference had its largest turnout in the history of the nine-year conference, with close to 300 attendees.
- *Connect* staff led over 40 suicide prevention and postvention trainings across the state, with several trainings conducted by second generation trainers (not *Connect* staff).
- Survivors of suicide loss have had increasing involvement in statewide planning and will be forming a survivor of suicide loss subcommittee of the Suicide Prevention Council.
- NH law enforcement has increased its participation in suicide prevention efforts with NH State Police leadership attending the 2012 Annual Suicide Prevention conference and joining the Suicide Prevention Council.
- A review of NH news articles from 2008 - 2012 by the Communications Subcommittee of the Suicide Prevention Council found that the percentage of articles that included information where to find help for individuals at risk for suicide quadrupled.

Many achievements will be described further throughout this report. What is critical to NH in the next few years is 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. Despite significant challenges with a struggling economic environment including budget cuts and reduced access to mental health and substance use treatment, NH continued to make progress in suicide prevention work in many diverse and systemic ways.

Knowing that it takes all of us working together with common passion and goals, we would like to thank everyone who has been involved in suicide prevention and postvention efforts in our state.

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/or serious emotional disorders through education, support and advocacy.

NAMI NH's *Connect* Suicide Prevention Program is designated as a National Best Practice. *Connect*'s community-based approach 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 and oversight 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 provided on the *Connect* website at www.theconnectprogram.org.

State Suicide Prevention Council

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

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

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

As part of SB 390 legislatively establishing the Suicide Prevention Council, the Council must report on its progress, to both the Governor and the legislature, annually. 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 will be 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.

Accomplishments of Suicide Prevention Efforts in NH

State Suicide Prevention Council

The Leadership Team of the SPC spearheaded several strategic planning sessions, including a 50-person retreat at New Hampshire Hospital and a 100-person summit at the Concord Holiday Inn. Both events addressed state plan development, community collaboration and sustainability.

SPC has also recruited new leadership from Law Enforcement, Substance Abuse, and Behavioral Health to join its Leadership Team, helping to strengthen and sustain SPC sustainability and outreach, as well as suicide prevention efforts across the State.

One of the strengths of the SPC is the constant development and evolution of the **SPC Network** – which includes the Leadership Team, Council Members (per statute or per SPC approval) and Subcommittee Membership – a network of over 80 members that reach across systems and organizational boundaries.

The **SPC Communications & Public Education Subcommittee** has taken a strategic and creative approach in increasing public awareness and education throughout the State. They have coordinated news stories with Public News Service, hosted community film screenings, and partnered with educators on providing classes on media guidelines. They also monitor and respond to news stories across the State on suicide deaths, encouraging adherence to the National Media Recommendations for Reporting on Suicide.

The **SPC Data Collection and Analysis Subcommittee** produces the Annual NH Suicide Prevention Report, which provides timely information and statistics on suicide deaths and attempts across all age groups. This information is tracked through collaboration with the Office of the Medical Examiner, the NH National Guard, the NH Bureau of Behavioral Health, Department of Health and Human Services, the Bureau of Emergency Management Services and the Northern New England Poison Center. The Report also includes activities and

accomplishments from many suicide prevention groups across the State, as well as examples of positive outcomes and testimonials related to suicide prevention work being done in the State.

The largest SPC subcommittee is **Military & Veterans Subcommittee** – a team of over 20 members. This subcommittee brings together military and civilian providers and communities that are helping to strengthen our military safety net through education and trainings to Veteran Service Organizations, SPC and community members. In 2012, this Subcommittee partnered with the Office of Veterans Services on a Welcome Home Letter and Resource Brochure that was mailed to every returning Veteran, as well as their Family.

The **Professional Practice and Education Subcommittee** collaborated with the Emergency Room Nurses Association to explore ways to promote suicide prevention, assessment and intervention for individuals who may be at risk for suicide while in the Emergency Departments.

The **SPC Public Policy Subcommittee** established two legislative initiatives. **The Suicide Fatality Review Committee** was legislatively established to hold confidential reviews of suicides to determine trends, risk factors, prevention strategies and system improvements, as well as identify barriers to safety and gaps in system response. **The National Violent Death Reporting Act** was also established, which studied the readiness of NH to respond to any future requests for proposals from the Centers for Disease Control to expand the National Violent Death Reporting System to additional states.

If you would like to join any of these Subcommittees, please contact the designated committee chair. The committee meeting schedule has been included on page 60 of this report.

The Youth Suicide Prevention Assembly (YSPA)

YSPA continued to review cases of confirmed suicides of youth in NH aged 24 and younger to look for trends and opportunities to increase prevention efforts. Along with a review of cases brought forward from the Office of Chief Medical Examiner, data reports from statewide Emergency Medical Services and New England Poison Control on suicide attempts in NH were also provided throughout the year. YSPA also assisted with the annual suicide prevention conference and discussed other statewide initiatives such as Department of Education promotion of training for schools in suicide prevention, postvention, bullying, and substance use prevention.

In 2012, YSPA prepared to review the mission of YSPA and purpose of meetings and to incorporate a commitment to safe messaging as a national best practice for communicating on the topic of suicide. YSPA also set the stage for both educational presentations at meetings, and a plan for presenting “bios” of participants at meetings in 2013 so that the membership could become familiar with the wealth of resources and expertise that exists among the participants in YSPA. Some of the presentations at YSPA during 2012 included: Connect School Suicide Prevention by Ann Duckless, Drug Overdose Deaths by Dr. Thomas Andrew, and Domestic Violence by Donna Raycraft.

YSPA is an open monthly meeting that is attended by a diverse group of individuals including mental health, health care and social service providers, state representatives, individuals affected

by suicide, law enforcement and emergency medical responders, school personnel, faith leaders, and many others. Participants note that as a result of the information shared and learned in YSPA many outcomes have resulted including changes in practice, such as including discussion of lethal means restriction into assessments and treatment services; an increased awareness of dangerous substances being utilized for self harm; expanded use of existing resources and programs within and beyond NH; mobilization of information and training to help schools, communities and individuals affected by a suicide; greater collaboration between services and providers and an increased understanding of social networking sites and their role in suicide prevention with youth.

The NH Suicide Survivor Network

Survivors of Suicide Loss

- NH Life Keeper Quilt displayed along with Survivor of Suicide Loss resources at 34 events.
- The total number of survivor groups in NH continues to be 12 - Concord, Exeter, Gorham, Hampstead, Keene area (2), Lebanon, Manchester (2), Greater Nashua, North Conway and Plymouth. Both North Country groups have had difficulty maintaining a steady membership and therefore meet as the need arises. Most other groups with the exception of Keene and Hampstead meet monthly. Keene and Hampstead meet weekly.
- The annual American Foundation for Suicide Prevention (AFSP) Survivors of Suicide Loss Day Teleconference on November gathered approximately 100 survivors of suicide loss together in healing, support and understanding at nine sites throughout the state. Sites included Portsmouth, Manchester (2), Concord, North Conway, Merrimack, Berlin, Keene, and Hampstead.
- Two Survivors of Suicide Loss Speaker trainings were held in Concord. The two-day public speaking trainings were held for survivors interested in telling their personal stories of suicide loss to educate the public and provide healing and support. Thirty-Five survivor speaker presentations were made throughout the state in 2012.
- The annual 2012 NH Survivors of Suicide Loss newsletter was distributed throughout the state with 8,000 hard copies made available at trainings and health fairs, as well as in public venues such as libraries, hospitals, healthcare, and mental health centers. In addition, the newsletter was distributed electronically to many email lists.
- The NH Survivors of Suicide Loss resource packet was updated and disseminated through the Office of the Chief Medical Examiner to the next of kin of all those who died by suicide. The book authored by a NH Survivor called “Healing the Hurt Spirit: Daily affirmations for people who have lost a loved one to suicide” continued to be available to new survivors and an online survey to solicit feedback on the folder and provide additional avenues to connect survivors to help was implemented.
- Five Survivors of Suicide Loss conference calls were held in 2012 with the last call in October at the end of the GLS grant. These calls gave survivors of suicide loss the opportunity to hear what is happening throughout the state and learn ways they can seek support and get involved. Survivor input on these calls has been instrumental in guiding many of the projects in NH for survivors.
- Survivors of Suicide Loss are becoming more and more involved in advocacy and fundraising efforts for various local and national suicide prevention organizations and

efforts. Some of these events included: the AFSP Out of The Darkness Community and Overnight Walks, the NAMI NH Walk, Nathan’s Ride, Paddlepower, Rails to Trails, Memorial Tree Lighting at The Mental Health Center of Greater Manchester, and Compassionate Friends.

- Two surveys were completed to determine if NH Survivors of Suicide Loss see a need to have a Survivor of Suicide Loss Subcommittee of the NH Suicide Prevention Council and, if so, whether they would be interesting in serving on it. A combined total of 43 responses were received from different individuals. 42 people answered “yes” and one answered “maybe” to the question asking whether a survivor of suicide loss subcommittee should be formed. When asked if they would be interested in serving on such a committee if it were formed, 26 answered “yes”, 9 answered “maybe”, and 8 answered “no”. Contact information for those interested in serving on the committee was secured and, due the overwhelming positive response, it is hoped this will become a reality. Such a committee would not replace the need and opportunity for Survivors of Suicide Loss to serve as representatives on other committees, but would instead be a committee that addresses survivor issues, resources, and events in NH.

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”.

Feedback from a respondent on the NH Survivor of Suicide Loss survey.

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

The State of NH was the recipient of a state suicide prevention grant in 2009 as part of the national Cohort 5 of states and tribes who were awarded SAMHSA Suicide Prevention Grants. During this final year of the grant, sustainability was built through bolstered efforts of the state Suicide Prevention Council in its work with key stakeholders such as legislators and the media and the revisions of the NH State Suicide Prevention Plan. Sustainability was also built by offering additional trainings of trainers in CALM and the Connect program and strengthening the work of coalitions, schools, survivors, and communities who embraced best practices and took leadership roles in suicide prevention efforts.

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

In 2012, Plymouth State University (PSU) was awarded a SAMHSA Suicide Prevention Campus Grant. PSU prepared to use the grant to utilize local, state and national resources to build infrastructure, strengthen a climate of help seeking, reduce stigma, and increase the skills and capacity for responding to students at risk for suicide.

Using best practice models offered by the Suicide Prevention Resource Center, Plymouth State University will integrate the resources from the NAMI NH's Connect Project; PSU's TIGER (Theatre Integrating Guidance Education and Responsibility) program; and on and off-campus providers into a comprehensive approach called TEAM: Training, Education, Arts and Mental Health. Implementation of training programs, protocol development, suicide prevention and mental health promotion, the TIGER Transitions program and evaluation were underway in the fall of 2012 for the start of this 3 year federal grant.

Annual NH Suicide Prevention Conference

The State Suicide Prevention Council, NAMI NH, and the Youth Suicide Prevention Assembly partnered to present the Annual Suicide Prevention Conference on November 9th, 2012 in Bedford NH. At this conference, close to 300 attendees gathered to learn and participate in statewide and national suicide prevention efforts and best practices. Opening remarks by Jerry Reed, the Director of the Suicide Prevention Resource Center were followed by dialogue, case scenarios and workshops throughout the day with a powerful closing plenary of testimony by three individuals who shared their personal experiences. The annual conference has been increasingly growing in size and diversity with representation from many sectors of the community including survivors of suicide loss, family members, consumers, mental health and health care providers, members of the military, first responders, law enforcement, social service providers, school and university personnel, and concerned citizens and volunteers.

Local Coalitions: Suicide Prevention at a Grassroots Level

Moultonborough Coalition for Suicide Prevention and Mental Health:

In 2012-13 Moultonborough Coalition Featured a Forum on Depression featuring NAMI NH representatives as well as staff members for Northern Human Services, speaking about Depression through the Lifespan. The Townspeople of Moultonborough again unanimously supported the warrant article request to fund our efforts to make Mental Health Services available in Moultonborough. The coalition is now planning on another First responder training as well as a forum on the impact of Social Media on child and adolescent mental health development. The coalition continues to meet monthly at the Town Library on the second Wednesday of the month 4PM-6PM. All are welcome. For more information contact Peter Whelley at ptw@sau45.org

North Country Suicide Prevention Coalition:

The North Country Suicide Prevention Coalition was formed in 2009 and met in person monthly until spring 2011 when the meeting was changed to conference calls monthly and in-person meetings every quarter in an effort to increase attendance and availability to those who travel a distance to attend. This coalition covers the top third of the state and it was hoped that making the coalition meetings more accessible would increase attendance. The change in format did not affect the number of people attending but did seem to occasionally allow new people to join. Throughout the GLS grant period (with most activities ending in September 2012), the coalition sent out monthly minutes and consistently received feedback that people do read them and are able to stay involved through this communication. At the end of the GLS grant, which covered funding for a community organizer for this coalition, it was decided that momentum for the coalition did not exist without paid leadership. Although people express that suicide prevention is a priority, the distance traveled, time commitment, budget cutbacks, and the inability to attend as part of their employment were major impediments for participation. An alternative plan was made for sustainability that targets the development of a webpage for suicide prevention and postvention resources that North Country residents and public health officials could readily access. This will be housed at the North Country Public Health's Webpage and will be completed in early 2013.

Seacoast Suicide Prevention Coalition:

The Seacoast Coalition continued to meet monthly in 2012. Both of the coalition coordinators were trained as Connect Suicide Prevention Trainers in the fall to further the sustainability of the suicide prevention efforts in the region. Additionally, these coordinators revitalized the support group for survivors of suicide loss in Portsmouth at a new location and time, which generated interest and met the needs of bereaved family members. In August 2012, members of the Seacoast Coalition worked with the Portsmouth Police and sponsored a public forum: "Say Yes To Life" to bring awareness to suicide prevention in Portsmouth. This event was preceded by a talk show where panel members discussed ways that citizens could be informed about warning signs and resources for people who are at risk of suicide.

State and National Attention on NH initiatives

NH Firearm Safety Project

The "Gun Shop Project", a NH initiative born out of the Firearm Safety Coalition, developed information on suicide prevention and lethal means restriction for gun shops and firing ranges in NH in 2011 and disseminated these materials to more than 65 gun shops across the state. In 2012, revisions were made based on feedback and dissemination continued. Follow-up surveys indicated that over half of the businesses that received the materials were making use of some of the materials.

This initiative garnered interest from numerous states around the country where the materials were adapted for local use. With the tragic incident in Newtown, Connecticut at the end of 2012, the increased attention on suicide, mental illness and firearms generated even more interest in the

common ground that NH had cultivated around firearm safety and suicide prevention. More information about the Gun Shop Project is available at: www.nhfsc.org

National Recognition

Several training programs developed in NH have been on the American Foundation for Suicide Prevention (AFSP)/Suicide Prevention Resource Center (SPRC) Best Practice Registry and have been transported to states across the country as well as countries outside of the U.S. Included in this are the Counseling on Access to Lethal Means (CALM) training which has since been converted to an on-line training and made available through the Suicide Prevention Resource Center (www.sprc.org). The CALM program has been presented and adopted by states around the country.

The *Connect* Suicide Prevention and Postvention program also continues to expand its geographical reach with trainings and workshops occurring in multiple states/territories across the U.S and Canada. The *Connect* program has received growing interest from native populations and staff from *Connect* led workshops at several national tribal conferences as well as a training of trainers in postvention for native Alaskan communities. In 2012, the *Connect* Program delivered trainings and consultation in 17 states, several campuses and over 24 tribes nationally. Survivor Voices, a NAMI NH program designed to offer a safe and structured way to tell the story of loss to suicide was added to the national AFSP/SPRC Best Practice Registry in 2011 and was offered in several states and tribal regions across the United States in 2012.

Other Education and Training Initiatives in NH

In addition to the training and educational resources made possible in NH through the Garrett Lee Smith federal grant, NAMI NH provided suicide prevention and postvention training, education and resources through the support of the NH Department of Health and Human Services' Bureau of Behavioral Health, the NH Department of Education, and Police Standards and Training Academy.

Hundreds of recipients of suicide prevention and postvention trainings included faith leaders, social service providers, staff in mental health and health care fields, school, military and law enforcement personnel. Multiple schools received funding through the Department of Education to carry out training and planning in their districts and regions to implement best practices and protocols for a comprehensive and effective response to a suicide incident. Several schools, organizations and individuals were able to benefit from technical assistance and resources after a suicide death occurred to help ease the impact of this tragedy and reduce the potential of further risk. Many people who were trained as *Connect* trainers proceeded to carry forward Suicide Prevention and Postvention trainings in their schools, communities, and organizations, further expanding information, best practices and capacity for suicide prevention.

There was a noted increase in requests for support by individuals, businesses, schools and communities in the aftermath of a suicide, demonstrating an awareness of resources and the necessity of taking action after a suicide to reduce the risk of contagion and promote healing. With the support of state and federal funding, outreach and resources were extended to individuals, communities, and organizations in NH who were impacted by suicide.

2012 Data

SPC/YSPA Data Subcommittee Membership Representation 2012-2013

Injury Prevention Center at Dartmouth
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 is the result of the collaborative efforts of a variety of organizations and people. The data was compiled by the two major collaborative groups for suicide prevention in New Hampshire, the YSPA and the SPC. YSPA and SPC merged data efforts over the past several years, 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 16 years and first created this report format in 2003. The SPC has been analyzing and planning for data capacity improvements for the last 4 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/age groups are most at risk, reveals points of particular vulnerability, and thus leads to determinations of prevention and intervention efforts as well as where to direct program funding. It also protects the privacy of individuals and their families. All of that said, we acknowledge that the numbers referred to here 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 primary 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. Another 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 data source are indicated with the corresponding chart or table.

What's New in this Year's Report?

Some of the new highlights to the report this year include:

- Updated hospital and emergency department discharge data.
- An expanded section on data from New Hampshire Hospital.
- A new source of data on NH Veterans.
- The results from a review of NH media reporting by the SPC Communications Subcommittee.
- 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.

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, 2012). Overall, NH is relatively homogeneous in terms of race/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 3rd highest and 9th highest rates of usage respectively. NH is also the state with the 6th highest rate of reported major depressive episodes.

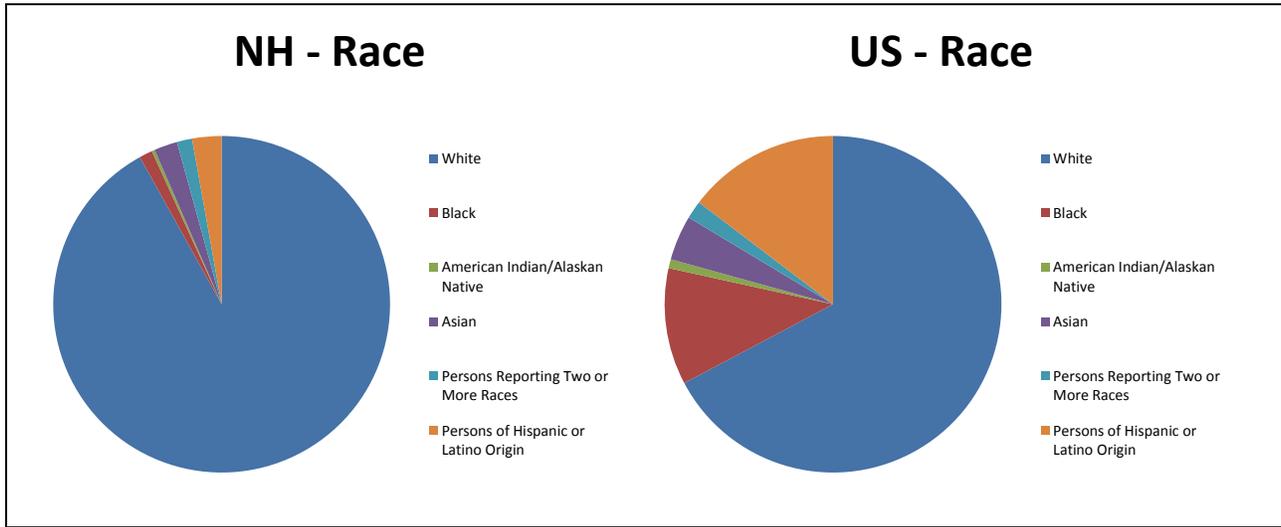
Table 1

Race/Ethnicity

	New Hampshire	United States
White	94.6	78.1%
Black	1.3%	13.1%
American Indian/Alaskan Native	0.3%	1.2%
Asian	2.3%	5.0%
Persons Reporting Two or More Races	1.5%	2.3%
Persons of Hispanic or Latino Origin	2.9%	16.7%

Source: US Census Bureau 2011

Figure 1
NH and US Race/Ethnicity



Source: US Census Bureau 2011

Table 2

Age

	New Hampshire	United States
Under 18	21.2%	23.7%
18 to 24	9.4%	10.0%
25 to 44	24.3%	26.4%
45 to 64	31.0%	26.5%
65 to 74	7.7%	7.2%
75 and Up	6.3%	6.0%

Source: US Census Bureau American Community Survey 2011

Table 3

Economic Factors

	New Hampshire	United States
Unemployed Residents	6.9%	10.3%
Persons Below Poverty Level	8.8%	15.9%
Persons Without Health Insurance	10.5%	15.1%
Per Capita Income (Yearly)	\$31,871	\$26,708
Median Household Income	\$62,647	\$50,502
Owner Occupied Homes	71.5%	64.6%
Median Home Value	\$237,500	\$173,600

Sources: US Census Bureau American Community Survey 2011

Table 4

Education – population age 25 and older

	New Hampshire	United States
Less Than High School Graduate	8.6%	14.1%
High School Graduate or Associates Degree	58.0%	57.4%
Bachelors Degree or Higher	33.4%	28.5%

Source: US Census Bureau American Community Survey 2011

Table 5

Substance Use – Individuals Age 12 and Up

	New Hampshire	United States
Illicit Drug Use – Past Month	11.0%	8.8%
Alcohol Use – Past Month	61.6%	51.8%
Tobacco Use – Past Month	27.3%	27.0%

Source: National Survey on Drug Use and Health, 2010-2011

Table 6

Mental Health Indicators – Individuals Age 18 and Up

	New Hampshire	United States
Serious Mental Illness – Past Year	5.8%	5.0%
Major Depressive Episode – Past Year	7.2%	6.7%
Had Thoughts of Suicide – Past Year	4.7%	3.8%

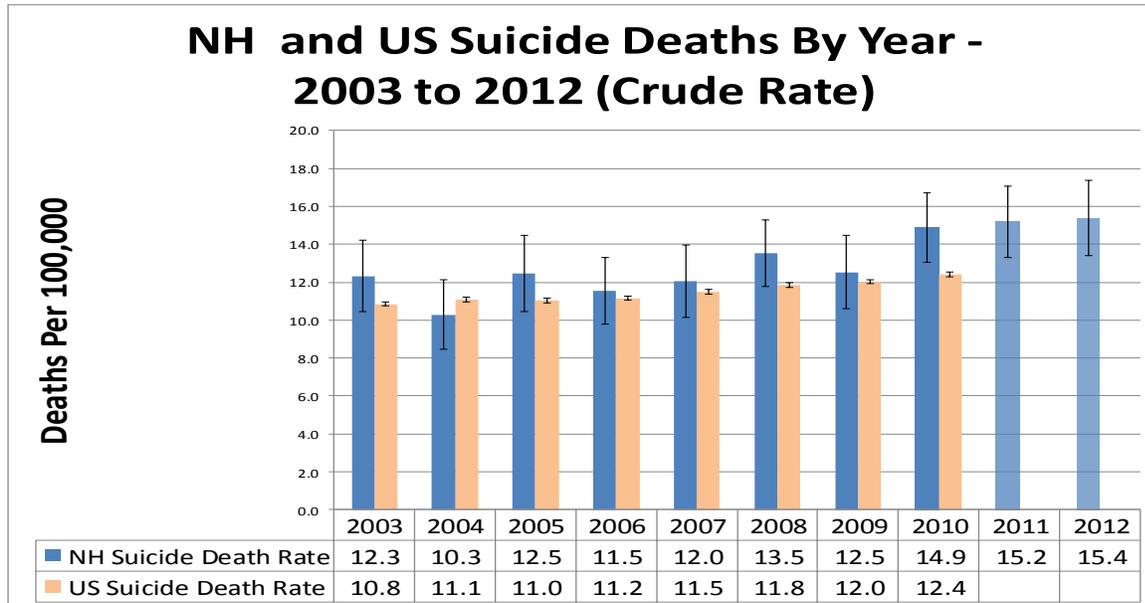
Source: National Survey on Drug Use and Health, 2010-2011

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 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, there have been no statistically significant differences from one year to the next during the ten-year period. 2010 is the first year in recent history where there has been a statistically significant difference compared to any other 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.

Figure 2
Crude Suicide Death Rates per 100,000 in NH by Year 2003-2012



Source: 2003-2010 – CDC Data; 2011-2012 – NH OCME Data

Table 7 displays the 10 leading causes of death for people of different age groups in NH. From 2006-2010, suicide among those aged 10-24 was the second leading cause of death for NH compared to the third leading cause nationally. For individuals age 25-34, it was the second leading cause of death both in NH and nationally. Suicide rates for individuals age 25-34 during 2006-2010 were behind only deaths due to unintentional injury; primarily motor vehicle crashes in NH within these age groups. Suicide among individuals of all ages was the 10th leading cause of death in NH and nationally.

Table 7
10 Leading Causes of Death, New Hampshire, by Age Group, 2006 – 2010

Rank	Age Groups										All Ages
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Congenital Anomalies 50	Malignant Neoplasms (*see note)	Unintentional Injury 14	Unintentional Injury 17	Unintentional Injury 260	Unintentional Injury 252	Unintentional Injury 305	Malignant Neoplasms 1,093	Malignant Neoplasms 2,370	Heart Disease 10,011	Malignant Neoplasms 12,806
2	Short Gestation 42	Unintentional Injury (*see note)	Malignant Neoplasms 12	Suicide (*see note)	Suicide 83	Suicide 117	Malignant Neoplasms 265	Heart Disease 590	Heart Disease 1,158	Malignant Neoplasms 8,950	Heart Disease 11,978
3	SIDS 39	Benign Neoplasms (*see note)	Congenital Anomalies (*see note)	Malignant Neoplasms (*see note)	Malignant Neoplasms 31	Malignant Neoplasms 69	Heart Disease 161	Unintentional Injury 381	Chronic Low. Respiratory Disease 291	Chronic Low. Respiratory Disease 2,756	Chronic Low. Respiratory Disease 3,163
4	Maternal Pregnancy Comp. 22	Homicide (*see note)	Chronic Low Respiratory Disease (*see note)	Congenital Anomalies (*see note)	Heart Disease 17	Heart Disease 35	Suicide 158	Suicide 214	Unintentional Injury 239	Cerebro-Vascular 2,212	Unintentional Injury 2,474
5	Placenta Cord Membranes 22	Septicemia (*see note)	Influenza & Pneumonia (*see note)	Heart Disease (*see note)	Homicide 14	Homicide 15	Diabetes Mellitus 37	Liver Disease 158	Diabetes Mellitus 193	Alzheimer's Disease 1,929	Cerebro-vascular 2,466
6	Respiratory Distress 14	Six-Tied (*see note)		Influenza & Pneumonia (*see note)	Congenital Anomalies 12	Congenital Anomalies 10	Liver Disease 33	Chronic Low. Respiratory Disease 100	Liver Disease 156	Diabetes Mellitus 1,048	Alzheimer's Disease 1,946
7	Unintentional Injury 10	Six-Tied (*see note)		Six-Tied (*see note)	Benign Neoplasms (*see note)	Complicated Pregnancy (*see note)	Cerebro-vascular 23	Diabetes Mellitus 95	Cerebro-vascular 145	Unintentional Injury 987	Diabetes Mellitus 1,385
8	Circulatory System Disease (*see note)	Six-Tied (*see note)		Six-Tied (*see note)	Chronic Low Respiratory Disease (*see note)	Diabetes Mellitus (*see note)	Homicide 18	Cerebro-vascular 73	Suicide 137	Influenza & Pneumonia 931	Influenza & Pneumonia 1,015
9	Neonatal Hemorrhage (*see note)	Six-Tied (*see note)		Six-Tied (*see note)	Complicated Pregnancy (*see note)	Cerebro-vascular (*see note)	Congenital Anomalies 15	Viral Hepatitis 38	Septicemia 70	Nephritis 778	Nephritis 854
10	Atelectasis (*see note)	Six-Tied (*see note)		Six-Tied (*see note)	Septicemia (*see note)	Chronic Low Respiratory Disease (*see note)	Septicemia 14	Septicemia 34	Nephritis 47	Parkinson's Disease 450	Suicide 850

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 9 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** 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, 2006-2010

	ALL AGES	YOUTH AND YOUNG ADULTS 10-24	YOUTH 10-17	YOUNG ADULTS 18-24
NH	12.94	6.73	2.62	11.59
US	11.80	7.09	2.83	11.89

	AGES 25 TO 39	AGES 40 TO 59	AGES 60 TO 74	OVER 75
NH	15.64	18.60	15.46	15.48
US	13.81	17.69	13.76	16.22

Source: CDC WISQARS

Adults age 40 to 59 had the highest suicide rates of all age groups identified above (18.60 NH, 17.69 US) from 2006-2010 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 2003-2012, 189 NH youth and young adults aged 10-24 have lost their lives to suicide. **Table 9** (pg. 20) depicts the most up-to-date information about these youth and young adults as reported by the OCME in NH and collected/aggregated by YSPA. Males are much more likely to die by suicide in NH (80%) and nationwide. Hanging and firearms were used with the same frequency among youth and young adult deaths during this period. Nationally, a greater proportion of youth and young adults who die by suicide use firearms.

From 2003 to 2006 a decreasing trend among youth suicide deaths was noted. This trend reversed in 2007. The decrease in suicide deaths among youth and young adults from 2003 to 2006 was accompanied by an increase in drug-related deaths. This increase in drug-related deaths represents a disturbing level of increased risk taking. Most of these drug-related deaths are ruled as accidental unless there is direct evidence of suicide intent as determined by the OCME. Refer to pages 39-40 for more information on drug-related deaths in NH.

Please note that **Table 9** is based on OCME data. “Hanging/Asphyxiation” refers to all forms of suffocation (e.g. hanging, bag over the head) 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 20**).

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 Suicide Death Trend, by Gender, Age Group and Method, 2003-2012**

Year	Total	Male	Female	≤ 19	20-24	Firearms	Hanging/ Asphyxiation	Drugs/ Poison	Other
2003	22	17	5	9	13	10	8	3	1
2004	19	15	4	8	11	6	13	0	0
2005	17	15	2	8	9	8	6	0	3
2006	12	10	2	1	11	6	3	1	2
2007	13	9	4	3	10	5	4	2	2
2003- 2007 Sub Total	83	66	17	29	54	35	34	6	8
Percent of Sub- Total¹	100%	80%	20%	35%	65%	42%	41%	7%	10%
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- Total¹	100%	83%	17%	43%	57%	45%	46%	5%	4%
Total	189	154	35	75	114	83	83	11	12
Percent of Total¹	100%	83%	19%	40%	61%	45%	45%	6%	6%

Produced by: NAMI NH

Data Source: NH OCME

¹ Note: Rounding may cause percentages to not total to 100%

Figure 3
NH Youth, Ages 10-24, Suicide Deaths

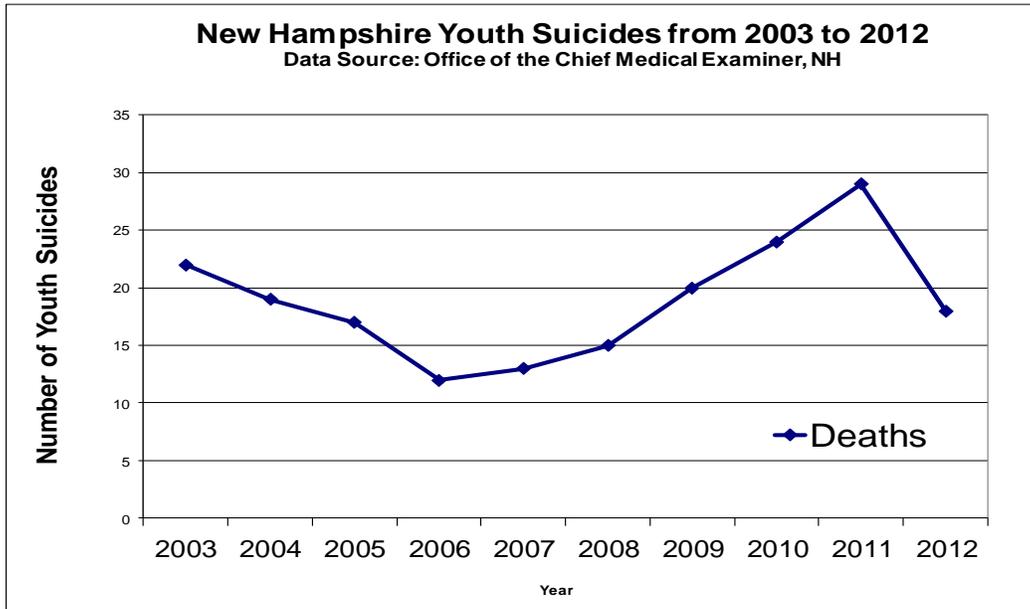
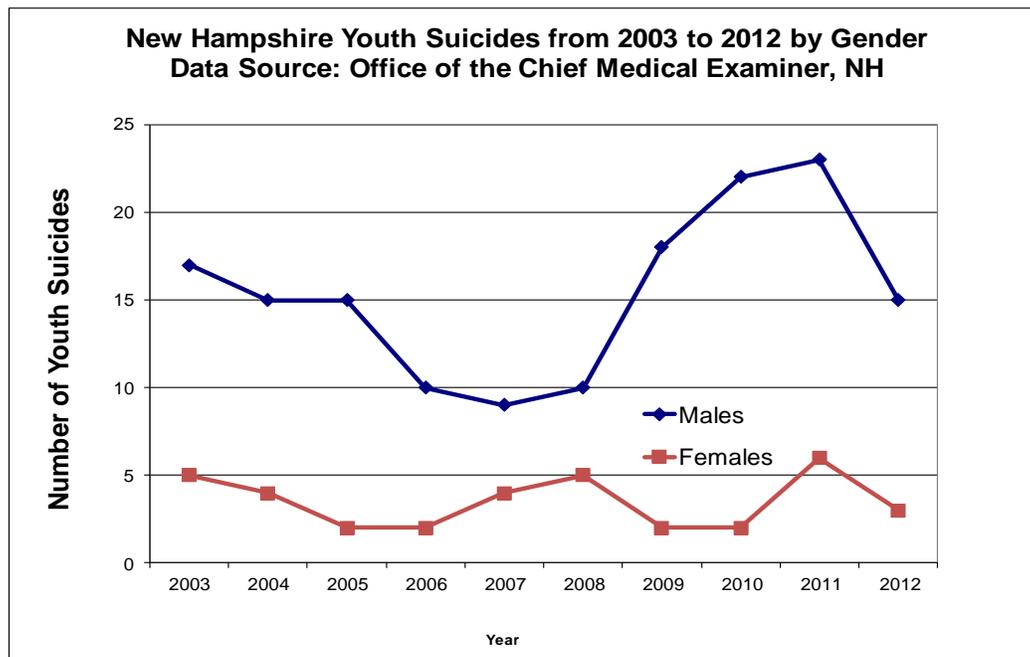


Figure 4
NH Male Youth Suicide Deaths Decrease then Increase 2003-2012, While Female Youth Rates have Remained Relatively Stable



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. This data cover a shorter period of time than the data for youth because the tracking all ages data through the OCME is a more recent state initiative. The number of deaths by year has been plotted in **Figure 5** (pg. 23) and **Figure 6** (pg. 23).

Table 10
NH All Ages Suicide Death Trend, by Gender, Age Group and Method, 2007-2012

Year	Total	Male	Female	≤ 24	25-44	45-64	65+	Firearms	Hanging/ Asphyxiation	Drugs/ Poison	Other
2007	150	115	35	13*	47	68	22	69	31	28	22
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
Total	1101	867	234	106	327	490	165	512	287	185	117
Percent of Total	100%	79%	21%	10%	30%	45%	15%	47%	26%	17%	11%

Produced by: NAMI NH
Data Source: NH OCME

Figure 5
NH Residents, All Ages, Suicide Deaths 2007 - 2012

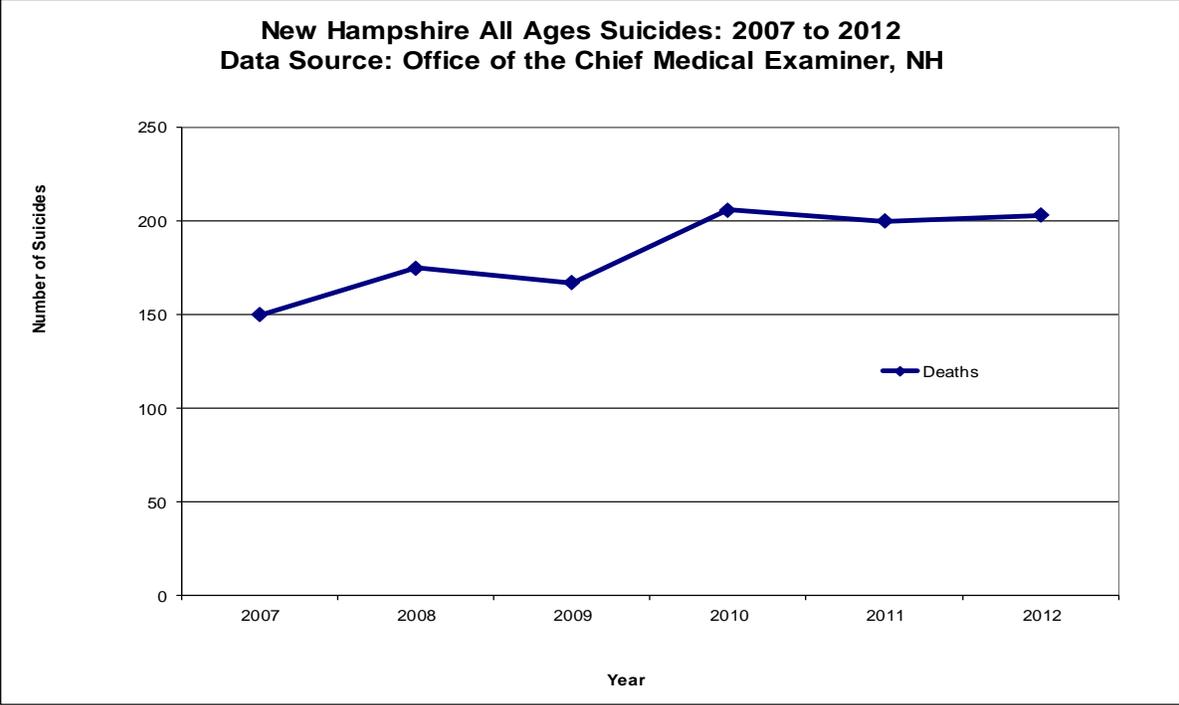


Figure 6
NH Male and Female Suicide Rates 2007 - 2012

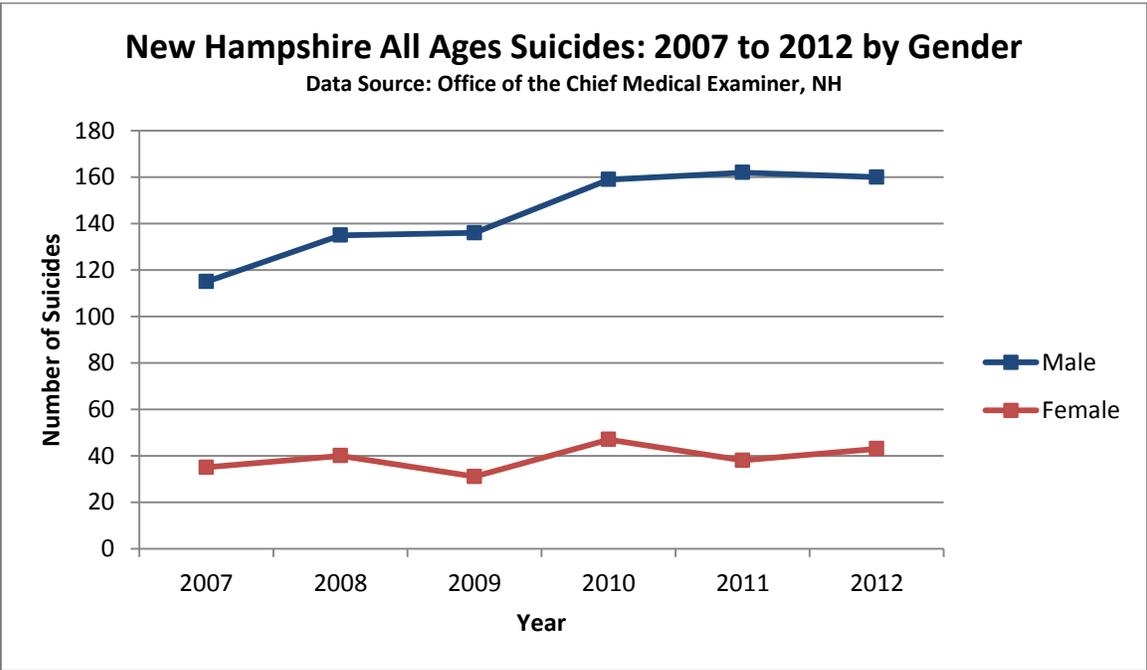
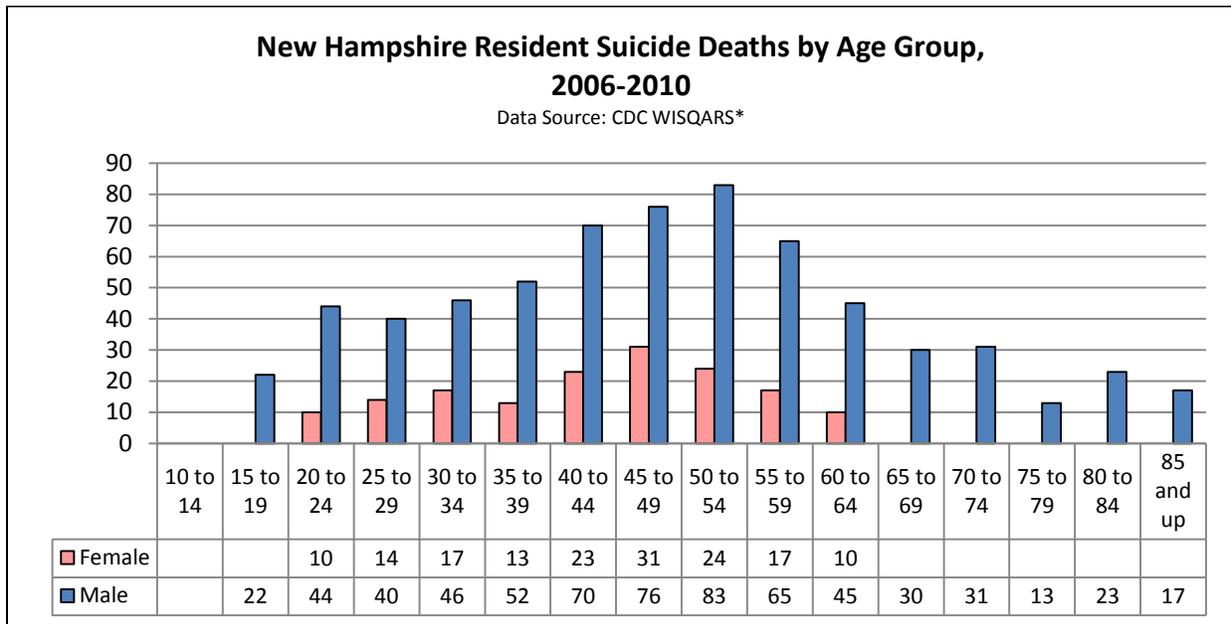


Figure 7 (below) and **Figure 8** (pg. 25), respectively, display NH suicide deaths and suicide death rates for all ages by age groups and gender from 2006-2010. Rates are expressed as the number of suicide deaths per 100,000 people. Displayed together, these charts reveal how death rates correct for differences in the size of each age group. While the highest number of suicide deaths occur in the 40 and 50 year-old age groups, the highest rates, or those at the greatest risk, are males over the age of 80, followed by males in their 70's and early 50's.

Figure 7

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

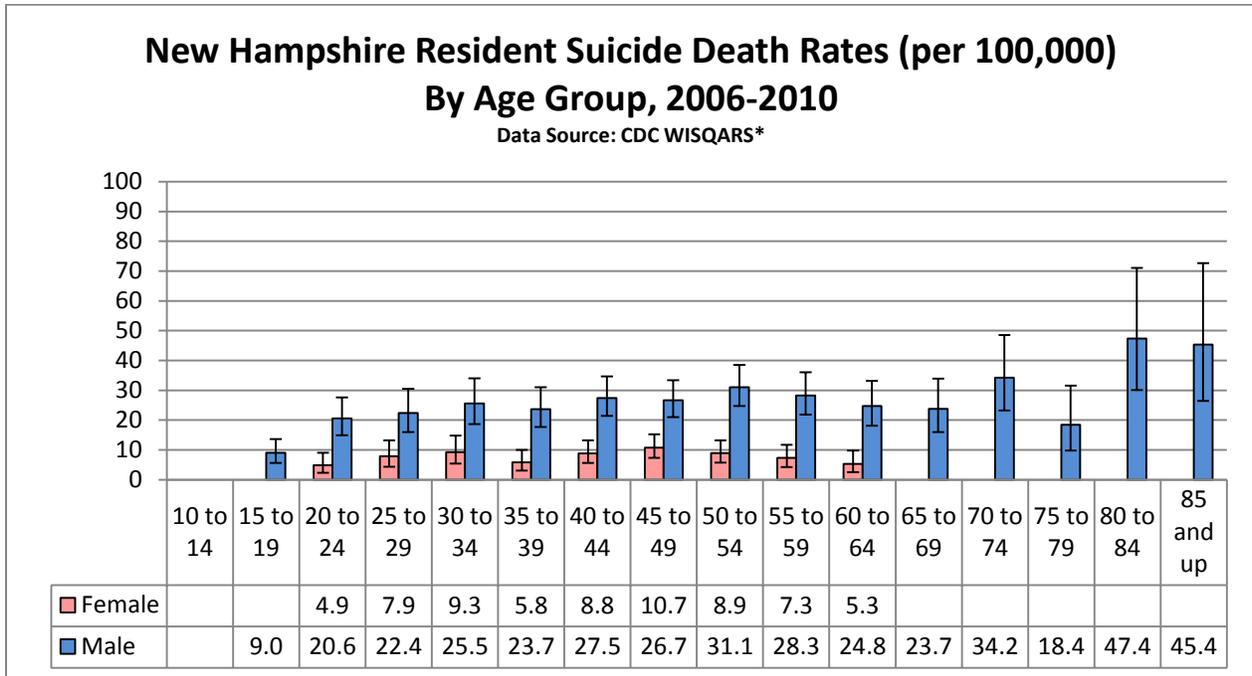


*Note: Beginning with 2008 data, the CDC has suppressed state-level counts/rates for categories with fewer than ten deaths

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, male elderly suicide rates increase substantially at 80-84 years compared to the younger age groups, indicating another vulnerable time of life for men.

Figure 8

Male NH residents over age 80 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 and 15-19 to 20-24.

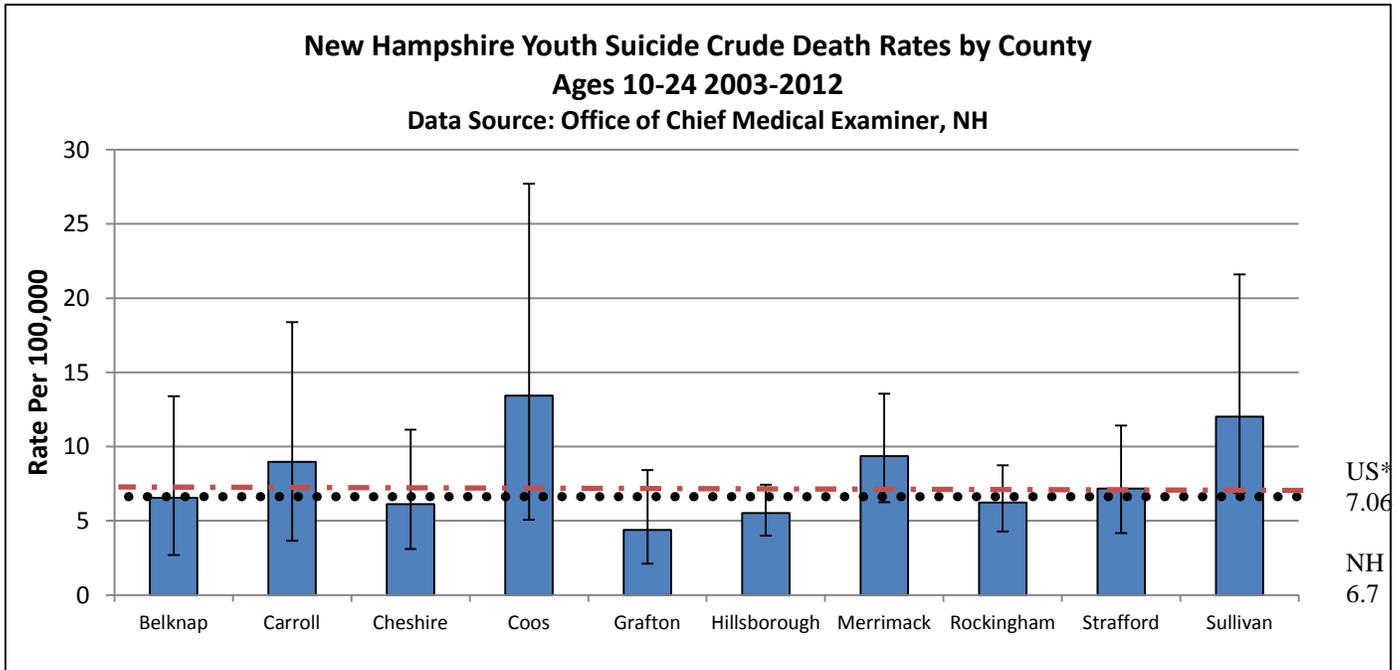


*Note: Beginning with 2008 data, the CDC has suppressed state-level counts/rates for categories with fewer than ten deaths

Geographic Distribution of Suicide in NH

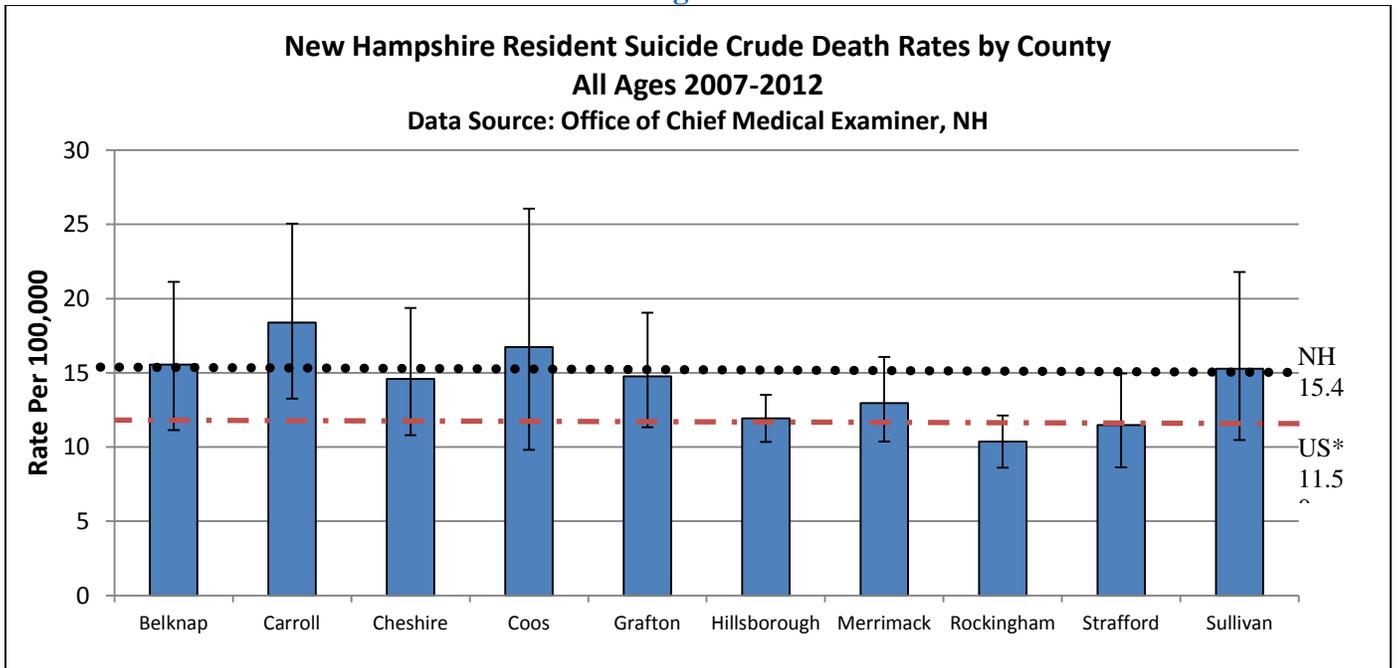
The numbers and rates of suicide in NH are not evenly distributed throughout the state. **Figure 9** (pg. 26) shows youth and young adult suicide rates by county in NH. **Figure 10** (pg. 26) presents this data for NH residents of all ages. The county suicide death rate chart indicates geographical locations 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, Carroll County (Carroll County all ages rate: 18.4 per 100,000) did have a significantly higher all ages suicide rate than Rockingham County (Rockingham County all ages rate: 10.4 per 100,000), as well as being significantly above the US rate (US all ages rate: 11.8 per 100,000). County limits are neither soundproof nor absolute. A suicide that occurs in one county can have a strong affect on neighboring counties, as well as across the state, due to the mobility of residents. **Figure 11** (pg. 27) presents the suicide rates for all ages from 2007 to 2011 as a NH map broken down by county.

Figure 9



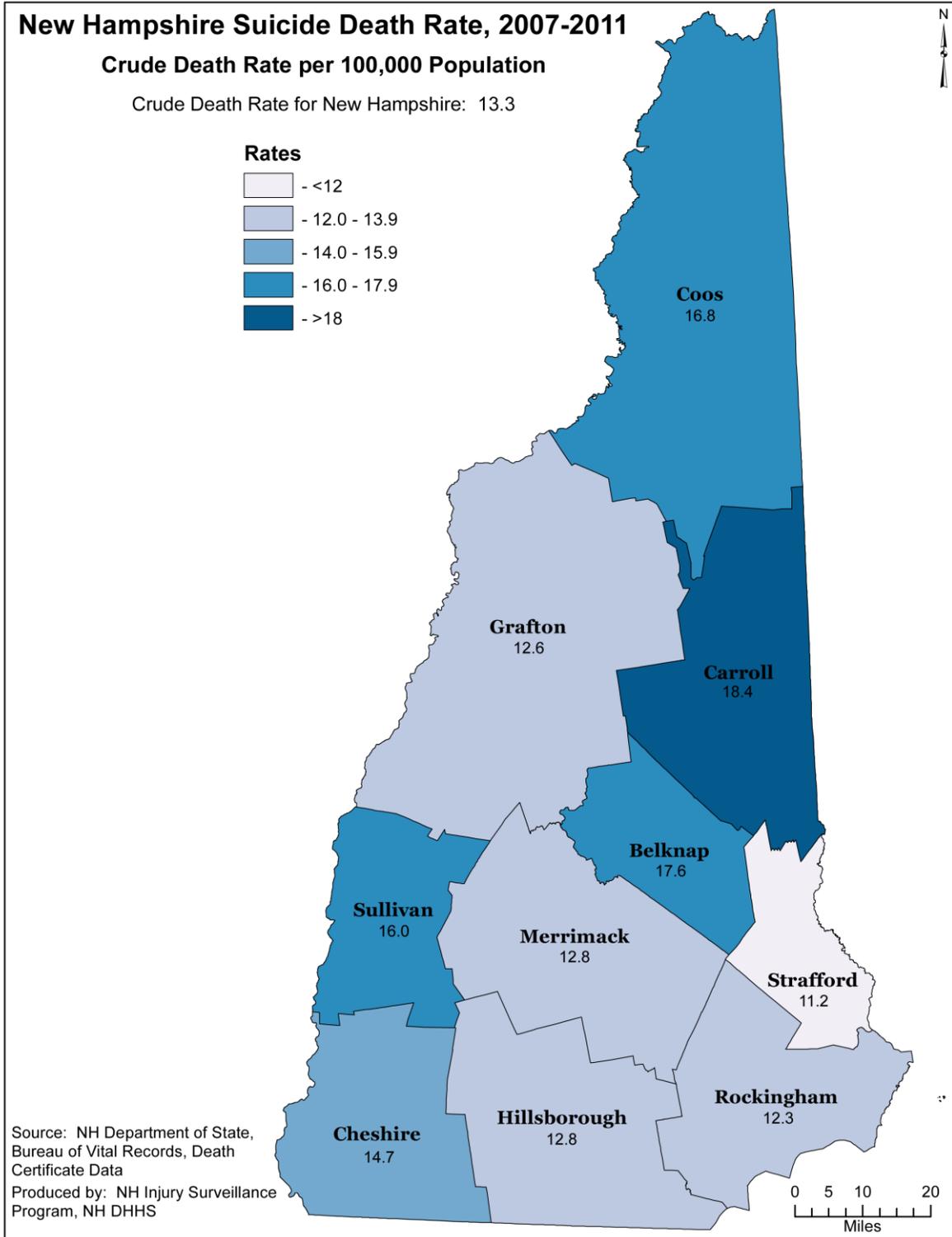
*US Rate is only through 2010
Source: CDC WISQARS

Figure 10



*US Rate is only through 2010
Source: CDC WISQARS

Figure 11
Map of NH suicide death rates



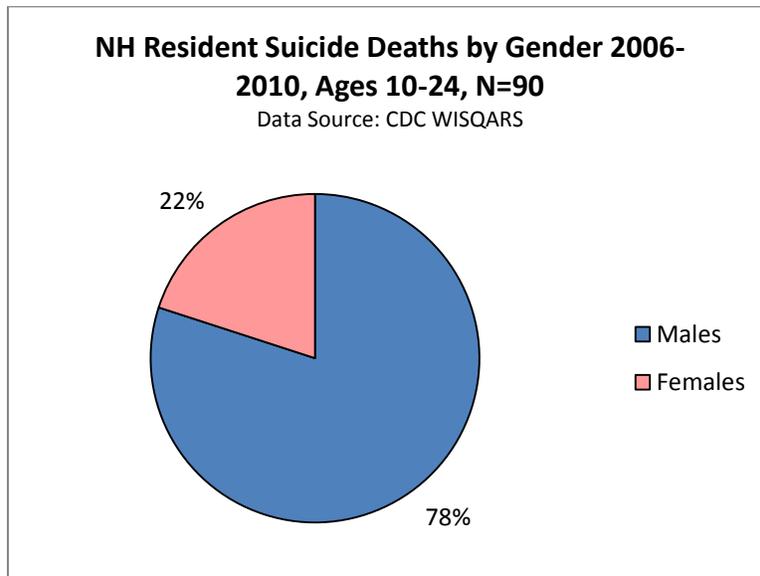
Suicide Behavior in NH: Gender Differences - Attempts and Deaths

Youth and Gender

While males represent nearly 80% of the youth and young adult suicides from 2005-2009, 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 12** (below) and **13** (pg. 29). In fact, females *attempt* suicide at a higher rate than males. When examining how many NH youth and young adults were hospitalized and then discharged for self-inflicted injuries from 2005-2009, it is shown that 64% of the 921 inpatient discharges represent females, while only 36% represent males. Likewise, the 2011 NH Youth Risk Behavior Survey (YRBS) reports approximately 1.6 times as many female youth attempt suicide as males each year (7.5 % of females and 4.8% of males). Emergency department (ED/ambulatory) data reveals the same gender ratio, based on self-inflicted injury rates.²

Figure 12

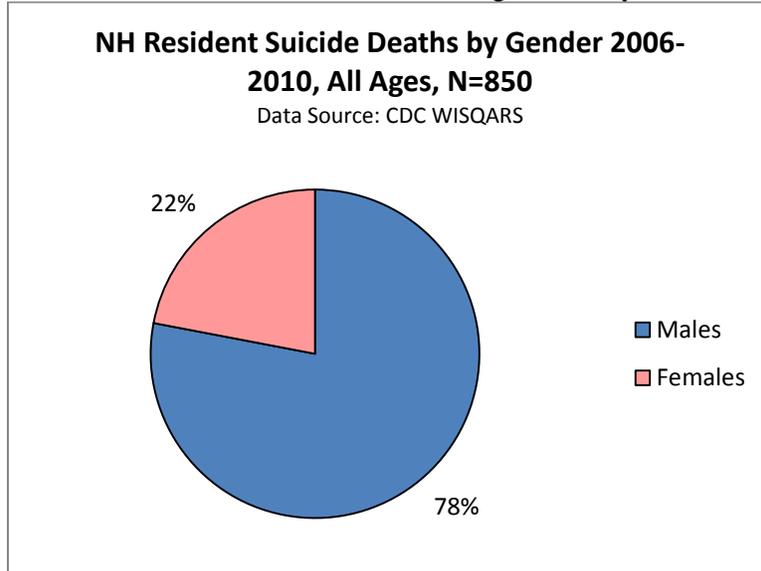
Three times more male than female NH residents ages 10-24 died by suicide 2006-2010.



² 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 13

Three times more male than female NH residents of all ages died by suicide 2006-2010.



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 – approximately twice as often (**Figure 14** and **Figure 15** – pg. 30). This report refers to two types of hospital discharge data; Emergency Department Discharges and Inpatient Discharges. Emergency Department (ED) data includes patients who came to the ED and stayed at the hospital for less than 24 hours. This is 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.

Figure 14

A greater percentage of female than male NH residents attempted suicide, as seen in inpatient self-inflicted injuries 2005-2009.

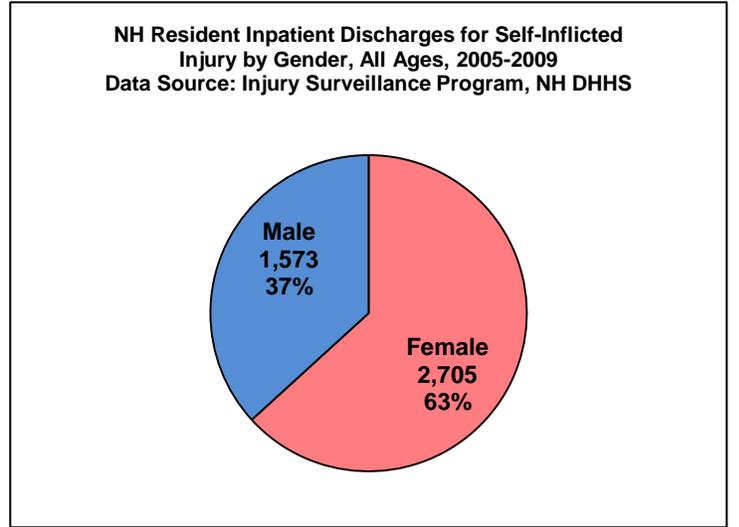
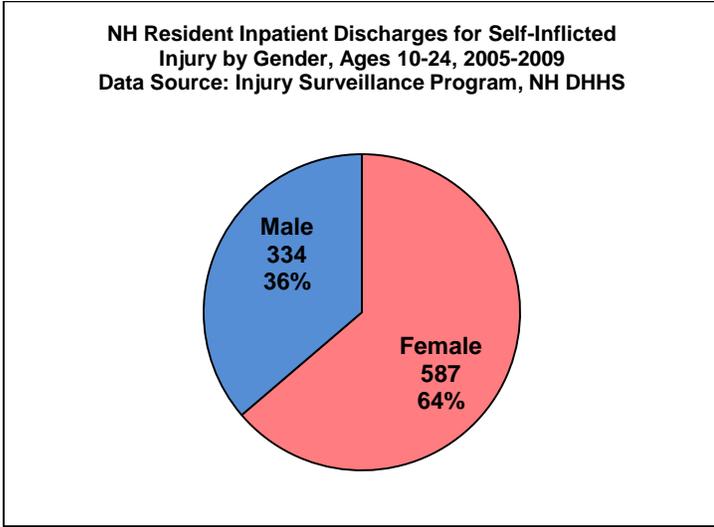
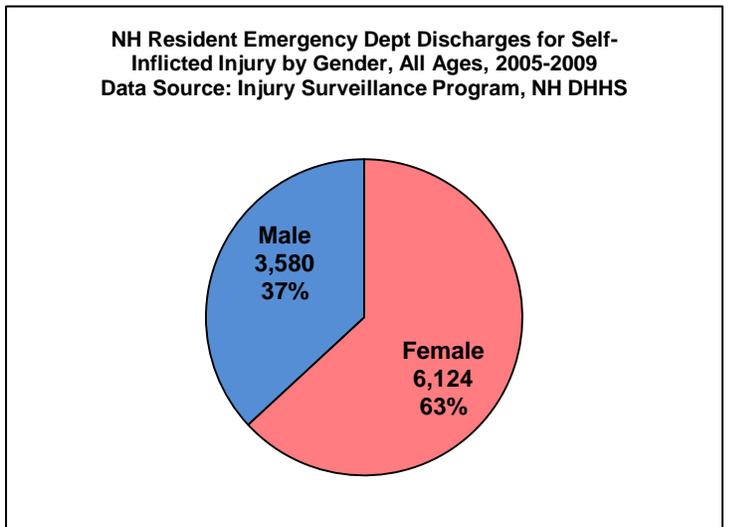
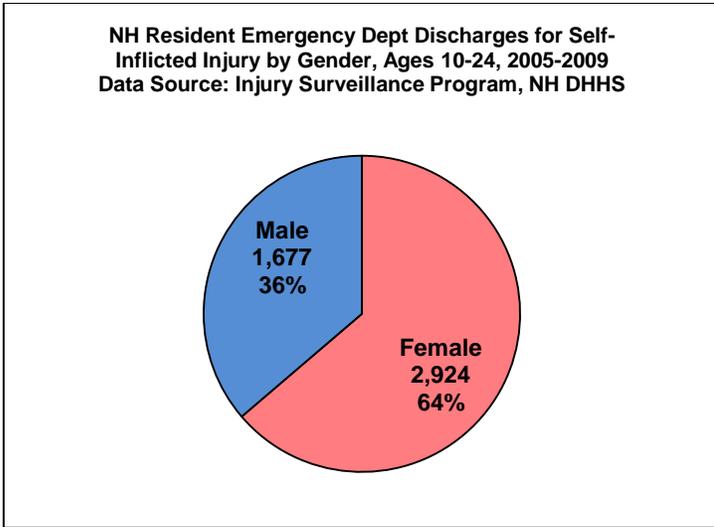


Figure 15

A greater percentage of female than male NH residents attempted suicide, as seen in ambulatory self-inflicted injuries 2005-2009.



Positive Outcomes and Testimonials

NH's Oldest & Largest Firearms Retailer:

I became interested in suicide prevention in quite a dramatic way. In a very short period of time several years ago, I became aware of several suicides utilizing firearms as a means. At the same time, I was invited to join an effort to examine the problem and possibly develop solutions with the NH Firearms Safety Coalition and a project known as the Gun Shop Project.

As firearms retailers, we do have a social responsibility to simply do the right thing in matters of our consumers and the potential for suicide.

To this end, I believe the project to be most worthy of our efforts. I believe, even though it is difficult to measure, we have been immensely successful.

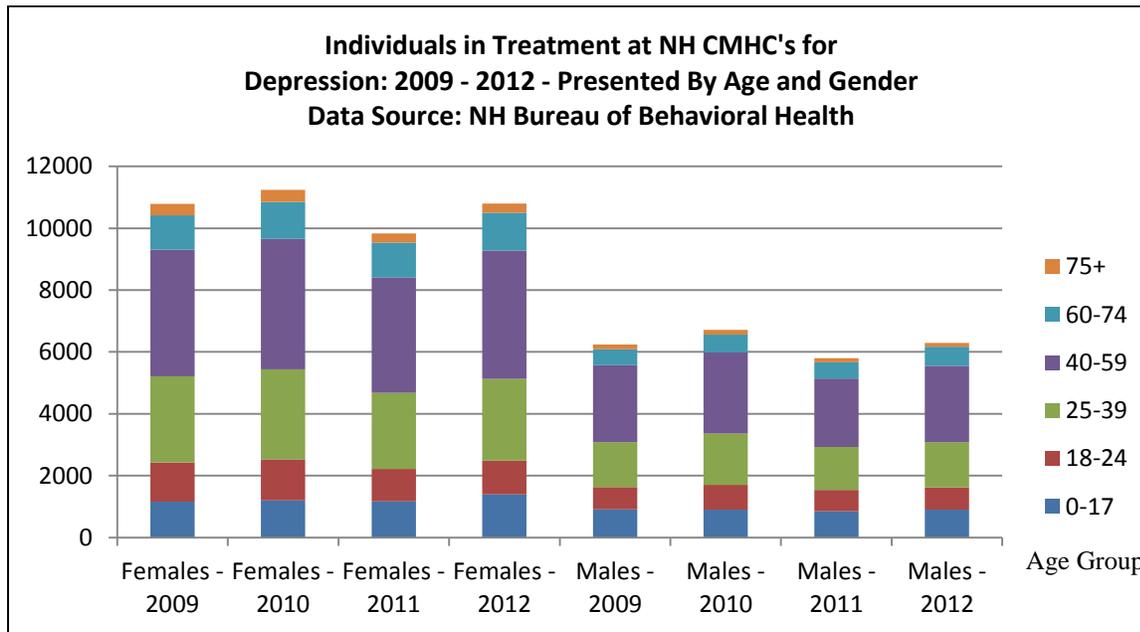
Ralph Demicco
Owners, Rileys Sport Shop Inc.

Gender differences exist not only for suicide attempts and deaths, but also for help-seeking behavior. It has been estimated that as many as 90% of individuals who take their own life had a diagnosable mental illness; the most common diagnoses being depression and substance abuse disorders³. Yet a much smaller percentage were receiving treatment. In NH, approximately 1 out of every 77 residents received treatment at a Community Mental Health Center (CMHC) for depression during 2012. Of those individuals in treatment for

depression, approximately 2/3 of them were female and 1/3 were male. This is illustrated in **Figure 16** below. Without additional data it is not possible to say how these numbers relate to the comparative incidence of depression nor 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 16

Individuals receiving treatment for depression at NH CMHCs presented by age and gender.⁴



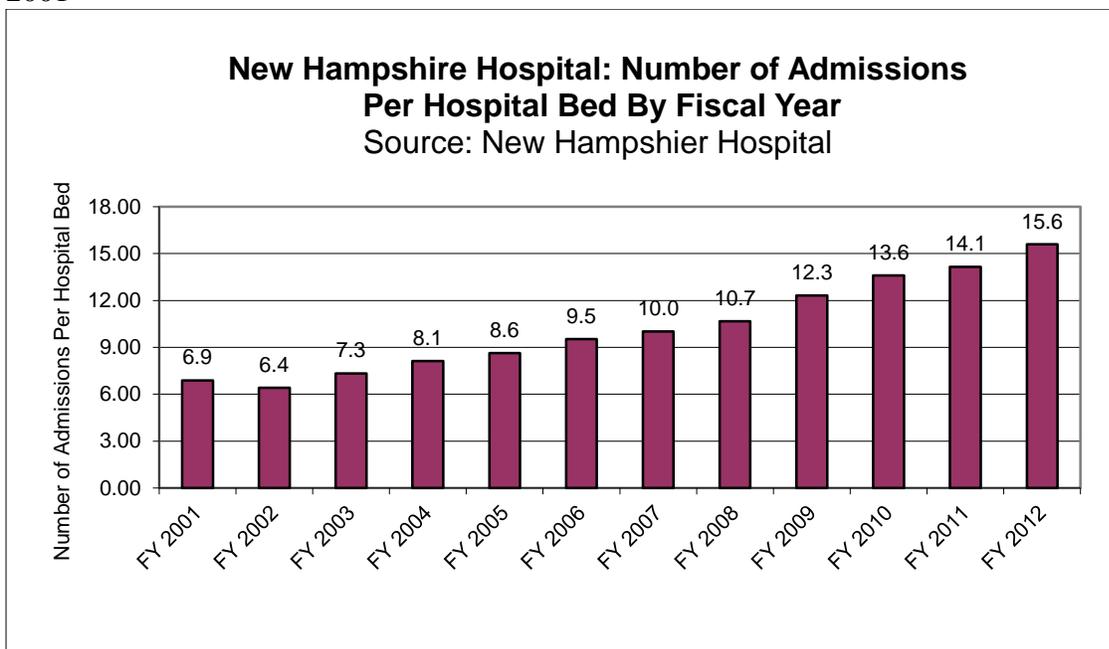
³ Conwell Y, Brent D. Suicide and aging I: patterns of psychiatric diagnosis. *International Psychogeriatrics*, 1995; 7(2): 149-64.

⁴ These numbers include all individuals with a primary or secondary diagnosis of depression.

Cases 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 2,351 admissions to New Hampshire Hospital (Estimates based on New Hampshire Hospital admissions for fiscal years 2010 - 2012). 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 47% females and 53% males. Although the number of admissions were comparable for males and females, this does not guarantee that severity of the cases were similar or that the lengths of stay were similar. **Figure 17** below presents the number of admissions per bed at New Hampshire Hospital. The increase over time on this chart has been due to both an increase in the number of admissions at the hospital, and decrease in the number of available beds. This simultaneous increase in need and decrease in capacity has resulted in many individuals, both children and adults, having to wait in hospital emergency rooms until a bed at New Hampshire Hospital became available. To help address this issue, the state will be re-opening a wing with 12 additional beds at New Hampshire Hospital in 2013.

Figure 17

The number of admissions per bed at New Hampshire Hospital has more than doubled since 2001



Age, Gender and Self-inflicted Injury

When 2005-2009 rates of 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 18 and 19** – pgs. 33-34). 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, males may, with some uncertainty, have a greater rate of self-inflicted injuries. For those females aged 15-19, the rate of those being discharged from inpatient care (**Figure 18** below) is close to 125/100,000, more than two times the rate for males of the same age. The peak age for males is between 25 and 29 for self-inflicted injuries requiring hospitalizations. Again, ED usage rates, depicted in **Figure 19** (page 34), point to females aged 15-19 as a population particularly vulnerable to self-injury and/or suicide attempts, with a rate over 660/100,000, about 194 times the suicide death rate for this population. Males also peak in self-injury around this age group with the male rates for ages 20 to 24 being slightly higher than those for ages 15 to 19. 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 ED visits (5,217) is 4.9 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.

Figure 18

NH female residents ages 25-29 and 35-39 show the highest rates of suicide attempts, higher than males of any age group.

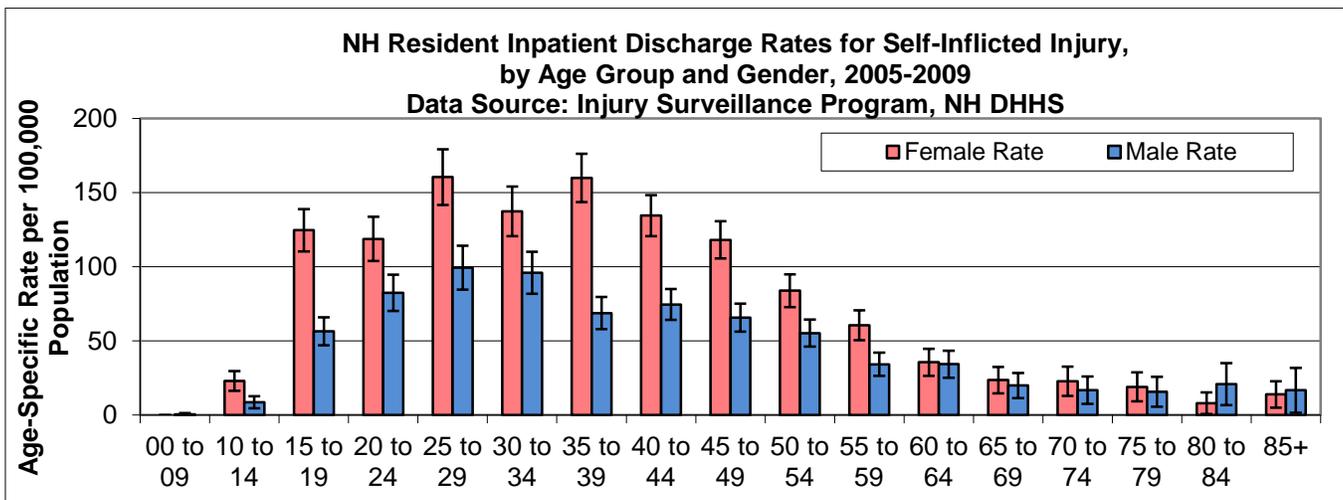
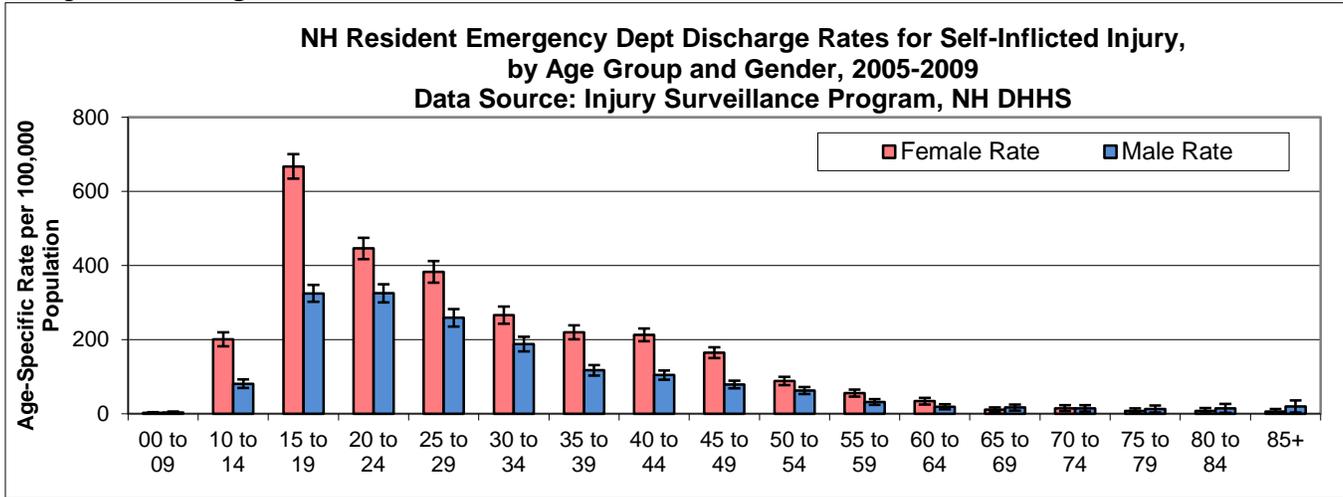


Figure 19

NH female residents ages 15-19 show the highest rates of suicide attempts, but male rates also peak at this age.



According to inpatient admissions/discharges and ED/ambulatory use data across all ages in NH, there are approximately 17 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 700 youth and young adults (age 24 and under) attempt suicide each year in NH.

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

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 2011, approximately 6 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 nearly 3,800 high school age youth in NH who may attempt suicide each year. The YRBS reports may account for attempts not included in hospital self-injury data. This could be the case for any attempts with relatively non-lethal means where medical assistance was not sought. Of particular concern for this data is the likelihood that in many of these cases, the youth have never sought help or disclosed the attempt to any adult.

While the great majority of self-inflicted injuries⁶ are not fatal, because of the larger incidence, they directly and indirectly affect a substantially 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). 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

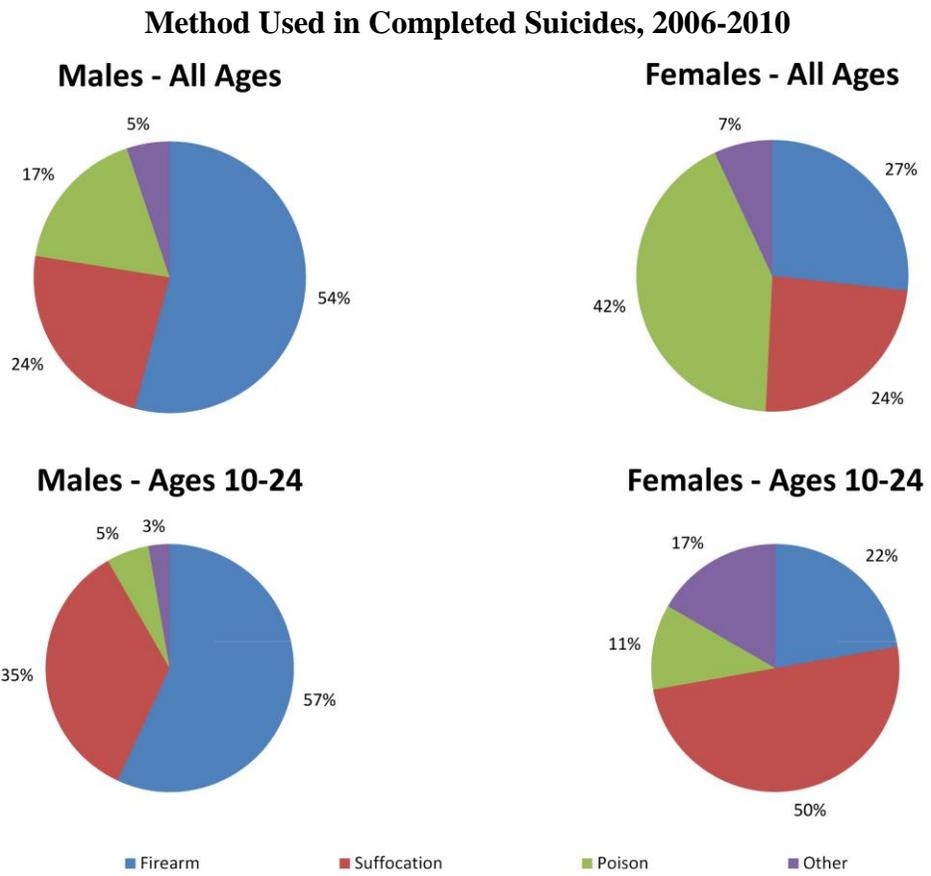
The gender difference in suicide deaths/attempts may be explained in part by the fact that males, in general, use more lethal means. Of NH male youth and young adults who died by suicide between 2006 and 2010, 54% used firearms compared to 27% of females (**Figure 20** – pg. 36). This gender disparity in firearm use becomes even greater as residents enter their late 20's, 30's, and 40's. Male rates remain relatively constant, while the proportion of female deaths from firearms decreases slightly.

Suicide attempt methods have varying lethality. **Figure 21** (pg. 37) compares firearms, hanging, poisoning, and cutting/piercing in terms of the percentage of various outcomes (emergency department visit, inpatient admission, death) for each method. Over 80% of self-injuries using a firearm result in death (**Figure 21**). Among youth and young adults, suicide is often a highly impulsive act and poor impulse control is one of the risk factors for suicide. Therefore, intervention efforts that reduce access to firearms and other highly lethal means may be effective to reduce suicide among those at risk for suicide and those who are impulsive. Firearms remain the most commonly used method of suicide throughout the lifespan in NH. In fact, the percentage of suicide deaths due to a firearm increases to almost 70% for those ages 60+. The use of suffocation as a suicide method peaks in early adolescence, and decreases steadily throughout the lifespan (**Figure 22** – pg. 37).

⁶ Classifying an injury as self-inflicted is another way of stating that the injury was an instance of deliberate self-harm. Not all self-inflicted injuries necessarily represent suicide attempts. Analysis of these injuries, however, is the best currently available proxy for approximating suicide attempts.

Figure 20

Variation in Method of Completed Suicide Deaths by Gender and Age Group, 2006-2010.



Data Source: CDC WISQARS

Figure 21

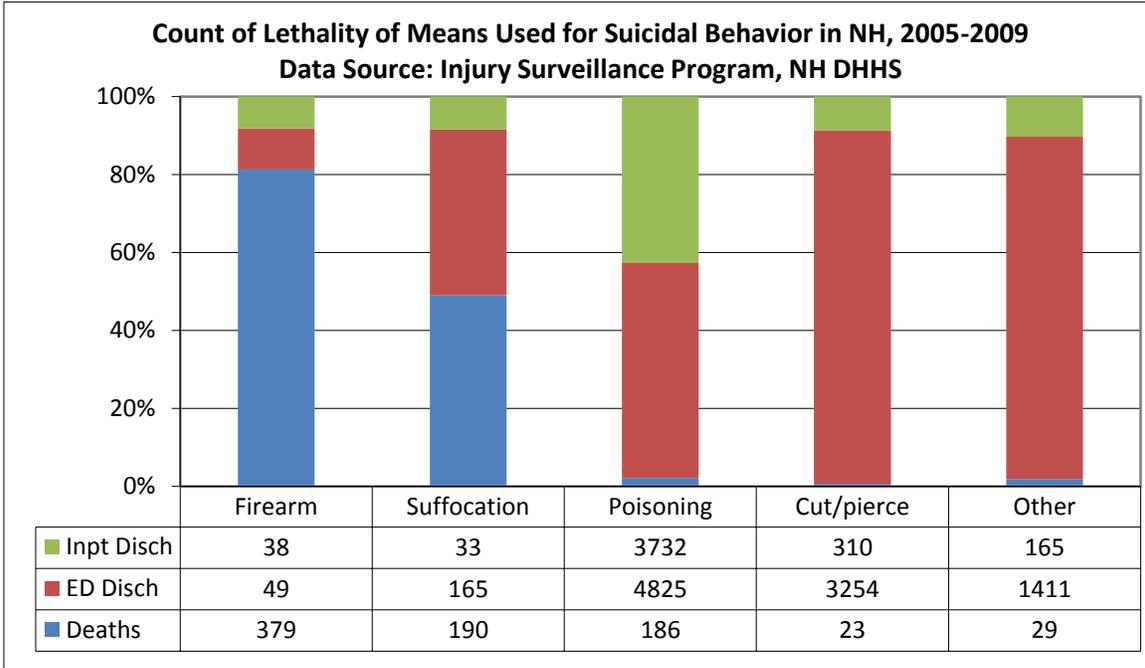


Figure 22

Suicide methods used in NH vary by age group, as seen in 2006-2010.

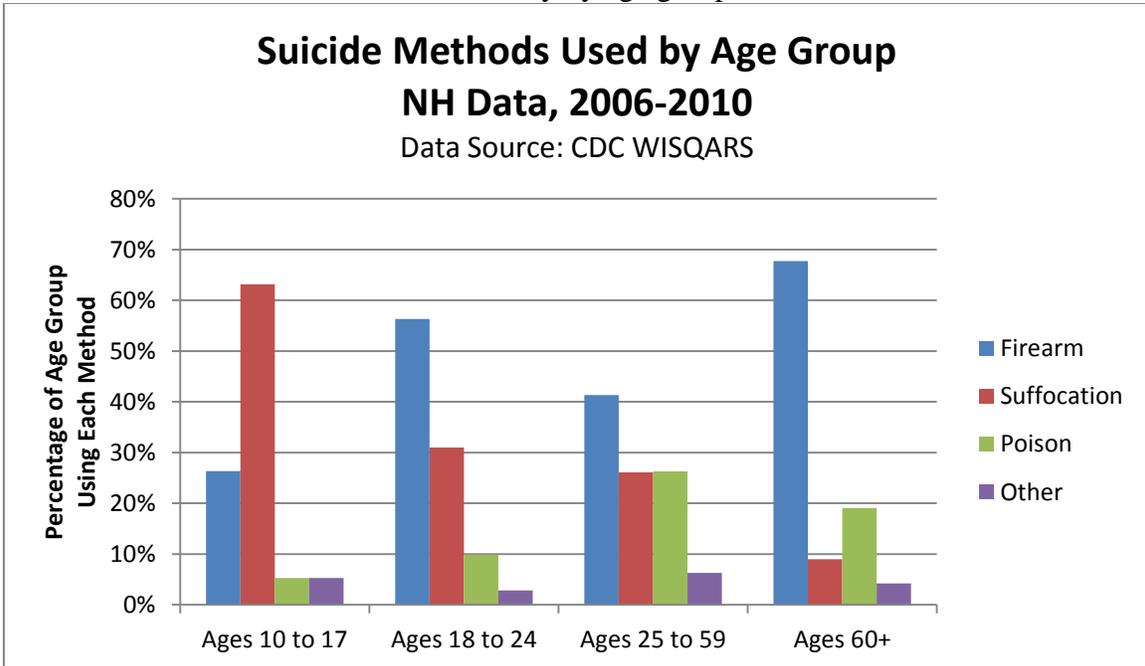
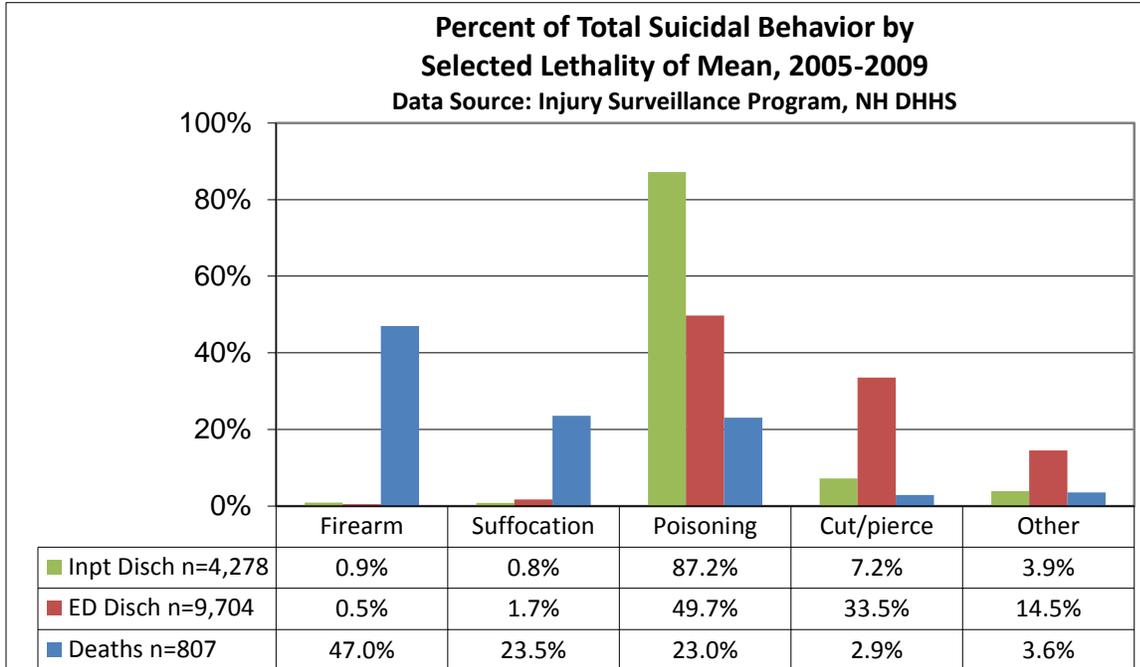


Figure 23

Poisoning is the most frequent method of suicide attempt, as seen in hospital discharge data 2005-2008.

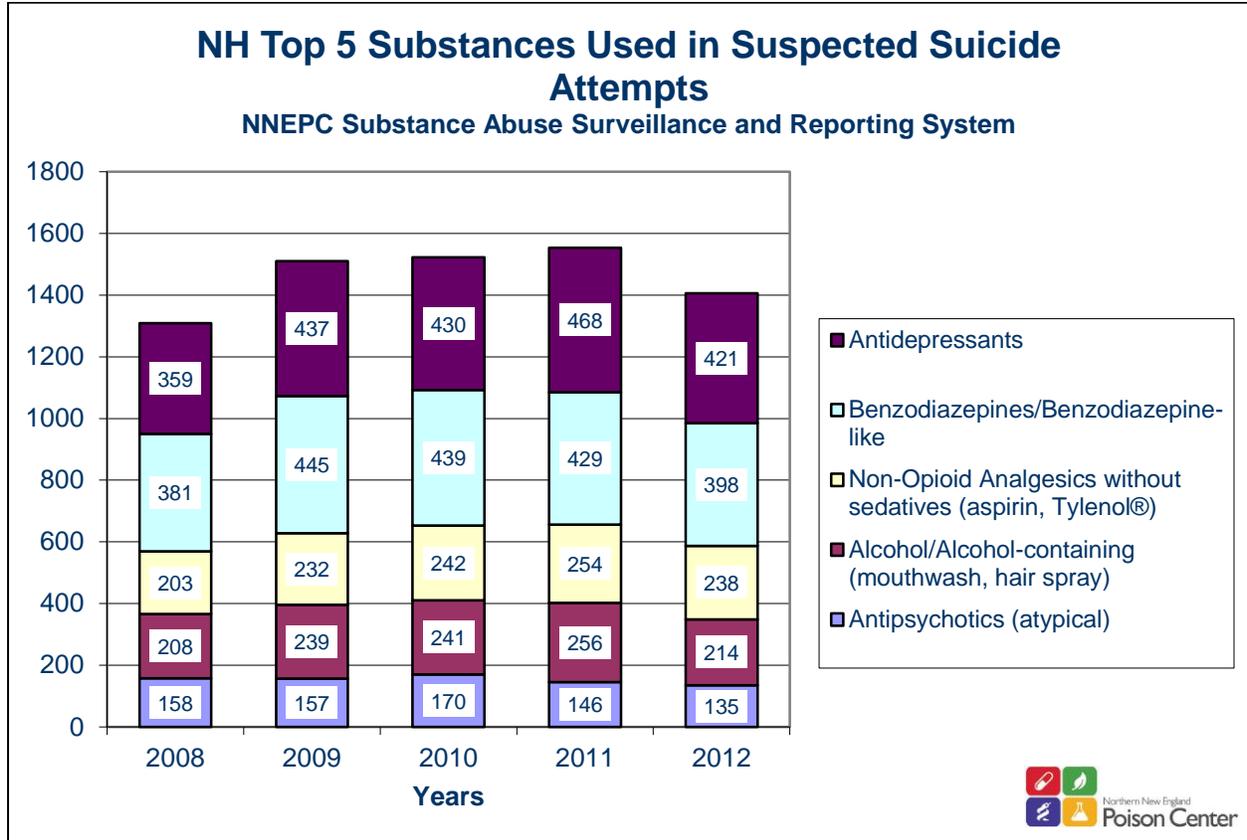


Although suicide attempts employing poison do not account for as many deaths in NH as firearms or hangings, intentional poisonings account for the overwhelming majority of inpatient and ED admissions for suicide attempts (**Figure 23** – above). **Figure 24** (pg. 39) depicts the prevalence of the five most common substances used in suspected suicide attempts in NH as collected by the NNEPC. The top two from 2008 through 2012 have been Antidepressants and Benzodiazepines.⁷

⁷ 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.

Figure 24

Antidepressants and Benzodiazepines have been the top substances used in suspected NH suicide attempts from 2008-2012.

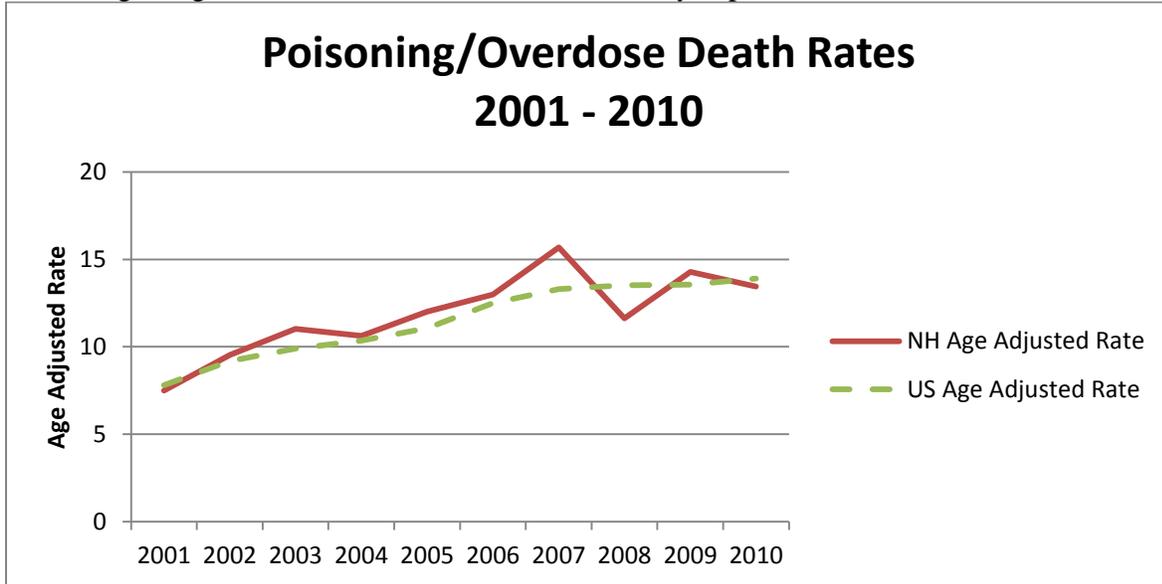


Increasing Accidental Poisoning/Drug-Related Death Rates – Cause for Concern

As seen in **Figure 25** below, the accidental poisoning/drug-related death rates in NH and the US as a whole have steadily increased from 2001 to 2010. During this time the US rate has nearly doubled, while the NH rate has nearly tripled. Although it is not possible to determine an exact number, it is likely that these accidental poisoning/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/drug-related suicide deaths, and as a potential indicator of increased risk taking behavior.

Figure 25

Poisoning/Drug-related death rates in NH have nearly tripled from 2001 to 2010



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 NH Firearm Safety Coalition, *Connect* and CALM. 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 and poisons. However, these reductions and the accompanying overall decline in suicide deaths suggest that when access to a highly lethal means is reduced, there is little "means substitution" (seeking a different method of killing oneself).

Positive Outcomes and Testimonials

"A number of lives have been undoubtedly saved since we integrated the CALM training into our structured interview. Now, not a day goes by in the Concord Hospital Emergency Department where we are not counseling patients and family members around the danger of access to firearms and other means of self-harm for people experiencing depression."

Karl Boisvert, LMHC
Director, Emergency Services
Riverbend Acute Care Services

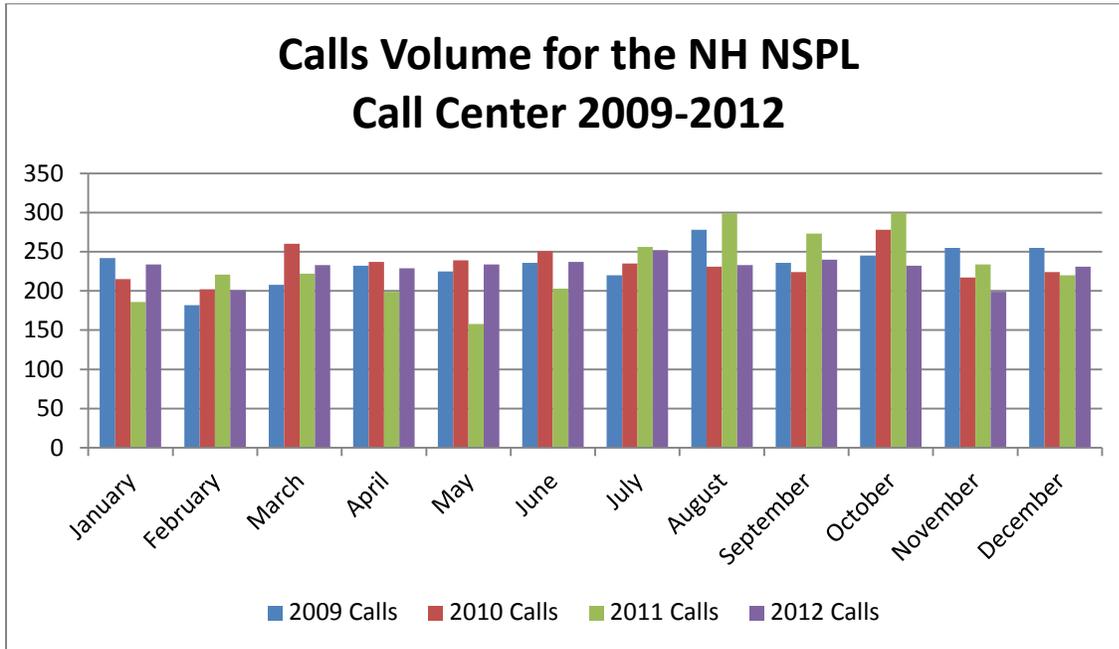
Linking At-Risk Individuals with Help

Crisis lines, such as the National Suicide Prevention Lifeline (NSPL) are vital to suicide prevention efforts in this state and nationally. In 2012, there were approximately 1,343,500 calls made to the NSPL. 2,755 of these calls, or roughly 230 per month were received by the NH

NSPL call center (see **Figure 26** 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 26

NH NSPL call center responds to an average of 230 calls per month.



Costs of Suicide and Suicidal Behavior

There were between 23,925 and 32,012 years of potential life lost to suicide from 2006-2010 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 \$2.2 billion in health care costs in 2005. This does not include the costs associated with mental health services on an inpatient or outpatient basis (CDC WISQARS, 2005). In NH, suicide deaths where the individual received treatment in a hospital or emergency department and subsequently died resulted in an estimated \$379,000 in medical expenses in 2005 (CDC WISQARS, 2005). Harder to measure is the cost to employers of lower or lost productivity due to suicidal behavior by employees or their loved ones.

Additional Data Sources

NH Baseline Survey on Attitudes

In 2006, YSPA, SPC and NAMI NH *Connect* collaborated with the UNH Survey Center on a survey of NH residents about their attitudes toward suicide prevention and mental illness. The survey included 500 NH households representative of the state as a whole. The survey was repeated in 2008, and again in 2012 to determine if there had been any change in public perception. No statistically significant differences were found between the answers from the different survey years. The 2012 results are summarized below:

- Three-quarters of New Hampshire adults (77%) agree that suicide is preventable (45% strongly and 31% somewhat), 8% are neutral, 8% somewhat disagree, 5% strongly disagree, and 3% do not know.
- Most New Hampshire adults (92%) agree that mental healthcare is useful for those who might be thinking about, threatening, or had attempted suicide (79% strongly and 13% somewhat), 3% are neutral, 2% somewhat disagree, 1% strongly disagree, and 1% do not know.
- About one in five New Hampshire adults (17%) agree that they would feel uncomfortable getting mental health care because of what some people might think if they found out (7% strongly and 10% somewhat), 6% are neutral, 12% somewhat disagree, 62% strongly disagree, and 2% do not know.
- Nearly all New Hampshire adults (96%) agree that that if they became aware that a young person was thinking about or had attempted suicide, they would feel that they had a responsibility to do something to help (84% strongly and 11% somewhat), 1% are neutral, 1% somewhat disagree, and 2% do not know.
- Three-quarters of New Hampshire adults (78%) agree that if someone were thinking or talking about suicide, they would know where to seek help (57% strongly and 21% somewhat), 3% are neutral, 9% somewhat disagree, 8% strongly disagree, and 2% do not know.
- About a quarter of New Hampshire adults (22%) would seek help for someone thinking or talking about suicide by contacting a local community mental health center, 16% would call a suicide prevention crisis hotline, 11% would contact their primary care physician, 9% would contact their mental health provider, 8% would take the person directly to the hospital, 7% would call 911, 20% would seek help from another source, and 6% don't know.
- A little less than a third of New Hampshire adults (29%) think that firearms are the most frequent method of suicide used in New Hampshire, followed by poisoning (22%), drugs or overdosing (12%), hanging (10%), knives (1%), some other method (4%), and 23% do not know.

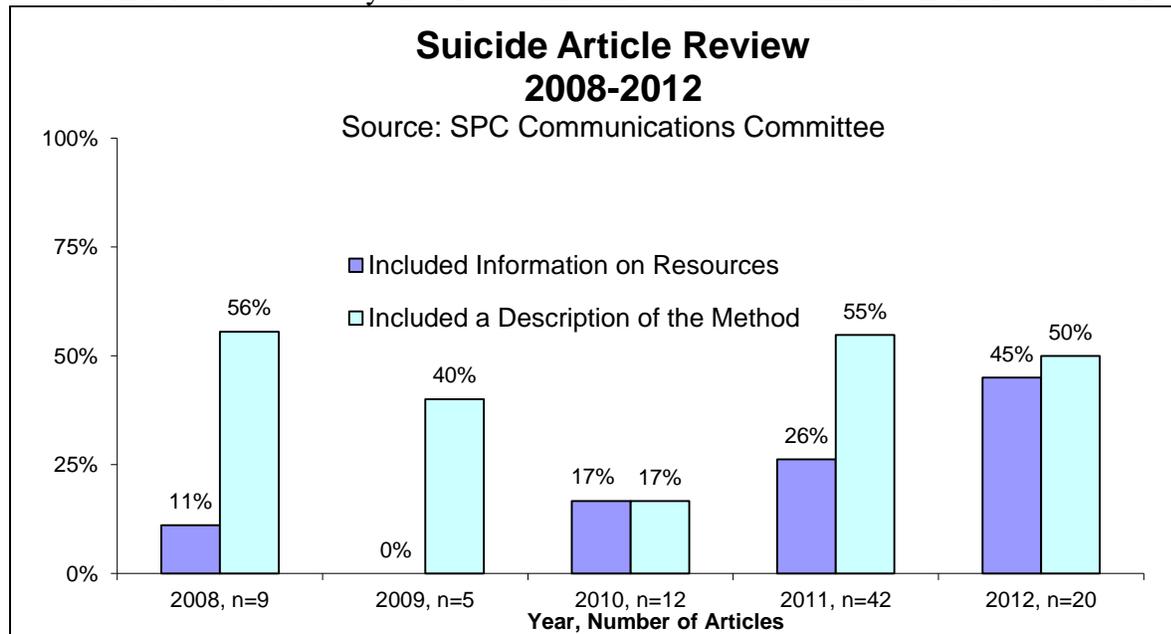
Although it is not possible to determine exactly how these results translate into actual behavior, they do indicate that progress has been made in the battle against overt stigma towards mental health services. They also show that the vast majority of NH residents feel that suicide prevention is a shared responsibility. These conclusions are important in reinforcing collaborative efforts to reduce suicide deaths and attempts..

Suicide Prevention Council Communications Subcommittee Media Review

In 2012 the Communications Subcommittee of the NH Suicide Prevention Council reviewed all known articles published by NH media from 2008 to 2012 that focused on an individual who died by suicide. Known articles include those that were identified by committee members and those that were sent to committee members by other individuals. The articles included in this review may not include all articles published in NH during this timeframe. The Communications Subcommittee established guidelines for rating whether articles included resource information, lists of warning signs, detailed descriptions of the method of suicide, inappropriate visuals, or glorification of the life of the deceased individual. Two trends emerged from this review and are presented in **Figure 27** below. From 2008 to 2012 the percentage of articles including detailed descriptions of the method of suicide remained relatively constant. During that same period the percentage of articles that featured resource information quadrupled. This may indicate that media outlets have been receptive to outreach around the inclusion of resource information, and that additional work may be needed to educate the media on the potential risk of suicide contagion related to articles which publish detailed information around the method of suicide.

Figure 27

Articles Reviewed by the SPC Communications Subcommittee from 2008 to 2012



NH Behavioral Risk Factor Surveillance System (BRFSS)

In both 2007 and 2009, support was provided to NH DHHS Division of Public Health Services, Health Statistics and Data Management to add five questions on suicide to the NH BRFSS telephone survey. This was made possible through federal funding brought into the state by the first GLS Youth Suicide Prevention grant received by NAMI NH. In order to provide a better estimate of the population prevalence for these relatively low frequency occurrences, the results from 2007 and 2009 have been combined for analysis. The results are presented in **Figure 28** below. The BRFSS also includes a core question on the number of days that poor physical or mental health kept individuals from doing their day-to-day activities. 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 29** (pg. 45).

Figure 28

NH BRFSS – Depression and Suicidal Ideation Among NH Residents Age 18 and Over

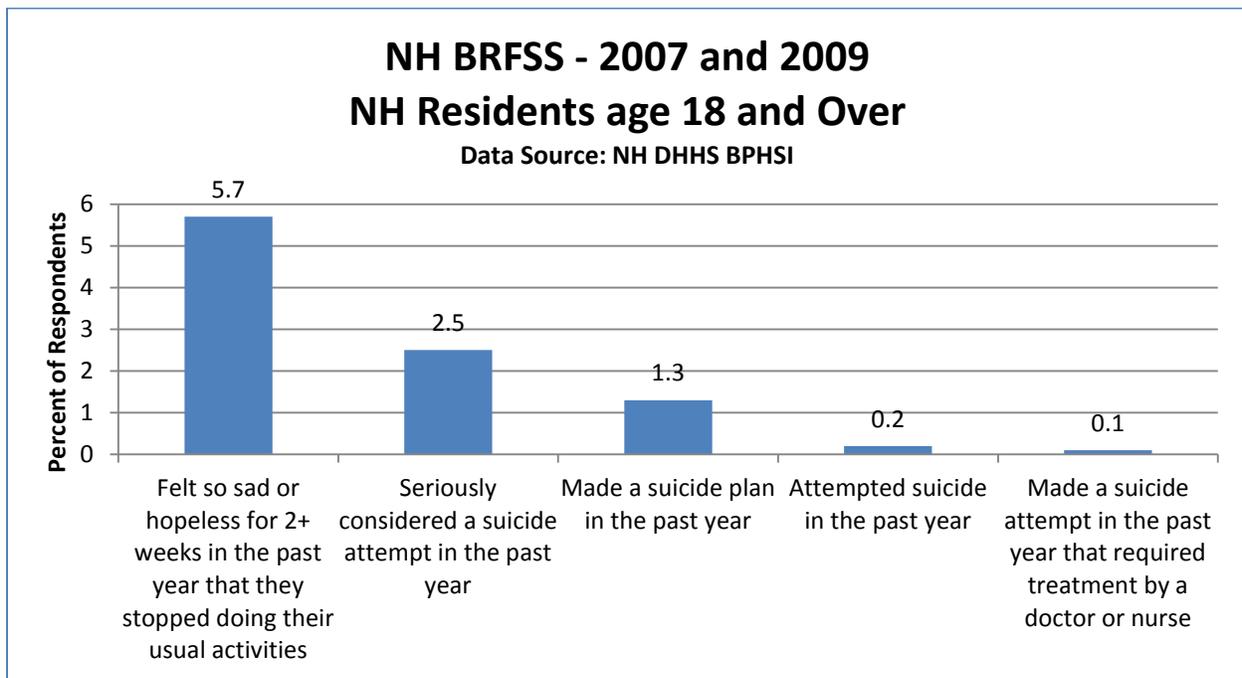
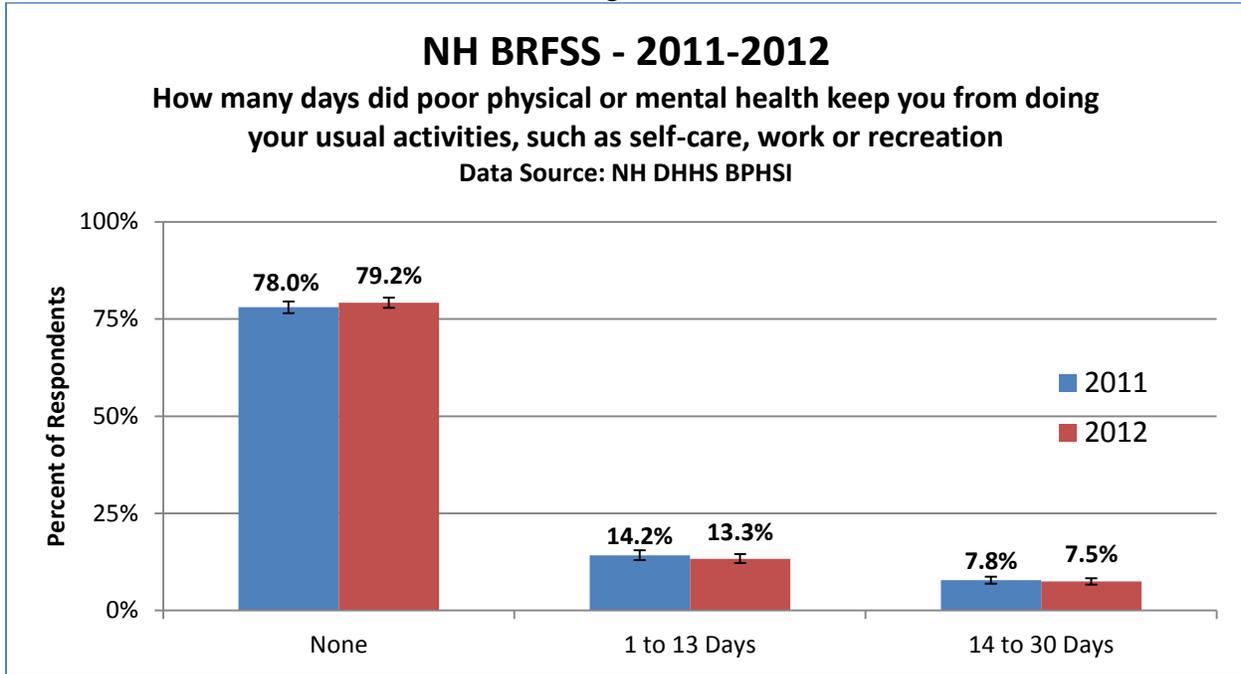


Figure 29

NH BRFSS – Number of Days Physical or Mental Health Impacted Daily Activities of NH Residents Age 18 and Over



Data from the NH National Guard

From 2009 through 2012 the NH National Guard recorded a total of 111 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, 27% were from individuals under the age of 22 and 35% were age 22-26, 12% were age 27-31, 6% were age 32-36, and 13% were age 37-41. All others were age 42 and above. Forty-five percent of the incidents were by non-deployed personnel. Of the incidents recorded, 79% were by males and 21% were by females (males may be disproportionally represented among NH National Guard compared with the general population).

Positive Outcomes and Testimonials

Since its inception the Deployment Cycle Support – Care Coordination Program (DCS-CCP) has served over 2,200 service members, as well as family members. In calendar year 2012, there were over 20 cases where DCS-CCP Care Coordinators intervened when service members or loved ones were at risk for suicide. Since the program inception (2008), Care Coordinators have intervened in over 60 instances of significant suicide risk. The supportive, on-going, outreach based relationship that a Care Coordinator develops with a Service Member and family creates and maintains a vital "protective envelope" that aids in the early detection of suicide risk factors and enables proactive, preventative, and at times, reactive interventions. To date no DCS-CCP participants have died by suicide.

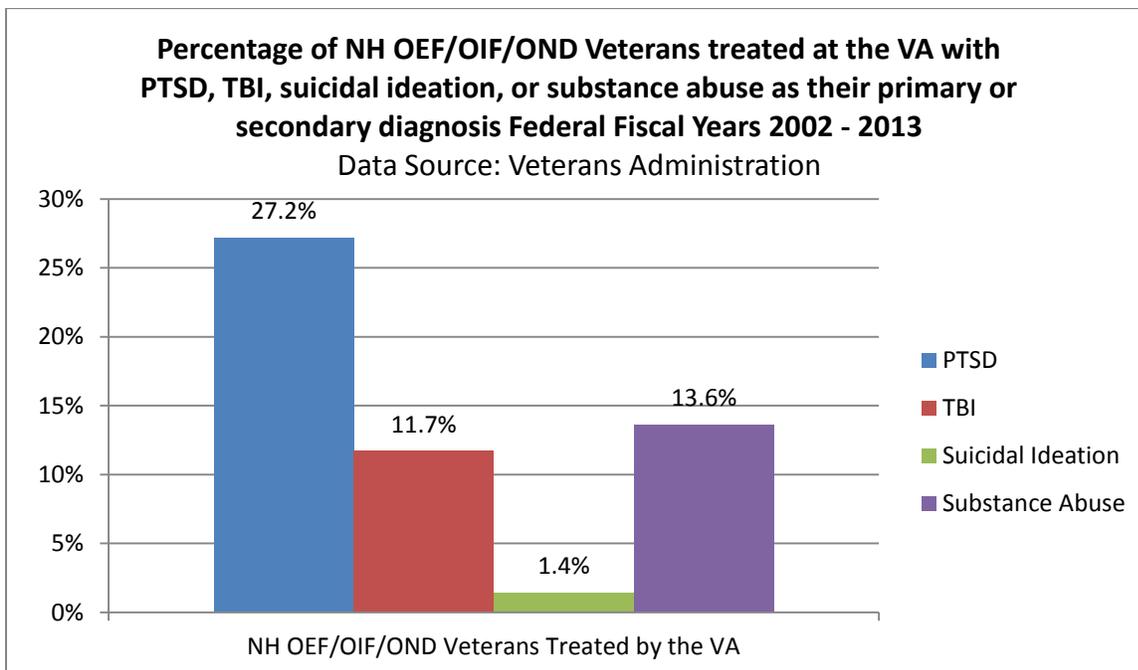
The DCS-CCP is a statewide interagency network managed by Easter Seals NH with oversight from DHHS, which provides comprehensive, proactive, local support to service members and their loved ones before, during and after deployment. DCS-CCP Care Coordinators work directly with service members and families to help them address the many clinical, logistical and financial challenges associated with deployment.

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, 5,575 have been treated at the VA since 2002. 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 30** below.

Figure 30

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



Data from the NH Department of Corrections

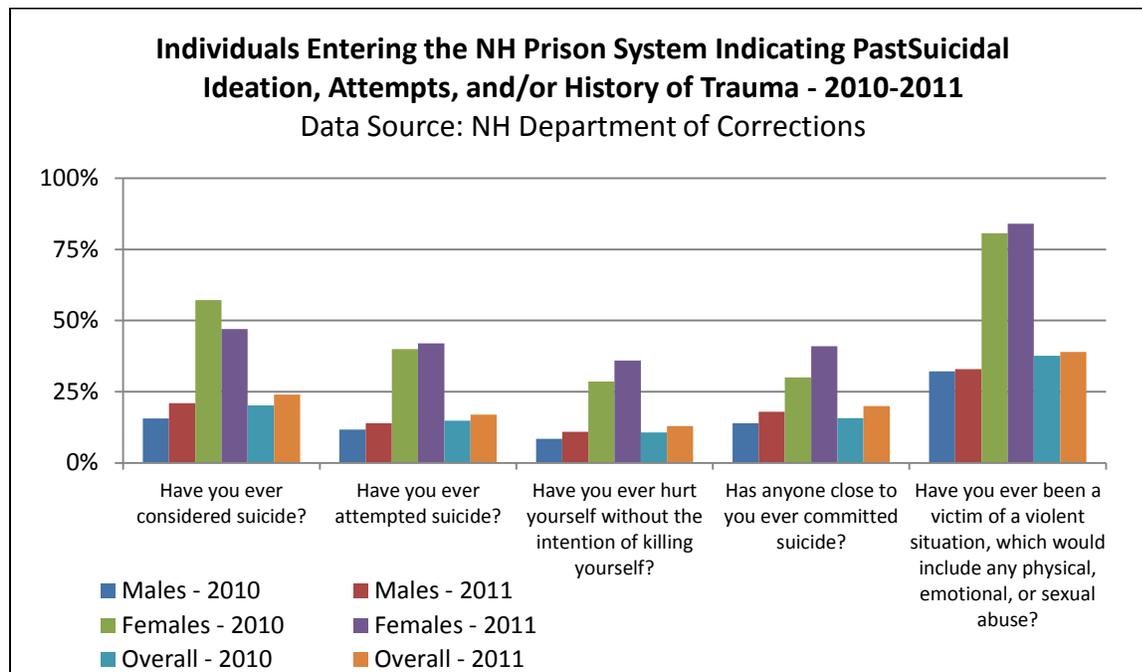
In 2011, the NH Department of Corrections had a total of 1,226 males and 139 females who were screened for suicidality and history of trauma upon their entry into the prison facilities. (**Note:** this does not reflect the populations in county or local facilities.) After an immediate screening by a 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 2011 show that at intake nearly 21% of males and 47% of females indicated past suicidal ideation and approximately 14% of males and 40% of females indicated a past suicide attempt⁸.

⁸ This information should be interpreted cautiously for several reasons. The information is collected by self-report from inmates at a single point in time. Inmates may also have incentive to falsely report past suicidal ideation if it

Although past suicidal ideation and attempts were relatively high for this group, fewer than 1% of the individuals screened at intake answered yes to the question, “Are you currently thinking about killing yourself?”. **Figure 31** (below) displays the percentage of intakes indicating suicidal ideation and/or attempts by gender. In 2011 there were 3 completed suicides in the NH Prison System (facilities operated by the NH Department of Corrections).

Figure 31

Percentage of individuals entering NH prisons in 2010 and 2011 indicating past suicidal ideation, attempts, and/or history of trauma by gender.



Suicide Rates in NH

Until recently (2010/2011) data have indicated that rates of youth and young adult suicide and suicidality overall in NH were 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 change in NH suicide rates may have occurred.

would result desirable outcomes from the inmates’ point of view (e.g., allowing them to avoid someone or something that they dislike).

Figure 32 (below) presents NH suicide death rates for youth and young adults aged 10-24 in rolling three-year intervals from 2001 to 2010. There is a significant difference between the span from 2001-2003 and those between 2005-2007 and 2006-2008; showing a decrease in rates during that period. The change seen on the chart for youth suicide deaths for the period from 2007-2009 and 2008-2010 do not reflect a significant increase from previous years. The rolling three-year intervals for NH residents of all ages combined showed a significant difference between 2002-2004 and 2008-2010. The 2004-2006 period was also significantly lower than the 2008-2010 period (**Figure 33** – pg. 49).

Figure 32

Suicide rates among 10-24 year old NH residents are decreasing, as seen from 2001-2010.

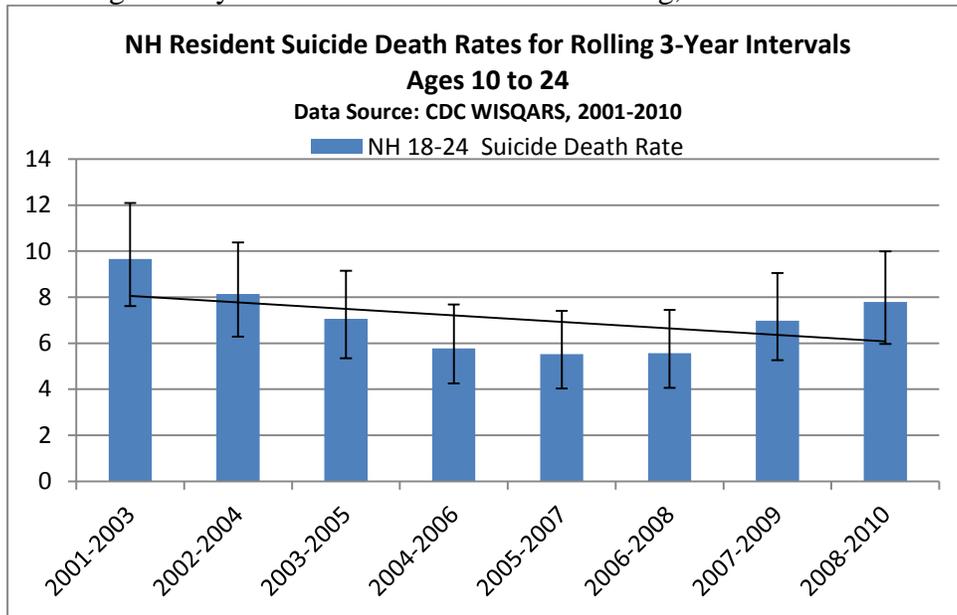


Figure 33

Figure 33 shows that the suicide death rate for people of all ages in NH has remained relatively constant over the last 10 years.

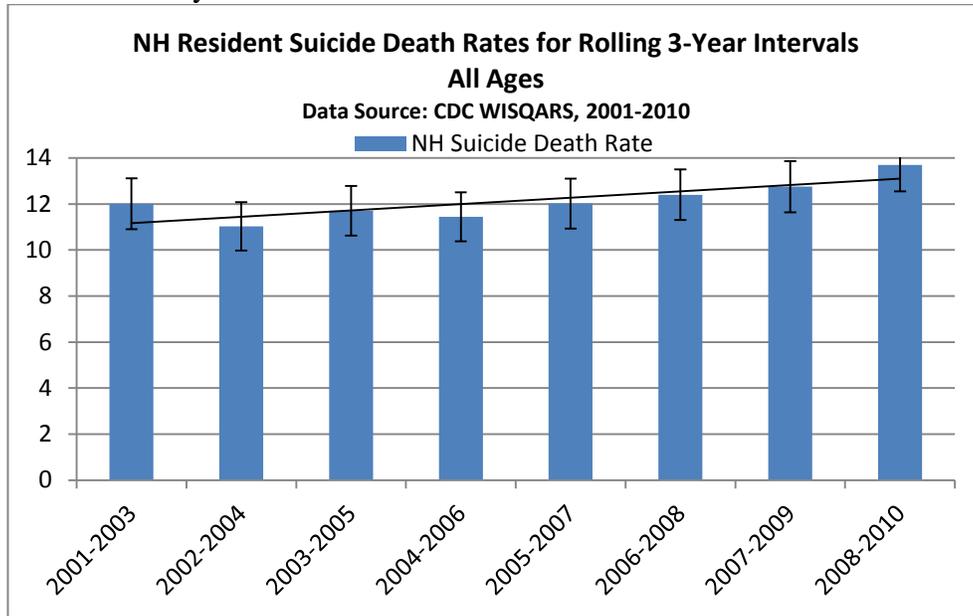
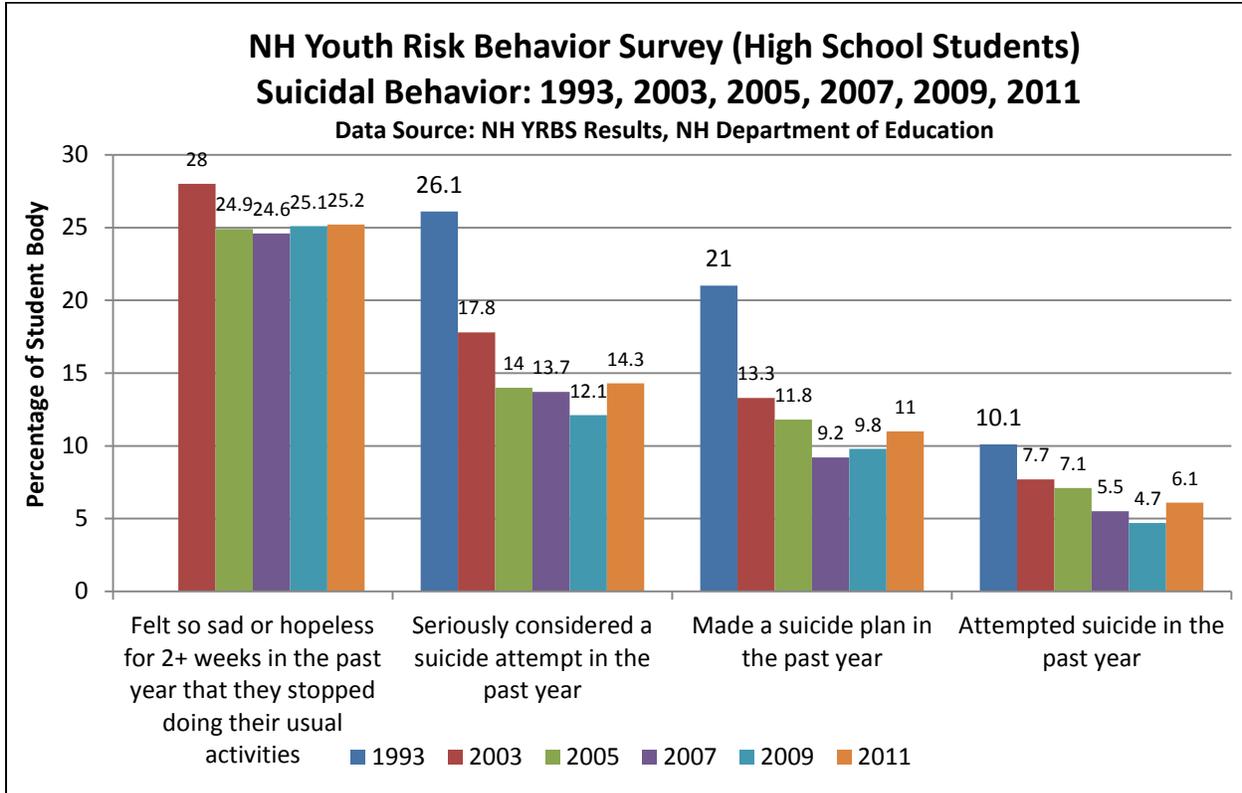


Figure 34 (below) indicates results of the NH YRBS from 1993, 2003, 2005, 2007, 2009, and 2011. The percentage of high school youth in NH who seriously considered a suicide attempt in the past year and the percentage of those who made a suicide plan in the past year both decreased by about 50% from 1993 to 2011. However, in 2011, 1 in 7 youth surveyed still seriously considered attempting suicide in the past year, while 1 in 16 reported actually having made an attempt.

Figure 34

Depression among high school youth remains at about a fourth of the population despite decreases in suicide attempts and suicidal ideation from 1993 to 2011.



While suicidal thinking and attempts reported by NH high school students on the YRBS have decreased in comparison with data from 2003, they still affect a large proportion of the student body.

Chart Reading Basics

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 12**) of this report shows the percent of male and female youths and young adults in NH that died by suicide from 2006 to 2010.
- **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 7 and 8**) in this report show the number of suicide deaths by age group in NH from 2006 to 2010 and the rate of suicide deaths by age group in NH from 2006 to 2010.

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 2003 to 2012. 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 10**). In that chart you can see there is only one place where the error bars do not overlap; those for Carroll County when compared with Rockingham County. From this we are able to determine that the rates of suicide in Carroll 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
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 Statistics and Data Management	HSDM
National Alliance on Mental Illness New Hampshire	NAMI NH
National Suicide Prevention Lifeline	NSPL
Northern New England Poison Center	NNEPC
Office of the Chief Medical Examiner	OCME
State Suicide Prevention Plan	SSPP
Substance Abuse and Mental Health Services Administration	SAMHSA
Suicide Prevention Council	SPC
Suicide Prevention Resource Center	SPRC
Veterans Administration	VA
Youth Risk Behavior Survey	YRBS
Youth Suicide Prevention Assembly	YSPA

Age Adjustment and Rates

All rates in this document are age-adjusted to the 2000 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 adds 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 2000 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?

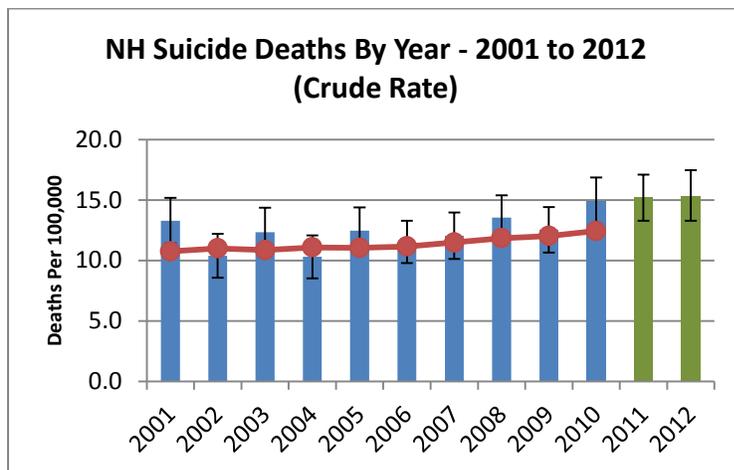
A: It is best to focus on data from a full year or multiple years rather than periods of just a few months. Over brief periods these numbers are too volatile to draw accurate conclusions from them.

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 20% (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 2002, and 2004 do not overlap with the 2010 through 2012 confidence intervals, meaning that the rate for 2010 - 2012 was significantly higher than the rate for 2002 and 2004.



Change in Rate per 100,000 from Year to Year	
2001-2002	13.29 to 10.39 (Down 22%)
2002-2003	10.39 to 12.33 (Up 16%)
2003-2004	12.33 to 10.29 (Down 17%)
2004-2005	10.29 to 12.46 (Up 21%)
2005-2006	12.46 to 11.54 (Down 7%)
2006-2007	11.54 to 12.04 (Up 4%)
2007-2008	12.04 to 12.91 (Up 7%)
2008-2009	12.91 to 12.02 (Down 7%)
2009-2010	12.02 to 14.90 (Up 24%)
2010-2011	14.90 to 15.20 (Up 2%)
2011-2012	15.20 to 15.40 (Up 1%)

2001-2010 = CDC Data, 2011-2012 = NH Data

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 generally not released until 24 months or more 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 2002 to 2003, the number of deaths were up nearly 20% followed by a 20% decrease from 2003 to 2004; 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, 2006 – 2010

Rank	Age Groups										All Ages
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Congenital Anomalies 50	Malignant Neoplasms ---	Unintentional Injury 14	Unintentional Injury 17	Unintentional Injury 260	Unintentional Injury 252	Unintentional Injury 305	Malignant Neoplasms 1,093	Malignant Neoplasms 2,370	Heart Disease 10,011	Malignant Neoplasms 12,806
2	Short Gestation 42	Unintentional Injury ---	Malignant Neoplasms 12	Suicide ---	Suicide 83	Suicide 117	Malignant Neoplasms 265	Heart Disease 590	Heart Disease 1,158	Malignant Neoplasms 8,950	Heart Disease 11,979
3	SIDS 39	Congenital Anomalies ---	Congenital Anomalies ---	Malignant Neoplasms ---	Malignant Neoplasms 31	Malignant Neoplasms 69	Heart Disease 161	Unintentional Injury 381	Chronic Low Respiratory Disease 291	Chronic Low Respiratory Disease 2,756	Chronic Low Respiratory Disease 3,163
4	Maternal Pregnancy Comp. 22	Benign Neoplasms ---	Chronic Low Respiratory Disease ---	Congenital Anomalies ---	Heart Disease 17	Heart Disease 35	Suicide 158	Suicide 214	Unintentional Injury 239	Cerebrovascular 2,212	Unintentional Injury ---
5	Placenta Cord Membranes 22	Homicide ---	Heart Disease ---	Heart Disease ---	Homicide 14	Homicide 15	Diabetes Mellitus 37	Liver Disease 158	Diabetes Mellitus 193	Alzheimer's Disease 1,929	Cerebrovascular 2,466
6	Respiratory Distress 14	Septicemia ---	Influenza & Pneumonia ---	Influenza & Pneumonia ---	Congenital Anomalies 12	Congenital Anomalies 10	Liver Disease 33	Chronic Low Respiratory Disease 100	Liver Disease 156	Diabetes Mellitus 1,048	Alzheimer's Disease 1,946
7	Unintentional Injury 11	Six Tied ---	---	Six Tied ---	Benign Neoplasms ---	Complicated Pregnancy ---	Cerebrovascular 23	Diabetes Mellitus 95	Cerebrovascular 145	Unintentional Injury 987	Diabetes Mellitus 1,385
8	Circulatory System Disease ---	Six Tied ---	---	Six Tied ---	Chronic Low Respiratory Disease ---	Diabetes Mellitus ---	Homicide 18	Cerebrovascular 73	Suicide 137	Influenza & Pneumonia 931	Influenza & Pneumonia 1,015
9	Neonatal Hemorrhage ---	Six Tied ---	---	Six Tied ---	Complicated Pregnancy ---	Cerebrovascular ---	Congenital Anomalies 15	Viral Hepatitis 38	Septicemia 70	Nephritis 778	Nephritis 854
10	Atelectasis ---	Six Tied ---	---	Six Tied ---	Septicemia ---	Chronic Low Respiratory Disease ---	Septicemia 14	Septicemia 34	Nephritis 47	Parkinson's Disease 450	Suicide 850

Source: CDC WISQARS, 2006-2010

---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: Jo Moncher – jamoncher@dhhs.state.nh.us

Meets 2nd Monday – Every **other** month 10:00 am – 12:00 pm
Room 460, Brown Building, DHHS, Concord

Youth Suicide Prevention Assembly

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

Meets 2nd Thursday of the month 10:00 – 11:30 am
Room 232, Brown Building, DHHS, Concord

Connect Program of NAMI NH

Primary Contact: Ken Norton – knorton@naminh.org

NH Suicide Survivor Network

Primary Contact: Becky McEnany – bmcenany@naminh.org

Suicide Prevention Council Subcommittees

Communications & Public Education

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

Meets 4th Thursday of the month 10:00 am – 12:00 pm
Hazen Drive, Concord

Cross Training & Professional Education

Acting Chair: Maggie Pritchard – mpritchard@genesisbh.org

Data Collection & Analysis

Chair: Patrick Roberts – proberts@naminh.org

2nd Friday of the Month 9:30 – 11:30 am
NAMI NH, Concord

Military & Veterans

Co-Chairs: SFC Dale Garrow – dale.garrow@us.army.mil
Loren Haberski – loren.haberski@va.gov

1st Wednesday of the Month 2:30 – 4:30 pm
VA Manchester Medical Center

Public Policy

Co-Chairs: Linda Saunders Paquette – lpaquette@new-futures.org
Kevin Stevenson – kevin.stevenson@nhdoc.state.nh.us

Meets 3rd Friday of the month 10:00 am – 12:00 pm
New Futures, 10 Ferry Street, Suite 307, Concord

State Suicide Prevention Conference Meetings

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

Contact Elaine de Mello for current meeting schedule

Suicide Fatality Review

Chair: Diane Langley – dlangley@dhhs.state.nh.us

Vice Chair: Catrina Watson – Catrina.Watson@nhms.org

Attendance is by invitation only

Survivors of Suicide Loss

Co-Chairs: Susan Morrison – SOKM@metrocast.net

Deb Baird – dbairdsellsnhre@gmail.com

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, as well as comprehensive lists of risk factors and protective factors, please consult the *Connect* website at <http://www.theconnectprogram.org> and click on Understanding Suicide.

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) Stay with them until a parent or professional is involved.
- 4) Offer a message of hope - Let them know you will assist them in getting help.
- 5) Connect them with help:
 - * National Suicide Lifeline (24/7) **1-800-273-TALK (8255)** (press “1” for veterans)
 - * Head rest – For teens and adults (24/7) **1-800-639-6095** or your local mental health center

