

DATA BRIEF: VIOLENT DEATHS IN MASSACHUSETTS

Surveillance Update, 2013

Massachusetts Violent Death Reporting System – MAVDRS Massachusetts Department of Public Health

Winter 2017

Violent deaths in Massachusetts represent a serious, but preventable public health problem.

In 2013, there were 849 violent deaths that occurred in Massachusetts. The majority of these deaths were suicides (69%), followed by homicides (17%), and deaths of undetermined intent (12%). This information was collected by the Massachusetts Violent Death Reporting System (MAVDRS) at the MA Department of Public Health. Included in the 849 violent deaths, were a number of multi-victim incidents, such as four double-homicides, seven homicide-suicide incidents, one triple homicide, and four victims of terrorism that occurred in 2013. MAVDRS provides additional information including circumstances surrounding each death or incident, toxicology of the victims, weapons used, and many other pertinent variables. This Surveillance Update of the 2013 violent deaths in Massachusetts provides communities with a clearer understanding of these serious, but preventable deaths.

| Table 1. Violent Deaths in MA (Number and Rate) and US Rates, 2013 | | | | |
|--|---------|----------------------|----------------------------------|--|
| Intent | MA N | MA Rate/ 100,000¹ | US Rate/ 100,000 ² | |
| Suicide | 585 | 8.7 | 13.0 | |
| Homicide | 148 | 2.2 | 5.1 | |
| Undetermined | 98 | 1.5 | 1.5 | |
| Legal Intervention | 12 | 0.2 | 0.2 | |
| Unintentional Firearm | 2 | | 0.2 | |
| Terrorism | 4 | | | |
| Total | 849 | 12.7 | 19.9 | |

 $^{^{1}}$ Rates are not calculated on numbers less than six and are considered unstable for counts less than 20.

The CDC defines a violent death

as a death that results from the intentional use of physical force or power against oneself, another person, or a group or community. Violent deaths include suicides, homicides, deaths due to legal intervention (excluding executions), deaths of undetermined intent, and firearm-related deaths regardless of intent.

Of the 849 Violent Deaths in MA in 2013:

- 69% were suicides.
- 17% were homicides.
- 12% were deaths of undetermined intent.
- 1% were legal intervention deaths.
- Four deaths were due to terrorsim.
- There were two unintentional firearm deaths.

CONTENTS OF THIS DATA BRIEF

- Violent Death Overview Demographics
- Suicides
 Demographics, Method Types,
 Circumstances, Toxicology
- > Homicides
 Demographics, Weapons,
 Circumstances, Victim-Suspect
 Relationships
- > Deaths of Undetermined Intent Demographics, Toxicology
- > And other variables

MAVDRS INFORMATION: http://www.mass.gov/dph/isp
CDC INFORMATION: http://www.mass.gov/dph/isp
CDC INFORMATION: http://www.mass.gov/dph/isp

 $^{^2\,} The \ U.S.$ rate was accessed from the Centers of Disease Control and Prevention, National Center for Injury Prevention and Control's Web-based Injury Statistics Query and Reporting System (WISQARS).

VIOLENT DEATHS IN MASSACHUSETTS 2013

OVERVIEW

| Table 2. Violent Death Demographics, MA 2013 | | | | |
|---|-----|---------|----------------------|--|
| | N | Percent | Rate per 100,000¹ | |
| Intent | | | | |
| Suicide | 585 | 68.9 | 8.7 | |
| Homicide | 148 | 17.4 | 2.2 | |
| Undetermined | 98 | 11.5 | 1.5 | |
| Legal Intervention | 12 | 1.4 | 0.2 | |
| Terrorism | 4 | 0.5 | | |
| Unintentional Firearm | 2 | 0.2 | | |
| Sex | | | | |
| Male | 610 | 71.8 | 18.8 | |
| Female | 238 | 28.0 | 6.9 | |
| Unknown | 1 | 0.1 | | |
| Race/Ethnicity | | | | |
| White, non-Hispanic | 644 | 75.9 | 12.6 | |
| Black, non-Hispanic | 74 | 8.7 | 15.4 | |
| Asian, non-Hispanic | 30 | 3.5 | 7.1 | |
| Hispanic | 87 | 10.2 | 12.3 | |
| Other/mixed/unknown race/ethnicity ² | 14 | 1.6 | | |
| Age Group | | | | |
| 0-14 | 18 | 2.1 | 1.6 | |
| 15-24 | 128 | 15.1 | 13.5 | |
| 25-34 | 164 | 19.3 | 17.9 | |
| 35-44 | 137 | 16.1 | 16.2 | |
| 45-54 | 166 | 19.6 | 16.6 | |
| 55-64 | 131 | 15.4 | 15.1 | |
| 65-74 | 66 | 7.8 | 12.3 | |
| 75-84 | 18 | 2.1 | 6.1 | |
| 85+ | 21 | 2.5 | 13.5 | |
| Total | 849 | 100.0 | 12.7 | |

- The youngest victim of a violent death was two months old and the oldest victim was 94 years old.
- The mean age of all victims was 43.3 years old and the median age was 43 years old.
- Eight victims of a violent death were homeless.
- Thirty-one victims were fatally injured while in custody, such as in a jail or prison. A victim is also considered "in custody" if he or she is under arrest or injured prior to arrest, in foster care, or remanded to an institution such as a juvenile detention or psychiatric hospital. It does not include voluntary commitments.
- There were 58 war veterans who were victims of a violent death.³
- Eighteen victims of a violent death were fatally injured at their workplace.

The National Violent Death Reporting System

To understand the complex circumstances surrounding violent deaths, the Centers for Disease Control and Prevention (CDC) developed a standardized database: the National Violent Death Reporting System (NVDRS). This unique system includes data not captured in other databases by linking information from multiple sources such as death certificates, medical examiner records, toxicology reports, and law enforcement records. Individually, these sources explain violence only in a narrow context; but together, they provide comprehensive answers to the questions that surround violent death. MAVDRS has been collecting data on violent deaths since 2003.

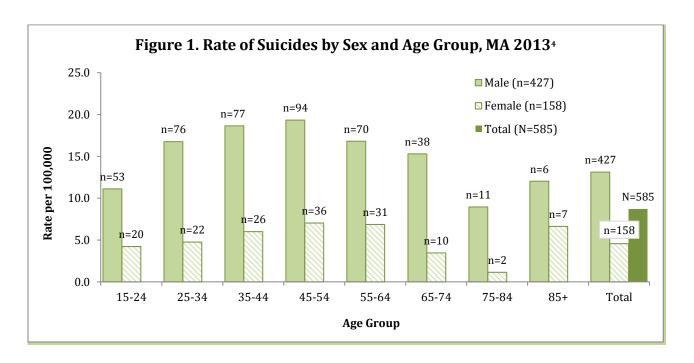
¹ Rates were not calculated for counts less than six and are considered unstable for counts less than 20.

² Rates for other/mixed/unknown race/ethnicity were not calculated due to lack of denominator information.

³ This Data Brief only includes information where the decedent was a U.S. veteran and the war in which they served was specified on the death certificate.

| Table 3. Suicide Demographics, MA 2013 | | | | |
|--|-----|---------|----------------------------------|--|
| | N | Percent | Rate per 100,000 ¹ | |
| Sex | | | | |
| Male | 427 | 73.0 | 13.1 | |
| Female | 158 | 27.0 | 4.6 | |
| Race/Ethnicity | | | | |
| White, non-Hispanic | 504 | 86.2 | 9.9 | |
| Black, non-Hispanic | 17 | 2.9 | 3.5 | |
| Asian, non-Hispanic | 20 | 3.4 | 4.7 | |
| Hispanic | 38 | 6.5 | 5.4 | |
| Other/mixed/unknown | 6 | 1.0 | | |
| race/ethnicity ² | Ü | 1.0 | | |
| Age Group | | | | |
| 0-14 | 6 | 1.0 | 0.5 | |
| 15-24 | 73 | 12.5 | 7.7 | |
| 25-34 | 98 | 16.8 | 10.7 | |
| 35-44 | 103 | 17.6 | 12.2 | |
| 45-54 | 130 | 22.2 | 13.0 | |
| 55-64 | 101 | 17.3 | 11.6 | |
| 65-74 | 48 | 8.2 | 8.9 | |
| 75-84 | 13 | 2.2 | 4.4 | |
| 85+ | 13 | 2.2 | 8.4 | |
| Total | 585 | 100.0 | 8.7 | |

- Male rates of suicides were almost three times higher than female rates.
- The youngest victim of suicide was 11 years old and the oldest victim was 94 years old.
- The mean age was 45.1 and the median age was 46 years old.
- Fifty-seven percent of suicides were among individuals aged 35 to 64 years old (n=334).
- Forty-five war veterans died by suicide. This accounted for 78% of the total violent deaths among war veterans (n=58).3
- Eighteen victims were in custody, such as a jail or prison. A victim is also considered "in custody" if he or she is under arrest or injured prior to arrest, in foster care (i.e., out of home placement), or remanded to an institution such as a juvenile detention facility, psychiatric hospital or ward, or other institution. It does not include voluntary commitments.
- Thirteen suicide victims were fatally injured at their workplace.



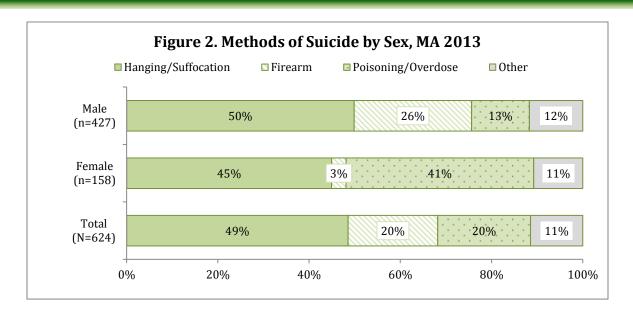
¹ Rates were not calculated for counts less than six and are considered unstable for counts less than 20.

² Rates for other/mixed/unknown race/ethnicity were not calculated due to lack of denominator information.

³ This Data Brief only includes information where the decedent was a U.S. veteran and the war in which they served was specified on the death certificate.

⁴ The 0-14 age group (n=6) is not depicted in Figure 1, but is included in the total number and rate.

METHODS USED IN SUICIDES



- The most common method of suicide was hanging/suffocation (49%, n=284).
- The second leading methods of suicide were poisoning (20%, n=119) and firearm (20%, n=115).
- Methods of suicide also varied by age group: hanging/suffocation was the most common method through age 64. Firearm and hanging/suffocation were the most common methods among those 65 and over.

LOCATIONS WHERE SUICIDES OCCUR

County of Injury

These counties had the highest **rates** of suicide:

Berkshire (17.8/100,000, n=23)

Franklin (12.6/100,000, n=9)

Barnstable (11.2/100,000, n=24)

These counties had the highest **numbers** of suicide:

Middlesex (n=112, 7.2/100,000)

Worcester (n=79, 9.7/100,000)

Essex (n=68, 8.9/100,000)

City of Injury

Of the cities with a population greater than 50,000, the highest **rates** of suicides were in:

New Bedford (13.7/100,000, n=13)

Worcester (13.1/100,000, n=24)

Somerville (12.7/100,000, n=10)

These cities had the highest **numbers** of suicide:

Boston (n=39, 6.0 /100,000)

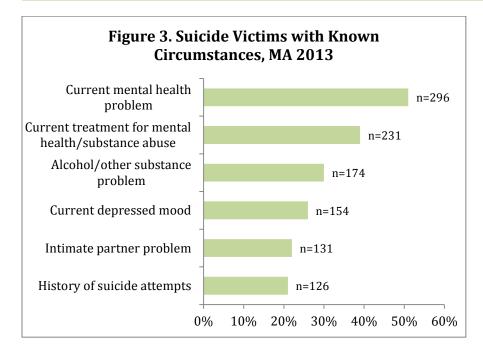
Worcester (n=24, 13.1/100,000)

Springfield (n=14, 9.1/100,000)

Places Where Suicides Occur

- The majority of suicides (70%, n=412) occurred in a house, apartment, or in its surroundings (yard, porch, driveway).
- Approximately 8% (n=44) of suicides occurred in a natural area (e.g., field, river, beaches, woods).
- Approximately 4% (n=22) of suicides occurred in a motor vehicle. Location type is classified as motor vehicle regardless of where the motor vehicle is located.

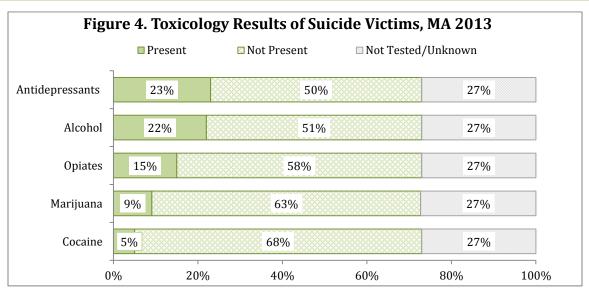
SUICIDE CIRCUMSTANCES



Of the 585 suicides, circumstance information was available for 94% (n=548) of victims. Of these victims:

- 51% were known to have a current mental health problem.
- 39% were currently being treated for a mental health or substance abuse problem.
- A larger percentage of females than males were reported to have a history of suicide attempts, current mental health problems and treatment, family or other relationship problems, and physical health problems.
- A larger percentage of males than females were reported to have a financial/job problem and intimate partner problem.

TOXICOLOGY OF SUICIDE VICTIMS



Of the 585 suicide victims, approximately 73% (n=429) were tested for alcohol, antidepressants, cocaine, opiates, and/or marijuana; Of those tested, 70% (n=301) had positive results for at least one of those substances.

- Of those suicide victims who were tested for antidepressants (n=428), 32% tested positive at the time of their death (n=135).
- Among the suicide victims who had a positive test result for alcohol (n=130), 79% had a blood alcohol concentration (BAC) of 0.041 or higher (n=103).1
- Over half (55%) of victims whose BAC was greater than 0.08 were in the age group of 21-44 (n=47).

¹ Caution should be used when interpreting BAC due to variation in time among ingestion of alcohol, time of death, and drawing of blood for testing which will affect the outcome of the test. BAC of 0.04% or less could be due to decomposition rather than ingestion of alcohol.

HOMICIDES

DEMOGRAPHICS

| Table 4. Homicide Demographics, MA 2013 | | | | |
|---|-----|---------|-------------------------------|--|
| | N | Percent | Rate/ 100,000 ¹ | |
| Sex | | | | |
| Male | 112 | 75.7 | 3.4 | |
| Female | 36 | 24.3 | 1.0 | |
| Race/Ethnicity | | | | |
| White, non-Hispanic | 53 | 35.8 | 1.0 | |
| Black, non-Hispanic | 46 | 31.1 | 9.6 | |
| Asian, non-Hispanic | 5 | 3.4 | | |
| Hispanic | 39 | 26.4 | 5.5 | |
| Age Group | | | | |
| 0-14 | 9 | 6.1 | 0.8 | |
| 15-24 | 43 | 29.1 | 4.5 | |
| 25-34 | 45 | 30.4 | 4.9 | |
| 35-44 | 16 | 10.8 | 1.9 | |
| 45-54 | 13 | 8.8 | 1.3 | |
| 55-64 | 10 | 6.8 | 1.2 | |
| 65-74 | 7 | 4.7 | 1.3 | |
| 75-84 | 1 | 0.7 | | |
| 85+ | 4 | 2.7 | | |
| Total | 148 | 100.0 | 2.2 | |

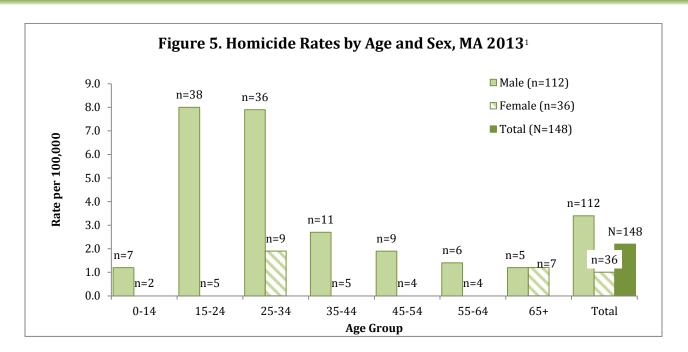
- Male rates of homicide were 3.3 times higher than female rates.
- The youngest victim of a homicide was two months old and the oldest victim was 90 years old.
- The mean age was 33.8 and the median age was 28 years old for homicide victims.
- There were seven war veterans who were victims of homicide.²
- Additionally, two victims were fatally injured while in custody, such as in a jail or prison. A victim is also considered "in custody" if he or she is under arrest, injured prior to arrest, in foster care, or remanded to an institution such as a juvenile detention facility, or psychiatric hospital.
- Black, non-Hispanics accounted for 31% of homicide victims (n=46), although they make up 7% of the Massachusetts population.
- Hispanics accounted for approximately 26% of homicide victims (n=39) although they make up 11% of the Massachusetts population.

| Table 5. Homicides by Race/Ethnicity and Sex, MA 2013 | | | | | | |
|---|------|---------|----------------------|--------|---------|----------------------|
| | Male | | | Female | | |
| | N | Percent | Rate per 100,000¹ | N | Percent | Rate per 100,000¹ |
| White, non-Hispanic | 30 | 26.8 | 1.2 | 23 | 63.9 | 0.9 |
| Black, non-Hispanic | 42 | 37.5 | 18.1 | 4 | 11.1 | |
| Asian, non-Hispanic | 4 | 3.6 | | 1 | 2.8 | |
| Hispanic | 33 | 29.5 | 9.4 | 6 | 16.7 | 1.7 |
| Other/Unknown Race | 3 | 2.7 | | 2 | 5.6 | |
| Total | 112 | 100.0 | 3.4 | 36 | 100.0 | 1.0 |

- Black, non-Hispanics had the **highest** homicide rate among males (18.1/100,000) and Hispanics had the highest rate among females (16.7/100,000).
- White, non-Hispanics had the **lowest** homicide rate for both males and females (1.2/100,000 and 0.9/100,000, respectively).

¹ Rates were not calculated for counts less than six and are considered unstable for counts less than 20.

² This Data Brief only includes information where the decedent was a U.S. veteran and the war in which they served was specified on the death certificate.



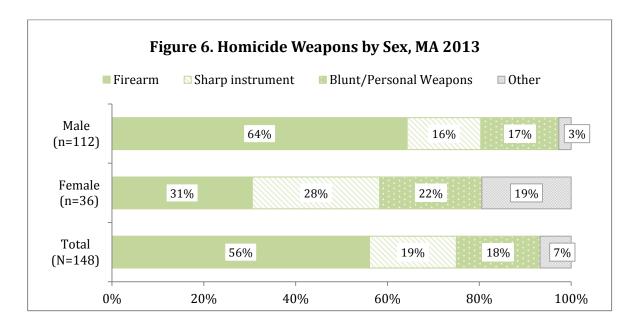
- The highest homicide rate by age group was among 15-24 year olds (4.5/100,000, n=43) and 25-34 year olds (4.9/100,000, n=45). The rate for both of these age groups was **twice** the overall statewide rate of 2.2/100,000.
- The highest **male** homicide rate by age group were among 15-24 year olds (8.0/100,00, n=38) and 25-34 year olds (7.9/100,00, n=36). The rates for both of these age groups was over **twice** the male statewide rate of 3.4/100,000 and over **three and a half times higher** than the overall statewide rate of 2.2/100,000.
- Female homicide rates were only able to be calculated for ages 25-34 which had the highest number of all age groups (n=9). The rate was 1.9/100,000 which was almost twice the state rate for female homicides.
- For the 15-24 age group, the homicide rate for black males (37.7/100,000) was 21 times higher than the rate for white males (1.8/100,000) and the rate for Hispanic males (20.4/100,000) was 11 times higher than white males (not depicted).

BIRTH COUNTRY OF HOMICIDE VICTIMS

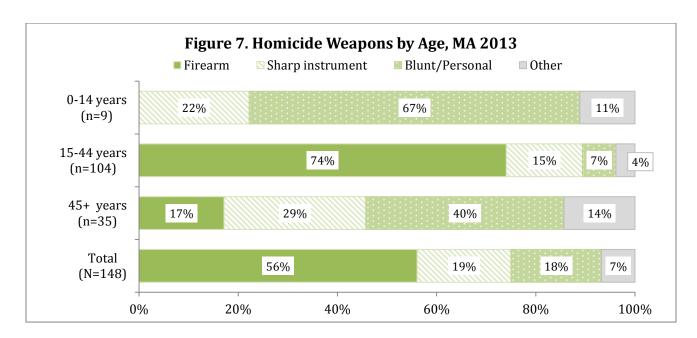
- 87% of victims were born in the U.S.
- 64% of victims were born in Massachusetts.
- 8% of victims were born in Mexico, Central America, South America, or the Caribbean.
- 5% of victims were born in other countries including China, Cape Verde, India, and the Philippines.

| Table 6. Birth Country of Homicide Victims, MA 2013 | | | | |
|--|-----|---------|--|--|
| Victim's Country of Birth | N | Percent | | |
| U.S. States and Territories | 129 | 87% | | |
| Mexico, Central America, South America, and the Caribbean | 12 | 8% | | |
| Other countries | 7 | 5% | | |

¹ Rates were not calculated for counts less than six and are considered unstable for counts less than 20.



- Across the state, firearms were the most commonly used weapon in homicides (56%, n=83).
- Of firearm homicides, most (70%, n=58) had information regarding the type of firearm. Of these homicides, handguns were the most prevalent type of firearm used (97%). Handguns include semi-automatic pistols, revolvers, and other types.
- "Other" weapons include hanging/suffocation, motor vehicles, drowning, falls.
- "Personal weapons" refer to the use of hands and feet.



• There were no firearm homicides among the 0-14 age group.

| Table 7. Homicides by County of Injury, MA 2013 | | | | |
|--|-----|---------|-------------------|--|
| County | N | Percent | Rate/ 100,000² | |
| Barnstable | 3 | 2.2 | | |
| Berkshire | 1 | 0.7 | - | |
| Bristol | 11 | 7.9 | 2.0 | |
| Dukes | 0 | 0.0 | 0.0 | |
| Essex | 10 | 7.2 | 1.3 | |
| Franklin | 0 | 0.0 | 0.0 | |
| Hampden | 25 | 18.0 | 5.3 | |
| Hampshire | 0 | 0.0 | 0.0 | |
| Middlesex | 15 | 10.8 | 1.0 | |
| Nantucket | 0 | 0.0 | 0 | |
| Norfolk | 5 | 3.6 | 0.7 | |
| Plymouth | 9 | 6.5 | 1.8 | |
| Suffolk | 45 | 32.4 | 5.9 | |
| Worcester | 15 | 10.8 | 1.9 | |
| Total MA | 139 | 100.0 | 2.1 | |
| Out of State | 7 | | | |
| Unknown | 2 | | | |
| Total | 148 | | | |

- Accounting for 32% of homicides, Suffolk County, which includes Boston, had the highest number (n=45) as well as the highest rate (5.9/100,000). This rate is almost three times higher than the state rate of 2.2/100,000.
- Two counties' rates were higher than the state rate: Suffolk and Hampden. Hampden includes the city of Springfield which had the highest rate of homicide (13.6/100,000, n=21) of any city.
- Other cities with high rates of homicide were Brockton (8.5/100,000, n=8) and New Bedford (6.3/100,000, n=6), Boston (6.0/100,000 n=39) and Worcester (6.0/100,000 n=11).
- The majority of homicides (43%, n=64) occurred in a place of residence.¹
- Tweny-six percent (n=38) occurred on a street/road, sidewalk, or alley.

HOMICIDE CIRCUMSTANCES

| Table 8. Known Circumstances associated with Homicide Victims, MA 2013 | | | | |
|--|-----|---------|--|--|
| Total Number of Homicides | 1 | 48 | | |
| Number of Homicides with Circumstance Information | 122 | | | |
| Circumstances | N | Percent | | |
| Argument/conflict | 30 | 20.3 | | |
| Precipitated by another crime | 27 | 18.2 | | |
| Precipitated crime was in progress at time of homicide | 22 | | | |
| Drug-related | 21 | 14.2 | | |
| Gang-related | 19 | 12.8 | | |
| Intimate partner violence-related | 18 | 12.2 | | |

Of the homicide victims, at least one circumstance was known for 82% of victims (n=122).

- Twenty percent of homicides were precipitated by an argument/conflict.
- Eighteen percent were precipitated by another crime. These crimes include:
 - o robbery/burglary (n=10)
 - o assault/homicide (n=7)
 - o drug trade (n=6)
- The most frequently noted circumstance for males was argument/conflict (22%, n=25).
- The most frequently noted circumstance for **females** was intimate partner violence-related (39%, n=14).

¹ "Residence" refers to a house or apartment, including the surrounding areas: driveway, porch, yard, and garage.

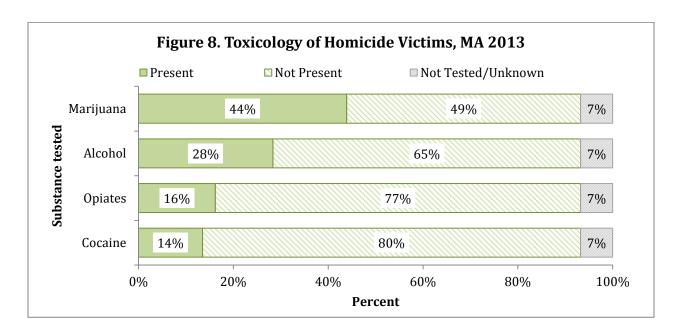
² Rates were not calculated for counts less than six and are considered unstable for counts less than 20.

HOMICIDES

VICTIM-SUSPECT RELATIONSHIP IN HOMICIDE INCIDENTS

- There were 115 homicide victims with supect information available, such as suspect demographics. Of these victims, 89% (n=103) involved one suspect and 10% (n=12) involved muliple suspects.
- There were 91 known relationships between the victim and suspect. *In the majority of these cases, the victim and suspect were known to each other.* Of these identified suspects:
 - 16% (n=15) were a current or former intimate partner.
 - o 16% (n=15) of suspects were a family member or a caregiver of the victim (including the boyfriend of a child's mother but not the father of the child).
 - o 57% (n=52) of suspects were someone else known to the victim.

TOXICOLOGY OF HOMICIDE VICTIMS



- Among the 148 homicide victims, approximately 93% of victims (n=138) were tested for marijuana, opiates, cocaine, and/or alcohol (blood alcohol concentration BAC).¹
- Of the homicide victims who were tested, 47% (n=65) tested positive for marijuana, 30% (n=42) tested positive for alcohol, 17% (n=24) tested positive for opiates, and 14% (n=20) tested positive for cocaine.
- Among the homicide victims who tested positive for alcohol, 79% had a BAC of 0.041 or higher (n=33).
- Sixty-four percent of homicide victims who were positive for alcohol had a BAC result of 0.08 or over (n=27), which is over the legal limit for operating a motor vehicle in Massachusetts. Of those, the majority of victims (59%) were between the ages of 21 and 44 (n=16).

¹ Caution should be used when interpreting BAC due to variation in time among ingestion of alcohol, time of death, and drawing of blood for testing which will affect the outcome of the test. BAC of 0.04% or less could be due to decomposition rather than ingestion of alcohol.

DEATHS OF UNDETERMINED INTENT

DEMOGRAPHICS

| Table 9. Deaths of Undetermined Intent Demographics, MA 2013 | | | | |
|---|----|---------|-------------------|--|
| | N | Percent | Rate/ 100,000² | |
| Sex | | | | |
| Male | 55 | 56.1 | 1.7 | |
| Female | 42 | 42.9 | 1.2 | |
| Unknown | 1 | 1.0 | - | |
| Race/Ethnicity | | | | |
| White, non-Hispanic | 79 | 80.6 | 1.6 | |
| Black, non-Hispanic | 6 | 6.1 | 1.3 | |
| Asian, non-Hispanic | 4 | 4.1 | | |
| Hispanic | 7 | 7.1 | 1.0 | |
| Other/mixed/unknown | 2 | 2.0 | | |
| race/ethnicity³ | L | 2.0 | | |
| Age Group | | | | |
| 0-14 | 2 | 2.0 | | |
| 15-24 | 6 | 6.1 | 0.6 | |
| 25-34 | 16 | 16.3 | 1.7 | |
| 35-44 | 14 | 14.3 | 1.7 | |
| 45-54 | 21 | 21.4 | 2.1 | |
| 55-64 | 20 | 20.4 | 2.3 | |
| 65-74 | 11 | 11.2 | 2.0 | |
| 75-84 | 4 | 4.1 | | |
| 85+ | 4 | 4.1 | - | |
| Total | 98 | 100.0 | 1.5 | |

- The youngest undetermined intent victim was one year old and the oldest victim was 91 years old.
- The mean age was 49.2 years old and the median age was 50 years old.
- There were five war veterans whose deaths were of undetermined intent.¹
- Approximately 72% (n=71) victims were between the ages of 25-64 years old.
- Worcester County had the highest rate of deaths of undetermined intent (2.8/100,000, n=23).

WEAPON TYPES OF UNDETERMINED INTENT DEATH VICTIMS

- Poisonings (drug overdoses) accounted for the most (46%) deaths of undetermined intent across the state (n=45). It was the leading weapon type for both males (40%, n=18) and females (58%, n=26).
- Other weapons for undetermined intent deaths include blunt instrument (21%, n=21), drowning (16%, n=16), and other/unknown (16%, n=16). "Other" weapons include falls, transport vehicles, firearms, sharp instruments, fire/burns, and hanging/suffocation.

TOXICOLOGY OF UNDETERMINED INTENT DEATH VICTIMS

- Of the 98 undetermined intent victims, 82% (n=80) were tested for alcohol, cocaine, opiates, marijuana, and/or antidepressants. Of the victims who were tested, 43% tested positive for antidepressants (n=34), 35% tested positive for alcohol (n=28), 31% tested positive for opiates (n=25), and 29% tested positive for benzodiazepines (n=23).
- Of the victims who tested positive for alcohol (n=28), 64% had a BAC of 0.041 or higher (n=18).

¹ This Data Brief only includes information where the decedent was a U.S. veteran and the war in which they served was specified on the death certificate.

² Rates were not calculated for counts less than six and are considered unstable for counts less than 20.

³ Rates for other/mixed/unknown race/ethnicity were not calculated due to lack of denominator information.

MAVDRS METHODOLOGY

The National Violent Death Reporting System (NVDRS) is a CDC-funded system in 32 states that links data from death certificates, medical examiner files, and police reports to provide a more complete picture of the circumstances surrounding violent deaths. MAVDRS operates within the Injury Surveillance Program (ISP) at the MA Department of Public Health (DPH). MAVDRS captures all violent deaths (homicides, suicides, deaths of undetermined intent, and all firearm deaths) occurring in MA and has been collecting data since 2003. Data reported are for calendar year and were analyzed by ICD-10 code and is used to establish the final database for all cases meeting the NVDRS case definition.

RATES

Rates were not calculated for counts less than six and are considered unstable for counts less than 20. Rates for other/mixed race were not calculated due to lack of denominator information. In calculating rates for race, Hispanic origin, sex, age group, and county, 2013 population estimates were used from the National Center for Health Statistics vintage 2013 postcensal estimates of the resident population of the United States (April 1, 2010, July 1, 2010-July 1, 2013), by year, county, single-year of age (0, 1, 2, .., 85 years and over), bridged race, Hispanic origin, and sex. Prepared under a collaborative arrangement with the U.S. Census Bureau. Available from: http://www.cdc.gov/nchs/nvss/bridged_race.htm as of June 26, 2014, following release by the U.S. Census Bureau of the unbridged Vintage 2013 postcensal estimates by 5-year age group on June 26, 2014.

City/town rates are calculated using Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2013, U.S. Census Bureau, Population Division Release Dates: For the United States, regions, divisions, states, and Puerto Rico Commonwealth, December 2013. For counties, municipios, metropolitan statistical areas, micropolitan statistical areas, metropolitan divisions, and combined statistical areas, March 2014. For Cities and Towns (Incorporated Places and Minor Civil Divisions), May 2014. http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

U.S. injury rates and U.S. popuation were accessed from Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) available from: http://www.cdc.gov/injury/wisqars/index.html

LOCATIONS WHERE FATAL INJURIES OCCUR

MAVDRS collects detailed information regarding the location of where the fatal injury occurred: the place (such as home, street, etc), the street address, city, county, and state. MAVDRS also collects data on place of death (such as emergency room, home, etc) but not the city where the actual death occurred. For purposes of this report, all tables, figures, and bullets that mentions any location refers to the location where the fatal injury occurred.

MAVDRS

MASSACHUSETTS VIOLENT DEATH REPORTING SYSTEM

Injury Surveillance Program (ISP)

Bureau of Community Health and Prevention (BCHAP)
Massachusetts Department of Public Health (DPH)
250 Washington Street, 4th Floor
Boston, MA 02108
(617) 624 – 5664
For general injury information: (617) 624 – 5648

http://www.mass.gov/dph/isp

More information regarding NVDRS and the CDC can be found at: <u>www.cdc.gov/ViolencePrevention/NVDRS/index.html</u>

This publication was supported by cooperative agreement #U17/CE002606 from the CDC. Its contents are solely the responsibility of the authors and do not represent the official views of the CDC.