2015 Connecticut Violent Death Reporting System Annual Report



Commissioner Raul Pino, MD, MPH Connecticut Department of Public Health



Prepared by:

Michael Makowski, MPH

Epidemiologist, Office of Injury Prevention

For inquiries about this report, contact:

Office of Injury Prevention Program

Community, Family Health and Prevention Section

Connecticut Department of Public Health

860-509-8251

www.ct.gov/dph/injuryprevention

Suggested Citation: Office of Injury Prevention. (2018) 2015 Connecticut Violent Death Reporting System Annual Report. Hartford, CT: Connecticut Department of Public Health

This annual report was funded by CDC NVDRS (Grant Number 1U17CE002594-01). The contents of this report are solely that of the author.

Acknowledgements

Connecticut Department of Public Health

Community, Family Health and Prevention Section

Rosa M. Biaggi MPH, MPA

Public Health Section Chief

Mark Keenan, RN, MBA

Public Health Section Chief

CTVDRS Advisory Board

Andrea, Duarte, MSW, MPH, LCSW, Behavioral Health Program Manager, Connecticut Department of Mental Health and Addiction Services

Craig Burns, MD, Chief of Psychiatric Services, Connecticut Department of Correction

Daniel Cargill, Director of Law Enforcement Services, Connecticut Coalition Against Domestic Violence

Faith Vos Winkel, MSW, Assistant Child Advocate, Connecticut Office of Child Advocate

Garry Lapidus, PA-C, MPH, Director, Injury Prevention Center, Connecticut Children's Medical Center/Hartford Hospital

James Gill, MD, Chief Medical Examiner, Connecticut Office of the Chief Medical Examiner

James P. Wardwell, MS, CFCE, Chief of Police, New Britain Police Department

Judith Stonger, MA, CPS, CARC, Vice President of Prevention, Wellness and Recovery, Wheeler Clinic/Connecticut Clearinghouse

Kate Evans, Associate Research Analyst, Crimes Analysis Unit, Connecticut Department of Emergency Services and Public Protection

Lloyd Mueller, PhD, Senior Epidemiologist, Health Statistics & Surveillance Section, Connecticut Department of Public Health

Patrick McCormack, MPH, Director of Health, Uncas Health District

Pina Violano, PhD, MSPH, RN-BC, CCRN, CPS-T, Manager, Injury Prevention, Community Outreach, and Research, Yale-New Haven Children's Hospital

Richard Spano, PhD, Associate Professor of Criminal Justice, University of New Haven

Robert Aseltine, PhD, Professor and Interim Chair, Division of Behavioral Science and Community Health, Deputy Director, Center for Public Health and Health Policy, UCONN Health

Scott Newgass, MSW, LCSW, Office of Student Supports and Organizational Effectiveness, Connecticut State Department of Education

Shawn Rutchick, JD, Legal Office Attorney, Connecticut Department of Public Health

Tim Marshall, LCSW, Director, Office of Community Mental Health, Connecticut Department of Children and Families

Annual Report Reviewers and Office of Injury Prevention CTVDRS Staff

Susan Logan, MS MPH, Principal Investigator

Michael Makowski, MPH, Program Manager and Data Abstractor

Heather Clinton, Data Abstractor

Amy Mirizzi, MPH, CPH, Director, Office of Injury Prevention

Justin Peng, MPH, Supervising Epidemiologist, Community, Family Health and Prevention Section

Table of Contents

Introduction	4
Suicide	6
Characteristics of Victims Who Died by Suicide	6
Circumstances Surrounding Suicide Deaths	8
Methods of Suicide	11
Locations Where Suicides Occurred	12
Toxicology of Those Who Died by Suicide	13
Homicide	15
Characteristics of Those Who Died By Homicide	15
Locations Where Homicides Occurred	19
Suspects Involved in Homicide	20
Death of Undetermined Intent	22
Characteristics of Undetermined Intent Cases	22
Toxicology for Undetermined Intent Cases	24
Conclusion	26

Introduction

In 2002, a new federal surveillance system called the National Violent Death Reporting System (NVDRS) was initiated by the Centers for Disease Control and Prevention (CDC). 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 5 year period to establish the Connecticut Violent Death Reporting System (CTVDRS). In 2015, CTDPH began collecting data on violent deaths. Currently, there are 40 U.S. states that participate in the NVDRS.

According to the NVDRS specifications, the definition of a violent death is as follows: 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. According to this definition, violent deaths include suicides, homicides, deaths from legal intervention, terrorism, deaths of undetermined intent, and accidental firearms deaths.

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. The data gleaned from these reports include the circumstances of suicides (e.g. depression, relationship problems) and homicides (e.g. committed during a crime such as a robbery or intimate partner violence). With this data, the CTVDRS and key stakeholders target violence prevention efforts.

In 2015, Connecticut (CT) had 549 violent death cases, 127 homicides, 2 legal interventions, 383 suicides, 36 deaths of undetermined intent, and 1 unintentional firearm death.

From Table 1, death by suicide was the highest number of violent deaths (69.7%) in CT, followed by homicide (23.1%). Men were three times more likely (73.7%) than women (26.3%) to be a victim of a violent death. Non-Hispanic White people were six times more likely to be a victim of a violent death when compared to non-Hispanic Black people. The 50-54 year-old age group had the highest rate of violent death (25.3 deaths per 100,000 CT population) for 2015.

For all 2015 violent deaths, the crude violent death rate was 15.2 persons per 100,000 CT population¹ and the age-adjusted violent death rate was 14.5 persons per 100,000. From Table 1, for all intents, gender/sex and race/ethnicity, the age-adjusted death rates were below

-

¹ Used Connecticut 2015 Census data; pop. 3,590,886

the NVDRS states' death rates.² Connecticut had lower rates of crude and age-adjusted violent death (overall violent death), 15.2 deaths per 100,000 and 14.5 deaths per 100,000 than the NVDRS states, 20.5 deaths per 100,000 and 20.1 deaths per 100,000, respectively.

Table 1 Violent Deaths in Connecticut, 2015

Intent	Number	Percent*	CT crude	CT age	NVDRS States	NVDRS state
			rate/	adj. rate/	crude rate/	age adj. rate/
			100,000*	100,000*	100,000**	100,000**
Suicide	383	69.7	10.6	9.7	13.3	12.9
Homicide	127	23.1	3.5	3.4	4.6	4.7
Legal	2	0.36	0.056	0.047	0.25	0.26
Intervention						
Undetermined	36	6.7	1.0	2.5	2.0	2.0
Unintentional	1	0.18	0 .028	0.029	0.13	0.13
Firearm						
Total	549	100	15.2	14.9	20.5	20.1
Sex						
Male	405	73.7	23.1	22.5	31.7	31.2
Female	143	26.2	7.8	8.2	9.7	9.6
Race/Ethnicity						
Non-Hispanic	402	73.0	17.8	15.0	20.9	20.0
White						
Hispanic	65	11.7	11.6	11.3	9.2	9.5
Non-Hispanic	69	12.6	18.2	17.7	24.8	24.3
Black						
Asian	13	2.4	7.8	7.5	7.7	7.6

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

Table 2 Violent Deaths in Connecticut - Age-Specific, 2015

Age group (years)	Number	Percent *	Age-Specific rate/ 100,000*
0-4	2	0.55	1.6
5-9	5	0.91	2.4
10-14	3	0.55	1.3
15-19	24	4.4	9.5
20-24	33	6.0	13.5
25-29	46	8.4	20.7
30-34	49	8.9	22.9
35-39	39	7.1	18.7

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

^{**} Rates compared to 2014 NVDRS states. 2014 NVDRS are the following: AK, CO, GA, KY, MA, MD, MI, NC, NJ, NM, OH, OK, OR, RI, SC, UT, VA and WI pop.106,559,664

40-44	41	7.5	17.8
45-49	60	10.9	22.9
50-54	72	13.1	25.3
55-59	59	10.8	21.9
60-64	48	8.7	21.9
65-69	18	3.3	10.2
70-74	17	3.1	13.3
75-79	10	1.8	11.2
80-84	12	2.2	16.7
85+	10	1.8	11.1
Total	548	100	NA

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

The victims of violent death ranged in age from one year old to 93 years old. The average age for violent death in CT was 46 years old. The median (middle of ranked order age list) age of violent death in CT was 48 years old and the most frequent age (mode) of violent death in CT was 51 years old.

The five most frequent places in 2015 to be fatally injured in CT were: within a home or apartment (N=338), street/road (N=50), natural areas (e.g. field, river, beaches, woods, N= 34), motor vehicles (excluding buses, public transportation, N=25), and parking lot/public garage (N=15).

10 victims were reported to have served in the military.

Suicide

In 2015, suicides were a major cause of intentional injury death in CT (N=383), accounting for nearly 70 percent of intentional deaths. 89% of the people who died by suicide were non-Hispanic White, four percent of the victims were non-Hispanic Black and Hispanic respectively, followed by three percent for Asian victims. Nearly 74% or 281 of the 383 people who died by suicide were men and 102 (26%) were women.

Characteristics of Victims Who Died by Suicide

The median age for men was 51 years old. The ages ranged from 13 to 93 years old. The most frequent age was 51 years old. Ninety percent of the male victims were non-Hispanic White followed by 4% for each, non-Hispanic Black and Hispanic, and 2% Asian.

In 2015, there were 102 women who died by suicide in CT. The ages ranged from 15 to 91 years old. The median age for women was 49 years old, and the most frequent age was 49 years old. 84% of the female victims were non-Hispanic White, 7% Hispanic, 5% Asian, and 4% were Non-Hispanic Black.

The 2015 age-adjusted suicide rate for CT was 9.7 deaths per 100,000 population.

Table 3 Suicide Deaths in Connecticut, 2015

	Number	Percent*	CT crude rate/ 100,000*	CT age adj. rate/ 100,000*	NVDRS States crude rate/ 100,000**	NVDRS state age adj. rate/ 100,000**
Sex						
Male	281	73.4	17.0	16.0	23.4	22.5
Female	102	26.6	5.5	5.0	6.05	5.9
Race/Ethnicity						
non-Hispanic White	328	85.6	13.3	11.8	16.2	15.3
Hispanic	29	7.6	5.2	5.5	6.1	6.6
non-Hispanic Black	15	3.9	3.9	3.9	5.3	5.3
Asian	11	2.9	6.5	6.2	5.8	5.8
Total	383	100	10.6	9.7	13.3	12.9

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

Table 4 Suicide Deaths in Connecticut - Age-Specific, 2015

Age group (years)	Number	Percent *	Age-Specific rate/ 100,000*
0-4	0	0	0
5-9	0	0	0
10-14	2	0.52	0.89
15-19	14	3.7	5.6
20-24	18	4.7	7.39
25-29	25	6.5	11.3
30-34	28	7.4	12.7
35-39	19	4.9	9.0
40-44	30	7.8	13.6
45-49	44	11.5	17.1
50-54	59	15.4	20.9
55-59	43	11.2	15.8
60-64	42	10.9	18.6
65-69	16	4.3	8.9
70-74	15	3.9	11.4
75-79	7	1.8	7.7
80-84	11	2.9	15.5
85+	10	2.6	11.1
Total	383	100	NA

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

^{**} Rates compared to 2014 NVDRS states. 2014 NVDRS are the following: AK, CO, GA, KY, MA, MD, MI, NC, NJ, NM, OH, OK, OR, RI, SC, UT, VA and WI pop.106,559,664

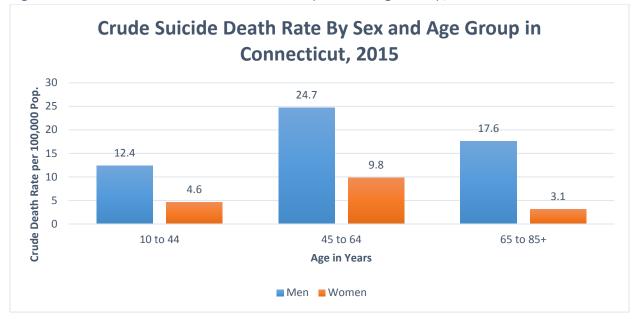


Figure 1 Crude Rate of Suicide in Connecticut by Sex and Age Group, 2015

From Figure 1, the highest crude death rates for suicide for men occurred in the 45-64 year old age group, followed by another spike in the 65-85+ year old age group. For women, the highest age-specific rates of suicide occurred in the 45-64 year old age group.

Circumstances Surrounding Suicide Deaths

93% (N=355) of those who died by suicide had known circumstances surrounding the incident. Figure 2 shows the leading six circumstances for suicide.

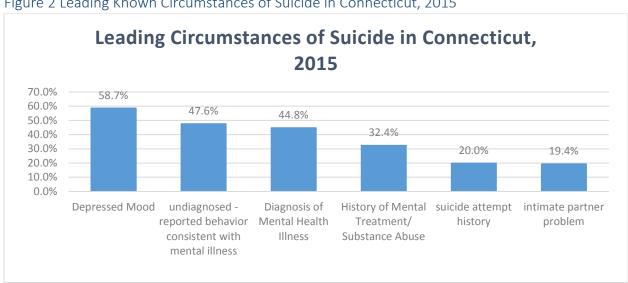


Figure 2 Leading Known Circumstances of Suicide in Connecticut, 2015

The top risk factors for people who died by suicide in CT (all ages) were: 1) a depressed mood, 2) behavior or history of mental illness, and 3) history of substance abuse. According to committee members of Pathophysiology and Prevention of Adult and Adolescent Suicide of the Institute of Medicine, depression and other mood disorders are the number one risk factor for suicide.³ Depression was the most common diagnosis among males and females of all ages. Males had a higher rate of mental health diagnosis than females in most age categories. Intimate partner problems, such as separation or divorce, were risk factors for suicide, especially among men. Men between 25 and 64 years old that experienced intimate partner problems had a death rate of 4.8 to 5.2 per 100,000 population. A crisis, such as pending arrest for a criminal or legal problem within the past two weeks, was another major risk factor for suicide.

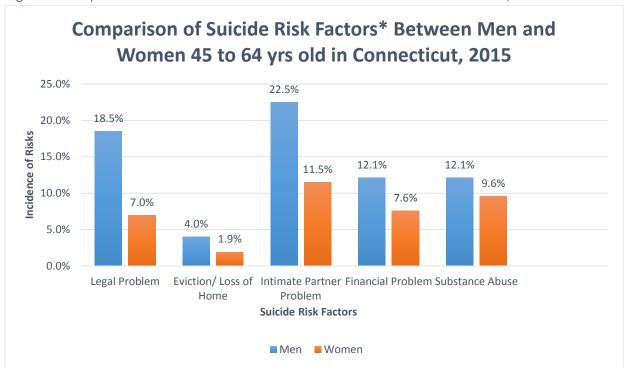


Figure 3 Comparison of Risk Factors between Men and Women in Connecticut, 2015

From Figure 1, the highest rate of death from suicide occurred in the 45 to 64 year old age group for men (24.7 deaths per 100,000 CT population) and women (9.8 deaths per 100,000 CT population). Figure 3 shows that in 2015, where risk factors were known, for people who died by suicide in the 45 to 64 year old age group, men who experienced the following: 1) legal

^{*} In some instances victims were reported to have experienced multiple risk factors

³ https://www.nap.edu/read/10215/chapter/2#2 accessed 12/2/2017

problems had 2.6 times the risk of dying by suicide compared to women; 2) eviction or loss of their home had 2.1 times the risk of dying by suicide compared to women; 3) intimate partner problems - 1.9 times the risk of dying by suicide compared to women [see Figure 4]; 4) financial problems - 1.6 times the risk of dying by suicide compared to women; 5) substance abuse - 1.3 times the risk of dying by suicide compared to women.

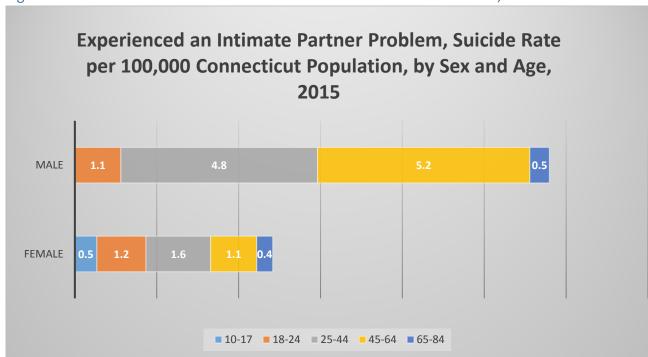
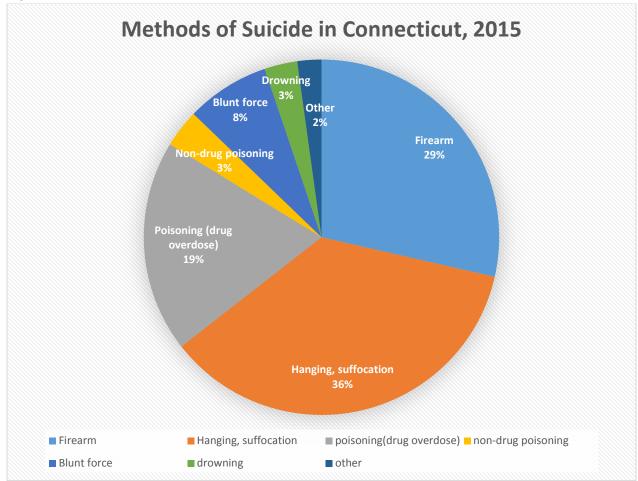


Figure 4 Rates of Intimate Partner Problems in Suicide Deaths in Connecticut, 2015

Methods of Suicide

Figure 5 Methods of Suicide in Connecticut, 2015



Non-drug poisoning includes carbon monoxide, hydrogen sulfide, helium inhalation, cyanide ingestion Blunt force includes- descent from height, deliberate motor vehicle crashes, train involvement Other includes self-immolation

Overall from Figure 5, suicide death by asphyxia due to hanging/suffocation was the leading method of suicide (36%) among CT victims, followed by firearms (29%) and poisonings by drug overdose (19%). A closer examination of suicide methods by sex, Figure 6, shows some differences by sex.

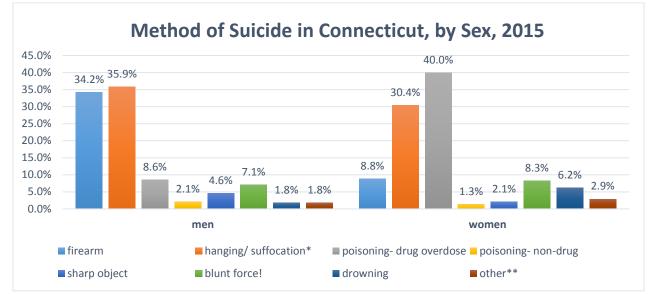


Figure 6 Method of Suicide in Connecticut by Sex, 2015

Poisoning by drug overdoses was the leading method among females (40%), particularly within the 45 and older age group.

Firearms was the leading method of suicide among males 64 and older, accounting for 54% of the suicides (data not shown).

Locations Where Suicides Occurred

Table 5 Connecticut Counties with Suicide Deaths, 2015

County of Injury	Number of suicides	Crude rate per 100,000
New Haven	103	11.9
Hartford	91	10.2
Fairfield	68	7.2
New London	48	17.4
Litchfield	21	11.4

^{*} Asphyxiation by displacement or deprivation of oxygen

^{**} Self-immolation, thermal burns

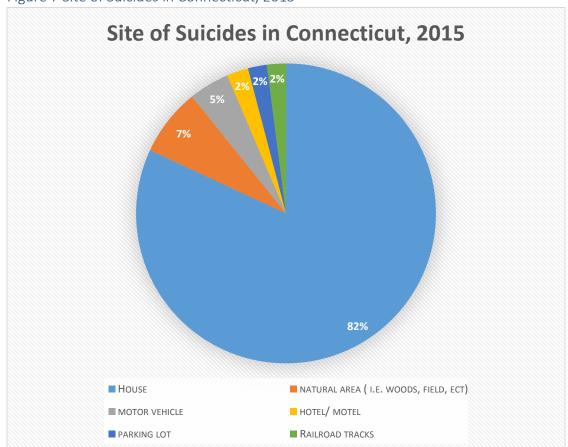
[!] Descent from height, deliberate collisions with moving objects or fixed objects

Table 6 Connecticut Cities with Suicide Deaths, 2015

Injury City	Number of suicides	Crude rate per 100,000*
Bristol	17	28.1
New Haven	14	10.7
Waterbury	13	11.9
Wallingford	10	22.3
Southington	9	20.5

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

Figure 7 Site of Suicides in Connecticut, 2015



82% (N=271) of the suicide incidents took place at a residence.

Toxicology of Those Who Died by Suicide

The influence of alcohol and other drugs on the cause of death is the primary factor in a substantial number of violent deaths such as suicide and homicide. 270 (70.5%) of the deaths by suicide had detectible levels of alcohol and drugs in their blood samples. 71 of those people intentionally overdosed on drugs/alcohol. (18.5% of the suicide deaths) The combination of

alcohol with other medications, such as opiates or benzodiazepines, dramatically enhances the effects of both substances. 63 people or 89% of the suicide deaths attributed to drug overdose involved the mixture of alcohol, opiates and benzodiazepines, 5 or 7% of deaths were solely from opiate overdose (2 heroin, 3 oxycodone), and the remaining three included intoxication from salicylates or cyanide.

Ingestion of alcohol initially has a stimulating effect and can lead to loss of inhibition. As the concentration of alcohol increases within the body, loss of judgment and cognitive processes will occur. However, alcohol and drug abuse without depression are just below mood disorders for the second highest risk factor.² Co-morbidity, the presence of more than one psychiatric or substance abuse disorder, is an important risk factor in suicidal behavior.⁴ People with substance use disorders are about six times more likely to commit suicide than the general population.⁵

According to the CDC, one in three people who die from suicide are under the influence of drugs, typically opiates such as oxycodone or heroin, or alcohol.

There were 181 people who died by suicide with alcohol or other drugs or the combination of alcohol and drugs present in their blood samples that did not cause their deaths. Figure 8 shows the most frequent substances present in their blood samples. (A blood sample can have multiple drugs present during testing, including the presence of alcohol).

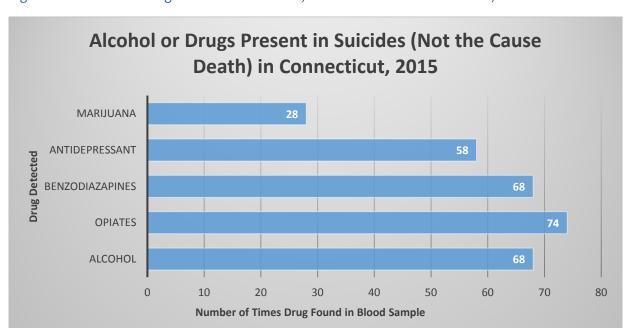


Figure 8 Alcohol or Drugs Present in Suicides, But Not the Causes of Death, Connecticut 2015

⁴ https://www.nap.edu/read/10215/chapter/2#2 accessed 12/2/2017

⁵ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4499285/ accessed 12/2/2017

Homicide

According to the 2015 CTVDRS data, there were 129 homicides (including 2 legal interventions) in Connecticut. These homicides accounted for the 23% of the violent deaths in Connecticut.

Characteristics of Those Who Died By Homicide

79% (N=101) of 129 homicide victims were men. The ages for the male victims ranged from less than 1 year old to 78 years old. The median age was 32 years old. Of the male victims, 49% were non-Hispanic Black followed by 41% non-Hispanic White and 11% Hispanic. The median age for non-Hispanic Black men was 33 years old, and the most frequent age was 23 years old. The range of age for non-Hispanic Black men was 7 to 59 years old. The median age for non-Hispanic White men was 42 years and the most frequent age was 27 years old. The range of age for non-Hispanic White men was 7 months to 79 years old. The median age for Hispanic men was 24 years old and the most frequent age was 34 years old. The range of age for Hispanic men was 1 to 55 years old.

21% (N=28) of 129 homicide victims were women. The ages of the female victims ranged from 6 years old to 76 years old. The median age for women was 42 years old and the most frequent age was 25 years old. Of the female victims, 25% were non-Hispanic Black, 57% non-Hispanic White and 18% Hispanic. The median age was 46 years old for non-Hispanic Black women. The range of age for non-Hispanic Black women was 6 to 57 years old. The median age for non-Hispanic White women was 46 years old. The range of age for non-Hispanic White women was 6 to 76 years old. The median age was 38 years old for Hispanic women and the most frequent age was 39 years old. The age range for Hispanic women was 30 to 45 years old. Forty-three percent of the women were victims of intimate partner violence.

The remains of 5 victims (4 women and 1 man) of a serial killer were discovered in 2015. Their homicides took place in 2003 and are included in the 2015 homicides.

There were 11 victims under the age of 17 that died by homicide. In 55% of these homicides, the parents were suspects.

Sex	Number	Percent*	CT crude rate/ 100,000*	CT age adj. rate/ 100,000*	NVDRS States crude rate/ 100,000**	NVDRS state age adj. rate/ 100,000**
Male	101	79	5.8	5.9	7.2	7.1
Female	28	21	1.5	1.5	2.1	2.1
Race/Ethnicity						
non-Hispanic White	43	32.5	1.7	1.7	2.0	2.0

Hispanic	34	27.3	6.1	5.4	4.1	3.9
non-Hispanic Black	51	39.5	13.5	11.1	16.4	15.9
Asian	1	0.7	0.59	0.54	1.2	1.1
Total	129	100	3.5	3.4	4.6	4.7

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

Table 7 shows that the crude and age-adjusted male homicide rates (5.8 and 5.9 deaths per 100,000 male population, respectively) for CT in 2015 were lower than the 2014 NVDRS states' crude and age adjusted homicide male rates (7.2 and 7.1 deaths per 100,000 male population, respectively). 2015 female homicide rates were also slightly lower in CT compared to the total NVDRS states in 2014. Regarding race and ethnicity of homicide victims, CT homicide rates were higher for Hispanics than the total NVDRS rates, rates were lower for non-Hispanic Blacks compared to total NVDRS rates, and rates for Asians were about half the total NVDRS rates.

Table 8 Homicide in Connecticut - Age-Specific, 2015

Age group (years)	Number	Percent *	Age-Specific rate/ 100,000*
0-4	2	0.36	1.1
5-9	4	0.72	1.9
10-14	1	0.7	0.44
15-19	10	7.6	3.9
20-24	14	10.9	5.7
25-29	17	13.2	7.7
30-34	18	13.9	8.2
35-39	17	13.2	8.2
40-44	8	6.2	3.5
45-49	10	7.6	3.8
50-54	8	6.2	2.8
55-59	12	9.3	4.5
60-64	1	0.7	0.46
65-69	1	0.7	0.56
70-74	2	1.5	0.16
75-79	2	1.5	2.2
80-84	0	0	0
85+	0	0	0
Total	129	100	NA

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

^{**} Rates compared to 2014 NVDRS states. 2014 NVDRS are the following: AK, CO, GA, KY, MA, MD, MI, NC, NJ, NM, OH, OK, OR, RI, SC, UT, VA and WI pop.106,559,664

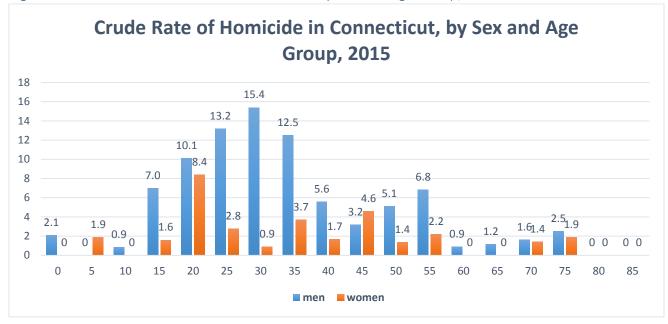


Figure 9 Crude Rate of Homicide in Connecticut by Sex and Age Group, 2015

Table 8 indicates that the highest age-adjusted rate of homicide occurred in the 25 to 39 year old age group. This was further broken down by sex. From Figure 9, overall, the highest crude rate of homicide in men occurred in the 30-34 year old age group and in the 20-24 year old age group for women. The crude homicide rates for men in the 20 to 39 year old age group were above 10 persons per 100,000 population.

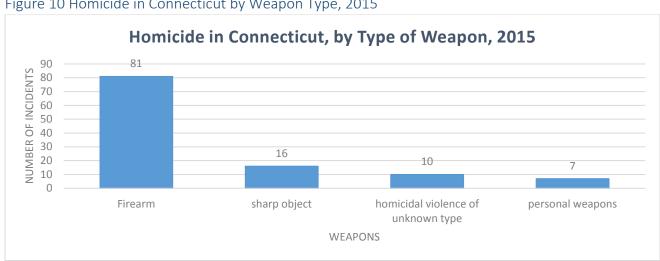


Figure 10 Homicide in Connecticut by Weapon Type, 2015

Personal weapons include – physical assault with hands and feet

Firearms were the leading type of weapons used in homicides among men and women and the leading type of weapons used in homicides for persons under 17 years old. Three children died from poisoning with diphenhydramine.

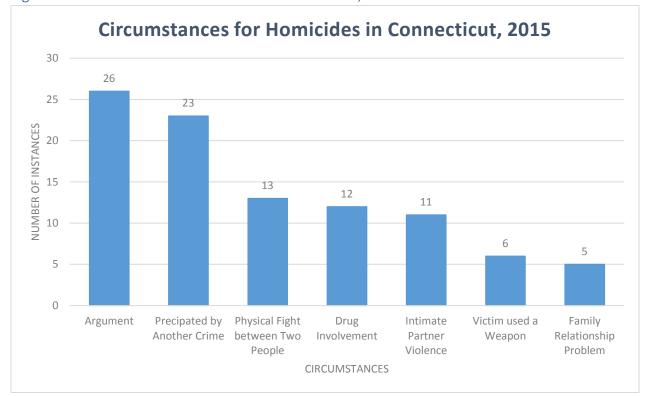


Figure 11 Circumstances for Homicides in Connecticut, 2015

65 (50%) of the homicide victims had known circumstances for their death. Figure 11 shows the frequency of reported circumstances that attributed to a victim's homicide. The five leading circumstances were an argument or dispute, commission of another crime such as an assault or robbery, a physical fight that escalated to a homicide, and drug involvement (e.g. a drug transaction gone wrong). Where the circumstances were known, 53% (N=9) of women died as a result of intimate partner violence.

Locations Where Homicides Occurred

Table 9 Location Where Homicides Occurred by Connecticut County, 2015

County of Injury	Number of	Crude rate per	
	homicides	100,000*	
Hartford	46	5.1	
New Haven	32	3.7	
Fairfield	24	2.5	
New London	8	2.9	
Middlesex	5	3.0	

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

Table 10 Location Where Homicides Occurred by Connecticut City, 2015

Injury City	Number of homicides	Crude rate per 100,000*
Hartford	34	27.4
Bridgeport	16	10.8
New Haven	15	11.5
New Britain	7	9.6
Waterbury	6	5.5

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

From Table 9, in counties where there were at least 5 victims, Hartford County had the highest number and highest crude rate of homicide in CT in 2015.

From Table 10, in cities that had at least 5 victims, Hartford had the highest number and highest crude rate of homicide for 2015.

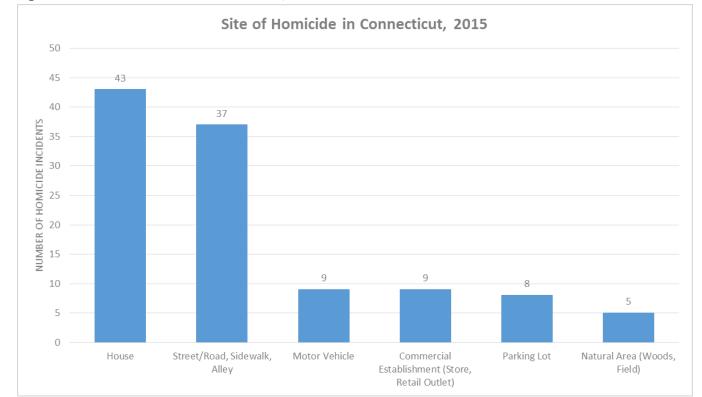


Figure 12 Site of Homicide in Connecticut, 2015

In Figure 12, where there were at least 5 occurrences, the most frequent site of homicide occurred within a house, followed by: street/road; within a motor vehicle; store; parking lot and in the woods or fields.

Suspects Involved in Homicide

There were 86 suspects apprehended for homicide in 2015. Figure 13 shows the number of suspects by sex and race/ethnicity.

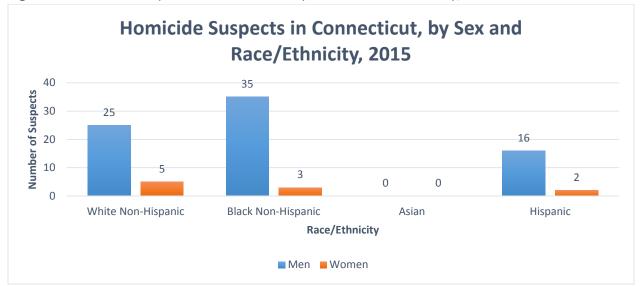


Figure 13 Homicide Suspects in Connecticut by Sex and Race/Ethnicity, 2015

76 (88%) of the suspects that were apprehended were men, while 10 (12%) of the suspects were women. 35 (46%) of the male suspects were non-Hispanic Black, 25 (33%) non-Hispanic White, and 16 (21%) Hispanic. For women, 5 (50%) of the suspects were non-Hispanic White, 3 (30%) non-Hispanic Black, and 2 (20%) Hispanic.

The ages for the male suspects ranged from less than 15 years old to 68 years old. The median age was 31 years old for men and the most frequent age was 22 years old. The ages for the female suspects ranged from 19 years old to 59 years old. The median age for women was 34 years old. (Data not shown)

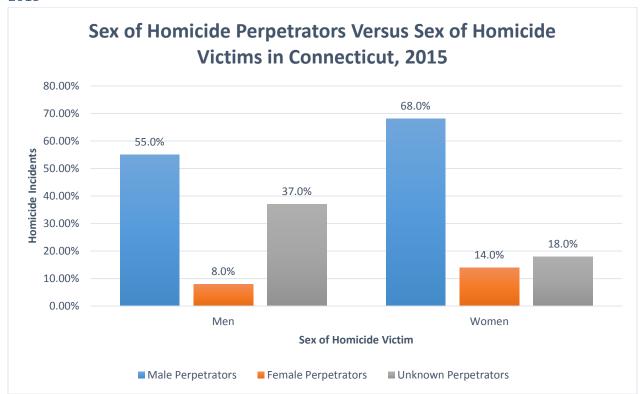


Figure 14 Sex of Perpetrators of Homicide Compared to Sex of Homicide Victims in Connecticut, 2015

From Figure 14, in homicidal incidents where suspects were apprehended by law enforcement, males were perpetrators of homicide in 55% of those incidents where a man died and in 68% of the homicides of women.

Death of Undetermined Intent

There were 36 undetermined intent cases in 2015. All 36 cases have a known cause of death, 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).

Characteristics of Undetermined Intent Cases

There were 23 male and 13 female undetermined cases. The median age for men was 49 years old. The ages ranged from 26 to 81 years old. 83% (N=19) of the male victims were non-Hispanic White, followed by 13% (N=3) Hispanic, and 4% (N=1) Asian.

The median age for women was 48 years old. The ages ranged from 8 to 78 years old. 77% (N=10) of the female victims were non-Hispanic White and 23% (N=3) were non-Hispanic Black.

Table 10 Deaths of Undetermined Intent by Sex and Race/Ethnicity in Connecticut, 2015

Sex	Number	Percent*	CT crude rate/ 100,000*	CT age adj. rate/ 100,000*	NVDRS States crude rate/ 100,000**	NVDRS state age adj. rate/ 100,000**
Male	23	64	1.3	1.2	2.6	2.5
Female	13	36	0.71	0.64	1.6	1.6
Race/Ethnicity						
non-Hispanic White	29	81	1.2	1.0	2.2	2.2
Hispanic	3	8	0.54	0.54	0.70	0.72
non-Hispanic Black	3	8	0.79	0.74	2.3	2.3
Asian	1	3	0.57	0.45	0.49	0.48
Total	36	100	1.0	2.5	2.0	2.0

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

^{**} Rates compared to 2014 NVDRS states. 2014 NVDRS are the following: AK, CO, GA, KY, MA, MD, MI, NC, NJ, NM, OH, OK, OR, RI, SC, UT, VA and WI pop.106,559,664

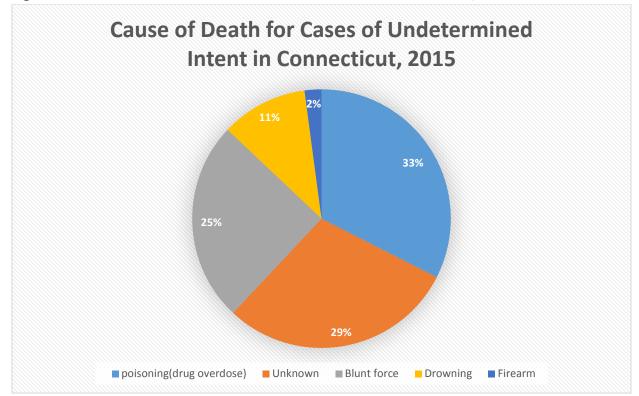


Figure 15 Cause of Death for Undetermined Intent Cases in Connecticut, 2015

Of the 36 undetermined intent cases, the causes of death were the following: 1) 33% poisoning (drug overdose), 2) 29 % un-specified/unknown, 3) 25% blunt force trauma, 4) 11% drowning and 5) 2% firearm.

Toxicology for Undetermined Intent Cases

For those people who died from poisoning, the cause of death was the result of combined intoxication from multiple drugs. The most frequent combination of drugs were opiates, benzodiazepines, antidepressants and alcohol.

For those people who did not die from poisoning (drug overdose), in the remaining 26 cases, the only other substance positively detected in blood samples was alcohol (N=8).

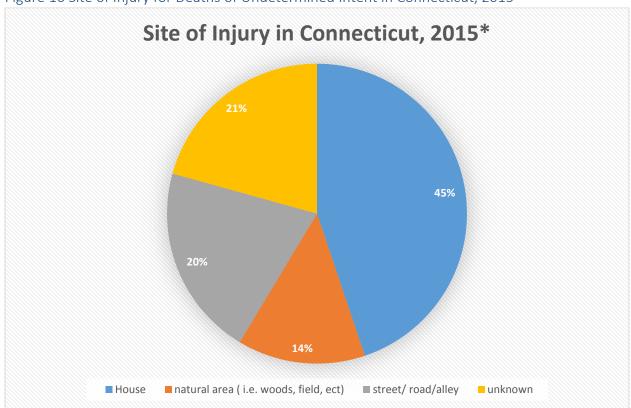
Table 11 Location of Injury for Undetermined Intent Cases by Connecticut County, 2015 Connecticut Counties with at least 4 victims are listed below:

County of Injury	Number of undetermined intent cases	Crude rate per 100,000*
New Haven	11	1.3
Hartford	9	1.0
New London	5	1.8
Fairfield	4	0.42

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

The city of New Haven had the largest number of deaths of undetermined intent (N=3) for a crude rate* of 2.3 deaths per 100,000 population. (Data not shown)

Figure 16 Site of Injury for Deaths of Undetermined Intent in Connecticut, 2015



^{*} At least 4 deaths occurred at these sites

Conclusion

Every violent death is a tragedy. Based on data from the eighteen 2014 NVDRS states (population 106,559,664), 21,842 people died from a violent death. A violent death has a devastating and far-reaching impact on survivor families, friends and on the community, even long after the incident. However, these violent deaths are preventable.

The CTDPH started the collection of violent death data in 2015. For 2015, CT had 549 violent death cases: 127 homicides, 2 legal interventions, 383 suicides, 36 deaths of undetermined intent and 1 unintentional firearm death. Important results to highlight are as follows. Connecticut had lower crude and age-adjusted rates of violent death (overall violent death), 15.2 deaths per 100,000 CT population and 14.5 deaths per 100,000 CT population compared to the 2014 NVDRS states, 20.5 deaths per 100,000 and 20.1 deaths per 100,000, respectively. Similarly for 2015, CT crude and age-adjusted death rates for suicide, (10.6 and 9.7 deaths per 100,000 population) and homicide (3.5 and 3.4 deaths per 100,000 population) were below the 2014 NVDRS states' crude and age-adjusted suicide rates (13.3 and 12.9 deaths per 100,000 population, respectively) and homicide crude and age-adjusted rates (4.6 and 4.7 death per 100,000 population, respectively).

The most frequent cause of violent death was suicide, a major cause of intentional injury death in CT (N=383), accounting for nearly 70% of the violent deaths in the state. For all suicide age groups, feeling depressed, mental illness, and a history of previous suicide attempts played a role in people dying from suicide. Non-Hispanic White males accounted for 85.6% (N=328) of the people dying from suicide. Middle-aged men and women (45 to 64 years of age) accounted for over 50% (50.6%, N=194) suicide deaths. When looking across the lifespan, the death rate for men and women in this age group was the highest, 24.7 deaths per 100,000 population for men and 9.8 deaths per 100,000 population for women. The incidence of mental illness was highest among middle-aged men and women. In addition, the incidence of other suicide risks factors, such as alcohol problems, financial problems, intimate partner problems and legal problems, was highest for middle-aged men and women, but men were affected more than women. Middle-aged men who experienced the following: 1) legal problems had 2.6 times the risk of dying by suicide compared to women; 2) eviction or loss of their home had 2.1 times the risk of dying by suicide; 3) intimate partner problems - 1.9 times the risk of dying by suicide; 4) financial problems - 1.6 times the risk of dying by suicide; and 5) substance abuse - 1.3 times the risk of dying by suicide compared to women.

In addition, there were 129 homicide victims in CT in 2015. 79% of those that died by homicide were men. The median age for men that died by homicide was 32 years old. 43% of the homicide victims were non-Hispanic Black men. Where circumstances were known, the five leading circumstances for homicides were an argument or dispute, commission of another crime such as an assault or robbery, a physical fight that escalated to a homicide, and drug

involvement (e.g. a drug transaction gone wrong). 28 (21%) of the homicide victims were women. The median age for women who died by homicide was 42 years old. The major risk factor for women who died by homicide was intimate partner violence. Intimate partner violence accounted for 43% of the homicide deaths for women.

Finally, firearms were the leading types of weapons used in homicides among men and women. There were 11 victims under the age of 17 that died by homicide. Three children died from poisoning with diphenhydramine. In 55% of these homicides, the parents were suspects. 76 (88%) of the suspects that were apprehended were men, while 10 (12%) of the homicides were perpetrated by women.

This surveillance update of 2015 violent death data in CT provides communities with a better understanding of the serious nature of suicide and homicide. These violent deaths are preventable. From an intervention standpoint, the 2015 data highlighted that mental illness and a depressed mood were associated with 47% of the suicides. Alcohol and substance use were connected with 28% and 20%, respectively, of all violent deaths in CT for 2015.

The CTDPH, other state agencies such as the Connecticut Department of Mental Health and Addiction Services (CTDMHAS) along with the United Way of Connecticut and Wheeler Clinic are working collaboratively to support suicide prevention initiatives. These include educating and training for Connecticut firearms dealers to recognize the signs of suicide when they interact with customers. In another initiative, the CTDPH is working with United Way, Connecticut Department of Transportation (CTDOT), and railway companies in CT to provide suicide data and support efforts to prevent suicide via the placement of signage on state bridges, highways and railroad crossings and trains.