

Homicide Data in Connecticut from 2020 to 2023 using CTVDRS Data and Hospital Discharge Data from 2020-2022

Data Request from Ms. Jennifer Torres

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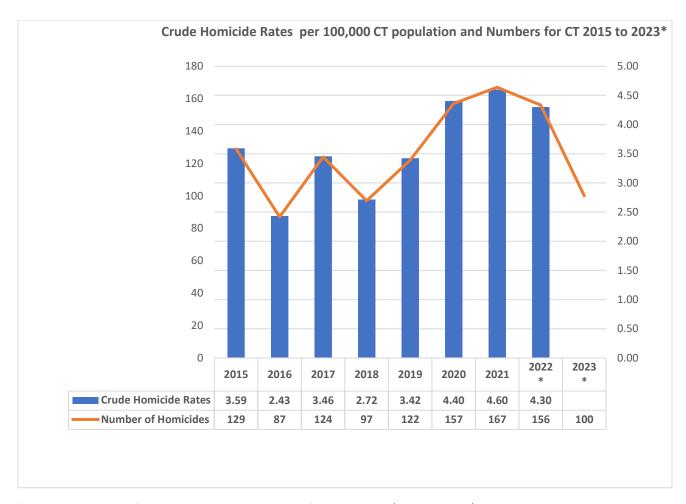
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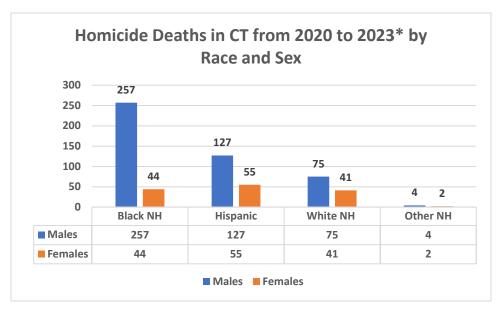
Connecticut Department of Public Health



^{*} data is preliminary for 2022 and 2023; 2023 data is from January 1st to August 31st, 2023

The graph above show the number of homicides and crude homicide rates in Connecticut from 2015 to 2022 using Connecticut Violent Death Reporting System (CTVDRS) data from 2015 to August 31st, 2023. In calculating the average crude homicide rates for the time periods of 2015 to 2019 and 2020 to 2022, from 2020 to 2022, Connecticut's average crude homicide rate was 4.4 deaths per 100,000 Connecticut population, while from 2015 to 2019 Connecticut's average crude homicide rate was 3.1 deaths per 100,000 Connecticut population. The difference in homicide rates (as a percentage) from 2020-2022 when compared to 2015 to 2019 revealed a 42% increase in the average homicide rate for 2020-2022 when compared to 2015 to 2019.

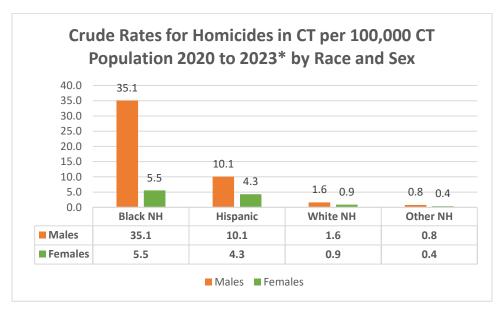
Graph 2. Homicide Deaths in CT from 2020 to 2023* by Race and Sex



^{*} data is preliminary for 2022 and 2023; 2023 data is from January 1st to August 31st, 2023

From Graph 2., the data revealed that males account for more homicide deaths than females. The highest number of homicides occurred in Black Non-Hispanic males, followed by Hispanic males, then by White Non-Hispanic males. Hispanic females account for the highest number of homicides, followed by Black Non-Hispanic females, then by White Non-Hispanic females.

Graph 3. Crude Homicide Rates in CT from 2020 to 2023* by Race and Sex



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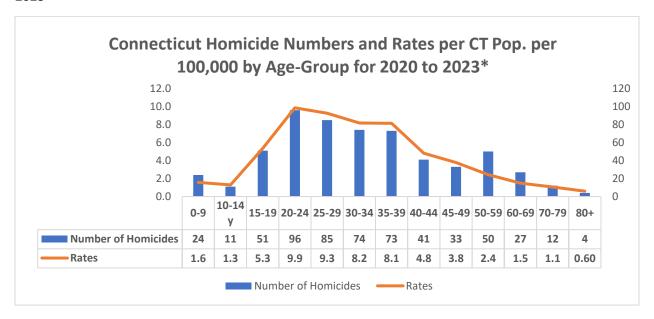
Populations change over time. Rates are often used instead of counts because they allow comparison of data from year to year or over periods of time. From Graph 3., from 2020 to 2023 Black Non-Hispanic males have the highest crude homicide rate in Connecticut, followed by Hispanic males, then by White Non-Hispanic males. The crude homicide rate for Black Non-Hispanic males is 3.5 times higher than Hispanic males and 22 times higher than White Non-Hispanic males. Similarly, Black Non-Hispanic females have the highest crude homicide rate in Connecticut, followed by Hispanic females, then by White Non-Hispanic females. The crude homicide rate for Black Non-Hispanic females is 1.2 times higher than Hispanic females and 6 times higher than White Non-Hispanic females.

Table 1. Comparison of Homicide Rates Pre-Pandemic (2015 to 2019) to Pandemic (2020-2022*) by Race/Ethnicity

Race/Ethnicity	Average Number Homicides (2015 to 2019)	Crude Rate 2015-2019	Crude Rate*2020- 2022	Number of Homicides 2020-2022	Rate Difference 2015 to 2019 Compared to 2020-2022*
Non-Hispanic Black	51	14.0 (12.3- 15.7)	21.6 (18.9- 24.3)	242	+ 54%
Non-Hispanic White	33	1.4 (1.2-1.6)	1.4 (1.0-1.6)	101	No change
Hispanic	27	4.60 (3.8-5.4)	6.9 (5.7-8.1)	129	+ 48%

From Table 1., Connecticut experienced a noticeable increased rate of death by homicide among the Black Non-Hispanic population (+54 %) and Hispanic population (+48 %) for the time period of 2020 to 2022 when compared to 2015 to 2019. There were not any rate differences for the White Non-Hispanic population for the time period of 2020 to 2022 when compared to 2015 to 2019.

Graph 4. Connecticut Homicide Numbers and Rates per CT Pop. per 100,000 by Age-Group for 2020 to 2023*



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From Graph 4, the highest rates for death by homicide occurred in the young adult age-group (20-24 years old). In combining the results from Graphs 2 and 3 with Graph 4, young adult (20-24 years old) Black Non-Hispanic males were disproportionally impacted by homicide deaths.

Table 2. Homicide Lethal Means 2015 to 2022

	2015-2019 (5 years)	Yearly Average of	2020-2022 (3 years)	Yearly Average of Homicides	Difference in percentage of
		Homicides (%		(% of homicide)	firearm deaths
		of homicide)			2015-19
					compared to
					2020-22
Number of	343	68.6 (61.2)	347	115.6 (72.5)	+18.5
Firearm					
Homicides					
Number of	69	13.8 (8.1)	69	23.0 (13.3)	+64.2
Sharp Force					
Homicides					
(Stabbing)					

In terms of lethal means for homicides, firearms are the most frequently used weapon as depicted in Table 2. From 2020 to 2022, firearms were used in 72.5 % of all homicides in Connecticut. When comparing firearms used in homicides between the time periods of 2020-2022 to 2015-2019, the difference in percentage of firearm deaths increased 18.5 % for the 2020-2022 time period. From table 2, the next most frequently used weapon was sharp force instruments such as a knife. When comparing sharp force homicides between the time periods of 2020-2022 to 2015-2019, the difference in percentage of sharp force deaths increased 64.2 % for the 2020-2022 time period.

Intimate Partner Homicides 2015 to 2023 in Connecticut

From CTVDRS data, from 2015 to August 31, 2023 (data preliminary for 2022 &2023), there have been N=131 cases of IPV homicides in CT, accounting for 11% of all homicides (N-1,140) in that period in CT. 78 % (N=102) of IPV homicide victims were females while 22% (N=29) were males. In further analysis of intimate partner homicides for females by race, White Non-Hispanic females account for the highest number of intimate partner homicides deaths N=48 (47 %), followed by Black Non-Hispanic females N=31 (30%), then Hispanic females N=20 (20%).

Connecticut Cities with the Highest Rate of Homicide

Table 3. Connecticut Cities (Injury City) Rank by Highest Homicide Rate (≥ 15 Homicides) during 2020 to 2023*

City	Number of Homicides	Homicide Death Rate per 100,000 City Pop.
Hartford	129	26.6
New Haven	80	14.9
Bridgeport	78	13.1
Waterbury	56	12.2
Hamden	15	6.1
Stamford	15	2.8

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Risk Factors and Circumstances of Homicides in Connecticut

The National Violent Death Reporting System (NVDRS)/ CTVDRS collects data from the Office of the Chief Medical Examiner (OCME), autopsy, investigator narratives and toxicology data, and from law enforcement(LE) reports (State Police, local police departments) in order to obtain the risk factors and circumstances of homicides in Connecticut.

Table 4. Known Risks and Circumstances for Homicides 2020-2021

Circumstances	Number of Occurrences	Rate per 100 Homicides
Disputes/Arguments	91	28.0
Assault	46	14.2
Drug Involvement	39	12.0
Robbery	25	7.7
Drug Trade	24	7.4

The collection of OCME and LE data is complete for the years 2020 to 2021. Because of the ongoing collection of LE data for 2022 and 2023, those two years of data are not included in table 4. Table 4 is the compilation of OCME and LE data on the risks and circumstances for homicides as reported by in-depth investigations, informants, and witnesses. The risks and circumstances in table 4 are not mutually exclusive, in that more than one risk/circumstance can be endorsed more than once in the table. From Table 4, substance use (Drug Involvement and Trade) are a risk factor. Table 5 shows the analysis of homicide victims' toxicology results at the time of autopsy as reported by OCME.

Table 5. Comparison of Rate of Positive Drug Results from Blood at the Time of Autopsy 2015 to 2019 (N= Number of Homicides (559)) to 2020 to 2021 (N= Number of Homicides (324))

Drug	Number of Positives 2015 to 2019	2015 to 2019 Rate per 100 Homicides	Number Positives 2020 to 2021	Rate per 100 Homicides 2020 to 2021
Marijuana	171	30.5 (26.0-35.0)	168	52.8 (44.8-60.8)
Alcohol	135	24.1 (20.0-28.2)	91	28.7 (22.8-34.6)
Opiates	66	11.8 (8.9-14.7)	48	15.1 (10.8-19.4)

Cocaine	56	10.1 (7.3-12.8)	42	13.2 (9.3-17.1)
Benzodiazepines	41	7.3 (5.1-9.5)	12	3.7 (1.6-5.8)

From table 5, particularly for the period of 2020 to 2021, the rate of positive results for marijuana at the time of autopsy in homicide victims was more pronounced than any other substances.

Non-Fatal ED/Hospital Discharge Data for Assaults

The Community Violence Prevention (CVP) Program was established through legislative mandate during the Connecticut 2022 legislative session and was effective from passage. The bill, Public Act 22-118 (House Bill 5506) Sec. 80, called for a Community Gun Violence Intervention and Prevention Program to be located at the Connecticut Department of Public Health (DPH). Violence and Homicide Prevention Program (ct.gov)

In addition to firearm homicides, The Community Gun Violence Commission was interested in tracking non-fatal firearm injuries from Connecticut hospital discharge data.

Hospital ED Discharge Data for Assaults 2020-2022 by **Weapon Type** 7000 6000 5000 4000 3000 2000 1000 Sharp Neglect/Mal Hands/Feet **Unspecified Blunt Object Firearm** Missing Object treatment **2020** 200 1,842 384 800 538 6,577 271 238 **2021** 143 437 6,347 2,198 408 757 **2022** 6,288 721 119 341 192 2,631 211

■ 2020 **■** 2021 **■** 2022

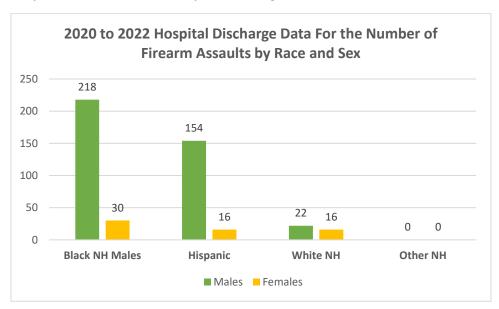
Graph 5. Hospital ED Discharge Data for Assaults 2020-2022 by Weapon Type

An analysis was done of Hospital ED Discharge Data (2020 to 2022) to glean data on hospital admissions ICD-10 coded for assaults, then further stratified by weapon type. From Graph 5, the most frequently

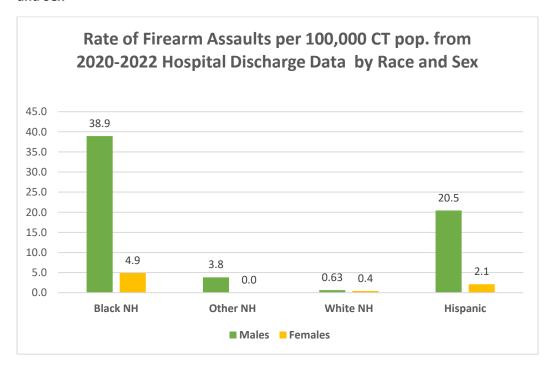
encountered weapon type for assaults at Connecticut EDs was hands and feet, followed by sharp objects (cuttings and stabbings).

Firearm Assaults

Graph 6. Firearm Assaults Hospital Discharge Data 2020-2022



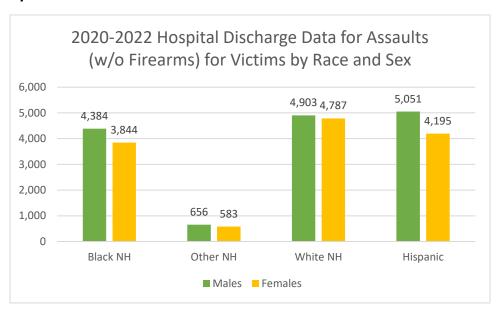
Graph 7. Rate of Firearm Assaults per 100,000 CT pop. 2020-2022* Hospital Discharge Data by Race and Sex



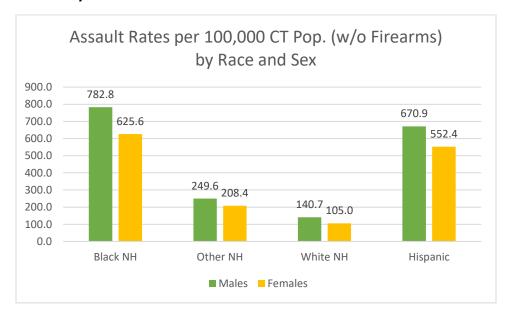
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With the focus on rates, from graph 7, the rate of firearm assaults per hospital discharge data, Black Non-Hispanic males and Hispanic males had the highest rate of ED visits for non-fatal firearm injuries when compared to White Non-Hispanic and Other Non-Hispanic males. There was a 62 % difference in firearm assault rates (as a percentage) for Black Non-Hispanic males when compared to White Non-Hispanic males and a 33% difference for Hispanic males when compared to White Non-Hispanic males.

Graph 8. 2020-2022 Hospital Discharge Data for Assaults (not including Firearms) for Victims by Race and Sex



Graph 9. 2020-2022 Hospital Discharge Data for Assaults Rates (not including Firearms) for Victims by Race and Sex



Using 2020-2022 hospital discharge data to calculate assaults rates that do not include firearms (graph 9), Black Non-Hispanic males had the highest assault rates, followed by Hispanic males, when compared to White Non-Hispanic males. The assault rates for Black Non-Hispanic, Hispanic and Other Non-Hispanic males were 5.6, 4.8 and 1.8 times higher, respectively, when compared White Non-Hispanic males. Similarly, for assault rates that do not include firearms, Black Non-Hispanic females had the highest assault rates, followed by Hispanic females, then Other Non-Hispanic females when compared to White Non-Hispanic females. The assault rates for Black Non-Hispanic, Hispanic and Other Non-Hispanic females were 6.0, 5.3 and 2.0 times higher, respectively, when compared White Non-Hispanic females.

Conclusion

From CTVDRS homicide data (2020 to current 2023 data) and Connecticut hospital discharge data(2020 to 2022), Black Non-Hispanic and Hispanic males and females are disproportionally impacted by homicide deaths (numbers and rates) and again (numbers and rates)in non-fatal assault injuries, in particularly young adults, when to White Non-Hispanic males and females. See tables 6 through 8 below.

Table 6. Homicide Rates 2020 to 2023* Factor Increases – When Compared to White Non-Hispanic Population (ED visits)

	Black Non- Hispanic	Hispanic	Other Non- Hispanic
Males	21.9 X	6.3 X	-
Females	6.1X	4.7X	-

Table 7. Hospital Discharge Data Firearm Assault Rates 2020 to 2022 Factor Increases – When Compared to White Non-Hispanic Population (ED visits)

	Black Non- Hispanic	Hispanic	Other Non- Hispanic
Males	61.1 X	32.5 X	-
Females	12.3 X*	5.3 X *	-

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Table 8. Hospital Discharge Data Assault Rates (Firearms Excluded) 2020 to 2022 Factor Increases – When Compared to White Non-Hispanic Population (ED visits)

	Black Non- Hispanic	Hispanic	Other Non- Hispanic
Males	5.6 X	4.8 X	1.8 X
Females	6.0X	5.3 X	2.0 X