

Homicides in Chicago: 2005, 2010 and 2015

The Illinois Violent Death Reporting System (IVDRS) is part of the National Violent Death Reporting System, which pools information about the “who, when, where, and how” of violent deaths to provide a more complete picture and develop insight into “why” they occur.

This IVDRS Data Brief is the first in a series about violent death in the City of Chicago over three time points: 2005, 2010 and 2015. This first data brief examines homicide rates in the City of Chicago overall, and by demographic group and weapon type; we present rates by sex, age group, race/ethnicity and by the type of weapons used to commit homicide. Information about how the data are collected is presented in a previous Data Brief (The Illinois Violent Death Reporting System, July 2015).

Overall, there were 468 homicides recorded in IVDRS in the City of Chicago in 2005, 476 in 2010 and 512 in 2015. The homicide rates per 100,000 people in the City of Chicago were 17.32, 17.64, and 18.81 in 2005, 2010 and 2015, respectively. (Table 1)

RATE PER 100,000

A rate, or per capita value, helps compare values among groups of different sizes. To find out if, for example, one city has higher levels of murder than another, you need to determine a *per capita* murder rate. That is, the number of murders *for each person in that group*. The homicide rate in the City of Chicago was determined by dividing the number of homicides by the total population of the city for that year. To keep from using a small decimal, statisticians typically multiply the result by 100,000, and give the result as the *number of homicides per 100,000 people*. (Adapted from RobertNiles.com)

STATISTICAL SIGNIFICANCE

Statistical significance is an indicator of the probability that observed findings (in this case differences between years or groups) could have occurred by chance. Statistical significance is often reported as a numerical value ‘p’ (probability value). If a p-value is *less than* 0.05 (5%), we typically say that the observed finding *is* statistically significant because we are 95% or more certain that the difference observed is not due to chance. If a p-value is *greater* than 0.05 (5%), we typically say that the finding *is not* statistically significant because we are less than 95% certain that the difference observed is not due to chance.

Table 2 shows homicide rates per 100,000 in the City of Chicago by sex at each time point. The rates of homicides in males increased at each time point, while the rates of homicide in females decreased at each time point; these changes were not statistically significant.

Table 3 presents homicide rates by race/ethnicity at each time point. The homicide rates among African Americans increased significantly from 2005 to 2010. No statistically significant

Homicide rates among African Americans were eight times higher than Caucasians in 2005, 16 times higher than Caucasians in 2010, and 18 times higher than Caucasians in 2015.

changes occurred over time in the rates of homicide among either Caucasians or Latinos. Homicide rates among Latinos were 2 times higher than Caucasians in 2005, 5 times higher than Caucasians in 2010, and 4 times higher than Caucasians in 2015. The rate differences among racial/ethnic groups were statistically significant at all three points, and the disparities increased over time.

Table 1. Homicide rates per 100,000 in the City of Chicago over time

	2005	2010	2015
TOTAL	17.32	17.64	18.81

Table 2. Homicide rates per 100,000 in the City of Chicago over time, by sex

	2005	2010	2015
Male	30.23	32.54	35.23
Female	5.35	3.66	3.48

Table 3. Homicide rates per 100,000 in the City of Chicago over time, by race/ethnicity

	2005	2010	2015
Caucasian	4.39	2.46	2.65
African American*	36.14	39.09	46.52
Latino	10.54	11.52	11.34

*Statistically significant increase from 2005 to 2015

Table 4 presents the homicide rates by age group at each time point. Twenty- to 24 year-olds had the highest homicide rates in 2005 and 2015.

Fifteen- to 19-year-olds had the highest homicide rate in 2010. Among 20- to 24-year-olds, there was a statistically significant increase in homicide rates from 2010 to 2015.

Table 4. Homicide rates per 100,000 in the City of Chicago over time, by age (years)

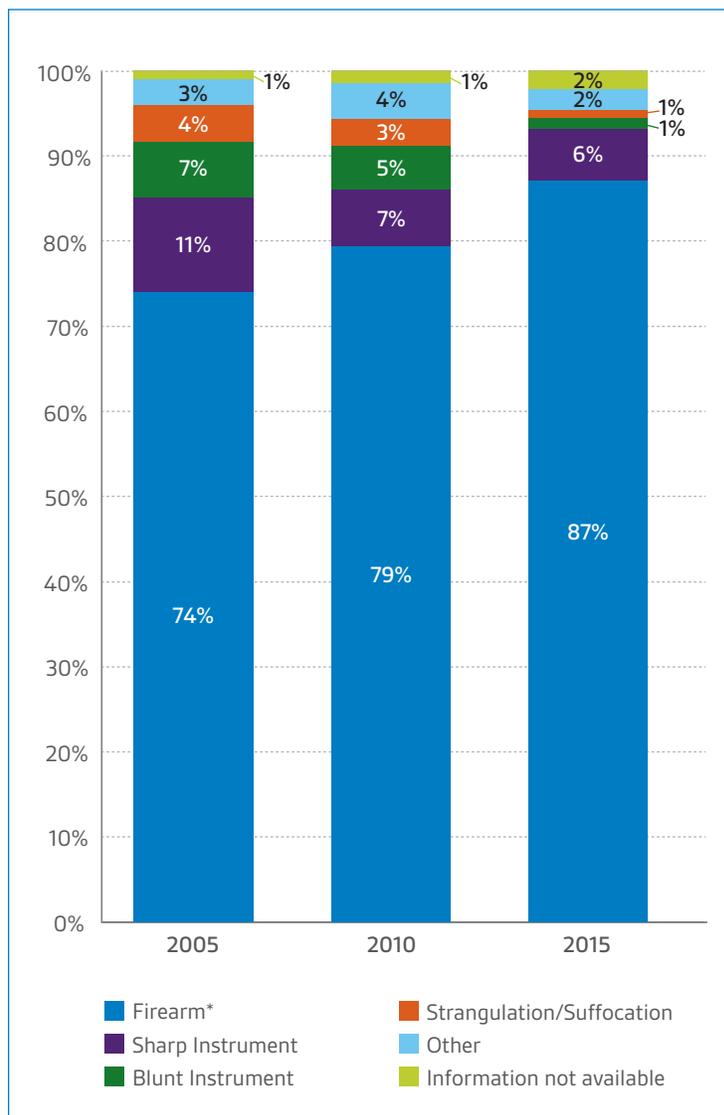
	2005	2010	2015
0 to 14	3.33	4.75	2.76
15 to 19	45.69	46.72	46.69
20 to 24*	53.02	43.38	64.28
25 to 34	26.19	29.80	30.07
35 to 44	17.00	16.79	16.79
45 to 54	9.62	9.12	10.02
55+	7.90	3.89	4.49

*Statistically significant increase from 2010 to 2015

Figure 1 presents data on the weapon type used to commit the homicide.

At each time point, firearms were the most frequently used weapon type. There was a statistically significant increase in the percentage of homicides due to firearms at each time point.

Figure 1. Homicides by weapon type in the City of Chicago over time



*Statistically significant increase from 2005 to 2010, and 2010 to 2015

CONTACT INFORMATION

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