

Alcohol in victims of homicide

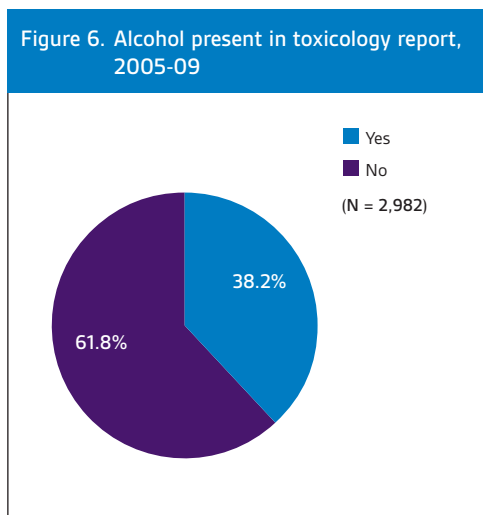
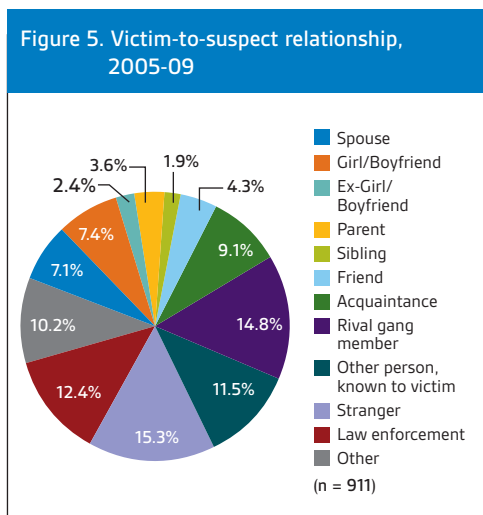
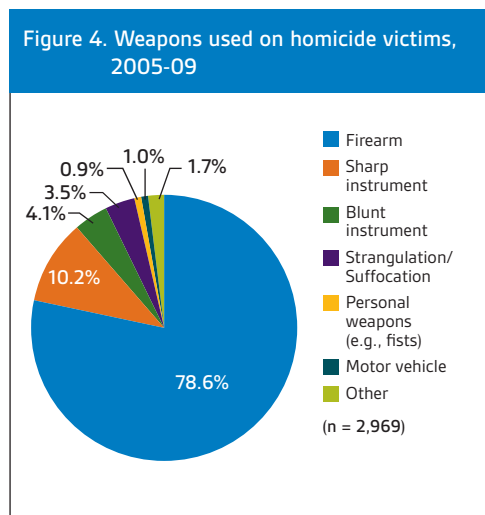
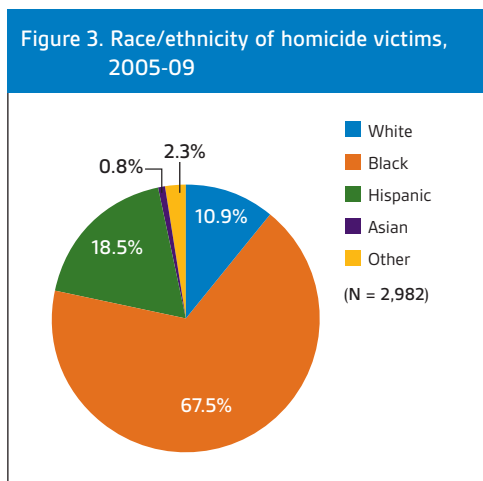
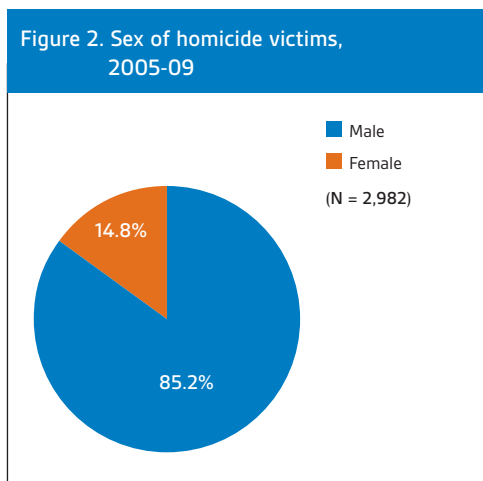
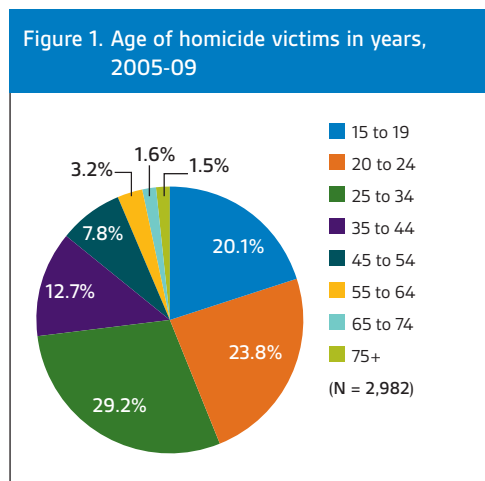
Violence is a public health problem that has a considerable impact on individuals, their families and communities, and society. The costs and consequences of violence are physical, emotional and economic. We know that deaths due to violence are preventable; by understanding the factors which influence or are associated with violence, we can form prevention strategies that work. The Illinois Violent Death Reporting System (IVDRS) was developed to provide public policy makers with valuable data to assist in prevention efforts.

This Child Health Data Lab (CHDL) report uses IVDRS data to examine how the presence of alcohol varies by demographics, weapon type and victim-to-suspect relationship in victims of homicide aged 15 years and older in Cook, DuPage, Kane, McHenry and Peoria counties from 2005 to 2009. These five counties comprise nearly 74.3% of all homicides which occurred in Illinois during that time (Illinois Department of Public Health).

Figures 1–6 describe the demographics, weapon type used, victim-to-suspect relationship and alcohol toxicological findings of the 2,982 victims of homicide in this report. Victims of homicide are overwhelmingly male (85.2%) and killed by a firearm (78.6%). The majority of homicide victims are black (69.1%). Nearly three-quarters of all homicides are under the age of 35 (73.1%).

The relationship of the victim to the suspect in the homicide (i.e., “the victim is the ____ of the suspect”) was reported and/or available in 30.5% of all cases (n=911). Intimate partners (spouse [7.1%], girl/boyfriend [7.4%], ex-girl/boyfriend [2.4%]) were victims in the most homicides (combined total 16.9%), while strangers (15.3%) and rival gang members of the suspect (14.8%) were second and third most often cited, respectively.

Finally, alcohol was determined by toxicological testing of blood to be present in 38.2% of all victims of homicide.



Positive alcohol toxicological findings vary by age, sex and race/ethnicity among homicide victims

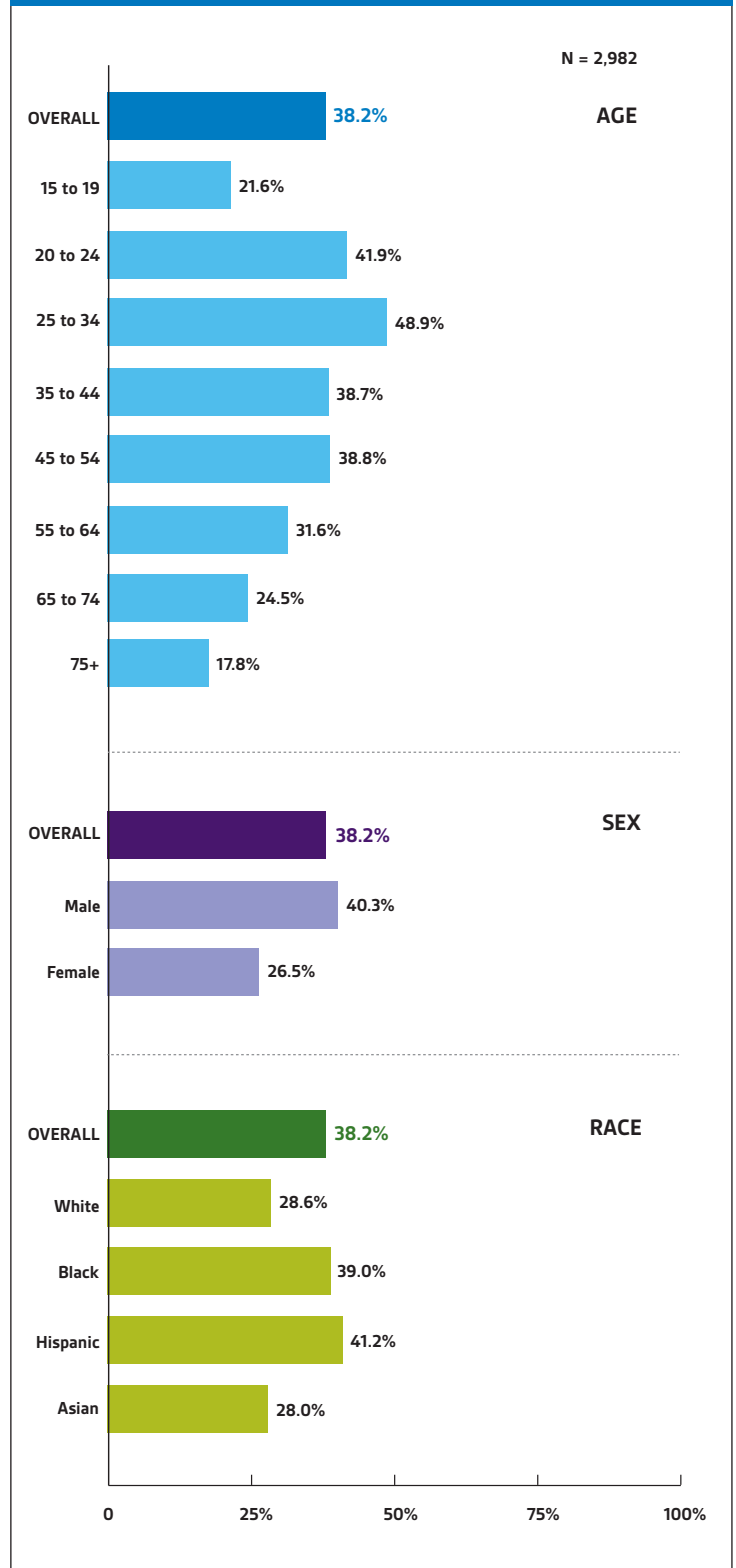
Figure 7 presents the percentage of homicide victims who tested positive for alcohol in a post-mortem toxicological analysis by age, sex and race/ethnicity. The percentage of homicide victims who tested positive for alcohol varies considerably by age, sex and race/ethnicity; these differences are all statistically significant ($p < 0.05$).

By age, homicide victims who were 25 to 34 years old were most likely to test positive for alcohol (48.9%), and homicide victims who were 75 years and older were the least likely to test positive for alcohol (17.8%).

Male victims of homicide were more likely than females to test positive for alcohol (40.3% versus 26.5%).

Black and Hispanic victims of homicide were more likely to test positive for alcohol (39.0% and 41.2%, respectively) than white or Asian homicide victims (28.6% and 28.0%, respectively).

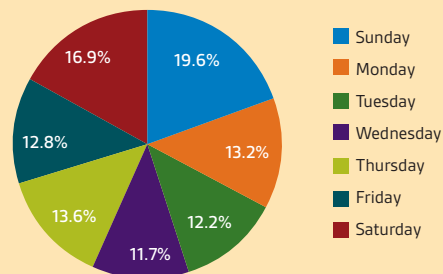
FIGURE 7. Percent of homicide victims who tested positive for alcohol, by age, sex and race/ethnicity, 2005-09



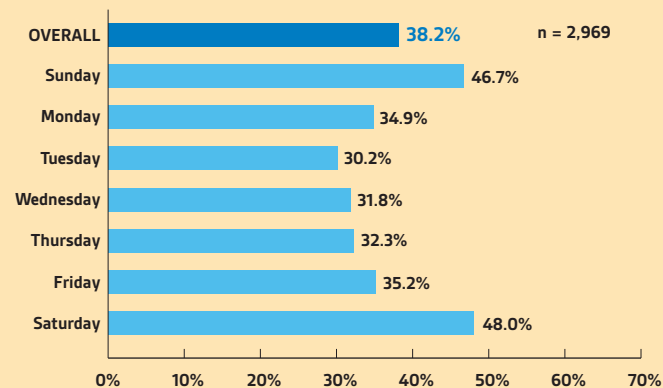
Positive alcohol toxicological findings vary by day of week

Not surprisingly, the majority of homicides occurred during Saturday and Sunday (16.9% and 19.6%, respectively). A disproportionate amount of the homicide victims who were killed on a Saturday or Sunday tested positive for alcohol (48.0% and 46.7%, respectively). These findings were statistically significant.

Day of week of death, 2005-09



Percent of homicide victims who tested positive for alcohol, by day of week of death, 2005-09



Positive alcohol toxicological findings vary by weapon used in the homicide

Figure 8 presents the percentage of homicide victims who tested positive for alcohol by weapon used. Not all weapons used are presented, as many have small numbers. The percentage of homicide victims who tested positive for alcohol varies by weapon used; these differences are all statistically significant ($p < 0.05$).

In 51% of cases in which a sharp instrument was used, the victim tested positive for alcohol, which was the highest percentage of the selected weapons presented here. Of cases in which personal weapons, such as fists, were used, 46.2% of victims tested positive for alcohol and in cases in which a motor vehicle was the weapon used, 44.8% tested positive.

The homicide weapons with the lowest percentages of positive alcohol toxicological findings among victims were blunt instruments (33.9%) and firearms (36.4%).

Positive alcohol toxicological findings vary by the victim-to-suspect relationship of the homicide

Figure 9 presents the percentage of homicide victims who tested positive for alcohol by the relationship of the victim to the suspect. Not all victim-to-suspect relationships are presented, as many have small numbers. The percentage of homicide victims who tested positive for alcohol varies by victim-to-suspect relationship; these differences are all statistically significant ($p < 0.05$).

Among all cases in which the victim was the girl/boyfriend of the suspect, 61.2% of the victims tested positive for alcohol. In cases where the victim was a friend or acquaintance of the suspect, 53.8% and 49.4% of the victims tested positive for alcohol, respectively.

The three victim-to-suspect relationships with the lowest percentages of positive alcohol toxicological findings among victims were spouses of the suspect (12.3%), parents of the suspect (21.2%) and rival gang members of the suspect (26.7%).

FIGURE 8. Percent of homicide victims who tested positive for alcohol, by weapon, 2005-09

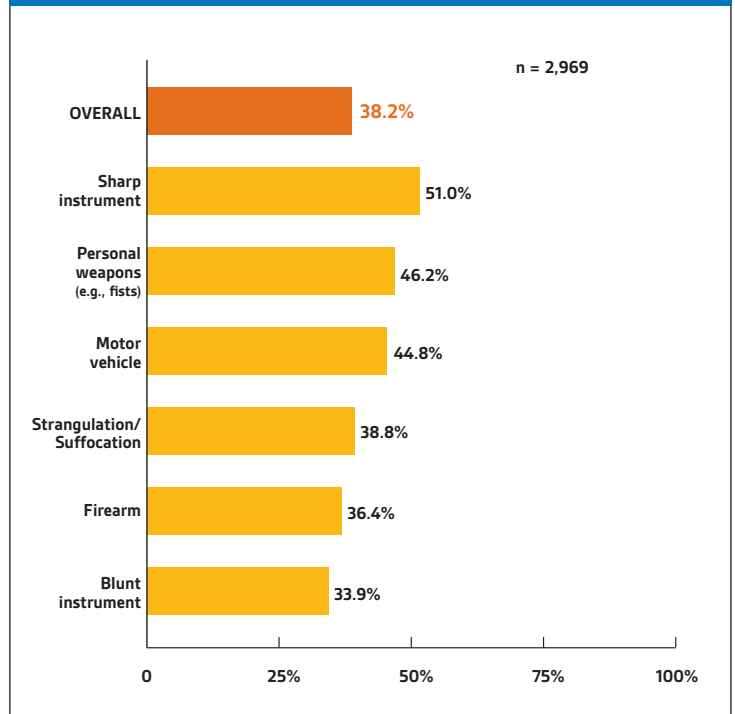
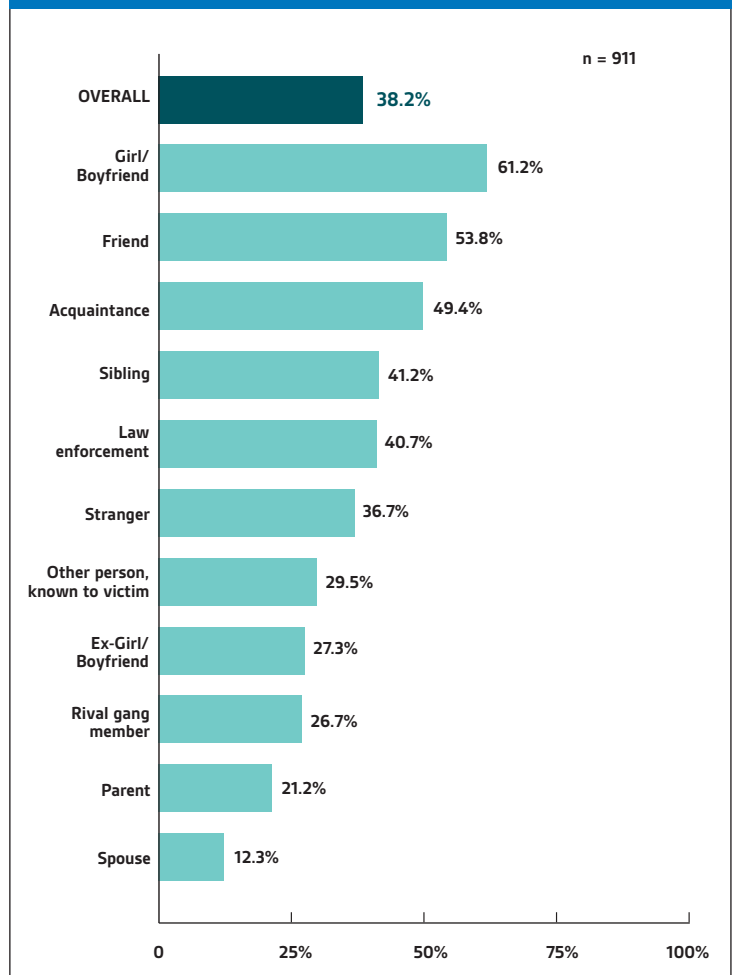


FIGURE 9. Percent of homicide victims who tested positive for alcohol, by victim-to-suspect relationship, 2005-09



RESOURCES

Domestic violence hotlines

Illinois Department of Human Services

dhs.state.il.us/page.aspx?item=30275
24 hour crisis line (877.863.6338)

Illinois Coalition Against Domestic Violence

ilcadv.org

AARDVARC (An Abuse, Rape and Domestic Violence Aid and Resource Collection)

aardvarc.org/dv/states/ildv.shtml

Alcohol treatment

Illinois Department of Human Services

Substance abuse treatment facility locator (nationwide)
dhs.state.il.us/page.aspx?item=29725

Coalition Against Drug Abuse

24-hour addiction specialist hotline, listing of rehab centers by city
drugabuse.com/usa/drug-abuse/illinois

Victims of violence

Illinois Attorney General

List of resources for crime victims
illinoisattorneygeneral.gov/victims

Illinoisvictims.org

Information about victims' rights, list of resources for crime victims
illinoisvictims.org

Violence prevention

Centers for Disease Control and Prevention: Violence prevention

cdc.gov/violenceprevention

"Violence is a serious public health problem in the United States. From infants to the elderly, it affects people in all stages of life. In 2010, over 16,250 people were victims of homicide and over 38,360 took their own life. The number of violent deaths tells only part of the story. Many more survive violence and are left with permanent physical and emotional scars. Violence also erodes communities by reducing productivity, decreasing property values and disrupting social services. CDC is committed to stopping violence before it begins."

Strengthening Chicago's Youth (SCY)

scy-chicago.org

"SCY's mission is to build capacity among hundreds of public and private stakeholders to connect, collaborate and mobilize around a public health approach to violence prevention — adopting consistent messaging about the preventability of violence, promoting use of evidence-based violence prevention strategies and fostering multi-sector collaboration — encouraging partnerships that strengthen existing efforts and benefit the children of Chicago."

Injury Prevention & Research Center

Ann & Robert H. Lurie Children's Hospital of Chicago

luriechildrens.org/en-us/community/advocacy/Pages/injury-prevention-research-center.aspx

Cure Violence (formerly CeaseFire)

cureviolence.org

Illinois Council Against Handgun Violence

ichv.org

TECHNICAL NOTES

The Illinois Violent Death Reporting System (IVDRS) is a project of the Child Health Data Lab at the Stanley Manne Children's Research Institute at the Ann & Robert H. Lurie Children's Hospital of Chicago. It is based on the National Violent Death Reporting System (NVDRS), which was developed by the Centers for Disease Control and Prevention (CDC) and uses NVDRS software and protocols. IVDRS seeks to help researchers and policymakers determine the circumstances and risk factors associated with homicide, suicide and other violent deaths by linking timely data from multiple sources. In Illinois, we collect this information in Cook, DuPage, Kane, Lake, McHenry and Peoria counties. We gratefully acknowledge the assistance of our data-providing agencies including the Cook County Medical Examiner, the County Coroners at DuPage, Kane, Lake, McHenry and Peoria, the Illinois Department of Public Health, and the Chicago Police Department. For additional information on NVDRS, see cdc.gov/ViolencePrevention/NVDRS.

What is a violent death?

CDC establishes standards for all of the state-level Violent Death Reporting Systems, such as the one in Illinois. The CDC defines violent death as homicide, suicide, unintentional firearm death, death from legal intervention, death related to terrorism and death from undetermined causes. Cook County (which includes the City of Chicago) is the source of the majority of IVDRS data; the data cannot be understood as representative of Illinois as a whole.

How is the presence of alcohol in victims determined?

The presence of alcohol in victims is determined by toxicological analysis of the victim's blood, vitreous humor, urine, or other bodily fluid. Blood alcohol content is not used to determine level of intoxication due to the variation of time between death and sample collection. All cases were tested for the presence of alcohol.

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