



A CLOSER LOOK: YOUTH SUICIDES

BACKGROUND

Suicide is a significant and preventable public health issue in Massachusetts and across the nation. The impact of suicide is enormous: it is conservatively estimated that for every suicide completion, there are six loved ones who are left behind to experience the complicated grief that comes from losing someone to suicide.¹ For youth suicide, the impact of the death on parents, friends, and the community is heightened.

Youth suicides are defined as suicides occurring between the ages of 10-19; this age group gives up the largest number of healthy years of life and therefore represents an important risk group for suicide prevention.

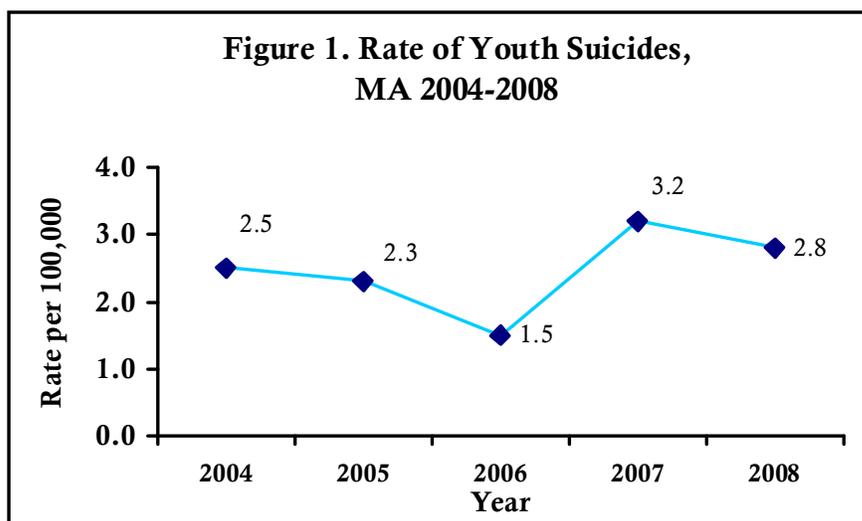
The information for this bulletin was gathered from the Massachusetts Violent Death Reporting System (MAVDRS). MAVDRS is a state-based surveillance system that compiles information on violent deaths in order to provide a detailed picture of how and why they occur. MAVDRS utilizes multiple data sources including death certificates, medical examiner files, toxicology reports, and law enforcement records in creating its data records. MAVDRS includes all suicides that occur within Massachusetts, regardless of whether or not those individuals were Massachusetts residents.²

Key Findings from 2004-2008

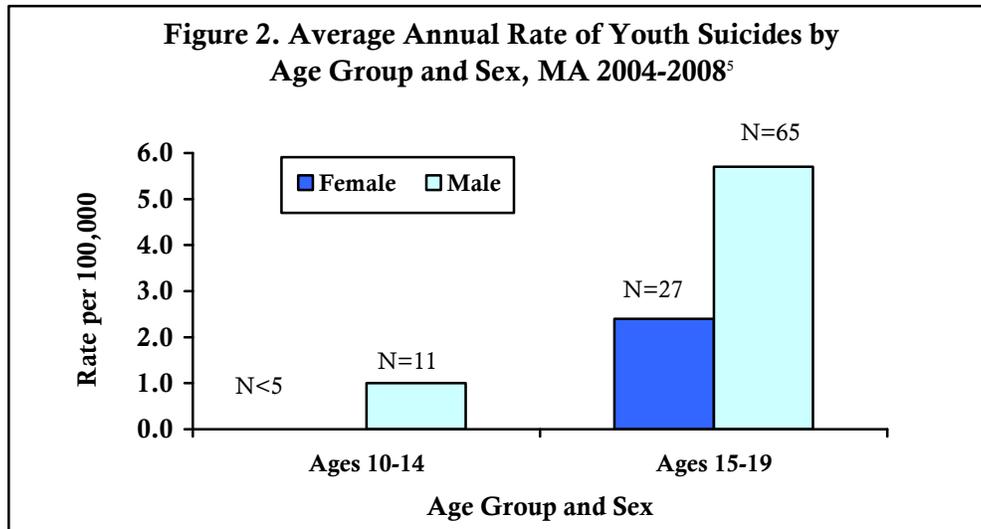
- On average, 21 youth suicides occurred each year from 2004-2008.
- The highest youth suicide rate overall was among White, non-Hispanic youths (N=92, 2.8/100,000).
- The youth suicide rate for males (3.4/100,000) was more than twice the rate for females (1.4/100,000).
- The most common weapon was hanging, accounting for 68% of the youth suicides (N=73).³

MAGNITUDE OF YOUTH SUICIDES, MA 2004-2008

- There were 107 completed youth suicides between 2004 and 2008.
- The rate of youth suicides remained relatively stable over the five year period.
- 2007 showed the highest rate of youth suicides in one year with 3.2/100,000.
- The average rate of youth suicide between 2004 and 2007 was 2.4/100,000. The average U.S. youth suicide rate between 2004 and 2007 was 4.4/100,000.⁴

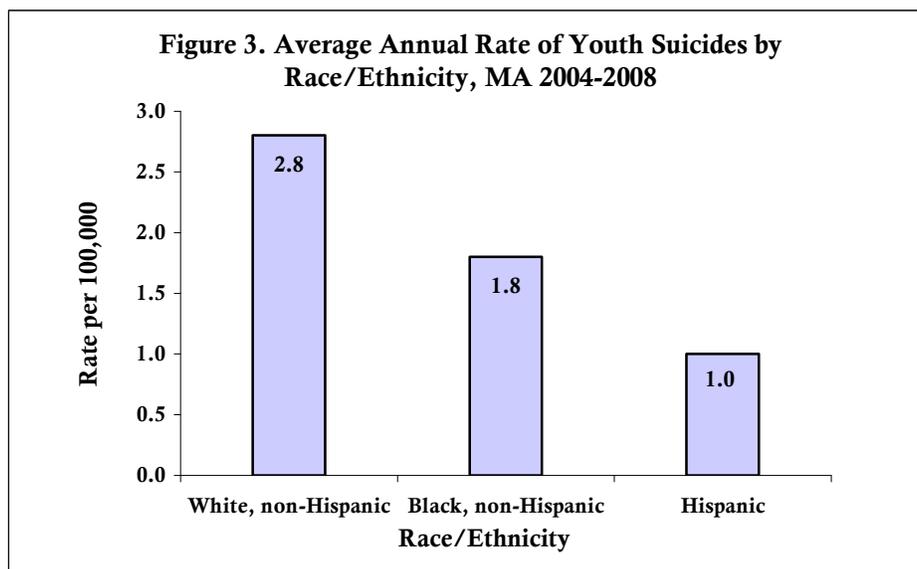


AGE AND SEX OF YOUTH SUICIDES, MA 2004-2008



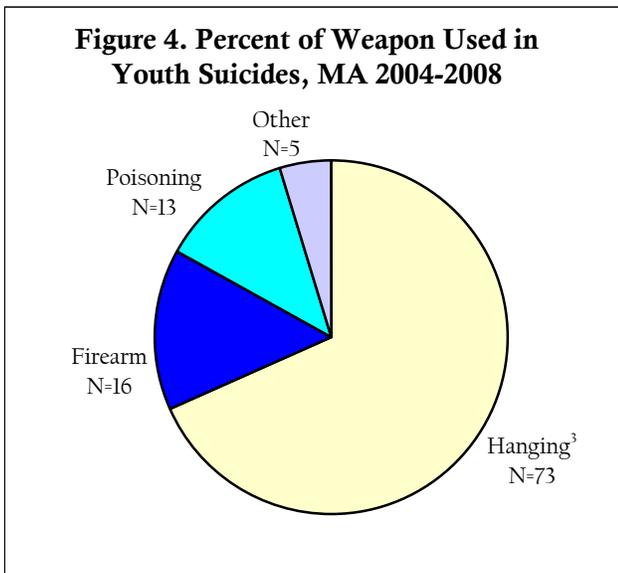
- Of the 107 youth suicides, 31 were female and 76 were male. Males accounted for 71% of the youth suicides during this time.
- 86% of youth suicides were between the ages 15-19 (N=92), compared to 14% of those between the ages 10-14 (N=15).
- For both 10-14 year old and 15-19 year old age groups, males accounted for over 70% of the suicides.

RACE AND ETHNICITY OF YOUTH SUICIDES, MA 2004-2008



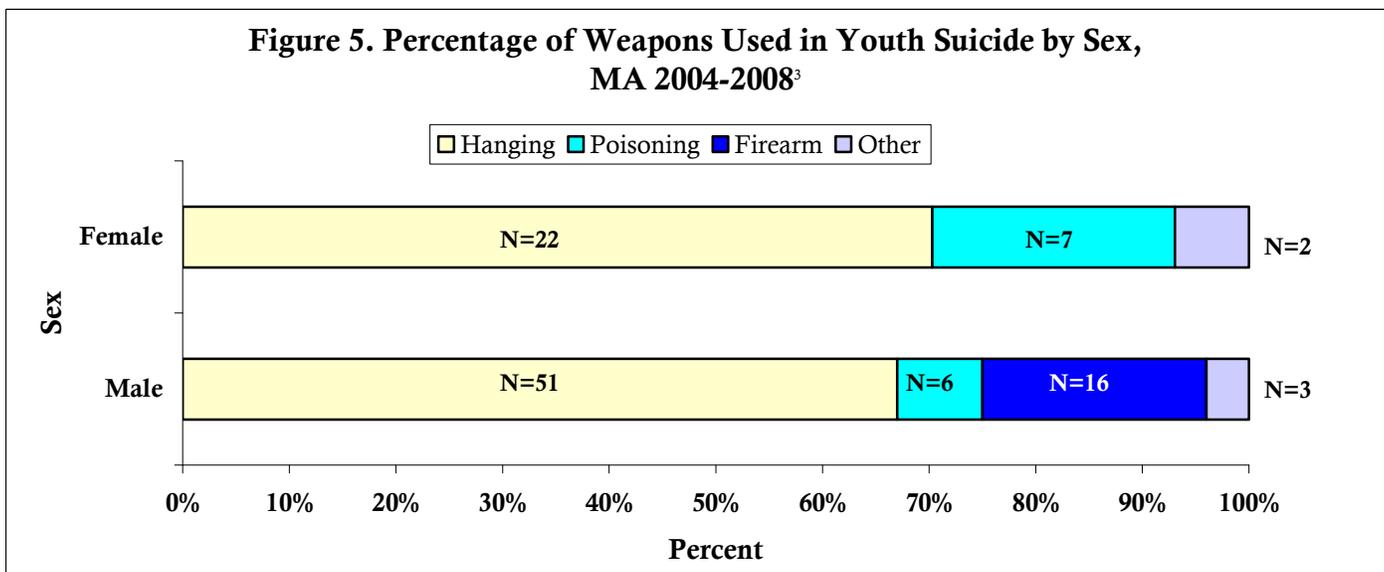
- 86% of youth suicides were of White, non-Hispanic youths (N=92, 2.8/100,000).
- There were six suicides of Black, non-Hispanic youths (6%, 1.8/100,000), five of Hispanic youths (5%, 1.0/100,000), and four of Asian/Pacific Islander, non-Hispanic youths (4%).⁵

Figure 4. Percent of Weapon Used in Youth Suicides, MA 2004-2008



- Hanging accounted for 68% of the suicides (N=73).
- Firearms were used in 15% of youth suicides, and were used *only* by male youths in the 15-19 age group (N=16).
- 12% of suicides were due to poisonings, which includes drug overdoses of legal or illegal drugs, carbon monoxide poisoning (N=13).
- Among 10-14 year olds, hanging accounted for all 15 of the suicides.
- Among 15-19 year-olds, hanging accounted for 63% of the suicides, followed by firearms (17%) and poisoning (14%).

Figure 5. Percentage of Weapons Used in Youth Suicide by Sex, MA 2004-2008³



The weapon used in youth suicides varied by sex:

- Hanging was the leading weapon type used among youth ages 10-19 for both males and females.
- Poisoning was the second leading weapon used by females.
- Firearm was the second leading weapon used by males and *only* used by males.

CIRCUMSTANCES OF YOUTH SUICIDES, MA 2004-2008

The circumstances surrounding youth suicides are one of the most important pieces of evidence collected when planning prevention strategies. In order to identify those at-risk youths, it is important to understand the trends in factors that contribute to the act. MAVDRS allows for the inclusion of more than one circumstance for a suicide victim. It is important to note that some circumstances are more likely to be known and/or reported than others.

MENTAL HEALTH

- 42% of youth suicide victims were currently experiencing a mental health problem at the time of their suicide.⁶
- 22% of youth victims were experiencing a depressed mood at the time of suicide.⁷
- 35% of youth victims had been treated for a mental illness at least once before in their lives.
- 33% of youth victims were currently being treated for a mental illness.

SUICIDE HISTORY

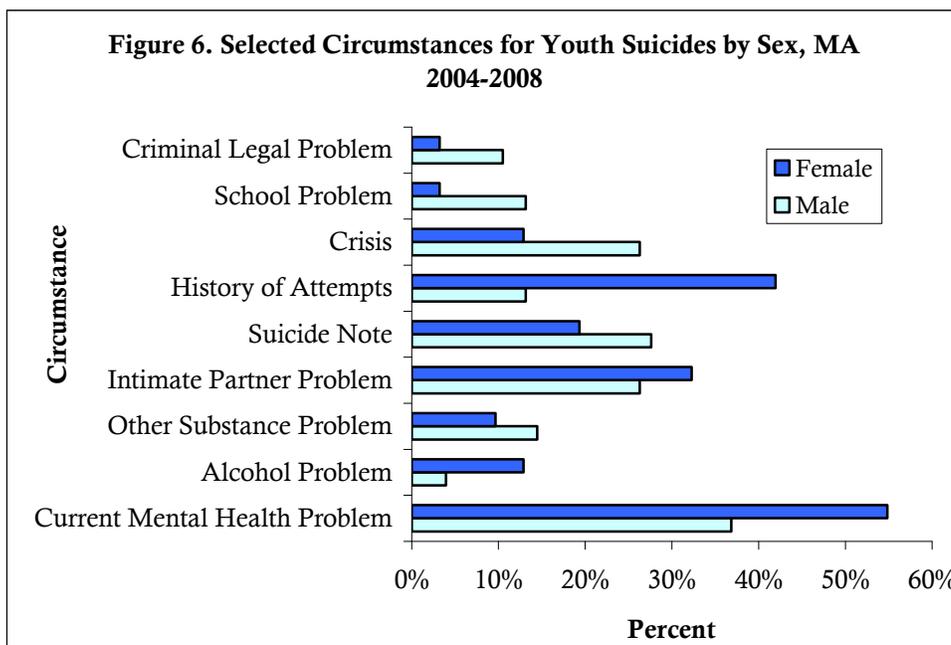
- 18% had disclosed their intent to complete suicide
- Male youths disclosed their intent to complete suicide nearly four times as often as female youths.
- 21% had a history of suicide attempts.

LIFE STRESSORS

- 22% had experienced a crisis within two weeks prior to their deaths.
- 28% had experienced an intimate partner problem prior to their suicides.⁸
- 21% had experienced a relationship problem with someone other than an intimate partner, such as parent, sibling, etc.
- 10% of youths experienced school issues prior to their suicides.⁹
- 8% experienced recent criminal legal problems prior to their suicides.

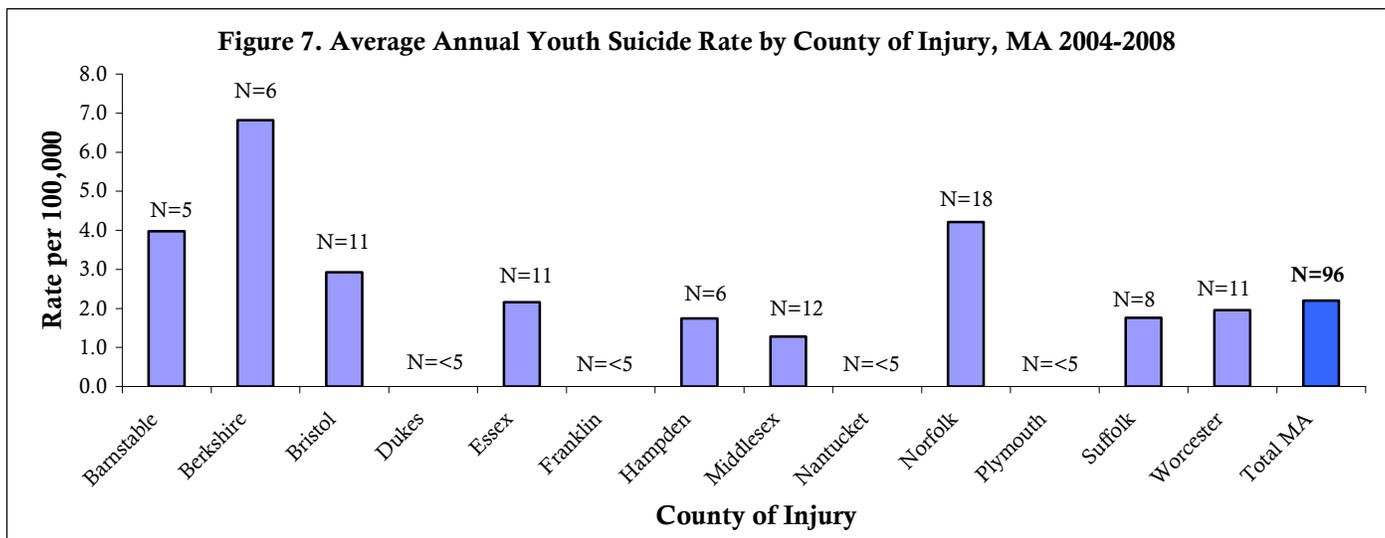
SUBSTANCE ABUSE

- 7 % of youths had an alcohol abuse problem.
- 13% of youths had a drug abuse problem.



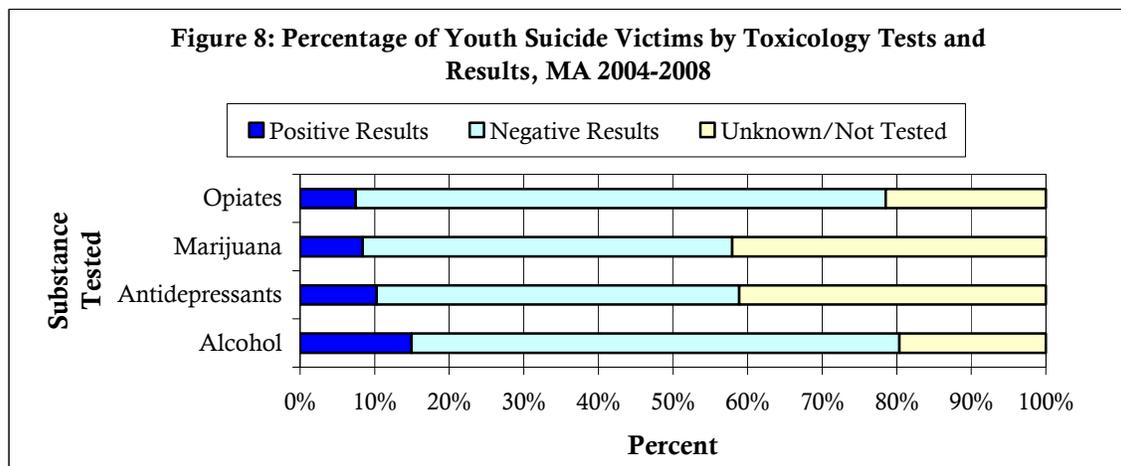
- The circumstance that was most often noted for females was history of suicide attempts and current mental health problem.
- The circumstances most often noted for males was current mental health problem, person left a suicide note, crisis in past two weeks and intimate partner problem.
- Females were more often noted as having a history of suicide attempts, intimate partner problem, alcohol problem, and current mental health problem compared to males.

COUNTY OF INJURY OF YOUTH SUICIDES, MA 2004-2008



- Dukes, Franklin, Nantucket, and Plymouth Counties had less than five youth suicides each; they had a total of eight youth suicides combined for 2004-2008. This number is reflected in the “Total MA” number.⁵
- There were nine youth suicides whose injury occurred out-of-state: these youths injured themselves in another state and were transported to a Massachusetts hospital where they later died. There were also two youth suicides whose location of injury was unknown. These suicides (11 total) are not included in the above figure, but are included in the total numbers for the rest of the bulletin (N=107).
- Berkshire had the highest average annual rate of youth suicide (6.8/100,000) and Middlesex had the lowest average annual rate (1.3/100,000). The total Massachusetts rate was 2.2/100,000.

TOXICOLOGY OF YOUTH SUICIDES, MA 2004-2008



- The majority of the youth suicide victims were *negative* for any of these substances.
- Alcohol and antidepressants were the highest with 16 victims testing positive for alcohol and 11 victims testing positive for antidepressants. Eight victims tested positive for opiates and nine victims tested positive for marijuana.
- The number of positive results for cocaine and amphetamines were less than five, so percentages were not calculated.

CONCLUSION

This bulletin has provided insight into youth suicides in Massachusetts. While state-specific information provides value to local public health officials, national data from all 50 states must be obtained to complete the picture and establish effective national youth suicide prevention policies and programs.

FOR HELP, PLEASE CONTACT:

Suicide Prevention Program
<http://www.mass.gov/dph/suicideprevention>
Massachusetts Department of Public Health
250 Washington Street, 4th Floor
Boston, MA 02108-4619
Tel: 617 - 624 - 5544

US Toll-Free, 24 hours/7 days a week:
1- 800 - SUICIDE (1-800-784-2433)
1- 800 - 273 - TALK (1-800-273-8255)

Samaritans: <http://samaritanshope.org/>
Statewide, toll-free: 1 - 877 - 870 - HOPE
(1-877-870-4673)
Samaritans: 1 - 800 - 252 - 8336
24 hour help lines: (617) 247 - 0220
(508) 875 - 4500

LGBT Youth: 1 - 800 - 850 - 8078
Spanish: 1 - 888 - 628 - 9454
TTY: 1 - 800 - 799 - 4TTY (4889)

METHODOLOGY

Rates were not calculated for counts less than 5 and are considered unstable for counts less than 20. Rates were calculated using the National Center for Health Statistics postcensal estimates of the Massachusetts resident population of the United States for July 1, 2000-July 1, 2008, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2008). Prepared under a collaborative arrangement with the U.S. Census Bureau; released May 14, 2009. Accessed September 2, 2009 and available from: <http://www.cdc.gov/nchs/nvss.htm>.

Suicide cases in the MAVDRS database are first identified by reviewing the manner of death field on death certificates maintained by the Massachusetts Department of Public Health's Registry of Vital Records and Statistics (RVRS). The final data file is determined on the basis of International Classification of Diseases, Tenth Revision (ICD-10) codes for the underlying cause of death field on death certificates. The ICD-10 codes that identify suicides to be included in the NVDRS database are X60 - X84, Y87.0.

ACKNOWLEDGEMENTS

The staff at the Massachusetts Violent Death Reporting System and Injury Surveillance Program at the Massachusetts Department of Public Health wishes to acknowledge and thank Sarah Gordon, an intern from New York University, for her contribution to our program and to this bulletin.

END NOTES

1. From the American Association of Suicidology; <http://www.suicidology.org/web/guest/suicide-loss-survivors>
2. There were 15 youth suicides of out of state residents that occurred in Massachusetts and there were six youth suicides of Massachusetts residents that occurred out of state
3. "Hanging" as a weapon also includes strangulation and suffocation.
4. National data was available from WISQARS only through 2007 and was accessed November 26, 2010.
5. Rates were not calculated for counts less than five and are considered unstable for counts less than 20.
6. "Current mental health problem" is a broad category that includes victims who have been diagnosed by a health professional as having a psychiatric condition and victims who were prescribed antidepressants or other psychiatric medication.
7. "Current depressed mood" means that the victim was reported by a family member or other witness as seeming depressed; it does not necessarily indicate that there was a clinical diagnosis of depression or treatment.
8. Intimate partner problem could include physical violence, a breakup, an argument, or jealousy.
9. School issues could include problems with school work, engaging in or being a victim of bullying, etc.

FOR MORE INFORMATION, PLEASE CONTACT:

Massachusetts Violent Death Reporting System
Massachusetts Department of Public Health
250 Washington Street, 6th Floor
Boston, MA 02108
(617) 624 - 5664
Email: dph-nvdrs@state.ma.us

