

Homicide and Non-Fatal Assault

Homicide was the fourth leading cause of death among African Americans.

- The leading cause of homicide and hospitalized assaults was firearms.
- African American males were most likely to die from homicide.
- Residents of Richmond and San Pablo were more likely to die from homicide than county residents overall.
- Residents 21-44 years were most likely to die from homicide.
- Males were more likely to die from homicide than females.

Homicide

There were 287 homicides among Contra Costa residents between 2005–2007. This means that on average 96 Contra Costa residents died from homicide each year. The crude death rate from homicide for Contra Costa (9.3 per 100,000) was higher than California's crude rate (6.6 per 100,000).

Half (50.5%) of all homicides in Contra Costa occurred among African Americans, followed by Hispanics (24.5%), whites (17.4%) and Asians/Pacific Islanders (5.2%).

African Americans had the highest homicide rate (51.7 per 100,000) in the county; significantly higher than the rates for the county overall (9.3 per 100,000) and all other racial/ethnic groups listed. Whites (3.1 per 100,000) had a significantly lower homicide rate than the county overall.

Table 1 ■ Homicide by race/ethnicity

Contra Costa County, 2005–2007

	Deaths	Percent	Rate	Homicide is any intentionally inflicted fatal injury to another person.
African-American	145	50.5%	51.7*	
Hispanic	73	24.5%	11.1	
White	50	17.4%	3.1**	
Asian/Pacific Islander	15	5.2%	NA	
Total	287	100.0%	9.3	

These are crude rates per 100,000 residents.

Total includes racial/ethnic groups not listed above.

*Significantly higher rate than the county overall.

**Significantly lower rate than the county overall.

Males (84.3%) accounted for the majority of deaths from homicide and had a higher homicide rate (16.0 per 100,000) than females (2.9 per 100,000).

Table 2 ■ Homicide by gender

Contra Costa County, 2005–2007

	Deaths	Percent	Rate
Males	242	84.3%	16.0*
Females	45	15.7%	2.9
Total	287	100.0%	9.3

These are crude rates per 100,000 residents.

*Significantly higher rate than county females overall.

African American males, in particular, were disproportionately affected by homicide. African American males comprised 4.3% of the county population yet represented 43.9% of all homicides that occurred in the county. They had the highest homicide rate (95.6 per 100,000); significantly higher than the rates for county males overall (16.0 per 100,000) and males of any other racial/ethnic groups listed. White males (4.3 per 100,000) had a significantly lower homicide rate than county males overall.

The greatest number of homicide deaths in Contra Costa occurred among residents ages 21–44 years (180), and in particular among males of this age group. Residents 21–44 years had the highest homicide rate (17.9 per 100,000); significantly higher than the rates for the county overall (9.3 per 100,000) and all other age groups listed. Residents 45–64 years (4.1 per 100,000) had a significantly lower homicide rate than county residents overall.

Table 3 ■ Homicide by Age

Contra Costa County, 2005–2007

	Deaths	Percent	Rate
0-20 years	64	22.3%	7.2
21-44 years	180	62.7%	17.9*
45-64 years	34	11.8%	4.1**
65 and older	9	3.1%	NA
Total	287	100.0%	9.3

These are age-specific rates per 100,000 residents.

*Significantly higher rate than the county overall.

**Significantly lower rate than the county overall.

The greatest number of homicides occurred among residents of Richmond (119), Antioch (35) and San Pablo (23). Richmond (38.6 per 100,000) and San Pablo (24.8 per 100,000) had significantly higher rates of homicide than the county overall (9.3 per 100,000).

Table 4 ■ Homicide by selected cities

Contra Costa County, 2005–2007

	Cases	Percent	Rate
Richmond	119	41.5%	38.6*
Antioch	35	12.2%	11.7
San Pablo	23	8.0%	24.8*
Pittsburg	22	7.7%	11.7
Concord	13	4.5%	NA
Walnut Creek	9	3.1%	NA
Pinole	8	2.8%	NA
Bay Point	7	2.4%	NA
Brentwood	7	2.4%	NA
Oakley	7	2.4%	NA
El Cerrito	5	1.7%	NA
Contra Costa	287	100.0%	9.3

These are crude rates per 100,000 residents.

Contra Costa total includes cities not listed above.

*Significantly higher rate than the county overall.

More than three-quarters (78.7%) of all homicide deaths in Contra Costa involved firearms.

Table 5 ■ Homicide by cause

Contra Costa County, 2005–2007

	Cases	Percent	Rate
Firearm	226	78.7%	7.3
Other	34	11.8%	1.1
Cut/Pierce	21	7.3%	0.7
Total	287	100.0%	9.3

These are crude rates per 100,000 residents.

Total includes causes not listed above.

Non-Fatal Assault Hospitalizations

To understand the impact of assault it is important to assess hospitalizations in addition to deaths. Information about homicides indicates the ultimate toll that assault takes on people's lives, but more people experience assault than die from it. Assaults that are serious enough to result in hospitalization greatly affect one's health and well-being. Other less-severe assault injuries are treated at home, in emergency departments or outpatient clinics.

Between 2005-2007, there were 1,144 hospitalizations due to non-fatal assaults among Contra Costa residents. This means that on average, there were 381 hospitalizations due to assaults each year. The crude hospitalization rate from assaults for Contra Costa (37.0 per 100,000) was lower than the crude rate for California (39.6 per 100,000).

Table 6 ■ Non-fatal assault hospitalizations

By Race/Ethnicity

Contra Costa County, 2005–2007

	Cases	Percent	Rate
African American	373	32.6%	133.0*
White	356	31.1%	22.0**
Hispanic	244	21.3%	37.1
Asian/Pacific Islander	38	3.3%	9.6**
Total	1,144	100.0%	37.0

These are crude rates per 100,000 residents.

Total includes racial/ethnic groups not listed above.

*Significantly higher rate than the county overall.

**Significantly lower rate than the county overall.

Non-fatal assault is intentionally inflicted injury to another person that may or may not involve intent to kill. In this section we look at non-fatal assaults that led to hospitalization.

The greatest number of assault hospitalizations in the county was among African Americans (373), followed by whites (356), Hispanics (244) and Asian/Pacific Islander residents (38).

African Americans had the highest assault hospitalization rate (133.0 per 100,000); significantly higher than the rates for the county overall (37.0 per 100,000) and all other racial/ethnic groups listed. Whites (22.0 per 100,000) had a significantly lower assault hospitalization rate than the county overall. Asians/Pacific Islanders (9.6 per 100,000) had the lowest rate, significantly lower than the county overall and all other racial/ethnic groups listed.

Table 7 ■ Non-fatal assault hospitalizations by gender

Contra Costa County, 2005–2007

	Cases	Percent	Rate
Males	959	83.8%	63.2*
Females	185	16.2%	11.7
Total	1,144	100.0%	37.0

These are crude rates per 100,000 residents.

*Significantly higher rate than county females overall.

Males (83.8%) experienced the majority of assault hospitalizations and had a higher rate of assault hospitalization (63.2 per 100,000) than females (11.7 per 100,000).

African American males had the highest assault hospitalization rate (235.2 per 100,000); higher than the rates for county males overall (63.2 per 100,000) and males of all other racial/ethnic groups listed. White males (35.5 per 100,000) had a lower assault hospitalization rate than county males overall. Asian/Pacific Islander males (16.2 per 100,000) had the lowest rate, lower than county males overall and all other racial/ethnic groups listed.

Table 8 ■ Non-fatal assault hospitalizations by age

Contra Costa County, 2005–2007

	Cases	Percent	Rate
0–14 years	33	2.9%	5.2**
15–24 years	453	39.6%	110.8*
25–34 years	254	22.2%	65.3*
35–44 years	180	15.7%	38.7
45–54 years	131	11.5%	27.6**
55–64 years	54	4.7%	15.5**
65 years and older	39	3.4%	10.5**
Total	1,144	100.0%	37.0

These are age-specific rates per 100,000 residents.

*Significantly higher rate than the county overall.

**Significantly lower rate than the county overall.

More than half (61.8%) of all assault hospitalizations occurred among residents 15–34 years. Within this age group, residents 15–24 years had the highest assault hospitalization rate (110.8 per 100,000); significantly higher than the rates for the county overall (37.0 per 100,000) and all other age groups listed. Residents 25–34 years old (65.3 per 100,000) had a significantly higher rate of assault hospitalizations than the county overall. Residents 0–14 years, and 45 years and older had significantly lower rates than the county overall.

Table 9 ■ Non-fatal assault hospitalizations by cause

Contra Costa County, 2002–2004

	Cases	Percent	Rate
Firearm	422	36.9%	13.6
Unarmed fight	209	18.3%	6.8
Cut/pierce	197	17.2%	6.4
Other	164	14.3%	5.3
Blunt object	106	9.3%	3.4
Abuse and neglect	46	4.0%	1.5
Total	1,144	100.0%	37.0

These are crude rates per 100,000 residents.

Total includes causes not listed above.

The largest percentage of all assault hospitalizations involved firearms (36.9%), followed by unarmed fights (18.3%), and cutting/piercing (17.2%).

Six ZIP codes had higher assault hospitalization rates than the county overall: 94565, 94804, 94806, 94801, 94509 and 94520. These ZIP codes comprised almost two-thirds (64.8%) of the assault hospitalizations in the county and accounted for at least 70 cases each. A stable rate could not be calculated

for ZIP codes with fewer than 20 cases. If denominator data was available, statistical testing generated a confidence interval for these ZIP codes to determine whether the rate range was lower, higher or similar to the county rate. One ZIP code (94548) was shown to have a rate range higher than the county rate and is represented accordingly on the map, but because there are fewer than five cases it is excluded from the table.

Seventeen ZIP codes had assault hospitalization rates or rate ranges lower than the overall county rate. These ZIP codes are shaded accordingly on the map and those that had at least five cases are included and identified in the table.

Table 10 ■ Non-fatal assault hospitalizations by ZIP code
Contra Costa County, 2005–2007

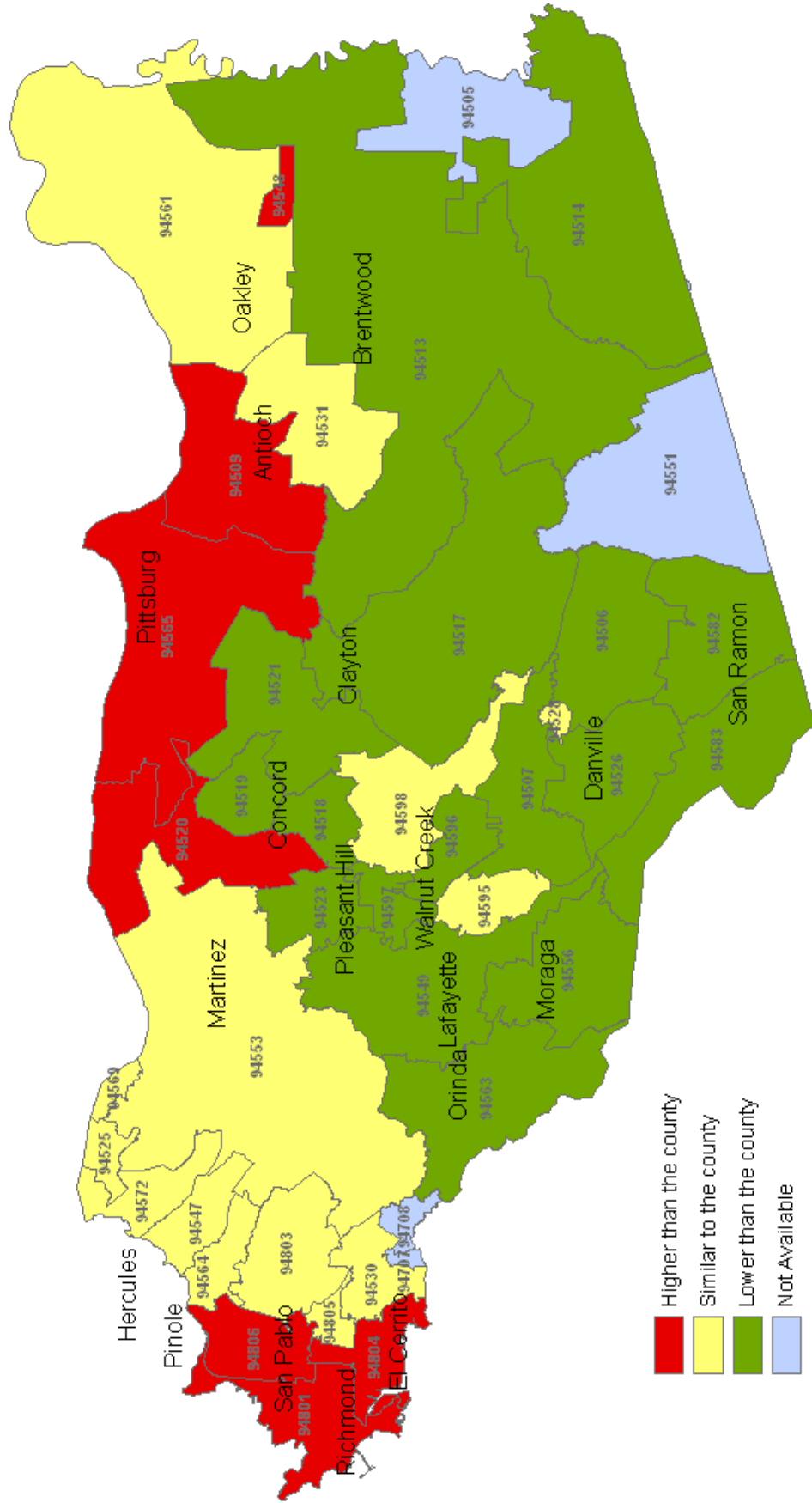
	Cases	Percent	Rate
94509	108	9.4%	54.8*
94513	18	1.6%	NA**
94518	20	1.7%	23.6**
94519	11	1.0%	NA**
94520	74	6.5%	64.4*
94521	18	1.6%	NA**
94523	15	1.3%	NA**
94526	5	0.4%	NA**
94530	16	1.4%	NA
94531	37	3.2%	30.4
94547	21	1.8%	31.2
94549	13	1.1%	NA**
94553	48	4.2%	32.5
94561	26	2.3%	25.6
94564	16	1.4%	NA
94565	158	13.8%	61.6*
94572	10	0.9%	NA
94583	11	1.0%	NA**
94595	10	0.9%	NA
94596	10	0.9%	NA**
94598	20	1.7%	25.2
94801	128	11.2%	135.9*
94803	29	2.5%	35.7
94804	144	12.6%	119.0*
94805	11	1.0%	NA
94806	129	11.3%	71.1*
Total	1,144	100.0%	37.0

These are crude rates per 100,000 residents. Total includes ZIP codes not listed above.

* Significantly higher rate than the county overall.

** Significantly lower rate than the county overall.

Non-fatal Assault Hospitalization Rates by Zip Code



What are homicides and non-fatal assaults?

Homicides and non-fatal assaults are violent injuries intentionally inflicted by one person on another.¹ They result from the use of physical force or power, threatened or actual, and can involve firearms, blunt objects, cutting/piercing, unarmed fights and abuse and neglect. Injuries caused by law enforcement officers in the line of duty, and combat deaths or acts of war are excluded from this category.

Why is it important?

Between 2005-2007, homicide was the second leading cause of death among Contra Costa residents 15-34 years, accounting for more than one-quarter (28.9%) of the deaths in this age group. Homicide was the fourth leading cause of death among African American residents.

Though there is an alarming number of homicide deaths, many more people survive this kind of violence than are killed by it. The Bureau of Justice 2003 statistics showed that for each homicide, there were approximately 1,000 nonfatal assaults.² In 2006, there were 1.8 million emergency department visits for assault in the United States.³

Violence affects people in all stages of life.⁴ Victims of violence and those exposed to it are often left with permanent physical injuries, chronic pain, emotional scars, disability, post-traumatic stress disorder, depression, substance abuse tendencies and sometimes profound changes in lifestyle.^{4,5} Violence erodes the health of communities by reducing productivity, decreasing property values, and disrupting public education and social services.⁴ Neighborhoods that offer no safe places to play put urban children and adolescents at greater risk for obesity and later cardiovascular disease.⁶

Who does it impact the most?

Homicide represents a troubling health disparity, disproportionately affecting young people and people of color. Nationwide in 2007, homicide was the second leading cause of death for young people ages 10-24 years, accounting for 5,764 deaths. Of these homicides, 86% of victims were male.⁷

In Contra Costa, African American males had the highest rate of homicide. In the county, homicide was the fourth leading cause of death for African Americans and the sixth leading cause of death for Hispanics. Among U.S. youths 10-24 years, homicide was the leading cause of death for African Americans, the second leading cause for Hispanics and third leading cause for Asians/Pacific Islanders and American Indians and Alaska Natives.⁷

Poverty is a risk factor associated with becoming victims or perpetrators of violence.⁸

What can we do about it?

Violence prevention efforts should include a continuum of strategies aimed at the individual, community and societal levels.⁸

Individual: Promote attitudes and beliefs that prevent violence through peer programs or mentorship. Provide young people with crucial conflict-resolution and problem-solving skills.

Community: Build social connections within neighborhood institutions. Provide after-school programs. Respond swiftly to reports of family violence. Limit adolescents' access to firearms and substances often involved in violent episodes such as alcohol and other drugs.

Societal: Develop and implement legislation limiting the availability of firearms since weapons are commonly obtained and used to commit violent acts and law regulating firearms are getting weaker.

Data Sources: Homicide and Non-Fatal Assault

TABLES AND MAP

Tables 1-10: Any analyses or interpretations of the data were reached by the Community Health Assessment, Planning and Evaluation (CHAPE) Unit of Contra Costa Health Services and not the California Department of Public Health (CDPH) nor the California Office of Statewide Health Planning and Development (OSHPD). Data presented for Hispanics include Hispanic residents of any race. Data presented for whites, Asians/Pacific Islanders and African Americans include non-Hispanic residents. Not all race/ethnicities are shown but all are included in totals for the county and for each gender, age, cause and city. Counts fewer than five are not shown in order to protect anonymity. Rates were not calculated for any group with fewer than 20 cases due to unstable estimates.

Population estimates for Contra Costa and its subpopulations (by age, gender, race/ethnicity, city/census place) for 2005-2007 were provided by the Urban Strategies Council, Oakland, CA. January, 2010. Data sources used to create these estimates included: U.S. Census 2000, Neilsen Claritas 2009, Association of Bay Area Governments (ABAG) 2009 Projections, and California Department of Finance Population Estimates for Cities, Counties and the State 2001-2009, with 2000 Benchmark.

California population estimate for state level rate from the State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001–2009, with 2000 Benchmark. Sacramento, California, May 2009.

Tables 1-5: These tables include total deaths due to homicide and crude or age-specific average annual death rates per 100,000 residents for 2005 through 2007. Homicide mortality data from the California Department of Public Health (CDPH), <http://www.dhs.ca.gov/>, Center for Health Statistics' Death Statistical Master File, 2005-2007.

ICD10 coding for homicide (ICD X85-Y05, Y06-Y07 (.0-.9), Y08-Y09) found at the CDHS Brand EPICenter California Injury Data Online at <http://www.applications.dhs.ca.gov/epicdata/default.htm>, modified from the Centers of Disease Control and Prevention National Center for Health Statistics available online at <http://www.cdc.gov/nchs/about/otheract/ice/matrix10.htm>.

Late effects are not included. Table 5's ICD10 coding for "other" may include homicides due to the following causes; drugs and other biological, corrosive, and noxious substances, explosives, arson, hanging, suffocation, strangulation, drowning, pushing from high place, rape, motor vehicle involvement

Tables 6-10: These tables include total hospitalizations due to non-fatal assault and crude or age-specific average annual hospitalization rates for 2005 through 2007. Non-fatal assault hospitalization data from the California Office of Statewide Health Planning and Development (OSHPD) Patient Discharge Data files 2005-2007, <http://www.oshpd.ca.gov/>, Healthcare Quality and Analysis Division, Health Care Information Resource Center.

OSHPD data includes only those hospitalizations for which assault was listed as the primary diagnoses (ICD9 E-960-E968.9 and E979.0--979.9). They do not include treatment that takes place in a doctor's office, health clinic or emergency room. A single resident can be counted multiple times for multiple assault hospitalizations. Table 9's "other" category includes non-fatal assault injuries from the following causes: rape, antipersonnel bombs, unspecified explosives pushing from a high place, motor vehicle involvement, air gun, human bite, and other unspecified means.

Table 10: The rates for several ZIP codes are marked "NA" in the table. This is because the ZIP code has fewer than 20 cases. ZIP codes with fewer than five cases and those that are shared with another county are not shown in the table.

Non-fatal Assault Injury Hospitalization map: The shading for some ZIP codes indicates that the rate is not available. This is due to the following reasons:

- A denominator for the ZIP code is not available: 94505
- The ZIP code extends to areas outside of Contra Costa county: 94551, 94707, 94708

Although rates were not calculated for ZIP codes with fewer than 20 cases, statistical testing generated a confidence interval for these ZIP codes to determine whether the rate range was similar to the county rate and it was shaded appropriately on the map.

ZIP code population estimates for ZIP code level rates provided by the Environmental Health Investigations Branch from the Environmental Systems Research Institute (ESRI) Community Sourcebook of ZIP Code Demographics. Data was not available for all ZIP codes.

Healthy People 2010 objectives from the U.S. Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at <http://www.healthypeople.gov/>.

TEXT

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<http://www.cdc.gov/ViolencePrevention/overview/social-ecologicalmodel.html>