



### The Connecticut Violent Death Reporting System Suicide in RBHAO Region 2 2015 to 2021\*

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Injury and Violence Surveillance Unit Community, Family Health and Prevention Section Connecticut Department of Public Health



# CTVDRS Data about Violent Death Victims

The Connecticut Violent Death Reporting System (CTVDRS) collects data about the victims of homicide, suicide, unintentional firearm injuries, and undetermined deaths

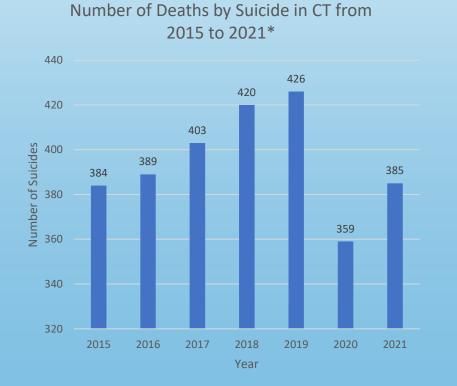
- Data sources: LE reports, Supplementary Homicide Reports, Family Violence (DESPP), OCME investigation, autopsy and toxicology data
- Data collection began in 2015

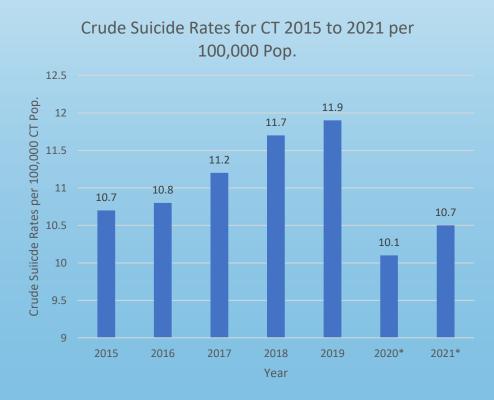
\* Data from Connecticut Violent Death Reporting System (CTVDRS) 2015 to December 31<sup>th</sup>, 2021



### Suicide Trends: 2015 – 2021\*



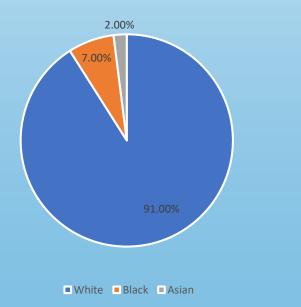




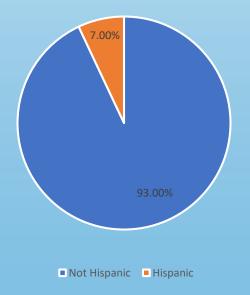


## Demographics of Suicides in Connecticut, by Race and Ethnicity

#### CT Suicides by Race Non Hispanic(n=2,528): 2015-2021\*



#### CT Suicides, by Ethnicity (n=2,708): 2015-2021\*





#### CTVDRS Age-Specific Rates Comparison 2021 to (2015-2019)

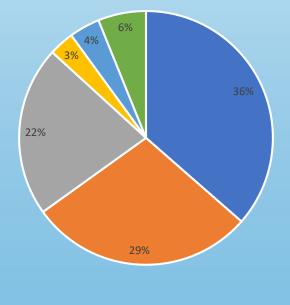
Age-Groups	Number of Suicides 2015- 2019	Yearly 5 -year average (2015- 2019)	Age-Specific Rate 2015-2019 per 100,000 pop	Number of Suicides 2021*	Age-Specific Rate 2021 per 100,000 pop
a de la composición d					
0-17 yrs	<mark>49</mark>	<mark>10</mark>	<mark>2.7</mark>	<mark>12</mark>	<mark>1.5</mark>
18-24 yrs	162	32	9.3	37	<mark>9.9</mark>
25-44 yrs	526	105	12.1	99	10.5
45-64 yrs	908	182	17.8	131	13.0
65+	<mark>377</mark>	<mark>75</mark>	<mark>12.7</mark>	<mark>106</mark>	<mark>16.0</mark>
Total	2,022			<mark>385</mark>	

\* data as of 12/31/21



#### Suicide Lethal Means

Suicide Lethal Means



Hanging, Suffocation
Firearm
Poisoning
Sharp Instrument
Fall
Other



### Lethal Means: CT Suicides 2015-2021\* CTVDRS

Most Common Methods – Death by Suicide:

#### Males

- 1)Hanging/asphyxiation (39%)
- 2)Firearm (35%)
- 3)Drug overdose (14%)

#### Females

Drug overdose (44%)
 Hanging/asphyxiation (31%)
 Firearm (9%)

Data Source: CT Violent Death Reporting System



### Drug Overdose Suicides 2015 to 2021\* CTVDRS

#### Most Drug Overdoses Involve Multi-Drug Ingestion

5				
Substance	Number of Incidents	Percentage of Fatal Overdoses	Major Drug	
Antidepressants	248	46.8		
Opiates	235	44.3	Oxycodone	
Benzodiazepines	188	35.5		
Antihistamines	121	22.8	Benadryl	
Alcohol	91	17.2		
# Non-drug	64	# 23.5 deaths per 1,000 suicides	Carbon Monoxide	



# Region 2 Suicides 2021\*

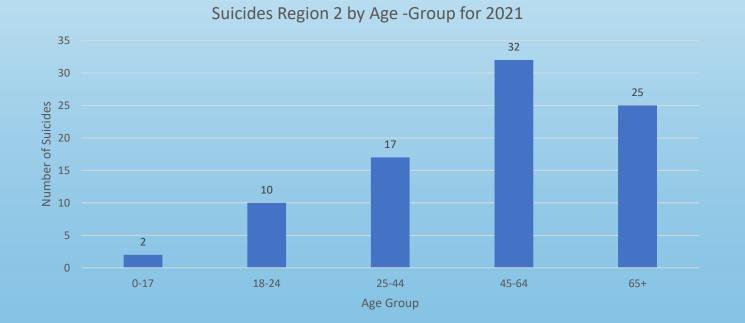
• N= 86 suicides

#### Table 1. Number of Suicides by Sex and Race/Ethnicity

Sex	White Non- Hispanic	Black Non- Hispanic	Other Non- Hispanic	Hispanic	Totals	Percent of Suicides
Males	57 (84%)	8	0	3	68	79%
Females	16 (89%)	1	0	1	18	21%



### Region2 Suicides 2021\*by Age Group



Data Source: CT Violent Death Reporting System



Fall

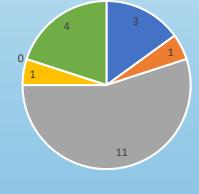
### Region 2 Lethal Means for 2021\*by Sex CTVDRS

Hanging, Suffocation = Firearm
 Poisoning
 Sharp Instrument

Other

Lethal Means for Males 2021\*

Lethal Means for Females 2021\*



Hanging, Suffocatio	n = Firearm
Poisoning	Sharp Instrument
Fall	Other

#### Data Source: CT Violent Death Reporting System



### Region2 Suicides 2021\*by Town CTVDRS

	Residence City	Number of Suicides	
	Ansonia		2
	Branford		7
	Clinton		2
	Cromwell		1
	Durham		1
	East Haddam		2
	East Haven		2
	Guilford		2
	Haddam		2
	Hamden	1	0
	Killingworth		1
	Madison		1
	Meriden		5
	Middletown		2
	Milford		6
	New Haven	1	1
	North Branford		1
	North Haven		4
	Old Lyme		1
	Old Saybrook		2
	Portland		2
	Seymour		1
	Shelton		4
	Wallingford		6
	West Haven		4
	Westbrook		1
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## Region2 Suicides 2021\*by Town and Age Group

#### 10-17 yrs Suicides for 2021

Residence City	Number of Suicides
East Haddam	1
Hamden	1

#### 18-24 yrs Suicides for 2021

Residence City	Number of Suicides
Branford	1
Durham	1
Hamden	2
Killingworth	1
Milford	1
New Haven	1
Portland	1
Wallingford	1
West Haven	1

#### Data Source: CT Violent Death Reporting System



### Region2 Suicides 2021\*by Town and Age Group

#### 45-64 yrs Suicides for 2021

#### 25-44 yrs Suicides for 2021

Residence City	Number of Suicides	
Branford		3
Hamden		4
Middletown		1
Milford		1
New Haven		6
North Branford		1
North Haven		1

Residence City	Number of Suicides
Ansonia	2
Branford	2
Clinton	1
Cromwell	1
East Haddam	1
East Haven	1
Hamden	1
Meriden	4
Middletown	1
Milford	3
New Haven	4
North Haven	1
Old Saybrook	1
Shelton	1
Wallingford	4
West Haven	3
Westbrook	1

Data Source: CT Violent Death Reporting System	
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### Region2 Suicides 2021\*by Town and Age Group

#### 65+ yrs Suicides for 2021

	Number of
Residence City	Suicides
Branford	1
Clinton	1
East Haven	1
Guilford	2
Haddam	2
Hamden	2
Madison	1
Meriden	1
Milford	1
North Haven	2
Old Lyme	1
Old Saybrook	1
Portland	1
Seymour	1
Shelton	3
Wallingford	1
Woodbridge	3

Data Source: CT Violent Death Reporting System



### Risk for Factors for Suicide in Region 2-2021\*

93 % (N=80) of risk factors or circumstances are known for Region 2 suicide victims

Most Common Risks

1)Mental Illness (44%; N=35)74%(N=26) Diagnosed Depression; 14% (N=5) Bipolar

Disorder; 9% (N=3) Anxiety

2)Intimate Partner Problem (divorce; break-up) (24%, N=19)

3)Previous Suicide Attempt (15%,N=12)

4) Physical Health Problem (Acute, Chronic, Terminal Illness or Pain) (13%, N=10)

5) Substance Use; Substance Misuse- Reported Alcohol Misuse (13%, N=10)

Data Source: CT Violent Death Reporting System



# Risk for Factors for Suicide in Region - 2021\*



#### Most Common Drugs Found In Suicide Victim for Region 2

Drug	Number of Positive	Percent of Suicides
Alcohol*	18	21%
Marijuana	14	16%
Opiate	10	12%
Benzodiazepines	7	8%

\* BAC ≥ .08

Marijuana use has been associated with psychotic events (hallucinations, paranoia); however, its incidence hasn't reached a threshold of  $\ge$  20 to calculate a reliable rate.

For more information about marijuana comorbidity with illness for ED Visits see <u>Connecticut Violent Death Reporting System CTVDRS</u>, question 5 Community Questions

Data Source: CT Violent Death Reporting System



# CTVDRS Data about Homicide Victims

The Connecticut Violent Death Reporting System (CTVDRS) collects data about the **victims of homicide**; limited information about perpetrator

- Data sources: LE reports, Supplementary Homicide Reports, Family Violence (DESPP), OCME investigation, autopsy and toxicology data
- Data collection began in 2015

\* Data from Connecticut Violent Death Reporting System (CTVDRS) 2015 to December 31 st, 2021



# Theories of Homicide Victimization

- A. **Subculture of Violence**: theme of violence that make up the life-style, the socialization process, interpersonal relationships of individuals living in similar conditions; not necessary to use violence to solve problems, but have greater exposure, susceptibility to violent victimization; **retaliation a major theme**
- **B.** Informal Social Control: a form of self-help "the expression of a grievance by unilateral aggression such as personal violence"; used by people of lower social status who have reduced access to formal control institutionspolice; offenders may use crime as a means of **retaliation or censure** when they cannot or will not seek police help



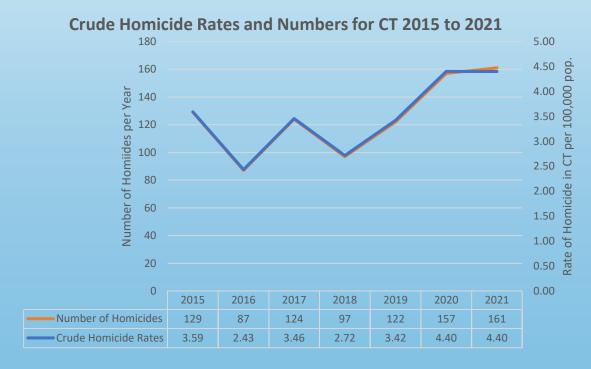
# Theories of Homicide Victimization

- **C.** Lifestyle- an individual's lifestyle influences their exposure to high-risk situations, placing them as a potential target for victimization
- 1. history of alcohol, and drug misuse
- 2. gang membership
- 3. criminal history (incarceration, arrests)
- 4. routine activities- convergence of space and time of motivated offenders, and suitable targets

All three theories share a common theme: the convergence of vulnerable people, risky people and risky places



### Homicide Rates In Connecticut 2015 to Present



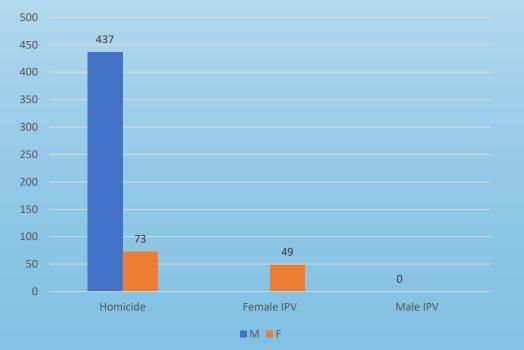
- 2020 and 2021 data is preliminary\* Rates are provisional, currently using 2019 population data for CT
- As December 31,2021 there were 161 homicides

Number of Homicides
 Crude Homicide Rates

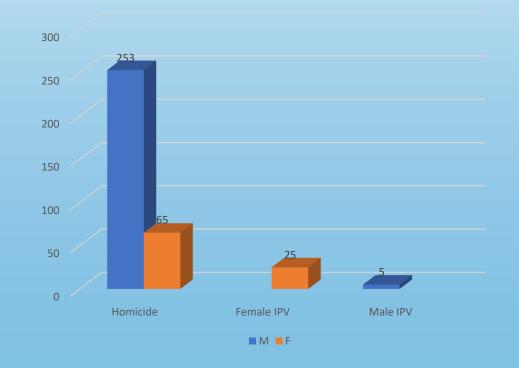


## Homicide 2015 to 2021\* by Sex

Homicides 2015 to 2015 by Sex

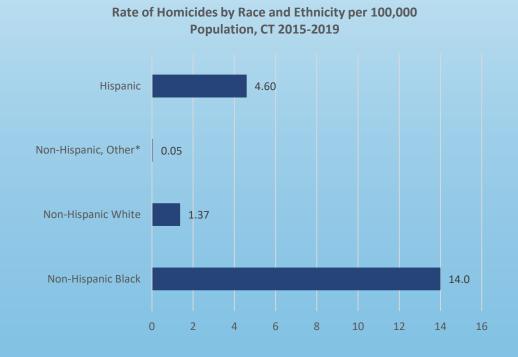


Homicide 2020 & 2021 by Sex





# Comparison of Homicide Rates Pre-Pandemic (2015 to 2019) to Pandemic (2020) by Race/Ethnicity



### Comparison of Homicide Rates Pre-Pandemic (2015 to 2019) to Pandemic (2020) by Race/Ethnicity

Race/Ethnicity	Average Number Homicides (2015 to 2019)	Crude Rate *2015-2019	Crude Rate*2021	Number of Homicides 2021	Rate Difference 2015 to 2019 Compared to 2021
Non-Hispanic Black	51	14.0	24.6	89	+ 76%
Non-Hispanic White	33	1.40	1.40	33	No change
Hispanic	27	4.60	5.8	35	+ 26 %

#### \*per 100,000 CT population



# Homicide by Age

### Average age of homicide victim 34 yrs old vs 51 yrs for suicide



### CTVDRS Data Lethal Means 2015 to 2021

Years	Weapon Type	Number of Homicides by Weapon Type	Total Number of Homicides for 2015 to 2019	Rate Weapon Death per 100 Homicides
Pre-Pandemic (2015to 2019)	<mark>Firearm</mark>	343	559	<mark>61.3</mark>
	Sharp Force Injury (Stabbing)	69	559	12.3
Pandemic				
2020	<mark>Firearm</mark>	108	157	<mark>68.7</mark>
	Sharp Force Injury (Stabbing)	31	157	19.7
2021	<mark>Firearm</mark>	120	161	<mark>74.5</mark>
	Sharp Force Injury (Stabbing)	18 ent of Public Heal	161 th - Keeping Connecticu	11.2 It Healthy



Circumstances of Homicide/ Possible Areas for Intervention

- For 2015 to 2019
   homicide circumstances
   were known for 80%
   (N=452)of the cases ( LE and OCME reports)
- Gang\* or groups involvement: rate 9 per 100 homicides

* Defined by law enforcement as organized gangs as Bloods,
Crips and Latin Kings

Circumstances	Number of Occurrences	Rate per 100 Homicides
Disputes/Arguments	167	36.9
Commission of a Crime:		
Assault	132	29.2
Robbery	63	13.9
Drug Trade	48	10.6
Drug Involvement	86	19.0

# Substance Use in Homicides 2015 to 2021

Rate of Positive Drug Results from Blood at the Time of Autopsy **2015 to 2019** (N= Number of Homicides (559))

Rate of Positive Drug Results from Blood at the Time of Autopsy **2020 to 2021** (N= Number of Homicides (318))

Drug	Number of Positives	Rate per 100 Homicides
Marijuana	171	30.5
Alcohol	135	24.1
Opiates	66	11.8
Cocaine	56	10.1
Benzodiazepines	41	7.3

Drug	Number of Positives	Rate per 100 Homicides
Marijuana	168	52.8
Alcohol	91	28.7
Cocaine	48	15.1
Opiates	42	13.2
Benzodiazepines	12	3.7



Number of Positive Marijuana Results by Race by Year \*

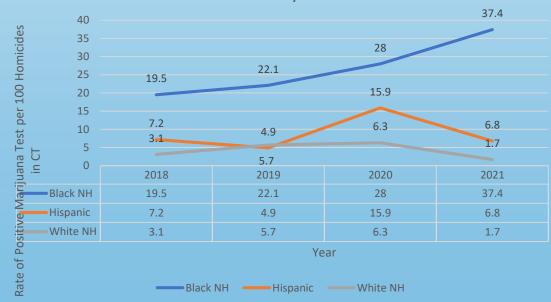
	2018	2019	2020	2021
Black NH	19	27	44	61
Hispanic	7	6	25	17
White NH	3	7	10	9
Other NH ( Asian, Native American, Pacific Islander)	0	1	0	1
Number of Homicides	97	122	157	161

\* Note: Rates calculated from counts less than 20 should be interpreted with caution

due to the variability of small numbers resulting in low reliability of rates



Comparision Of Positive Marijuana Rate for Homicide Victims by Race





Number of Alcohol Results (BAC ≥ .08 )by Race by Year \*

	2018	2019	2020	2021
Black NH	7	12	19	11
Hispanic	6	6	12	6
White NH	13	15	14	2
Other NH ( Asian, Native American, Pacific Islander)	0	0	0	0
Number of Homicides	97	122	157	161

\*note: Rates calculated from counts less than 20 should be interpreted with caution

due to the variability of small numbers resulting in low reliability of rates

#### Rate of Alcohol Results (BAC $\geq$ .08 ) by Race per 100 Homicides

Rate of BAC≥ .08 Results in Blood of Homicide Victims at the Time Autopsy per 100 Homicides by Race



Rate of BAC Greater Than Equal To .08 in Blood of Homicide Victims per 100 Homicides

------ Hispanic ------ Black NH ------ White NH ------ Other NH(Asian, Native American)



Number of Positive Opiate Results \*

	2018	2019	2020	2021
Black NH	4	5	8	9
Hispanic	3	4	7	2
White NH	8	13	8	8
Other NH ( Asian, Native American, Pacific Islander)	0	0	0	0
Number of Homicides	97	122	157	116

\* Note: Rates calculated from counts less than 20 should be interpreted with caution

due to the variability of small numbers resulting in low reliability of rates

Rate of Opiate Positive Results in Blood of Homicide Victims at the Time of Autopsy per 100 Homicides by Race



Rate of Positive Opiate Results per 100 Homicides



Number of Positive Cocaine Results \*

	2018	2019	2020	2021
Black NH	6	3	7	6
Hispanic	6	6	10	4
White NH	7	13	12	9
Other NH (	0	0	0	0
Asian,				
Native				
American,				
Pacific				
Islander)				
Number of	97	122	157	116
Homicides				

\* Note: Rates calculated from counts less than 20 should be interpreted with caution

due to the variability of small numbers resulting in low reliability of rates

Rates of Cocaine Positive Results in Blood of Homicide Victims at Time of Autopsy per 100 Homicides by Race



Rate of Positive Cocaine Results per 100 Homicides

------ Hispanic ------ Black NH ------ White NH ------ Other NH(Asian, Native American)



Number of Positive Benzodiazepine Results \*

	2018	2019	2020	2021
Black NH	2	4	0	2
Hispanic	3	3	3	0
White NH	9	8	5	2
Other NH (	0	0	0	0
Asian,				
Native				
American,				
Pacific				
Islander)				
Number of	97	122	157	116
Homicides				

\* Note: Rates calculated from counts less than 20 should be interpreted with caution

due to the variability of small numbers resulting in low reliability of rates

Rates of Benzodiazepine Results in Blood of Homicide Victims at Time of Autopsy per 100 Homicide by Race



Rate of Positive Benzodiazepines Results per 100 Homicides



# Region 2 Homicides for 2020&2021\*

• N= 86 homicides

#### Number of Homicides by Sex and Race/Ethnicity

Sex	White Non- Hispanic	Black Non- Hispanic	Other Non- Hispanic	Hispanic	Totals	Percent of Homicides
Males	8	40(60%)	1	18	67	78%
Females	6	8 (42%)	0	5	19	22%

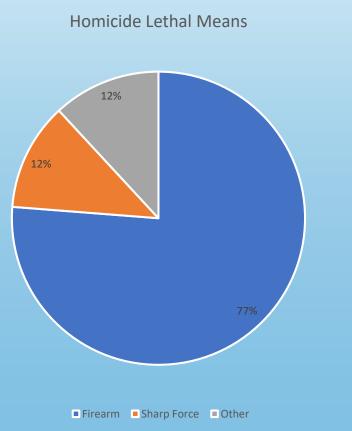


### Region 2 Homicides for 2020&2021\* by Town

Resident City	Number of Homicides
New Haven	38
Hamden	11
Meriden	8
West Haven	8
Middletown	5
Ansonia	3
Derby	3
East Haven	2
Wallingford	2
Durham	1
Guilford	1
North Haven	1
Orange	1
Seymour	1
Shelton	1



# Region 2 Homicides for 2020&2021\* by Lethal Means





86 Homicides for Region 2 in 2020 and 2021

Sex	NH White	NH Black	NH Other	Hispanic
Male	8	40	1	18
Female	6	7	0	5

Circumstances	Number of Occurrences	Rate per 100 Homicides
Disputes/Arguments/Fist Fights	34	57.6
During a Commission of a Crime:	32	54.2
1. Assault	17	28.8
2. Drug Trade	3	5.1
3. Robbery	4	6.7
4. Other	8	13.5
Drug Involvement	9	15.3
Drive -By Shooting	7	11.8
Walk by Assault	9	15.3
Intimate Partner Violence	8	13.5

# Substance Use in Homicides Region 2 2015 to 2021

Rate of Positive Drug Results from Blood at the Time of Autopsy **2015 to 2019** (N= Number of Homicides (126))

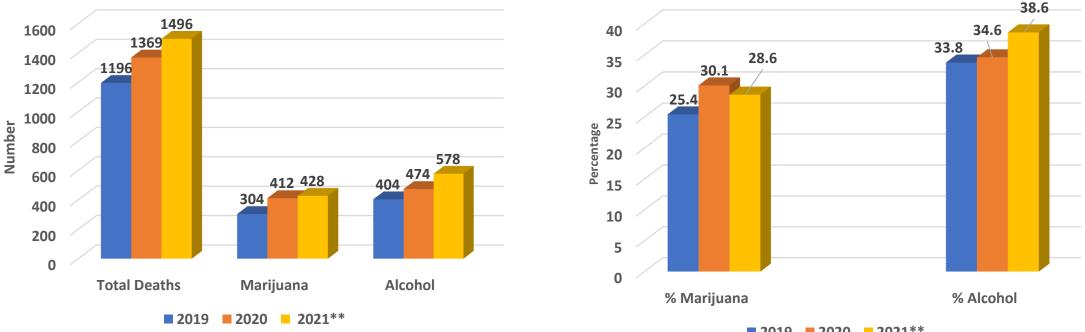
Drug	Number of Positives	Rate per 100 Homicides
Marijuana	32	25.4
Alcohol	26	20.6
Opiates	14	11.1
Cocaine	21	16.6
Benzodiazepines	12	7.3

Rate of Positive Drug Results from Blood at the Time of Autopsy **2020 to 2021** (N= Number of Homicides (86))

Drug	Number of Positives	Rate per 100 Homicides
Marijuana	50	58.1
Alcohol	22	25.6
Cocaine	15	17.4
Opiates	9	10.5
Benzodiazepines	4	4.7

### Presence of Marijuana and Alcohol in Accidental Overdoses Statewide

Number of Unintentional Drug Overdose Deaths with Presence of Marijuana and Alcohol, Connecticut, 2019-2021\* Unintentional Drug Overdose Deaths with Presence of Marijuana and Alcohol, Connecticut, 2019-2021\*



**2019 2020 2021**\*\*



The Connecticut Violent Death Data

# Questions?

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