

This brief looks at deaths, hospital and emergency department visits involving firearms among Vermont residents. Statistically significant differences are noted with an asterisk.

A **firearm injury** is a nonfatal injury caused by the discharge of a firearm by accident, in an assault, intentional self-harm or through legal intervention.

A **firearm death** is a death caused by the discharge of a firearm unintentionally, in an assault, suicide or through legal intervention.

## Trend

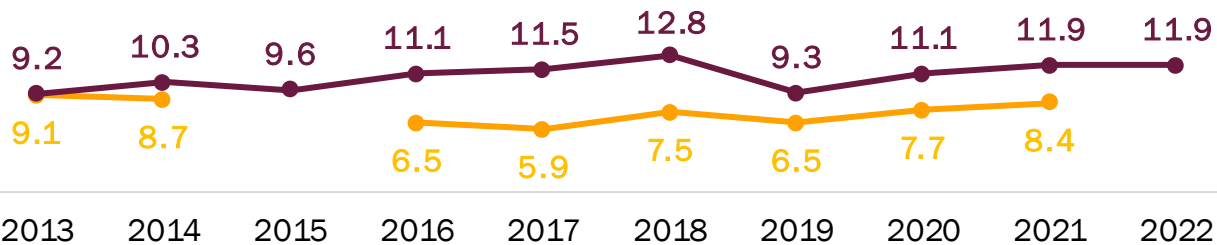
Firearms were responsible for 55 hospital visits in 2021 and 82 deaths in 2022<sup>1</sup>. The rates of firearm injury and death among Vermonters have not significantly changed over the past ten years. See the [appendix](#) for death numbers by year and other demographics.

### KEY POINTS

- Most deaths involving a firearm are suicide (85%).
- Male suicides account for 76% of all firearm deaths. Male suicide deaths are highest for adults 65 years and older.
- Orleans county has a significantly higher rate of firearm injuries compared to other places in Vermont.
- BIPOC individuals are at greatest risk for firearm homicide death in Vermont (57%).
- Out-of-state residents account for 48% of firearm homicide deaths in Vermont.

### The rate of firearm injury and deaths have fluctuated over the past 10 years.

Age-adjusted rates per 100,000 Vermont residents



Source: Vermont Vital Statistics, 2013-2022; Vermont Uniform Hospital Discharge Data Set (VUHDDS), 2013- 2021

## Recent Nonfatal Firearm Injury As A Proportion of Emergency Department Visits

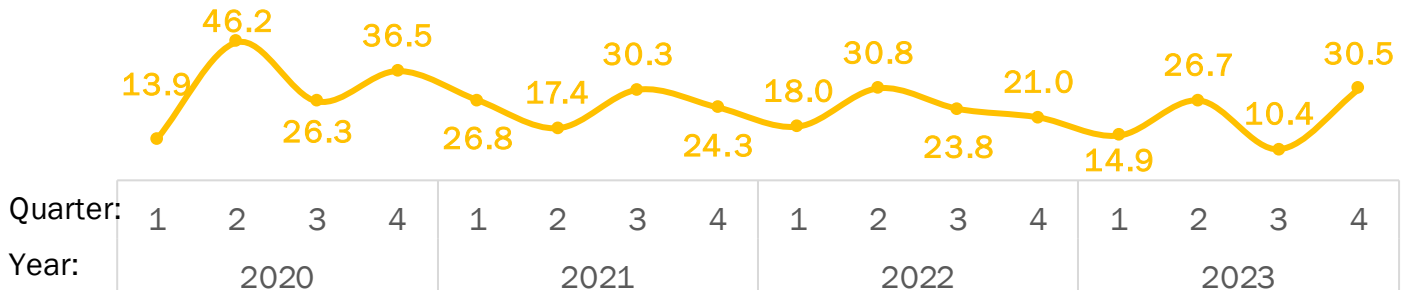
Emergency department syndromic surveillance data is used to understand the most recent firearm injuries. From 2020–2023, an average of 24.3 per 100,000 people were cared for in Vermont emergency departments due to nonfatal firearm injuries. The majority of these firearm injuries were accidental (67%). While the proportion of emergency department visits that are nonfatal firearm injuries fluctuates, the trend is stable.

<sup>1</sup> As of March 2024, 2021 is the most recent data year available for the Vermont Uniform Discharge Data Set

# Firearm injury and death

## Nonfatal firearm injury rates fluctuated quarterly from 2020-2023.

Rate per 100,000 emergency department visits.

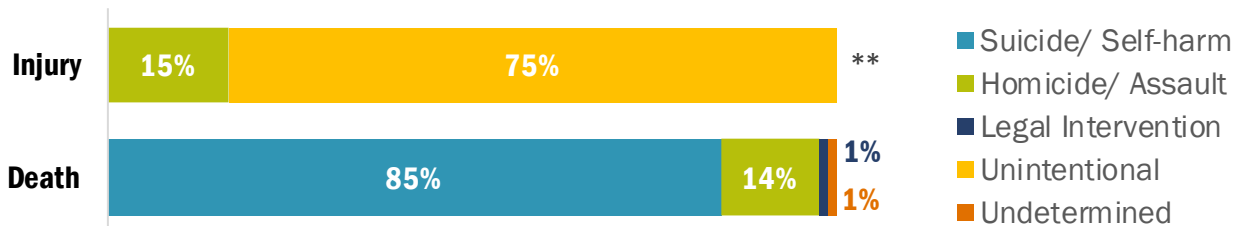


Source: Early Notification of Community-based Epidemics (ESSENCE) 2020-2023

## Intent

Among hospital visits for firearm injuries, 75% are unintentional and 15% are the result of an assault. The remaining categories have fewer than six visits and are suppressed. Most firearm deaths are suicides (85%). Following suicide, 14% of firearm deaths are due to homicide and 1% of deaths are undetermined or from legal intervention.

### A majority of firearm injuries are unintentional, while the majority of deaths are suicide.



Source: Vermont Vital Statistics, 2022; VUHDDS, 2020-2021, \*\* suppressed, fewer than six hospital visits.

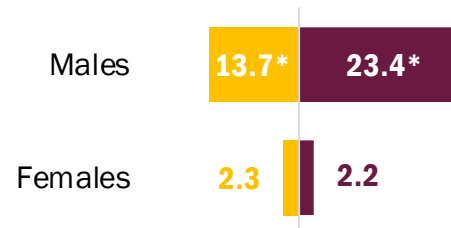
## Sex and Age

Males make up the majority of firearm injury patients (87%) and deaths (91%). Firearm injury rates in Vermont are six times higher for males compared to females. Firearm death rates are nearly 11 times higher for males than females.

Firearm injury rates in Vermont are highest for those 25-44, followed by 15-24. The firearm injury rate among people 15-44 is significantly higher than the rates among adults 45-64.\* Firearm death rates are highest for adults 65 years and older, followed by those 25-44. Rates among both populations are statistically higher than people 24 years and younger.\*

### Firearm injury and death rates are significantly higher for males.\*

Age-adjusted rate per 100,000 Vermonters

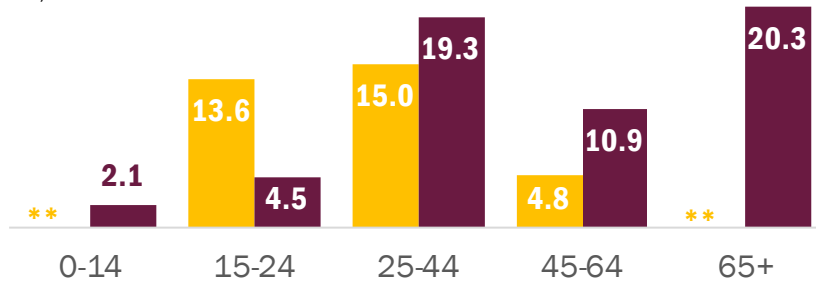


Source: Vermont Vital Statistics, 2022; VUHDDS, 2020-2021

# Firearm injury and death

**Firearm injuries are highest for people aged 15 to 44. Firearm deaths are highest for adults 25 to 44 and 65 years and older.**

Rate per 100,000 Vermonters



Source: Vermont Vital Statistics, 2022; VUHDDS, 2020-2021

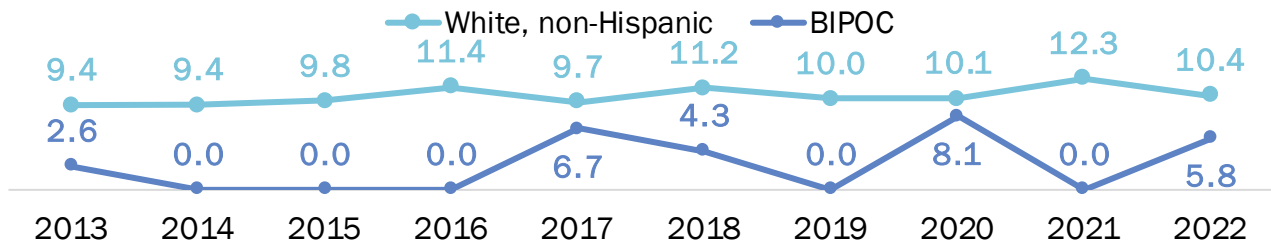
\*\*Data suppressed, fewer than six hospital visits

## Race and Ethnicity

Vermonters' risk for firearm death differs by race and ethnicity. From 2013-2022, white, non-Hispanic Vermonters were twice as likely to die by firearm than Vermonters identifying as Black, Indigenous, or a Person of Color (BIPOC). It is important to breakdown firearm deaths by intent to further understand this difference in risk. White, non-Hispanic Vermonters are four times more likely to die by firearm suicide than BIPOC Vermonters (10.4 vs. 2.9 firearm suicide deaths per 100,000). However, BIPOC Vermonters are three times more likely to die by firearm homicide than white, non-Hispanic Vermonters (3.3 vs 1.1 firearm homicide deaths per 100,000).

**Firearm suicide death rates are highest among white, non-Hispanic Vermonters.**

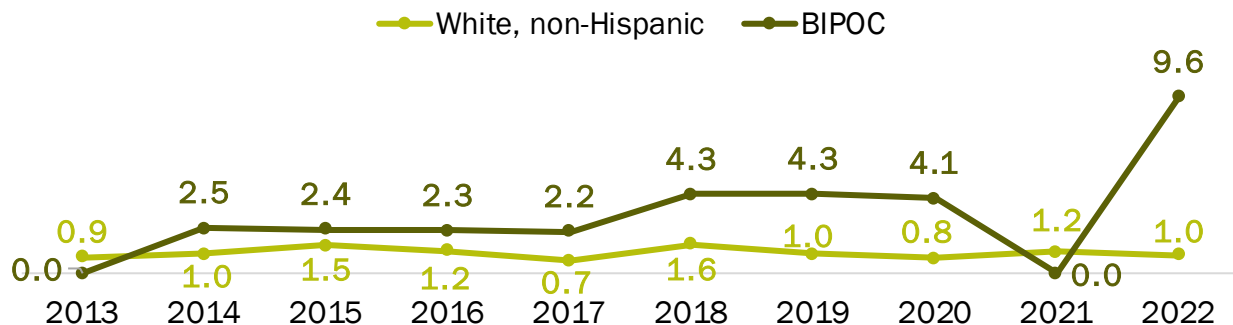
Rate per 100,000 Vermonters



Source: Vermont Vital Statistics 2013-2022

**Firearm homicide deaths among BIPOC Vermonters more than doubled in 2022 compared to any other year in the past decade.**

Rate per 100,000 Vermonters



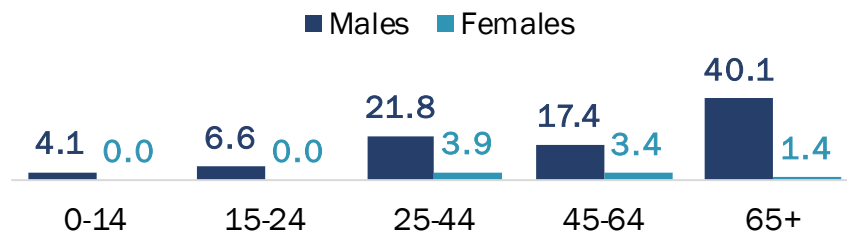
Source: Vermont Vital Statistics 2013-2022

## Suicide Deaths by Firearm

More than three quarters of firearm deaths are male suicide deaths (76%). Males 65 years and older are twice as likely to die by suicide using a firearm compared to any other age group or sex (40.1 firearm suicide deaths per 100,000 males 65+ compared to the next closest group 21.8 per 100,000 Vermont males 25-44). Older males are at least 10 times more likely to die by firearm suicide than any age group among females.

### Firearm suicide death rates are highest for 65+ year old males.

Rate per 100,000 Vermonters



Source: Vermont Vital Statistics 2022

## County of Residence

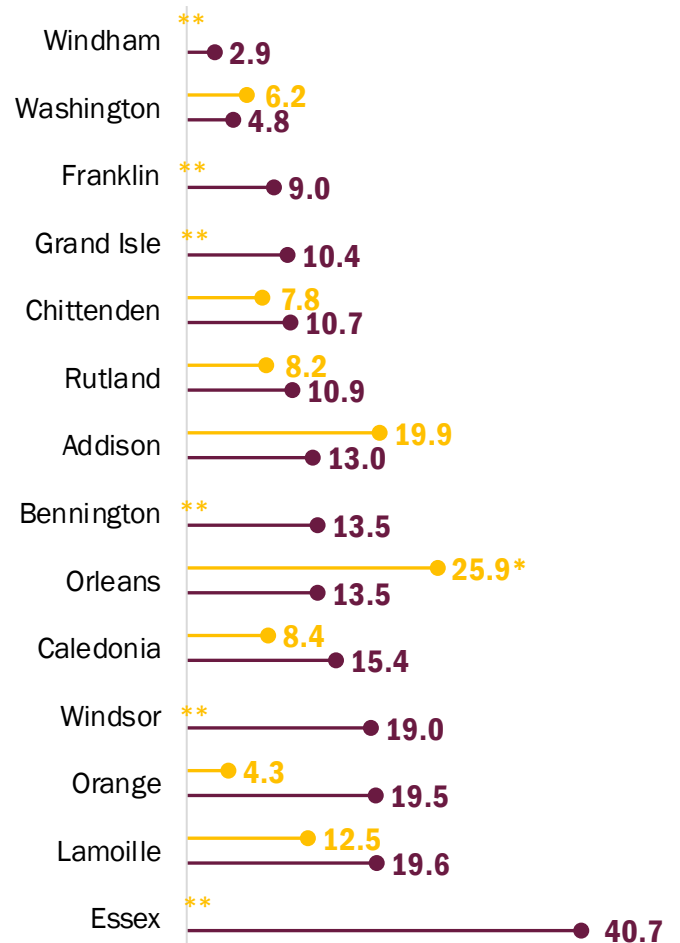
Firearm injury rates in Orleans County are significantly higher than Vermont overall. Injury rates are highest in Orleans, Addison and Lamoille Counties. Firearm death rates are statistically similar across counties, but are highest in Essex, Lamoille, Caledonia and Windsor Counties. While Essex County's firearm death rate is more than double any other county, due to the county's small population this difference is not statistically significant.

## Firearm Deaths and State Residency

While the rate of firearm deaths among Vermonters has not statistically increased over time, in 2022 there was a 24% increase in firearm deaths occurring in Vermont compared to the average during the nine years prior (92 vs.74). This change is due to an increase in firearm homicide deaths among out of state residents. From 2013-2021, 6% of all firearm deaths in Vermont were among out-of-state residents, this more than doubled in 2022 to 16%. This increase is statistically significant. In 2022, nearly half of firearm homicide deaths were among out-of-state residents, about three times higher than the average proportion during the nine years prior (48% vs 13%).

## County firearm injury and death rates.

Age-adjusted rate per 100,000 Vermonters

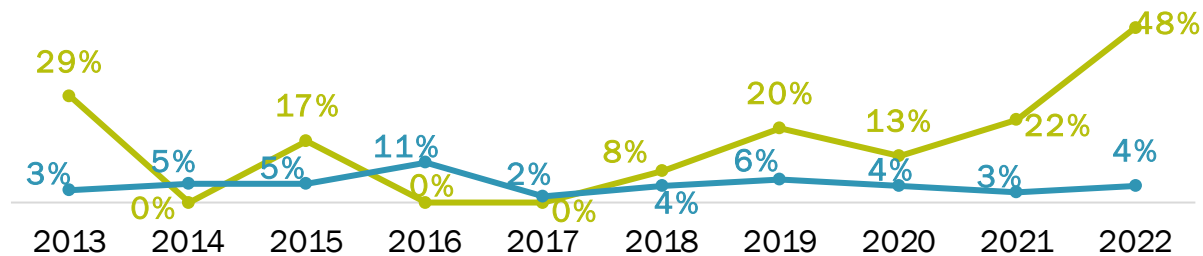


Source: Vermont Vital Statistics, 2022; VUHDDS, 2020- 2021

\*\*Data suppressed, fewer than six hospital visits

**The percent of out-of-state resident firearm homicide deaths increased in 2022.\* The percent of out-of-state resident firearm suicide deaths has not changed over the past 10 years.**

Percent of out-of-state resident firearm deaths in Vermont.



Source: Vermont Vital Statistics 2013-2022

## Key Takeaways

While the number of firearm injuries and deaths are relatively small in Vermont, they are preventable through education and policy. We know that [44% of Vermont households](#) have a firearm in their residence, which places them at higher risk for firearm injury and death, primarily for unintentional injury, suicide and domestic violence related homicide. According to the [National Domestic Violence Hotline](#), the presence of a gun in the home increases the risk of homicide for women by 500 percent. Best practice is to have firearms unloaded, locked in a secure location, and have the ammunition stored and locked separate from the firearm. If someone in your household is experiencing a crisis, firearms should be [stored in a temporary location](#) outside of the home. Learn more about [firearm injury prevention](#) and accessing [free gun locks](#).

**Most firearm deaths are suicides.**

## Methodology

Firearm hospital visit injuries are defined using hospital billing (ICD-10) codes from emergency department and hospitalizations; new for the 2024 report, only non-fatal firearm visits are included. As a result, the rates from 2017- 2021 have been updated. Nonfatal firearm injuries to the emergency department are defined using discharge diagnosis ICD-10 codes. Probabilistic matching was used to remove duplicate individuals who were transferred between emergency departments and those that were secondary visits due to an initial firearm injury treated in the ED. Firearm deaths are defined using ICD-10 codes. The death statistics in this brief are among Vermont residents unless otherwise specified, firearm injury statistics are among Vermont residents treated at Vermont hospitals. Overall rates, and rates by biological sex, and county are age-adjusted. Firearm hospital visit injury rates were calculated using 2020 and 2021 combined due to small numbers.

For more information: [AHS.VDHSuicideData@vermont.gov](mailto:AHS.VDHSuicideData@vermont.gov)

## Appendix

<b>Number of Firearm Deaths Among Vermont Residents, 2017-2022</b>						
<b>County of Residence</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Addison	1	3	6	2	8	7
Bennington	8	3	4	7	5	6
Caledonia	7	8	2	4	5	5
Chittenden	10	14	10	11	12	18
Essex	4	1	1	1	1	3
Franklin	5	6	8	6	6	5
Grand Isle	0	1	1	0	2	1
Lamoille	3	1	1	2	4	5
Orange	4	7	8	6	7	6
Orleans	6	4	2	7	7	4
Rutland	7	9	8	11	3	6
Washington	4	11	6	6	9	4
Windham	6	6	2	3	4	2
Windsor	5	8	8	9	9	10
<b>Total Firearm Deaths</b>	<b>70</b>	<b>82</b>	<b>67</b>	<b>75</b>	<b>83***</b>	<b>82</b>
Firearm / Suicide	62	70	59	68	74	69
Firearm / Homicide	7	10	5	7	7	11
Firearm / legal intervention	0	2	3	0	1	1
<b>Age Group</b>						
<b>Age Group</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
0-14 years	0	0	0	2	2	2
15-24 years	7	8	9	10	8	4
25-44 years	31	31	20	22	26	30
45-64 years	22	27	18	23	26	19
65+ years	10	16	20	18	21	27
<b>Sex</b>						
<b>Sex</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2020</b>	<b>2022</b>
Female	13	13	5	8	7	7
Male	57	69	62	67	76	75

\*\*\*1 firearm death was missing county of residence in 2021.