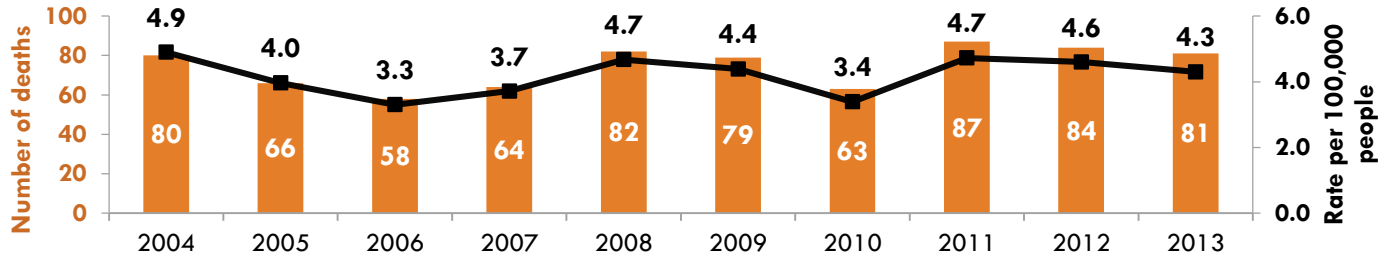
Santa Clara County: Firearms injuries

Santa Clara County PUBLIC HEALTH

Key findings

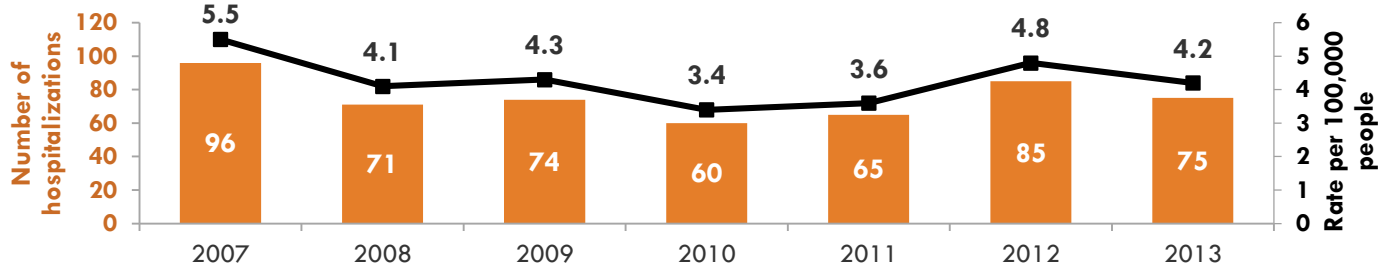
- In 2013, 12% of injury deaths were due to firearms injuries.
- The death rate from firearms injuries fluctuated from 2004 to 2013.
- The rate of hospitalizations for firearms injuries has decreased since 2007. The rate of emergency department (ED) visits for firearm injuries decreased from 2007 to 2010, but increased in 2011.
- The rate of deaths, hospitalizations, and ED visits for firearms injuries is highest among males and African Americans.
- The rate of hospitalizations and ED visits for firearms injuries is highest among adults ages 18 to 44. The rate of death from firearm injuries is highest among ages 65 and older.
- Self-inflicted/suicide accounts for the highest percentage of deaths from firearms injuries and assault/homicide accounts for the highest percentage of hospitalizations and emergency department (ED) visits for firearms injuries.

Number and age-adjusted rate of deaths from firearms injuries, 2004-2013



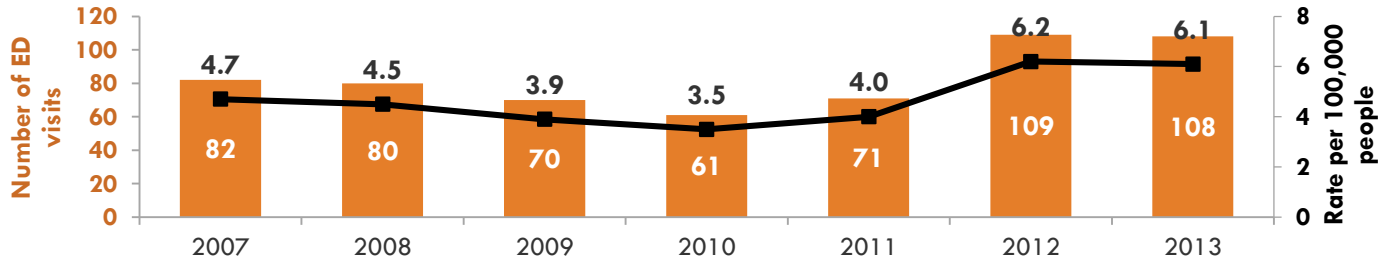
Source: Santa Clara County Public Health Department, 2004-2013 Death Statistical Master File[1]

Number and age-adjusted rate of hospitalizations for firearms injuries, 2007-2013



Source: Office of Statewide Health Planning and Development, 2007-2013 Patient Discharge Data[1]

Number and age-adjusted rate of emergency department (ED) visits for firearms injuries, 2007-2013



Source: Office of Statewide Health Planning and Development, 2007-2013 Emergency Department Data[1]

Note: In each graph above, the colored bars represent the number and the black line represents the age-adjusted rate per 100,000 people.

Number, percentage, and age-adjusted/age-specific rates of deaths from firearms injuries by demographic characteristics, 2009-2013

		Deaths		
		Average annual number of deaths±	% of deaths from firearms injuries*	Rate per 100,000 people+
Santa Clara County		74	N/A	4.2
Gender	Male	66	89	7.6
	Female	8	11	0.9
Age group	<18	3	4	0.7
	18-44	38	51	5.3
	45-64	22	30	4.8
	65+	12	16	5.7
Race/ethnicity	African American	<1	4	5.7
	Asian/Pacific Islander	10	14	1.9
	Latino	21	28	4.2
	White	38	52	5

Source: Santa Clara County Public Health Department, 2009-2013 Death Statistical Master File[1]

Number, percentage, and age-adjusted/age-specific rates of hospitalizations and emergency department (ED) visits for firearms injuries by demographic characteristics, 2009-2013

		Hospitalizations			ED visits		
		Average annual number of visits±	% of hospitalizations for firearms injuries*	Rate per 100,000 people+	Average annual number of visits±	% of visits for firearms injuries*	Rate per 100,000 people+
Santa Clara County		72	N/A	4.0	84	N/A	4.7
Gender	Male	64	89	7.0	76	91	8.4
	Female	8	11	0.9	8	9	0.9
Age group	<18	9	12	2.0	11	13	2.5
	18-44	55	77	7.8	63	75	8.9
	45-64	7	10	1.5	8	10	1.8
	65+	--	--	--	--	--	--
Race/ethnicity	African American	10	14	19.9	8	9	16.6
	Asian/Pacific Islander	6	9	1.0	10	13	1.9
	Latino	42	58	7.2	49	59	8.5
	White	9	13	1.6	13	16	2.2

Source: Office of Statewide Health Planning and Development, 2009-2013 Emergency Department Data and 2009-2013 Patient Discharge Data[1]

Note: ±Represents the average annual number of deaths, hospitalizations, or ED visits in each category over a 5-year period. If the average is reported, the sum of hospitalizations or ED visits for each 5-year period is ≥15 cases. *Represents the percentage of deaths, hospitalizations, or ED visits in each category, e.g., the percentage of deaths or visits for firearms injuries that were male or female. +Rates for age groups are reported as age-specific rates per 100,000 people. All other rates are age-adjusted rates per 100,000 people. Numbers and percentages may not sum to county totals or 100% because some categories are not presented (race/ethnicity), due to missing data, or due to rounding. N/A indicates fields where data are not applicable. (--) indicates not reportable due to small number of deaths, hospitalizations, or ED visits.

Number and percentage of deaths, hospitalizations, and emergency department (ED) visits for firearms injuries by intent of injury

Intent	Deaths 2004-2013		Hospitalizations 2009-2013		ED visits 2009-2013	
	Average annual number of deaths	% of deaths	Average annual number of visits	% of hospitalizations	Average annual number of visits	% of ED visits
Unintentional	<1	1	6	13	17	29
Self-inflicted/suicide	44	59	2	4	--	1
Assault/homicide	28	37	40	79	31	52
Undetermined	1	1	--	--	4	7
Legal intervention	2	2	--	--	6	11

Source: Santa Clara County Public Health Department, 2004-2013 Death Statistical Master File; Office of Statewide Health Planning and Development, 2009-2013 Patient Discharge Data and 2009-2013 Emergency Department Data

Note: The number of firearms-related deaths and injuries is too small to report by intent of injury for individual years and groups. (--) indicates data are not reportable due to small number of hospitalizations or ED visits. Data presented for deaths, hospitalizations and ED visits are an annual average. If the average is reported, the sum of hospitalizations or ED visits for each 5-year period is ≥15 cases.

Annual economic cost of firearms injuries

Costs	Deaths (N=81)	Hospitalizations (N=69)	ED visits (N=93)
Medical	$451,000	$1,473,000	$237,000
Work loss	$111,811,000	$5,854,000	$381,000
Combined	$112,263,000	$7,326,000	$619,000

Source: Santa Clara County Public Health Department, 2013 Death Statistical Master File; Office of Statewide Health Planning and Development, 2011 Emergency Department Data and 2011 Patient Discharge Data; Centers for Disease Control and Prevention, Web-based Injury Statistics Query and Reporting System, 2010

Note: For annual economic costs, data are for non-fatal hospitalizations and non-fatal treat and release ED visits only and so may not match numbers reported in other tables and graphs. Costs are indexed to 2013 U.S. prices for hospitalizations and ED visits and in 2013 California prices for deaths. Hospitalizations and ED visits exclude undetermined intent.

Self-reported household firearm ownership among adults

		Any firearms now kept in or around home %	Any of the firearms are now loaded (among those with firearms) %	Any loaded firearms are also unlocked (among those with loaded firearms) %
Santa Clara County		11	12	60*
Gender	Male	13	16	66*
	Female	9	7	41*
Race/ ethnicity	African American	13*	10*	56*
	Asian/Pacific Islander	2	3*	100*
	Latino	5	6*	100*
	White	22	13	53

Notes: * indicates estimate is statistically unstable due to a relative standard error of greater than 30% or less than 50 respondents in the denominator. These estimates should be viewed with caution and may not be appropriate to use for planning or policy purposes.
Source: Santa Clara County Public Health Department, 2013-14 Behavioral Risk Factor Survey

Self-reported firearm use among middle and high school students

		Carried a gun on school property in the past 12 months %	Saw someone carrying a gun, knife, or other weapon on school property in the past 12 months %
Santa Clara County		4	25
Gender	Male	6	28
	Female	2	21
Race/ ethnicity	African American	9	31
	Asian/Pacific Islander	3	19
	Latino	6	33
	White	3	19
Grade	7th	4	27
	9th	5	26
	11th	3	21

Source: California Healthy Kids Survey, 2009-10

Technical notes

A firearms injury is defined as a penetrating force injury resulting from a bullet or other projectile shot from a powder-charged gun. This category includes gunshot wounds from powder-charged handguns, shotguns, and rifles.[2] This category does not include injury caused by a compressed air-powered paint gun or a nail gun, which falls in the "other specified" category. All intents are included in this category such as unintentional, self-inflicted/suicide, homicide/assault, undetermined, and legal intervention. Legal intervention is an injury or death that involves any law enforcement official, such as injury or death to law enforcement official, suspect, and/or bystander.

Injury data are presented as counts and rates:

- Counts represent the total number of events (e.g., deaths, hospitalizations) that occur in a defined period of time, such as one year.
- Rates consist of the count divided by the number of people in the population at risk (e.g., Latinos in Santa Clara County), multiplied by a standard number (e.g., 100,000). When comparing data over time or between different populations, rates are often used instead of counts to make it possible to compare outcomes between populations that differ in size.
- Rates are "age-adjusted" to account for differences in the age profiles in populations over time or between different populations, in this case using weights corresponding to the 2000 U.S. population.
- Age-specific rates are similar to overall rates. Age-specific rates represent the number of cases in a specific age group, divided by the number of people in Santa Clara County in that age group and multiplied by a standard number (e.g., 100,000) to enable comparison between age groups that differ in size.
- Trends are generally presented as single-year estimates over time. However, in some Quick Facts, a "moving average" is presented, which consists of combining data for overlapping three-year periods. Moving averages stabilize fluctuations that can be misleading when counts from a specific type of injury are low from year to year.

[1]Denominator is based on the following sources: State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000–2010. Sacramento, California, September 2012 (years 2000-2009); State of California, Department of Finance, State and County Population Projection, 2010-2060. Sacramento, California, January 31, 2013 (years 2010-2013)

[2]Centers for Disease Control and Prevention. Injury Center: 4.0 Definitions for WISQARS™ Nonfatal. http://www.cdc.gov/ncipc/wisqars/nonfatal/definitions.htm. Last modified 3/27/2007. Accessed 7/29/2014.