Connecticut Violent Death Reporting System 2016 Annual Report



Connecticut Department of Public Health Commissioner Renée D. Coleman-Mitchell, MPH

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Introduction

The National Violent Death Reporting System (NVDRS) is a state-based federal surveillance system that aggregates data on the characteristics and circumstances associated with violent deaths from multiple sources into one anonymous database. The purpose of the NVDRS is "to assist the development, implementation, and evaluation of programs and strategies designed to reduce and prevent violent deaths at the national, state and local levels" (Fowler et al., 2018).

In 2002, Centers for Disease Control and Prevention (CDC) initiated the NVDRS with its first appropriation from Congress. The states of Massachusetts, Maryland, New Jersey, Oregon, South Carolina and Virginia were chosen to begin collecting data for entry into the reporting system. Since 2002, NVDRS has expanded several times to include new states. In 2014, the Connecticut Department of Public Health (CTDPH) was awarded CDC funds for a five-year period to establish the Connecticut Violent Death Reporting System (CTVDRS). In 2015, CTDPH began collecting data on violent deaths. In 2016 (the data collection period for this report), 40 U.S. states participated in the NVDRS.

According to the NVDRS specifications, the definition of a violent death is "a death that results from the intentional use of physical force or power, threatened or actual, against oneself, another person, or a group or community. The person using the force or power need only have intended to use force or power; they need not have intended to produce the consequence that actually occurred" (CDC, 2015). Based on this definition, violent deaths include homicides, suicides, legal intervention deaths, unintentional firearm deaths, and deaths of undetermined intent.

The major sources of violent death data for the CTVDRS are the Office of the Chief Medical Examiner (OCME) (autopsy, investigator, and toxicology data), death certificates from the CTDPH Office of Vital Records, and law enforcement reports that include Supplementary Homicide Reports. Participating NVDRS states are required to collect data on all violent deaths occurring within their boundaries irrespective of the decedent's place of residence.

The NVDRS includes over 600 unique data elements that provide valuable context about violent deaths. Categories of variables analyzed in the NVDRS include: manner of death, mechanism of injury, toxicology findings, whether the decedent was a victim, information about any known suspect, incident, and type of incident, and circumstances preceding injury. Circumstances variables are categorized by manner of death: all manners of death; homicide/legal intervention deaths; suicide and undetermined intent deaths; and unintentional firearm deaths. Circumstances are events that precede or are determined to be related to a person's death. Circumstances provide a context for the violent death and help to inform prevention activities. In general, the vast majority of suicides reported in the CTVDRS have circumstances of death, but a smaller proportion of homicides have circumstances listed. It should be noted that if a circumstance is not endorsed, it does not mean that the circumstance was not present. It means that circumstances were not listed in at least one of the required source documents (i.e., law enforcement report or coroner/medical examiner report). Reasons why circumstances may be unknown vary. For example, circumstances may be unavailable because the investigating agencies chose not to share information or the investigating agency was unable to determine the circumstances surrounding the death.

Violent Deaths in Connecticut

In 2016, Connecticut had 493 violent death cases: 389 suicides, 85 homicides, 17 deaths of undetermined intent, 1 legal intervention, and 1 unintentional firearm death.

Death by suicide was the most prevalent type of violent death (79%) in Connecticut, followed by homicide (17%), undetermined intent (3%), legal intervention (0.2%), and unintentional firearm (0.2%). Men were more than twice as likely (20 per 100,000 Connecticut population) as women (8 per 100,000 Connecticut population) to be a victim of a violent death. Non-Hispanic Blacks had the highest rate of a violent death when compared to all other race/ethnicities (Table 1). The 50-59 year old age group had the highest rate of violent death (21.7 deaths per 100,000 Connecticut population) for 2016 (Table 2).

For all 2016 violent deaths, the crude violent death rate was 13.8 persons per 100,000 Connecticut population¹ and the age-adjusted violent death rate was 12.8 persons per 100,000. For all manners of death, gender and race/ethnicity, the age-adjusted death rates were below the NVDRS states' death rates (Table 1).² Connecticut had a lower crude rate (13.8 deaths per 100,000) and age-adjusted rate (12.8 per 100,000) for overall violent deaths than the NVDRS states which had a crude rate of 21.27 deaths per 100,000 and an age-adjusted rate of 20.87 deaths per 100,000.

Table 1
Violent Deaths in Connecticut, 2016

	Number	Percent*	Connecticut crude rate/	Connecticut age adj. rate/	NVDRS States crude rate/ 100,000**	NVDRS state age adj. rate/
Manner of Death						
Suicide	389	78.90	10.88	9.78	13.12	12.61
Homicide	85	17.24	2.38	2.52	5.29	5.42
Legal						
Intervention	1	0.20	0.03	0.02	0.25	0.26
Undetermined Intent	17	3.45	0.48	0.46	2.26	2.23
Unintentional Firearm	1	0.20	0.03	0.03	0.15	0.15
Gender						
Male	349	70.79	19.99	18.74	33.17	32.61
Female	144	29.21	7.87	7.33	9.79	9.64
Race/Ethnicity						
Non-Hispanic White	375	76.06	15.30	13.36	20.92	19.97
Hispanic	40	8.11	7.11	7.19	12.99	13.11
Non-Hispanic Black	68	13.79	17.84	17.08	31.51	30.54
Asian	9	1.83	5.24	4.91	9.17	8.87
Total	493	100.00	13.78	12.81	21.27	20.87

^{*} When the numerator is less than 20, the rates should be interpreted with caution due to the instability of rates.

^{** 2016} NVDRS states are: AK, AZ, CO, CT, GA, HI, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, NC, NH, NJ, NM, NY, OH, OK, OR, PA, RI, SC, UT, VA, VT, WA and WI. Population = 187,525,906

¹ Used Connecticut 2016 Census data; pop. 3,576,452

² https://www.cdc.gov/injury/wisqars/index.html

Table 2
Violent Deaths in Connecticut - Age-Specific, 2016

Age group (years)	Number	Percent	Age-Specific rate/ 100,000
< 20	30	6.1	3.5
20-29	81	16.4	17.3
30-39	81	16.4	18.6
40-49	57	11.6	12.4
50-59	119	24.1	21.7
60-69	73	14.8	17.4
70+	52	10.6	13.4
Total	493	100.0	n/a

Decedents ranged in age from 2 years old to 94 years old. The average age for violent death in Connecticut was 46.8 years old. The median (middle of ranked order) age of violent death in Connecticut was 49 years old and the most frequent age (mode) of violent death in Connecticut was 53 years old.

Twelve decedents were reported to have served in the military. However, military service was not consistently collected on all decedents and, therefore, it is difficult to verify whether these ten deaths represent all possible military personnel who died by violent death in 2016.

In 2016, the five most frequent places in Connecticut where a fatal injury occurred were: within a home or apartment (n=323), natural areas (e.g., field, river, beaches, woods, n= 34), motor vehicles (excluding buses, public transportation, n=30), street/road (n=24), and parking lot/public garage (n=14).

Suicide

In 2016, 389 individuals died by suicide in Connecticut. Suicides were the primary cause of violent death in Connecticut, accounting for 79% of violent deaths. There were 10.9 suicides per 100,000 Connecticut population. The 2016 age-adjusted suicide rate for Connecticut was 9.8 deaths per 100,000 population.

Characteristics of Individuals Who Died by Suicide

Eighty-seven percent of the people who died by suicide were non-Hispanic Whites, approximately 6% were non-Hispanic Black, 5% were Hispanic, and 2% were Asian (Table 3). Age 53 was both the median age and the most frequent age of people who died by suicide.

Nearly seventy percent (n = 271) of those who died by suicide were males. The median age for males was 53 years old and the most frequent age was 57 years old. The ages for males ranged from 14 to 91 years old. Eighty-six percent of the male decedents were non-Hispanic White, 6% were Hispanic, 6% were Non-Hispanic Black and 2% were Asian.

Thirty percent (n = 118) of those who died by suicide were females. The median age for females was 51 years old, and the most frequent age was 48 years old. The ages for females ranged from 14 to 86 years old. Eighty-nine percent of the female decedents were non-Hispanic White, 6% were non-Hispanic Black, 3% were Hispanic, and 2% were Asian. It is important to note that the Connecticut female crude rate (6.45) and age-adjusted rate (5.82) per 100,000 population are slightly higher than the NVDRS states rates, 5.96 and 5.76 per 100,000, respectively.

Table 3
Suicide Deaths in Connecticut, 2016

Gender	Number	Percent*	Connecticut crude rate/ 100,000*	Connecticut age adj. rate/ 100,000*	NVDRS States crude rate/ 100,000**	NVDRS States age adj. rate/ 100,000**
Male	271	69.67	15.52	14.16	20.54	19.97
Female	118	30.33	6.45	5.82	5.96	5.76
Race/Ethnicity						
Non-Hispanic White	338	86.89	13.79	11.83	15.96	14.97
Hispanic	21	5.40	3.79	3.95	6.28	6.59
Non-Hispanic Black	22	5.66	5.77	5.89	5.76	5.65
Asian	8	2.06	4.65	4.38	6.68	6.44
Total	389	100.00	10.88	9.78	13.12	12.61

^{*} When the numerator is less 20, the rates should be interpreted with caution due to the instability of rates.

Among all suicides, the greatest crude rate occurred in the 50-59 year old age group with slightly lower rates in the 60-69 year olds (Table 4). There was a slight reduction in the suicides among both men and women in their 40's. Women had lower rates of suicide in every age group when compared to men (Figure 1).

Table 4
Suicide Deaths in Connecticut - Age-Specific, 2016

Age group (years)	Number	Percent	Age-Specific rate/ 100,000*
< 20	13	3.3	1.5
20-29	47	12.1	10.0
30-39	60	15.4	13.8
40-49	49	12.6	10.7
50-59	105	27.0	19.2
60-69	69	17.7	16.4
70+	46	11.8	11.8
Total	389	100.0	n/a

^{*} When the numerator is less than 20, the rates should be interpreted with caution due to the instability of rates.

^{** 2016} NVDRS states are: AK, AZ, CO, CT, GA, HI, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, NC, NH, NJ, NM, NY, OH, OK, OR, PA, RI, SC, UT, VA, VT, WA and WI. Population = 187,525,906

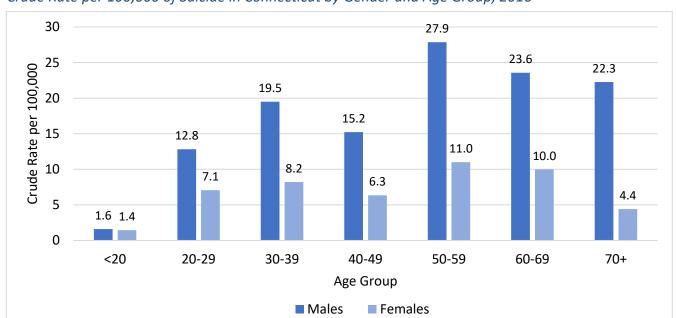


Figure 1
Crude Rate per 100,000 of Suicide in Connecticut by Gender and Age Group, 2016

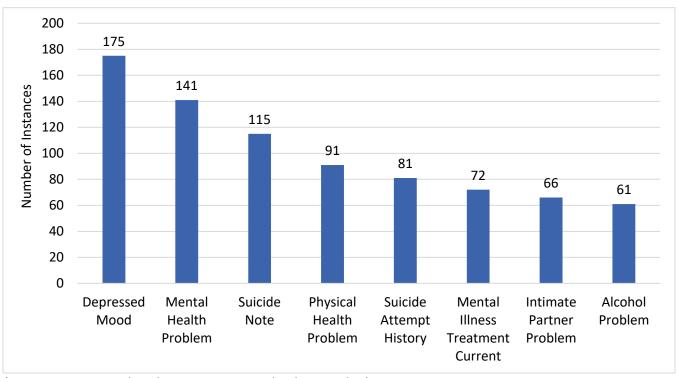
Leading Circumstances of Suicide Deaths

Ninety-four percent (n=364) of those who died by suicide had known circumstances surrounding the incident. Figure 2 shows the leading circumstances for suicide. Individuals had between 2 and 10, with an average of 4.5 (SD=1.8) circumstances leading to suicides.

Circumstances surrounding a death are recorded by the medical examiner and law enforcement officials. More than one circumstance may be listed for each suicide. The top circumstances recorded for people who died by suicide in Connecticut (all ages) were: 1) a depressed mood, 2) a mental health problem, 3) history of mental illness, and 4) physical health problem (Figure 2). Thirty-two percent of decedents left a suicide note.

Figure 3 shows the circumstances of suicide death by gender. Depression was the most common diagnosis among both males and females of all ages. Females had a higher rate of mental health circumstances (depression, mental illness, current or history of mental illness treatment) than males. More males had intimate partner problems, such as separation or divorce, and alcohol abuse as circumstances.

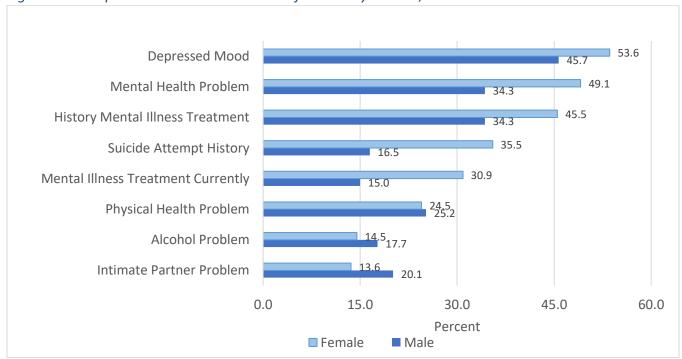
Figure 2
Eight Most Frequent Known Circumstances of Suicide in Connecticut, 2016*



^{*}In some instances, decedents were reported to have multiple circumstances.

Figure 3

Eight Most Frequent Known Circumstances of Suicide by Gender, 2016*

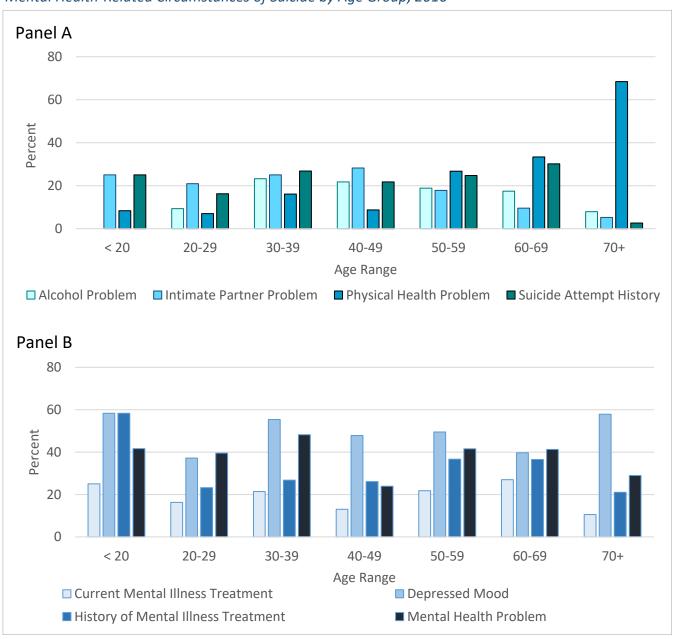


^{*} In some instances, decedents were reported to have multiple circumstances.

Figure 4 shows the eight most frequent circumstances of suicide by age group. The circumstances are shown below in two graphs – the top panel (A) shows non-mental health circumstances and the bottom panel (B) shows mental health-related circumstances. Depression was the most frequently listed circumstance of suicide in almost every age group. A physical health problem appears as the most prevalent circumstance of suicide after age 50, and was the dominant circumstance among the 70+ group. Among the youngest age group (<20), a history of mental health treatment was also reported as a frequent circumstance of suicide. In addition, intimate partner problems are indicated as a top circumstance for less than 20 year olds and again for the 30 -39 year olds and the 40-49 year olds. For the younger age group (< 20), this is mainly due to a breakup with a boyfriend or girlfriend. For the 30+ age groups, this is mainly due to marital separation and divorce.

Figure 4

Mental Health-Related Circumstances of Suicide by Age Group, 2016

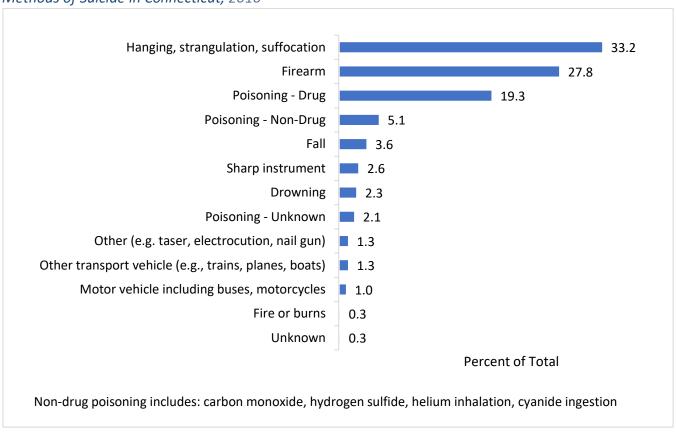


Methods of Suicide Deaths

Suicide death by asphyxia due to hanging/suffocation was the leading method of suicide (33%) among Connecticut decedents, followed by firearms (28%) and poisonings by drug overdose (19%) (Figure 5).

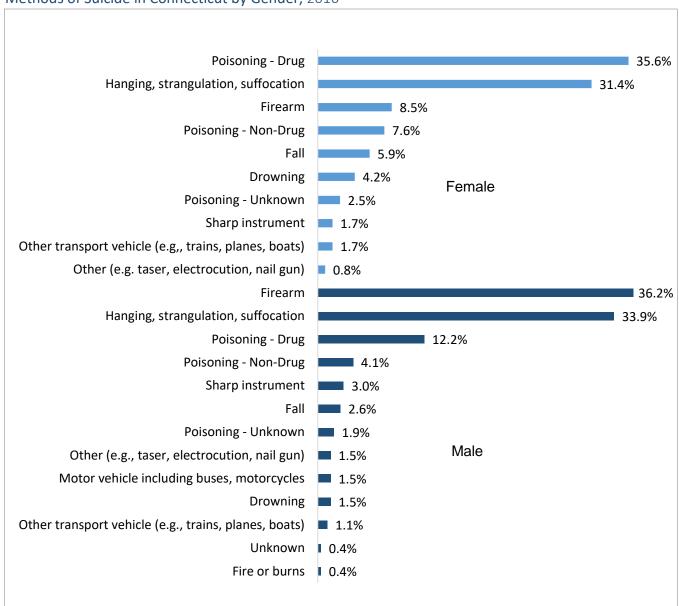
Figure 5

Methods of Suicide in Connecticut, 2016



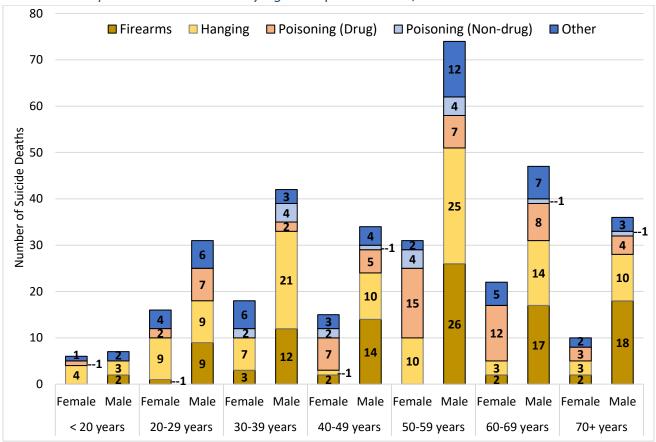
A closer examination of suicide methods shows some differences by gender (Figure 6). Males are more likely to die from firearms (36%) and females are more likely to die by drug poisoning (36%).





For both males and females, the highest number of suicides occurred in the 50-59 year old age group (Figure 7). In this age group, the most frequent method was drug poisoning for females (n=15) and firearms for males (n=26). Hanging/strangulation was the most frequent method for both males and females younger than 40 years old. For decedents 40 years of age and older, firearms was the most frequent method of suicide for males, and poisoning by drug was the most frequent method of suicide for females.

Figure 7
Four Most Frequent Suicide Methods by Age Group and Gender, 2016



Location of Injury Leading to Suicide Death

New Haven County had the highest number of suicides (n=95) and Windham county had the highest crude rate of suicides (18.01) (Table 5). Table 6 shows Connecticut cities with at least four suicide deaths.

Table 5
Connecticut Counties with Suicide Deaths, 2016

County of Injury	Number of suicides	Crude rate per 100,000
Windham	21	18.01
Tolland	26	17.17
New London	36	13.24
Litchfield	24	13.07
New Haven	95	11.05
Fairfield	86	9.07
Hartford	83	9.27
Middlesex	15*	9.14

Three sites of injury leading to suicide death occurred outside of Connecticut (Dutchess NY, Hampden MA, and Westchester NY).

^{*}When the numerator is less 20, the result should be interpreted with caution due to the instability of rates.

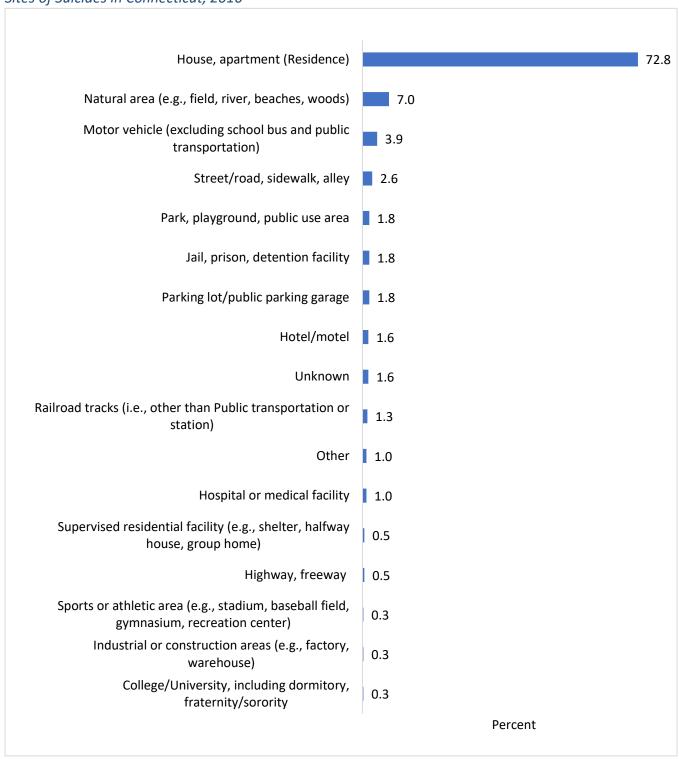
Table 6
Connecticut Cities with Suicide Rates >10 per 100,000, 2016

Injury City	City Population	Number of Suicides*	Crude Rate per 100,000
Woodstock	7,838	4	51.0
Ellington	15,916	6	37.7
New Fairfield	14,126	5	35.4
East Haven	28,935	6	20.7
Vernon	28,959	6	20.7
New Canaan	20,387	4	19.6
Naugatuck	31,538	6	19.0
Milford	53,592	9	16.8
Enfield	44,323	7	15.8
Wallingford	44,893	7	15.6
Manchester	58,007	9	15.5
Bristol	60,452	9	14.9
Shelton	41,296	6	14.5
Torrington	34,906	5	14.3
Branford	28,145	4	14.2
Waterbury	108,802	15	13.8
Windsor	29,016	4	13.8
Cheshire	43,817	4	13.7
New Britain	72,808	10	13.7
Southington	29,262	6	13.7
Danbury	84,657	10	11.8
Stamford	128,874	14	10.9
Trumbull	36,628	4	10.9
Groton	39,692	4	10.1

^{*}When the numerator is less 20, the result should be interpreted with caution due to the instability of rates.

The most frequent site of suicide occurred at a residence (n=281, 73%) (Figure 8).

Figure 8
Sites of Suicides in Connecticut, 2016



Toxicology of Individuals Who Died by Suicide

Of the 389 suicides, toxicology reports were available for 273 deaths. All of the poisoning by drug overdose deaths (n=75) had toxicology reports but only 198 of the remaining 314 (63%) other suicide deaths had toxicology reports. Figure 9 shows the percent of decedents who tested positive for each substance. Opiates and antidepressants were found in almost half of the poisoning by drug overdose decedents. In contrast, alcohol was the most common substance found in those who died by other means. Of the 66 decedents with alcohol present, 37 (56%) were over the legal limit of 0.08.

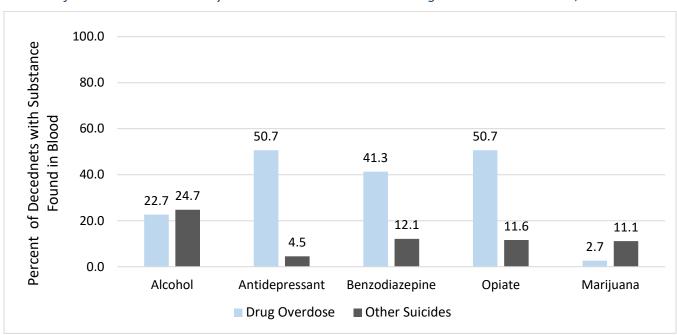


Figure 9

Percent of individuals who died by suicide who had Alcohol or Drugs Present Connecticut, 2016

Homicide

In 2016, there were 86 homicides (including 1 legal intervention) accounting for 17% of the violent deaths in Connecticut. There were 2.4 homicides per 100,000 CT population. The 2016 age-adjusted homicide rate for Connecticut was 2.5 deaths per 100,000 population.

Characteristics of Individuals Who Died By Homicide

Forty-nine percent of the people who died by homicide were non-Hispanic Black and 29% were non-Hispanic White, 20% were Hispanic, and 1% were Asian (Table 7).

Seventy-seven percent (n=66) of homicide decedents were males. The median age for males was 29 years old and the most frequent age was 22 years old. The ages for the male decedents ranged from 4 years old to 94 years old. Twenty-four percent of the male decedents were non-Hispanic White, 20% were Hispanic, and 55% were non-Hispanic Black.

Twenty-three percent (n=20) of the homicide decedents were females. The median age for females was 38 years old and the most frequent age was 22 years old. The ages of the female decedents ranged

from 2 years old to 73 years old. Of the female victims, 45% were non-Hispanic White, 30% were non-Hispanic Black, 20% were Hispanic and 5% were Asian.

There were eight decedents under the age of 18 that died by homicide. The highest age-adjusted rate of homicide occurred in the 20-29 year old age group (Table 8). This was true for both genders (Figure 10).

Table 7
Homicide Decedents in Connecticut, 2016

	Number	Percent*	Connecticut crude rate/ 100,000*	Connecticut age adj. rate/ 100,000*	NVDRS States crude rate/ 100,000**	NVDRS state age adj. rate/ 100,000**
Gender						
Male	66	76.7	3.78	3.94	8.51	8.57
Female	20	23.3	1.09	1.15	2.19	2.25
Race/Ethnicity						
Non-Hispanic White	25	29.07	1.02	1.02	2.18	2.22
Hispanic	16	19.77	3.07	3.05	5.15	4.91
Non-Hispanic Black	42	48.84	11.02	10.24	21.64	20.82
Asian	1	1.16	0.58	0.53	1.55	1.51
Total	86	100.00	2.29	2.44	5.29	5.42

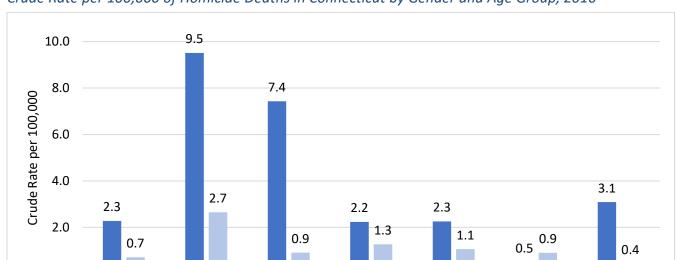
^{*} When the numerator is less than 20, the rates should be interpreted with caution due to the instability of rates

Table 8
Homicide in Connecticut - Age-Specific, 2016

Age group (years)	Number	Percent	Age-Specific rate/ 100,000*
< 20	13	15.1	1.5
20-29	29	33.7	6.2
30-39	18	20.9	4.1
40-49	8	9.3	1.7
50-59	9	10.5	1.6
60-69	3	3.5	0.7
70+	6	7.0	1.5
Total	86	100.0	n/a

^{*} When the numerator is less than 20, the rates should be interpreted with caution due to the instability of rates.

^{** 2016} NVDRS states are: AK, AZ, CO, CT, GA, HI, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, NC, NH, NJ, NM, NY, OH, OK, OR, PA, RI, SC, UT, VA, VT, WA and WI. Population = 187,525,906



40-49

Age Group

Females

50-59

60-69

0.4

70+

Figure 10 Crude Rate per 100,000 of Homicide Deaths in Connecticut by Gender and Age Group, 2016

30-39

Males

Circumstances for Homicides Deaths

<20

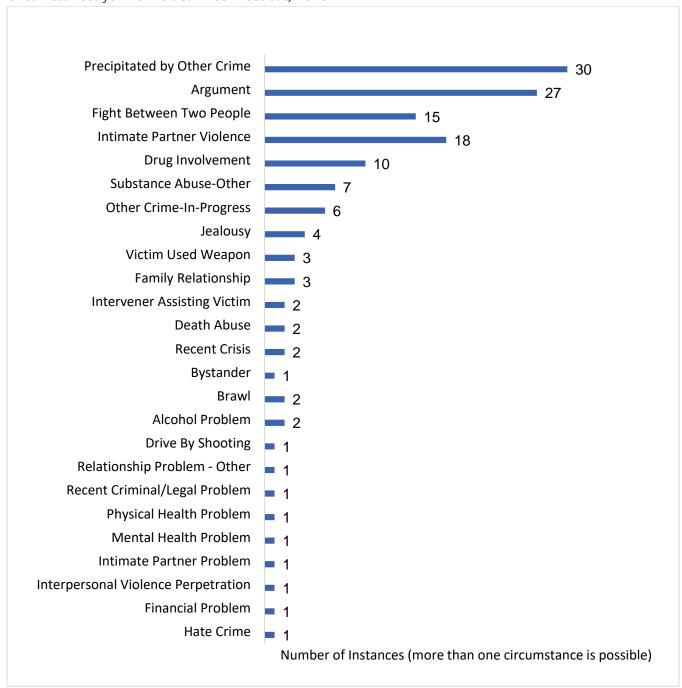
20-29

0.0

Seventy-two percent (n = 62) of those who died by homicide had known circumstances surrounding their deaths (Figure 11). Decedents had up to seven, with an average of 3.3 (SD=1.3) circumstances associated with a homicide.

The five leading circumstances were: commission of another crime such as an assault or robbery (48%), an argument or dispute (43%), intimate partner violence (29%), a physical fight that escalated to a homicide (24%), and drug involvement (e.g., a drug transaction gone wrong) (16%). Circumstances of homicide deaths were known for 19 of the 20 females; 12 (63%) of the 19 women were victims of intimate partner violence.

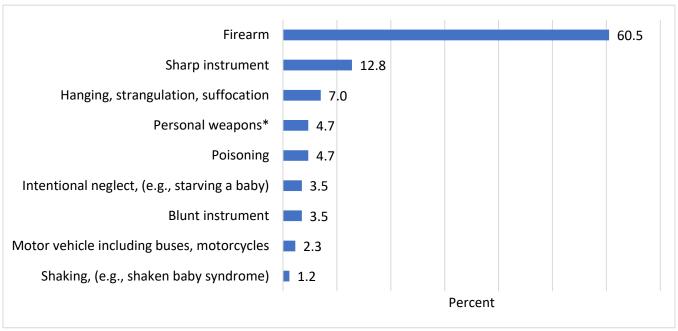
Figure 11
Circumstances for Homicides in Connecticut, 2016



Methods of Homicide Deaths

Firearms were the leading type of weapons used in homicides (60%, n=52). Figure 12 shows the percent of homicides by weapon for 2016.

Figure 12
Homicide in Connecticut by Weapon Type, 2016



^{*}Personal weapons include – physical assault with hands and feet

Location of Injury Leading to Homicide

In counties where there were at least five decedents, New Haven County had the highest number and highest crude rate of homicide in Connecticut in 2016 (Table 9). In cities that had at least five decedents, Hartford had the highest number and highest crude rate of homicide for 2016 (Table 10).

Table 9
Connecticut County Where Homicides Occurred, 2016

County of Injury	Number of homicides	Crude rate per 100,000*
New Haven	35	4.08
Hartford	26	2.91
Windham	3	2.58
Fairfield	15	1.59
New London	4	1.48
Tolland	1	0.66
Litchfield	1	0.55

^{*} When the numerator is less than 20, the rates should be interpreted with caution due to the instability of rates

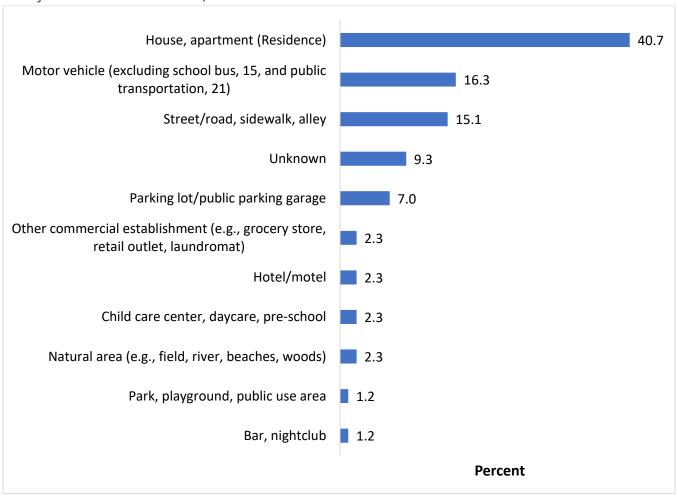
Table 10
Connecticut City Where Homicides Occurred (Top 5), 2016

Injury City	Number of homicides	Crude rate per 100,000*
Hartford	16	12.90
New Haven	14	10.74
Waterbury	11	10.11
Bridgeport	9	6.10
East Hartford	4	7.87

^{*} When the numerator is less than 20, the rates should be interpreted with caution due to the instability of rates

The most frequent site of homicide occurred at a residence (n=35, 40.7%), followed by within a motor vehicle excluding school bus and public transportation (n=14, 16%), and a street/road, sidewalk, alley (n=13, 15%) (Figure 13).

Figure 13
Site of Homicide in Connecticut, 2016



Toxicology of Those Who Died by Homicide

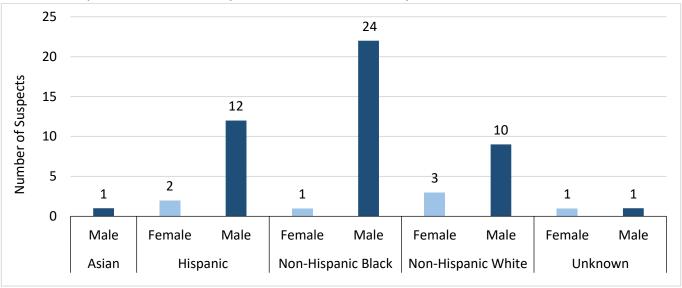
Of the 86 homicides, toxicology reports were available for 59. Among the 59 people, 13 tested positive for alcohol, 4 for benzodiazepines, 5 for opiates, 13 for marijuana. None of the 59 tested positive for antidepressants.

Suspects Involved in Homicide

There were 55 suspects apprehended for homicide in 2016. Eighty-seven percent (n=48) were male and 13% (n=7) were female (Figure 14). Twenty-four (50%) of the male suspects were non-Hispanic Black, twelve (25%) were Hispanic, ten (21%) were non-Hispanic White, and one (2%) was Asian. For women, three (43%) of the suspects were non-Hispanic White, two (29%) were Hispanic, and one (14%) was non-Hispanic Black.

The ages for the male suspects ranged from 16 years old to 70 years old. The median age was 29.5 years old for men and the most frequent age was 33 years old. The ages for the female suspects ranged from 16 years old to 53 years old. The median age for women was 40 years old.





In homicidal incidents where law enforcement apprehended suspects, males were perpetrators of homicide in 89% of those incidents where a male died and in 85% of the homicides of females. A female was the perpetrator of a male's death in four cases (11%) and the perpetrator of a female's death in three cases (15%) (Figure 15).

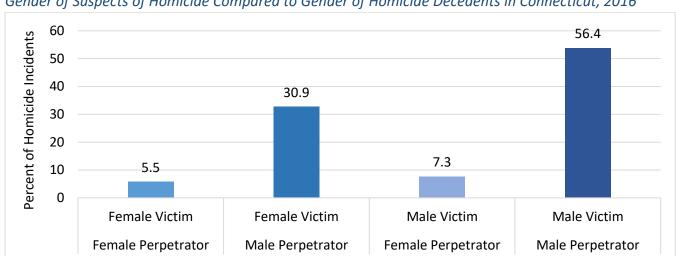


Figure 15
Gender of Suspects of Homicide Compared to Gender of Homicide Decedents in Connecticut, 2016

Deaths of Undetermined Intent

In 2016, there were 17 undetermined intent deaths accounting for 3.4% of all violent deaths in Connecticut. All 17 deaths had a known cause, but the medical examiner, after weighing all the evidence from law enforcement, and the medical examiner investigators, could not determine the manner of death (e.g., suicide, homicide, accidental, or natural). There were 0.48 undetermined deaths per 100,000 Connecticut population. The age-adjusted undetermined death intent rate for Connecticut was 0.46 deaths per 100,000.

Characteristics of Deaths of Undetermined Intent

Sixty-five percent (n=11) of the individuals who died by undetermined intent were non-Hispanic Whites, approximately 24% (n=4) were non-Hispanic Black, 12% (n=2) were Hispanic (Table 11). The median age was 28 years old.

Sixty-five percent (n = 11) of those who died by undetermined intent were males. The median age for males was 39 years old and the most frequent age was 28 years old. The ages for males ranged from 14 to 61 years old. Sixty-four percent (n=7) of the male decedents were non-Hispanic White, 9% (n=1) were Hispanic, 27% (n=3) were non-Hispanic Black.

Thirty-five percent (n = 6) of those who died with undetermined intent were females. The median age for females was 22 years old, and the most frequent age was 19 years old. The ages for females ranged from 9 to 52 years old. Sixty-seven percent (n=4) of the female decedents were non-Hispanic White, and 17% (n=1 each) were non-Hispanic Black, and Hispanic.

Table 11

Deaths of Undetermined Intent by Gender and Race/Ethnicity in Connecticut, 2016

	Number	Percent*	Connecticut crude rate/ 100,000*	Connecticut age adj. rate/ 100,000*	NVDRS States crude rate/ 100,000**	NVDRS States age adj. rate/ 100,000**
Gender						
Male	11	64.71	0.63	0.57	2.98	2.93
Female	6	35.29	0.33	0.36	1.56	1.54
Race/Ethnicity						
Non-Hispanic White	11	64.71	0.45	0.46	2.27	2.28
Hispanic	2	11.76	0.36	0.34	0.93	1.00
Non-Hispanic Black	4	23.53	1.05	0.95	3.01	2.99
Asian	0	0	0	0	0.68	0.69
Total	17	100.00	0.48	0.46	2.26	2.23

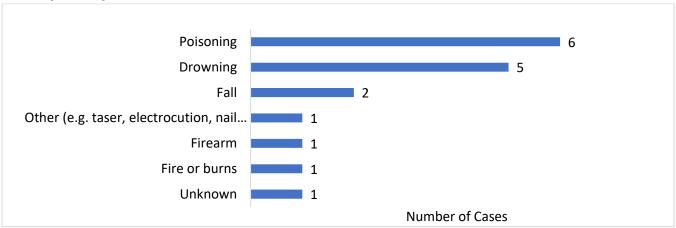
^{*} When the numerator is less than 20, the rates should be interpreted with caution due to the instability of rates.

Methods of Undetermined Intent Deaths

Of the 17 undetermined intent deaths (Figure 16), the leading causes of death were poisoning by drug overdose (35%, n=6) and drowning (29%, n=5).

Figure 16

Cause of Death for Undetermined Intent Deaths in Connecticut, 2016



Toxicology for Undetermined Intent Deaths

Toxicology data was available for 13 of the 17 people. Among the 13 people, 5 tested positive for alcohol (4 of them over the legal limit of 0.08), 4 for benzodiazepines, 4 for opiates, 2 for marijuana, and 1 for antidepressants. Six (46%) died from poisoning by drug overdose.

^{**2016} NVDRS states are the following: AK, AZ, CO, CT, GA, HI, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, NC, NH, NJ, NM, NY, OH, OK, OR, PA, RI, SC, UT, VA, VT, WA and WI. Population = 187,525,906

Location of Injury Leading to Undetermined Intent Deaths

The number of undetermined intent deaths per county ranged from one (Litchfield) to four (Fairfield and New Haven). There were none in Tolland or Windham counties. In cities that had a death of undermined intent, the number of deaths ranged from one to three (New Haven). The site of death was known for 15 of the 17 (88%) deaths; the most common locations were a home/residence (n=6), and a natural area (n=5).

Summary of Results

Every violent death is a tragedy. In 2016, Connecticut had 493 violent deaths: 388 suicides, 86 homicides, 17 deaths of undetermined intent, 1 legal intervention, and 1 unintentional firearm death. Connecticut had a lower crude rate per 100,000 Connecticut population (12.9) and age-adjusted rate per 100,000 Connecticut population (13.8) for overall violent deaths compared to NVDRS states that had a crude rate of 21.27 per 100,000 and an age-adjusted rate of 20.87 per 100,000. Similarly, for 2016, Connecticut crude and age-adjusted death rates for suicide, (10.8 and 9.8 deaths per 100,000 population) and homicide (2.3 and 2.4 deaths per 100,000 population) were below the 2016 NVDRS states' crude and age-adjusted suicide rates (13.12 and 12.61 deaths per 100,000 population) and homicide crude and age-adjusted rates (5.29 and 5.42 death per 100,000 population).

In 2016, the most frequent cause of violent death in Connecticut was suicide (n=388), accounting for 78% of the violent deaths in the state. Individuals in their 50's and 60's accounted for close to half (45%, n = 173) of suicide deaths. Overall, hanging was the most frequent method of death by suicide (33%). However, males were more likely to die by firearms (36%) while females were more likely to die by drug poisoning (36%). For all age groups, feeling depressed, having a mental health problem, and a history of mental illness treatment played a role in dying by suicide.

In 2016, there were 86 homicide deaths and one death by legal intervention in Connecticut accounting for 17% of violent deaths. Individuals who died by homicide were more likely to be male (n=63, 76%), non-Hispanic Black (n=40, 48%), in their twenties (n=28, 34%), and die by a firearm (n=49, 59%). When circumstances were known, the leading circumstances for homicides were commission of another crime such as an assault or robbery (n=26, 46%), an argument or dispute (n=25, 44%), a physical fight that escalated to a homicide (n=14, 25%) and intimate partner violence (19%, n=11). Of the suspects apprehended for homicide in 2016, 87% (n=45) were male and 13% (n=7) were female. Further, males were suspects of homicide in 62% of those incidents where a male died and in 38% of the homicides of females. A female was the suspect of a male's death in four cases (57%) and the suspect of a female's death in three cases (43%). Finally, firearms (59%) were the leading types of weapons used in homicides among men and women.

This report of 2016 violent deaths in CT provides communities with a better understanding of the serious nature of suicide and homicide. From an intervention standpoint, the 2016 CTVDRS data highlight the importance of addressing mental health issues, limiting access to lethal means including alcohol and other drugs (e.g., opioids, antidepressants and benzodiazepines).

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Fowler KA, Jack SP, Lyons BH, Betz CJ, Petrosky E. Surveillance for Violent Deaths — National Violent Death Reporting System, 18 States, 2014. *MMWR Surveill Summ* 2018;67(No. SS-2):1–36. DOI: http://dx.doi.org/10.15585/mmwr.ss6702a1

Appendix

Table A1

Violent Deaths in Connecticut – Age Specific, 2016

Age group (years)	Number	Percent*	Age-Specific rate/ 100,000*
0-4	5	1.0	2.7
5-9	2	0.4	1.0
10-14	5	1.0	2.2
15-19	18	3.7	7.3
20-24	41	8.3	16.5
25-29	40	8.1	18.2
30-34	37	7.5	16.7
35-39	44	8.9	20. 7
40-44	19	3.9	9.0
45-49	38	7.7	15.2
50-54	58	11.8	21.1
55-59	61	12.4	22.3
60-64	45	9.1	19.4
65-69	28	5.7	14.9
70-74	17	3.4	12.5
75-79	12	2.4	12.8
80-84	11	2.2	15.7
85+	12	2.4	13.3
Total	493	100	NA

^{*} When the numerator is less than 20, the rates should be interpreted with caution due to the instability of rates.

Table A2
Suicide Deaths in Connecticut – Age Specific, 2016

Age group (years)	Number	Percent *	Age-Specific rate/ 100,000*
0-4	0	0	0
5-9	0	0	0
10-14	3	0.8	1.35
15-19	10	2.6	4.04
20-24	18	4.6	7.26
25-29	29	7.5	13.17
30-34	26	6.7	11.72
35-39	34	8.7	15.96
40-44	11	2.8	5.24
45-49	38	9.8	15.22
50-54	50	12.9	18.21
55-59	55	14.1	20.14
60-64	42	10.8	18.15
65-69	27	6.9	14.34
70-74	13	3.3	9.58
75-79	11	2.8	11.77
80-84	11	2.8	15.70
85+	11	2.8	12.23
Total	389	100	n/a

^{*} When the numerator is less than 20, the rates should be interpreted with caution due to the instability of rates.

Table A3
Four Most Frequent Suicide Methods by Age Group and Gender, 2016

			Hanging/	Poisoning	Poisoning		
		Firearms	Strangulation	(Drug)	(Non-drug)	Other	Total
Age Group	Gender	n (%)	n (%)	n (%)	n (%)	n (%)	Individuals
< 20 years	Female	0 (0)	4 (66.7)	1 (16.7)	0 (0)	1 (16.7)	6
	Male	2 (28.6)	3 (42.9)	0 (0)	0 (0)	2 (28.6)	7
20-29 years	Female	1 (6.3)	9 (56.3)	2 (12.5)	0 (0)	4 (25)	16
	Male	9 (29)	9 (29)	7 (22.6)	0 (0)	6 (19.4)	31
30-39 years	Female	3 (16.7)	7 (38.9)	0 (0)	2 (11.1)	6 (33.3)	18
	Male	12 (28.6)	21 (50)	2 (4.8)	4 (9.5)	3 (7.1)	42
40-49 years	Female	2 (13.3)	1 (6.7)	7 (46.7)	2 (13.3)	3 (20)	15
	Male	14 (41.2)	10 (29.4)	5 (14.7)	1 (2.9)	4 (11.8)	34
50-59 years	Female	0 (0)	10 (32.3)	15 (48.4)	4 (12.9)	2 (6.5)	31
	Male	26 (35.1)	25 (33.8)	7 (9.5)	4 (5.4)	12 (16.2)	74
60-69 vears	Female	2 (9.1)	3 (13.6)	12 (54.5)	0 (0)	5 (22.7)	22
	Male	17 (36.2)	14 (29.8)	8 (17.0)	1 (2.1)	7 (14.9)	47
70+ years	Female	2 (20)	3 (30)	3 (30)	0 (0)	2 (20)	10
	Male	18 (50)	10 (27.8)	4 (11.1)	1 (2.8)	3 (8.3)	36
Gender	Female	10 (8.5)	37 (31.4)	40 (33.9)	8 (6.8)	23 (19.5)	118
	Male	98 (36.2)	92 (33.9)	33 (12.2)	11 (4.1)	37 (13.7)	271
Total		108	129	73	19	60	389

Table A4

Homicide Deaths in Connecticut – Age Specific, 2016

Age group (years)	Number*	Percent	Age-Specific rate/ 100,000
0-4	5	5.8	2.70
5-9	1	1.2	0.50
10-14	1	1.2	0.45
15-19	6	7.0	2.42
20-24	21	24.4	8.47
25-29	8	9.3	3.63
30-34	9	10.5	4.06
35-39	9	10.5	4.23
40-44	8	9.3	3.81
45-49	0	0	0
50-54	4	4.7	1.46
55-59	5	5.8	1.83
60-64	2	2.3	0.86
65-69	1	1.2	0.53
70-74	4	4.7	2.95
75-79	1	1.2	1.07
80-84	0	0	0
85+	1	1.2	1.11
Total	86	100	n/a

^{*} When the numerator is less than 20, the rates should be interpreted with caution due to the instability of rates.