

Gun Violence in Ohio

March 2013

Ohio Statistical Analysis Center

Victor Yocco, Ph.D.

Lisa Shoaf, Ph.D.

Ohio Office of Criminal
Justice Services

1970 West Broad Street
Columbus, Ohio 43223

Toll-free (800)448-4842

Fax (614) 728-8330

www.ocjs.ohio.gov

Gun Violence in Ohio

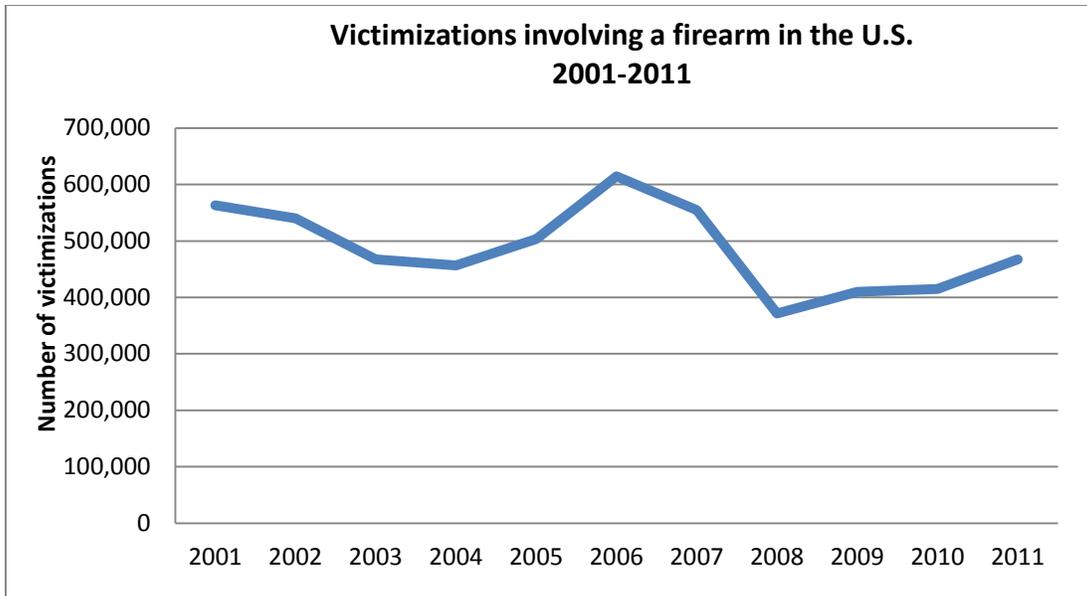
Gun violence is an issue that touches communities across the United States. Ohio's communities are no exception. Capturing data on the nature, extent, and frequency of gun violence is a vital first step to conducting research and developing strategies and policies aimed at gun violence prevention.

Data on gun violence are collected by a number of criminal justice and non-criminal justice sources. Some of the data are specific to Ohio or regions within Ohio and some are representative of the U.S. as a whole. This report pulls together statistics from numerous sources to present a snapshot of gun violence in Ohio and the United States.

National Crime Victimization Survey

The National Crime Victimization Survey (NCVS) is administered annually by the Bureau of Justice Statistics. It is one measure of crime in the United States. It collects data on reported and unreported nonfatal crime. Specifically, the survey collects detailed information on rape, sexual assault, personal robbery, aggravated and simple assault, household burglary, theft, and motor vehicle theft.

The NCVS collects data on weapon use during the commission of a violent crime, with the exception of rape. Analyses indicate a decline in nonfatal firearm incidents by population and a slight increase in proportion of violent crime involving a firearm over past several years. In 2001, the firearm crime rate was 2.0 per 1,000 residents. By 2011, this rate had decreased to 1.5 per 1,000 residents. However, in 2001, seven and a half percent of all violent crimes involved a firearm. By 2011, this had increased to eight percent.



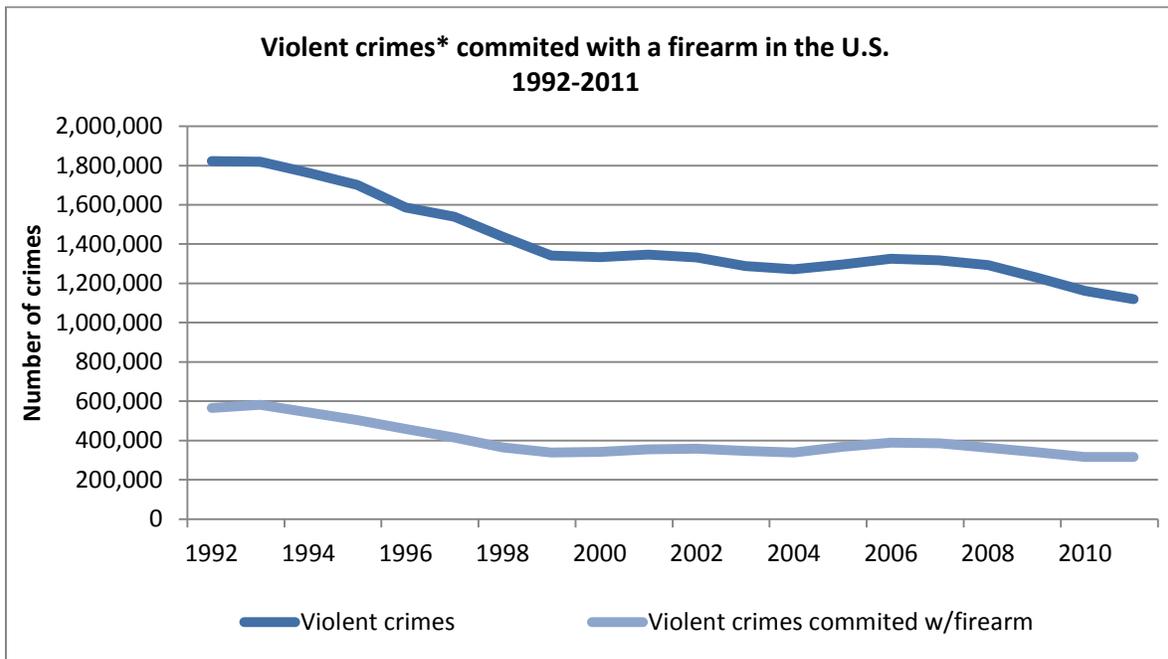
Source: Bureau of Justice Statistics. Number of violent victimizations by weapon category, 2001-2011. Generated using the NCVS Victimization Analysis Tool at www.bjs.gov. 31-Jan-13

*Due to methodological changes in the 2006 NCVS, use caution when comparing 2006 criminal victimization estimates to other years. See Criminal Victimization, 2006 Technical Notes (BJS Web, NCJ 219413, December 2007), Criminal Victimization, 2007 (BJS Web, NCJ 224390, December 2008) for more information.

Uniform Crime Reporting Program

Another indicator of crime is the FBI's Uniform Crime Reporting (UCR) Program. UCR collects information on various fatal and non-fatal crimes reported to law enforcement. UCR specifically collects weapon data on the Part I violent crimes of homicides, robberies, and aggravated assaults.

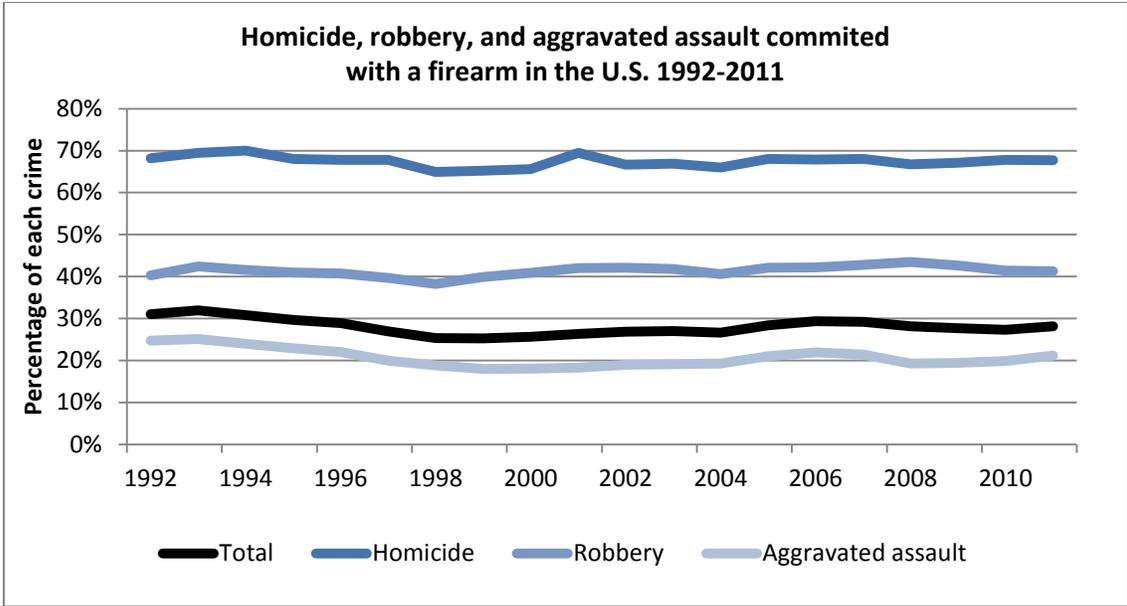
Of these three crimes, homicides were most likely to be committed with a firearm, followed by robberies and aggravated assaults. From 1992 to 2011, the total number of homicides, robberies, and aggravated assaults decreased 38.6 percent in the U.S, as shown by the dark blue line in the following chart. The total number of homicides, robberies, and aggravated assaults committed with a firearm also decreased by a larger percentage—44.5 percent—as shown by the light blue line in the chart.



Source: FBI's Crime in the United States, 1992-2011

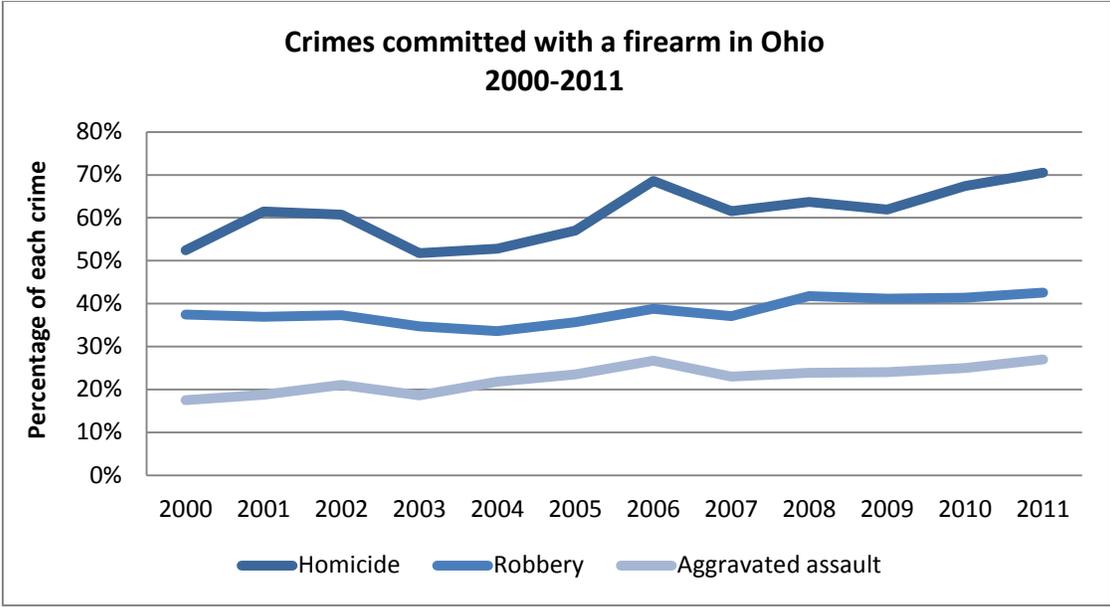
*Violent crimes in this table refers to the FBI's Part I crimes of homicide, robbery, and aggravated assault.

Overall, as shown in the following chart, the total number of each type of violent crime decreased, as did the number of each crime involving a firearm. A closer look at the numbers finds the most notable decrease in the use of firearms in the category of aggravated assault. There was a 38.5 percent decrease in the number of homicides between 1992 and 2011, however there was only a 26.0 percent decrease in the total number of homicides committed with a firearm. Likewise, there was a 47.3 percent decrease in the total number of robberies between 1992 and 2011, but a 46.0 percent decrease in the number of robberies in which a firearm was used. In the case of aggravated assault, the total number of aggravated assaults from 1992 to 2011 decreased 33.3 percent, while the number of aggravated assaults involving a firearm decreased 44.0 percent.



Source: FBI’s Crime in the United States, 1992-2011.

In Ohio, as in the U.S., homicide is the crime most frequently committed with a firearm. Over a 12-year period, the percentage of homicides committed with a firearm averaged 60.8 percent. On average, slightly over 38 percent of robberies and 22.6 percent of aggravated assaults were committed with a firearm.



Source: FBI’s Crime in the United States, 2000-2011.

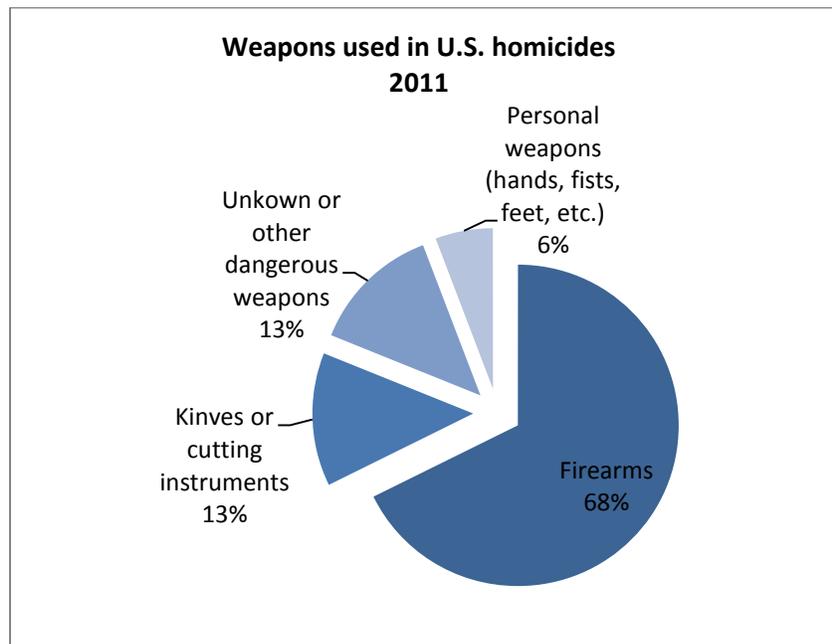
Supplementary Homicide Report

Law enforcement agencies that participate in the Uniform Crime Reporting (UCR) Program are also asked to submit detailed information on criminal homicides through the Supplementary Homicide Report (SHR). The SHR provides incident-level details on location, victim, and offender characteristics. Nationally, in 2011, usage of the SHR covered about 96 percent of all homicides. A significant problem of using SHR data is with regard to analysis of offender characteristics due to the sizable number of unsolved homicides contained in the data file. Missing offender data, particularly when associated with certain offender characteristics, can result in underestimation of rates of offending, distort trends, and bias patterns of offending. This must be taken into consideration when looking at SHR data.

Weapons used in homicides

All homicides involve some sort of weaponry, whether it is a firearm, knife, fist, poison, or other object, and the SHR is designed to capture this information. For all homicide incidents where the weapon could be determined, the following data were obtained.

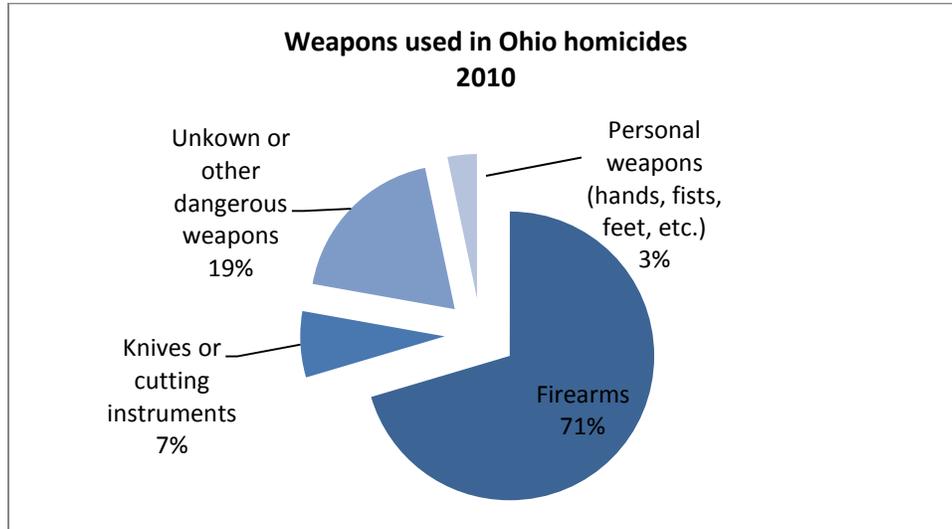
In 2011, firearms were the leading weapon identified in homicide incidents, making up 68 percent of all identified weapons. Thirteen percent of homicides involved a knife as the weapon. Six percent of weapons used in homicides fell under the category 'personal weapons', which includes beatings using hands, feet, or fists. Thirteen percent of homicides were due to other or unknown weapons.



Source: Supplemental Homicide Report, 2011 data:

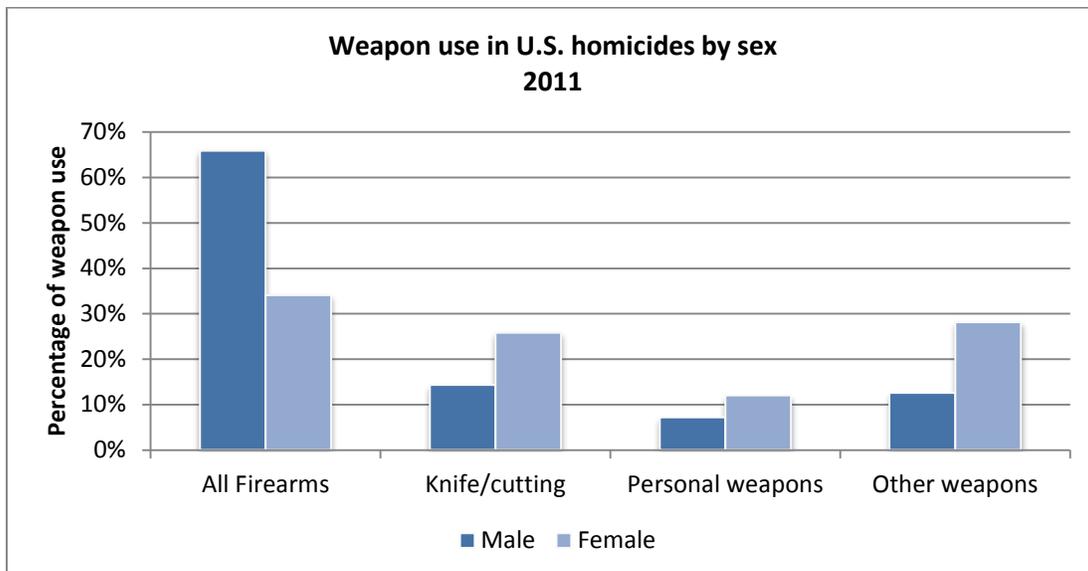
<http://www.icpsr.umich.edu/icpsrweb/NACJD/series/57/studies/33527?q=supplementary+homicide+&archive=NACJD&ortBy=7&paging.rows=25&paging.startRow=1>

According to the 2010 Ohio SHR data, types of weapons used in Ohio are similar to the 2011 rates at national levels. As shown in the chart below, 70 percent of 2010 Ohio homicides involved firearms, 19 percent unknown or other dangerous weapons, seven percent knives or cutting instruments, and three percent personal weapons.



Source: Supplemental Homicide Report, 2010 data

Nationally, differences in weapon usage emerge as a function of gender. In 2011, 66 percent of male offenders used a firearm to commit homicide, as opposed to 34 percent of females. Knives/cutting instruments were used by a higher percentage of females than males, as were personal weapons and other weapons, although the overall number of homicides committed by females using these weapons remains low.



Source: Supplemental Homicide Report, 2011 data

Ohio Incident-Based Reporting System

One tool that can be used to examine gun crime in Ohio is the Ohio Incident-Based Reporting System (OIBRS). OIBRS is a voluntary crime reporting program in which Ohio law enforcement agencies can submit crime statistics directly to the state and federal government in an automated format. At the end of 2009, 545 agencies covering approximately 71 percent of the Ohio population were reporting OIBRS data. The use of OIBRS data allows for detailed information to be obtained on the nature of the offense, the victim, the suspect/arrestee, and weapon use.

Some limitations must be noted regarding the use of OIBRS data:

- Because reporting for Ohio is voluntary, caution should be used in interpreting the findings reported in this paper, as the data may reflect more the composition of the OIBRS-reporting jurisdictions than the composition of the state as a whole.
- Because the number of agencies submitting OIBRS data increases yearly, no annual comparisons can be made with the data.
- Not all victims choose to report crime to law enforcement. Thus, what is reflected in this document are only those incidents that have been reported to police.
- Incidents are often reported that contain some missing data elements, such as information on demographics, weapon type, or circumstances regarding the incident. In this report, statistics are only provided for those instances in which complete information is available.

Gun incidents in Ohio

Between 2010 and 2011, law enforcement in OIBRS-participating agencies reported 24,990 criminal incidents in which a gun was present. Nearly 87 percent of the incidents came from seven counties: Franklin, Cuyahoga, Hamilton, Lucas, Montgomery, Summit, and Mahoning.

County	Number of Firearm-involved Incidents	Percentage
Franklin	6,362	25.5%
Cuyahoga	5,038	20.2%
Hamilton	4,609	18.4%
Lucas	1,864	7.5%
Montgomery	1,710	6.8%
Summit	1,312	5.3%
Mahoning	828	3.3%
Remainder of Ohio	3,267	13.0%
Total	24,990	100%

Source: OIBRS data, 2010-2011

Type of firearm

Approximately 60 percent of firearms reported were handguns. A smaller percentage of firearms were shotguns and rifles. Twenty-four percent were unspecified.

Firearm Type	Number of Firearms	Percentage
Handgun	14,906	59.6%
Automatic handgun	1,375	5.5
Shotgun	759	3.0%
Rifle	358	1.4%
Other firearm	358	1.4%
Semi-automatic assault firearm	137	0.5
Fully automatic rifle	26	0.1
Machine pistol	21	0.1
Semi-automatic sporting rifle	19	0.1
Other fully automatic firearm	9	0.0
Firearm—type unspecified	7,022	28.1%
Total	24,990	100%

Source: OIBRS data, 2010-2011

Location of incident

The majority of incidents involving firearms took place in an outside location, such as a street or a parking lot. Residential structures (single-family and multi-family dwellings) were also common locations for crimes involving firearms. Within the retail establishment category, restaurants, convenience stores, gas stations, and bars were the site for 73.6 percent of gun-involved incidents.

Location Type	Number of Firearm-involved Incidents	Percentage
Outside	13,990	56.0%
Residential structure	7,406	29.6%
Retail establishments	2,460	9.8%
Commercial services	543	2.2%
Public access building	309	1.2%
Other location	282	1.1%
Total	24,990	100%

Source: OIBRS data, 2010-2011

Offenses involving firearms

There can be more than one offense (i.e., crime) that occurs within a given incident. Consequently, of the 24,990 incidents reported in OIBRS in 2010-2011, there were 30,519 corresponding offenses. Three offenses—robbery, weapon law violations, and aggravated assault—made up over 78 percent of all firearm-involved offenses reported.

Offense Reported	Number of Firearm-involved Offenses	Percentage
Robbery	11,348	37.2%
Weapon law violations	7,002	22.9%
Aggravated assault	5,222	17.1%
Intimidation	1,721	5.6%
Burglary/B&E	684	2.2%
Murder	565	1.9%
All other offenses	3,977	13.1%
Total	30,519	100%

Source: OIBRS data, 2010-2011

Locations of offenses

An analysis of type of crime by location was conducted in order to determine whether certain crimes involving firearms were more commonly committed in certain locations. The specific locations analyzed were residential structures (single- and multi-family dwellings combined), schools/colleges, restaurants/bars, liquor stores, and drug stores.

The highest percentage of robberies involving firearms occurred at retail establishments—gas stations, restaurants/bars, liquor stores, and drug stores. Similarly, the highest percentage of firearm-involved crimes at schools and colleges was robbery. Crimes in residential structures were more evenly split between robbery, weapons law violations, and aggravated assaults.

Offense Reported	Residential Structure N=8,423	Schools and Colleges N=47	Restaurants and Bars N=732	Liquor Stores N=31	Gas Station N=448	Drug Stores N=48
Robbery	24.3%	40.4%	70.2%	87.1%	79.0%	85.4%
Aggravated assault	22.6%	31.9%	17.8%	6.5%	12.1%	6.3%
Weapons law	31.3%	0.0%	0.0%	0.0%	0.0%	2.1%
Burglary	7.5%	0.0%	0.1%	0.0%	0.2%	0.0%
Intimidation	8.6%	23.4%	4.4%	3.2%	5.8%	6.3%
Kidnapping/Abduction	3.0%	2.1%	4.2%	3.2%	2.5%	0.0%
Murder	2.6%	2.1%	2.9%	0.0%	0.4%	0.0%
Total	100%	100%	100%	100%	100%	100%

Source: OIBRS data, 2010-2011

Bureau of Alcohol, Tobacco, Firearms and Explosives

A key component of the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) enforcement mission is the tracing of firearms on behalf of federal, state, and local law enforcement agencies. Firearms trace data provides insight into the nature and frequency of firearms recoveries in Ohio and in the U.S.

ATF notes the following disclaimers with regard to firearm trace data:

- Firearm traces are designed to assist law enforcement authorities in conducting investigations by tracking the sale and possession of specific firearms. Law enforcement agencies may request firearms traces for any reason, and those reasons are not necessarily reported to the Federal Government. Not all firearms used in crime are traced and not all firearms traced are used in crime.
- Firearms selected for tracing are not chosen for purposes of determining which types, makes, or models of firearms are used for illicit purposes. The firearms selected do not constitute a random sample and should not be considered representative of the larger universe of all firearms used by criminals, or any subset of that universe. Firearms are normally traced to the first retail seller, and sources reported for firearms traced do not necessarily represent the sources or methods by which firearms in general are acquired for use in crime.

Types of firearms recovered in Ohio

In 2011, there were 9,566 firearms recovered and traced in Ohio. Recovery does not include gun buybacks and firearms turned in. Of the firearms recovered and traced, the majority, 56 percent, were pistols and revolvers.

Firearm Type	Number of Firearms Recovered and Traced in Ohio	Percentage of Firearms Recovered and Traced in Ohio
Pistol	5,364	56.0%
Revolver	1,953	20.4%
Rifle	1,071	11.2%
Shotgun	1,016	10.6%
All other	162	1.7%
Total	9,566	100%

Source: ATF Firearms Tracing System data, 2011

<http://www.atf.gov/statistics/download/trace-data/2011/2011-trace-data-ohio.pdf>

Categories reported on firearm traces

The top category reported on firearm traces with an Ohio recovery was *possession of weapon*, which constituted over one-third of the gun traces. This was followed by *dangerous drugs*, which made up nearly 11 percent of firearm traces.

Category	Number of Cases in Ohio	Percentage of Cases in Ohio
Possession of weapon	3,336	34.9%
Dangerous drugs	1,046	10.9%
Firearm under investigation	773	8.1%
Carrying concealed weapon	768	8.0%
Health safety	661	6.9%
Found firearm	508	5.3%
Homicide	353	3.7%
Simple assault	313	3.3%
Aggravated assault	310	3.2%
Robbery	307	3.2%
Other	1,191	12.5%
Total	9,566	100%

Source: ATF Firearms Tracing System data, 2011

Time to crime

'Time-to-crime' was calculated for firearm traces with an Ohio recovery. This was calculated for those traces in which the purchase date could be subtracted from the recovery date (N=6,470). Of these, the average time to crime in Ohio was 10.55 years, and the national average was 11.20 years. Approximately 5.6 percent of firearms with an Ohio recovery had a time-to-crime rate of less than three months.

Top recovery cities in Ohio

The top recovery cities in Ohio were also the largest in population. Columbus, Cincinnati, and Cleveland accounted for over half (54%) of all firearms recovered in Ohio in 2011.

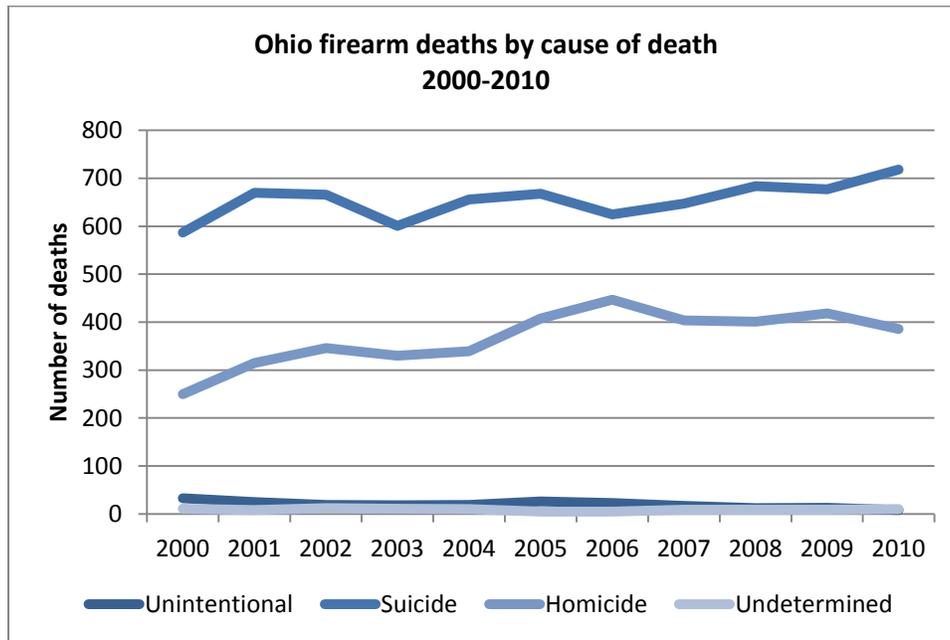
City	Number of Recoveries	Percentage of Recoveries
Columbus	2,307	24.2%
Cincinnati	1,570	16.4%
Cleveland	1,276	13.4%
Toledo	971	0.2%
Dayton	213	2.2%
Akron	512	5.4%
Youngstown	127	1.3%
Canton	148	1.6%
Mansfield	183	1.9%
Warren	143	1.5%
All others (N=341 other agencies)	2,106	22.0%
Total	9,556	100%

Source: ATF Firearms Tracing System data, 2011

Ohio Department of Health

The Ohio Department of Health (ODH) collects data on all births and deaths in the state. Statistics are kept on intentional and unintentional firearm deaths, which include accidental discharge, intentional self-harm, and homicide.

Between 2000 and 2010, there were 11,555 deaths caused by firearms. Suicides were the most frequently reported cause of death due to firearms, accounting for 62 percent of all deaths. Thirty-five percent were assaults (homicides) by firearms. Two percent of deaths were due to the accidental discharge of a firearm, and in slightly less than one percent the intent was undetermined.



Source: Ohio Dept. of Health, Office of Vital Statistics

Cuyahoga County Coroner's Office

The Cuyahoga County Coroner's Office collects data on gun-involved deaths in Cuyahoga County as the result of homicide, suicide, or accident. Between 2009 and 2011, there were 436 gun-involved deaths. Of these, 244 (56.0%) were homicides, 186 (42.7%) were suicides, two (0.5%) were accidental, and four (0.9%) were violence of undetermined origin.

The demographic characteristics of gun-involved homicide and suicide victims are somewhat different. Although males constitute the majority of victims of both homicides and suicides involving a gun, the race and age of victims differ.

Manner of Death	Gender		Race		Median Age
	Male	Female	White	Non-White	
Homicide	91.8%	8.2%	16.8%	83.2%	28.0 years
Suicide	88.7%	11.3%	76.3%	23.7%	51.0 years

Other Resources for Information

This report is an attempt to consolidate some of the myriad data on gun violence in the U.S. and Ohio. There are a number of other resources available online for further information on gun violence. The following is a list with links to some of these resources:

Bureau of Justice Statistics NCVS Victimization Analysis Tool

<http://www.bjs.gov/index.cfm?ty=nvat>

Centers for Disease Control and Prevention

<http://www.cdc.gov/>

FBI Uniform Crime Reports

<http://www.fbi.gov/about-us/cjis/ucr/ucr>

FBI Uniform Crime Report Table Building Tool

<http://www.ucrdatatool.gov/Search/Crime/Crime.cfm>

Nationwide Children's Hospital Center for Injury Research and Policy

<http://www.nationwidechildrens.org/center-for-injury-research-and-policy-ohio-injuries-firearms>

Ohio Department of Health Data and Statistics

<http://www.odh.ohio.gov/healthstats/datastats.aspx>