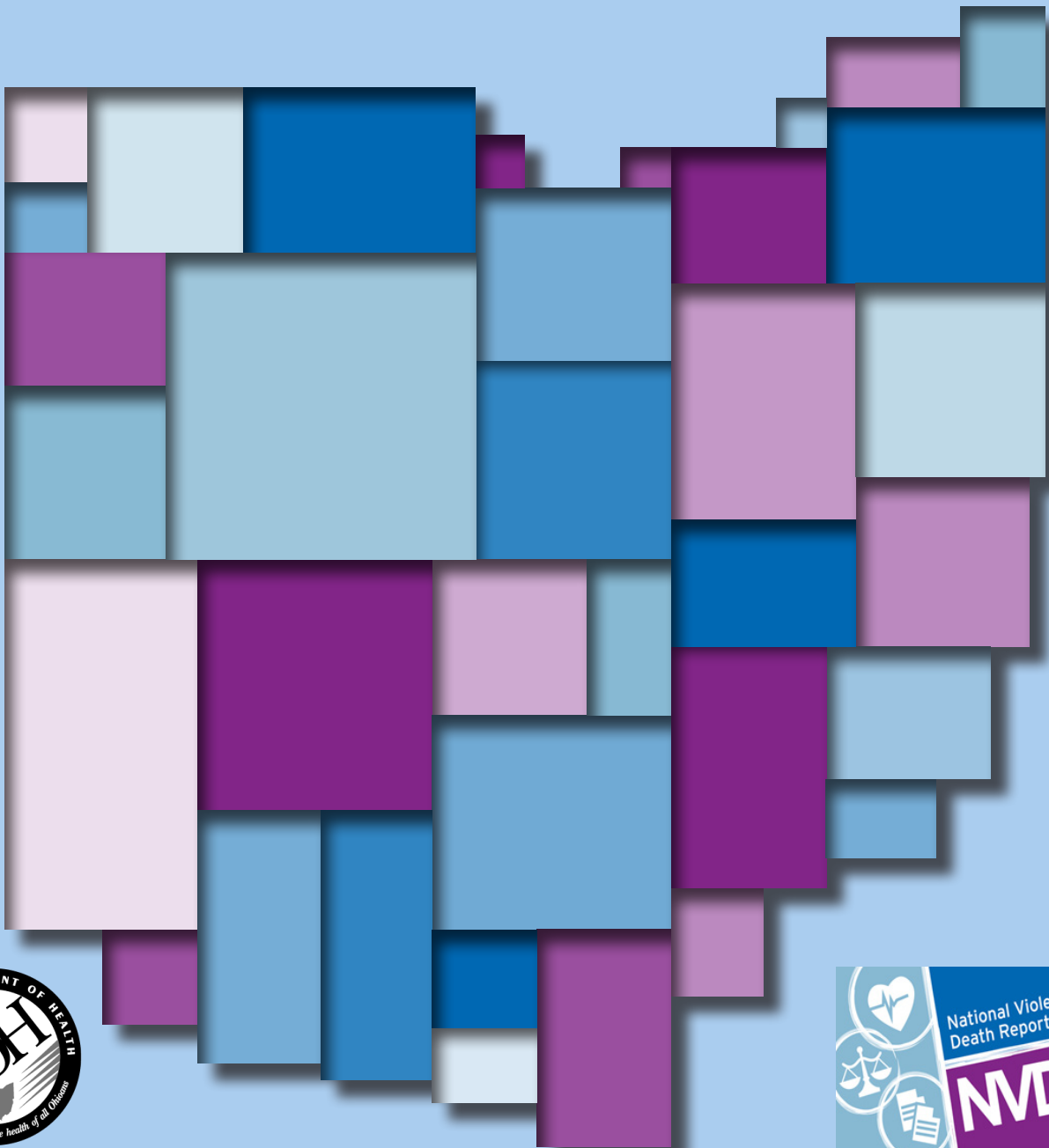


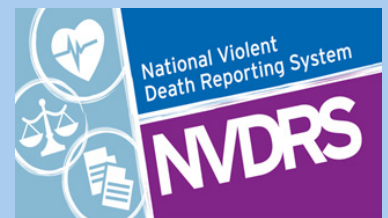
OHIO VIOLENT DEATH REPORTING SYSTEM

Annual Report

2011



Violence and Injury
Prevention Program



OHIO

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Violent Deaths in Ohio: Selected Counties

Ohio Violent Death Reporting System

Annual Report 2011

Ohio Department of Health, Injury and Violence Prevention Program

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State Overview

Although the contents of this report focus on violent deaths and the circumstances surrounding them in selected Ohio counties¹, violent death data from death certificates were available for all 88 counties. There were a total of 2,333 violent deaths among Ohio residents in 2011, with an age-adjusted rate of 20.1 per 100,000. Men had the greater number of violent deaths with a violent death rate of 31.9 per 100,000. The violent death rate for women was lower, at 8.8 per 100,000. Generally, men and women aged 25 to 34 years had the highest overall violent death rate (29.5 per 100,000), followed by 45 to 54-year-olds (27.8 per 100,000).

Suicides made up the majority of violent deaths, accounting for 1,481 or 63.5 percent of all violent deaths. The age-adjusted suicide rate in 2011 was 12.4 per 100,000 for both sexes. Males had a considerably higher suicide rate compared to females (20.3 vs. 5.1 per 100,000). Among men, the highest suicide rate was observed among those aged 85 years and above, followed by 45 to 54-year-olds (36.7 and 33.6 per 100,000, respectively). Among women, the highest suicide rate was seen among those aged 45 to 54 (8.6 per 100,000). In terms of race and ethnicity, the highest suicide rate was seen among white, non-Hispanics whereas the lowest was among black non-Hispanics (13.7 and 6.4 per 100,000, respectively). The suicide rate in all Hispanics was 4.5 per 100,000. Common methods of suicide for men and women included firearms, hanging/suffocation, and poisoning. Among men, the most common method of suicide was a firearm (54.2 percent), among women poisonings were the predominant method of suicide (41.4 percent).

¹ As part of Ohio's participation in NVDRS, data collection was phased in over a 3 year period. In the second year (2011), selected counties were expanded from 12 to 34 counties.

There were 599 homicides among Ohio residents in 2011. The overall homicide rate was 5.4 per 100,000. Males had a higher homicide rate compared to females (8.8 vs. 2.2 per 100,000). When examined by age category, the highest homicide rate was observed among those aged 25 to 34-years-old (10.8 per 100,000). Among men, the highest homicide rate was seen among those aged 25 to 34 followed by 15 to 24-year-olds (17.8 and 17.1 per 100,000, respectively). Among women, the highest homicide rate was seen among those aged 15 to 24 years (3.86 per 100,000). The highest homicide rate was seen among black, non-Hispanics and lowest among white non-Hispanics. Black males had eight times the homicide rate of black females (45.2 vs. 5.6 homicides per 100,000) and 15 times the rate of white males (45.2 vs. 2.9 per 100,000). In terms of methods, firearms accounted for about 70 percent of homicides, followed by sharp instruments and personal weapons (9.3 percent and 4.7 percent, respectively). Firearms were used for more than three-quarters of male homicides, compared to approximately half of female homicides.

In 2011, there were 206 undetermined deaths, with 115 among men and 91 among women. The overall rate for deaths of undetermined intent was 1.8 per 100,000. Similar to other violent deaths, men had a higher undetermined death rate than women (2.0 vs. 1.5 per 100,000). Among men, the highest undetermined death rate was seen among those aged 45 to 54 years (3.8 per 100,000). Among women, the highest undetermined death rate was observed among those aged 45 to 54 (2.4 per 100,000). Overall, the highest undetermined death rate was observed among those aged 45 to 54-years-old (3.1 per 100,000). In terms of methods, unknown methods accounted for about 43 percent of undetermined deaths in 2011, followed by poisoning and other methods (41.3 percent and 16 percent respectively). Maps and tables of county-specific violent death rates can be found in Appendix C.

Executive Summary

The Ohio Violent Death Report System (OH-VDRS) is a statewide, population-based surveillance system capturing detailed information on suicides, homicides, deaths of undetermined intent and deaths occurring as a result of a legal intervention. The OH-VDRS utilizes multiple sources to collect data on victims, suspects and circumstances associated with violent deaths. The database links these comprehensive data on violent deaths, which in turn serve to aid in the prevention and reduction of violent deaths in Ohio. This report summarizes the violent death data collected through the OH-VDRS for selected counties² in Ohio in 2011.

Violent Deaths

In 2011, among selected counties in Ohio, 1,907 Ohio residents died as a result of a violent death. The most common manners of death were suicides (60.5 percent), followed by homicides (28.6 percent) and deaths of undetermined intent (8.9 percent). Unintentional firearm deaths and legal interventions accounted for less than 3 percent of violent deaths. There were no violent deaths due to terrorism. Firearms were the principal methods of death (52.3 percent), followed by hanging, strangulation or suffocation (18.8 percent) and by poisonings (14.6 percent).

Violent death rates among men were 3.6 times greater than death rates among women (32.9 vs. 9.1 per 100,000). Black non-Hispanics had the highest overall violent death rate (34.4 per 100,000), followed by white non-Hispanic (18.1 per 100,000) and Hispanics (11.3 per 100,000). In terms of age, Ohioans aged 25 to 34 had the highest violent death rates (30.3 per 100,000), followed by 45 to 54-year-olds (28.3 per 100,000) and 35 to 44-year-olds (26.7 per 100,000). Among females, violent death rates were highest for those aged less than 1 (27.6 per 100,000). In males, violent death rates were highest among those aged 25 to 34 (49.4 per 100,000).

Suicides

There were a total of 1,153 suicides among selected Ohio counties in 2011. Suicides were the leading manner of violent death with an adjusted age rate of 12.2 per 100,000 persons. Comparable to all violent deaths, firearms were the most common method of death, accounting for 48 percent of all suicides. Other methods of deaths included poisonings (17.9 percent) and hanging, suffocation, or strangulation (29.1 percent). There were gender differences with respect to the leading method of death, with firearm-related suicides seen predominantly in men and poisoning-related suicides more commonly noted in women (53.4 percent vs. 41.2 percent, respectively).

Suicide rates were higher for men compared to women (19.8 versus 5.2 per 100,000). The highest overall suicide rates was seen among white, non-Hispanic males (22.0 per 100,000), followed by black,

² Selected Ohio counties in 2011 included Allen, Athens, Ashtabula, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren and Wood, accounting for approximately 80 percent of the Ohio population.

non-Hispanic males (11.0 per 100,000) and white, non-Hispanic females (6.0 per 100,000). Black, non-Hispanic females had the lowest suicide rates (2.3 per 100,000). In general, those aged 45 to 54 years old had the highest suicide rates (20.6 per 100,000 persons). Among men, those aged 85 and above had the greatest suicide rates (38.4 per 100,000). Among women, the highest suicide rates were seen for those aged 45 to 54 years (9.0 per 100,000).

Circumstances most commonly associated with suicides included current mental health problems (48.6 percent), current mental health treatment (34.8 percent), and a current depressed mood (34.8 percent). Life stressors such as a crisis in the past two weeks, health problems and job problems were also commonly seen among suicide decedents (18.7 percent, 17.2 percent and 14.8 percent, respectively). Among suicide decedents with toxicology results, most tested positive for alcohol (23.5 percent), opiates (15.4 percent) and antidepressants (13.5 percent).

Homicides

There were a total of 545 homicides among selected Ohio counties in 2011. Homicides were the second leading manner of violent death with an overall rate of 6.2 per 100,000. Comparable to all violent deaths, firearms were the most common method of death, accounting for 74.7 percent of all homicides. Less common methods of death included sharp instruments (8.8 percent) and personal weapons (5.0 percent).

Homicide rates were higher for men compared to women (10.2 versus 2.2 per 100,000, respectively). The highest overall homicide rates were seen among black, non-Hispanic males (46.9 per 100,000), followed by black, non-Hispanic females (5.7 per 100,000) and Hispanics (4.4 per 100,000). White, non-Hispanic females had the lowest homicide rates (1.4 per 100,000). Overall, those aged 15 to 24 years had the highest homicide rates (12.8 per 100,000 persons). Among men and women, men aged 25 to 34 had the greatest homicide rates (21.3 per 100,000). Among women, the highest homicide rates were seen for those aged 25 to 34 years (3.3 per 100,000).

Circumstances most commonly associated with homicide included association with another crime (33.4 percent), and drug involvement (12.1 percent). Other arguments or conflicts, unrelated to money or property, were seen in 33.6 percent of homicide decedents. Intimate partner violence for female homicides was almost five times more likely than for male homicides (44 percent versus 9 percent). Among homicide decedents with toxicology results, 26 percent tested positive for alcohol, 36 percent for marijuana and 11 percent for cocaine.

Undetermined Deaths

In certain instances, violent deaths could not be assigned to a specific manner of death due to insufficient evidence of intent. Among selected Ohio counties in 2011, there were a total of 169 deaths of undetermined intent and an overall death rate of 1.8 per 100,000 persons. The leading methods of death included poisonings (40.2 percent) and men generally had higher undetermined death rates than women (2.0 versus 1.6 per 100,000, respectively). Among men, the highest undetermined death rate was seen among those aged 45 to 54 followed by 25 to 34-year-olds (4.3 and 2.6 per 100,000). Overall, the highest undetermined death rate was observed among those under the age of 1 (10.8 per 100,000).

Other Violent Deaths

Legal interventions and unintentional firearm deaths accounted for 1.3 percent and 0.6 percent of all violent deaths in selected Ohio counties in 2011. Unintentional firearm deaths included those that were self-inflicted and those inflicted by another or unknown person. There were 32 merged incidents (e.g. multiple homicides, homicide-suicide) accounting for a total of 68 deaths. The most common merged incidents were homicide-suicides, followed by multiple homicides.

Introduction

Injury and violence-related deaths are a significant public health concern in the United States, and are among the leading causes of death for individuals aged 1 to 39 years. In 2011, there were more than 50,000 deaths due to violence in the US. In Ohio, violence resulted in more than 2,200 deaths in 2011. A violent death is defined as a death that results from the intentional use of physical force, or power against oneself, another person, or against a group or community. Disparities by age, sex and race are evident for violence-related deaths, emphasizing the need for policies and intervention strategies for high-risk groups. Prior to the implementation of the violent death reporting system, there was no unified surveillance system for violent deaths in the United States. The need for an active, centralized, population-based surveillance system was proposed as a means to provide comprehensive data on violent deaths occurring within the U.S.

The national violent death reporting system (NVDRS) is a public health surveillance system funded by the Centers for Disease Control and Prevention (CDC) capturing detailed information on violent deaths occurring in participating states. NVDRS data collection was started in 2003 and included the following states: Maryland, Massachusetts, New Jersey, Oregon, South Carolina, and Virginia. Since then, NVDRS has expanded to include Alaska, Colorado, Georgia, Kentucky, New Mexico, North Carolina, Oklahoma, Rhode Island, Utah, Wisconsin and, most recently, Michigan and Ohio. The data captured through the NVDRS accounts for 34 percent of all violent deaths in the United States. NVDRS data collection relies on abstraction from three primary sources: death certificates, coroner/medical examiner records and police reports. Currently, though these records may be available, they are often in different forms and locations. Death certificate data lack sufficient detail on the nature and circumstances surrounding the violent death. By linking coroner and law enforcement records with death certificates, the use of the data can be expanded, allowing researchers to explore violent incidents, risk factors and underlying circumstances surrounding the death.

Through the aid of a cooperative agreement from the CDC, Ohio became a participating state in the NVDRS in 2010. The purpose of OH-VDRS is multifold; it not only provides information relating to counts of violent deaths in Ohio, it also provides detailed descriptions of the characteristics and circumstances associated with these violent deaths. Specifically, it can detect specific types of violent deaths, examine the circumstances associated with incidents involving multiple victims and identify risk factors associated with particular types of violent deaths.

The implementation of OH-VDRS informs legislators, public health officials, law enforcement, and violence prevention groups in effective ways to reduce and prevent future violent deaths in Ohio. The data can also be utilized in assessing the effectiveness of current policies and programs to reduce and prevent violence. The results presented in this report provide valuable and comprehensive data on the characteristics and circumstances associated with violent deaths in Ohio in 2011.

Methods

Case Definition

Violent deaths were defined as suicides, homicides, legal interventions, unintentional firearm deaths, terrorism-related deaths or deaths of undetermined intent. OH-VDRS cases were identified based on specific manner cause of death codes, specifically International Classification of Diseases codes, version 10 (ICD-10). The manner of death was obtained primarily from death certificates; abstractors assigned the OH-VDRS manner of death based on the manner of death provided on the death certificate and the corresponding ICD-10 cause of death codes (Table 1).

Data collection for OH-VDRS relies on the abstraction of three primary sources: death certificates, coroner/medical examiner records and law enforcement reports. Death certificates were provided electronically by Vital Statistics at the Ohio Department of Health (ODH). Electronic records and hardcopies of medical examiner/coroner reports were obtained from county-specific medical examiners' offices. Reports from law enforcement agencies were provided to abstractors either electronically or via hard copy.

Table 1. ICD-10 Codes for Manners of Death Meeting the NVDRS Case Definition

Manner of Death	Death < 1 year after injury	Death ≥ 1 year or more after injury
Intentional Self-harm (Suicide)	X60-X84	Y87.0
Assault (Homicide)	X85-X99, Y00-Y09	Y87.1
Undetermined Intent	Y10-Y34	Y87.2, Y89.9
Unintentional Firearm	W32-W34	Y86 (guns)
Legal Intervention	Y35.0-Y35.7	Y89.0
Terrorism	U01, U03	U02

The following types of deaths were excluded from the case definition:

- Legal executions
- Unintentional injury deaths not cause by a firearm, such as motor vehicle collisions, classified as "vehicular homicides"

Data Phase-In

Death certificate data were available for the entire state of Ohio. However, detailed information on the circumstances surrounding the death, collected through coroner records and law enforcement reports, was structured as a three-year, phase-in process. In the first year, circumstance data from 12 counties, accounting for 66 percent of all violent deaths, were collected and entered into the OH-VDRS database. In 2011, data collection was expanded to an additional 22 counties, representing 85 percent of all violent deaths. In 2012, coroner and law enforcement participation encompassed all 88 counties in Ohio. A map of the phase-in process is shown in Appendix A. The data presented in this report are

centered on counties from the second year. Counts and rates for all Ohio residents, based on death certificate data, are provided in Appendix C.

Analysis

The analysis for this surveillance report includes descriptive statistics, namely counts and percentages of violent death types and their characteristics. Rates for homicides, suicides, and deaths of undetermined intent are reported at the county level as well as across various demographic groupings. Demographic groupings include age, sex, race, ethnicity, and educational attainment. Rates were calculated by dividing the number of group-specific deaths by the total group-specific population. Population estimates were obtained from bridged Ohio population data (vintage 2011) from the National Center for Health Statistics. Rates were expressed per 100,000 persons. Crude rates are reported, unless otherwise specified. Details on the calculation of crude and age-adjusted rates are discussed in Appendix B.

Data Restrictions

The calculation of rates was limited to instances where death counts were sufficiently large. Small numbers of events can vary considerably over time and could also pose concerns with respect to confidentiality and identifiable data. Several rules of thumb apply for what constitutes as sufficiently large counts. Typically rate calculations require a count of at least 10 to 20 events and a denominator of at least 100.³ In the rate calculations generated for this report, denominators were sufficiently large. Counts, however, varied considerably and could decrease substantially once parsed into specific demographic groupings. Mortality rates were calculated for counts of 10 or more, but in instances with fewer events, mortality rates were suppressed.

Data were captured for all occurrent deaths in Ohio, however for these analyses, violent death data were restricted to Ohio residents at the time of their death.

³ Brillinger DR. [The natural variability of vital rates and associated statistics](#). *Biometrics* 1986;42(4):693–734

Section 1: Overview of Violent Deaths

Data Highlights

Demographic Characteristics

- There were a total of 1,871 violent incidents in selected Ohio counties in 2011. The majority of these incidents were suicides (60.8 percent), followed by single homicides (27.7 percent) and deaths of undetermined intent (8.9 percent).
- In terms of total deaths, a total of 1,907 Ohio residents died as a result of violence. Men were more likely than women to suffer a violent death. Suicides accounted for the largest proportion of violent deaths in both men and women (60.5 percent).
- The age-adjusted violent death rate for 2011 was 20.7 per 100,000 persons. Among men the violent death rate was almost four times greater than the rate among women (32.9 vs. 9.1 per 100,000).
- Ohioans aged 25 to 34 had the highest violent death rates (30.3 per 100,000) in 2011. Among males, the highest violent death rate was also seen among those aged 25 to 34 (49.4 per 100,000), followed by those aged 85 and above (43.4 per 100,000). Among females, the highest violent death rate was observed for those under the age of 1 (27.6 per 100,000) followed by those aged 45 to 54 years (12.6 per 100,000).
- Among specific racial/ethnic groups, white males and females had the greatest number of violent deaths; however the violent death rate was highest for non-Hispanic blacks. Black, non-Hispanic males had the highest violent death rate (62.4 per 100,000) whereas white, non-Hispanic females had the lowest violent death rate (9.3 per 100,000).
- In terms of educational attainment, most violent death victims had a high school education or GED equivalent (46.5 percent). Those with less than a high school education accounted for almost a quarter of all violent deaths (22.8 percent).

Manner and Method of Death

- Suicides were the common manner of death for both men and women (60.5 percent), followed by homicides (28.6 percent) and deaths of undetermined intent (8.9 percent).
- Firearms were the most common method of death (52.3 percent). This was observed for men; however, among women, the percentage of poisoning deaths was greater than the percentage of firearm deaths (32.3 percent vs. 30.2 percent). For men, poisoning deaths accounted for only 9.4 percent of violent deaths, while firearms and hanging/suffocation were about 58.8 percent and 19.0 percent, respectively.

Distribution of Violent Deaths

- County-specific rates for violent deaths were highest for Montgomery County (28.5 per 100,000), followed by Muskingum County (27.8 per 100,000). The lowest violent death rate was observed in Warren County (9.8 per 100,000).

Incidents

Table 2: Incident Types in Selected Ohio Counties, 2011

Incident Type	Count	Percent
Suicide	1,138	60.8
Single Homicide	519	27.7
Multiple Homicide	12	0.6
Death of Undetermined Intent	168	8.9
Homicide/Suicide	19	1.0
Unintentional Firearm Death	15	0.8
Total Incidents	1,871	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Violent Deaths Demographics

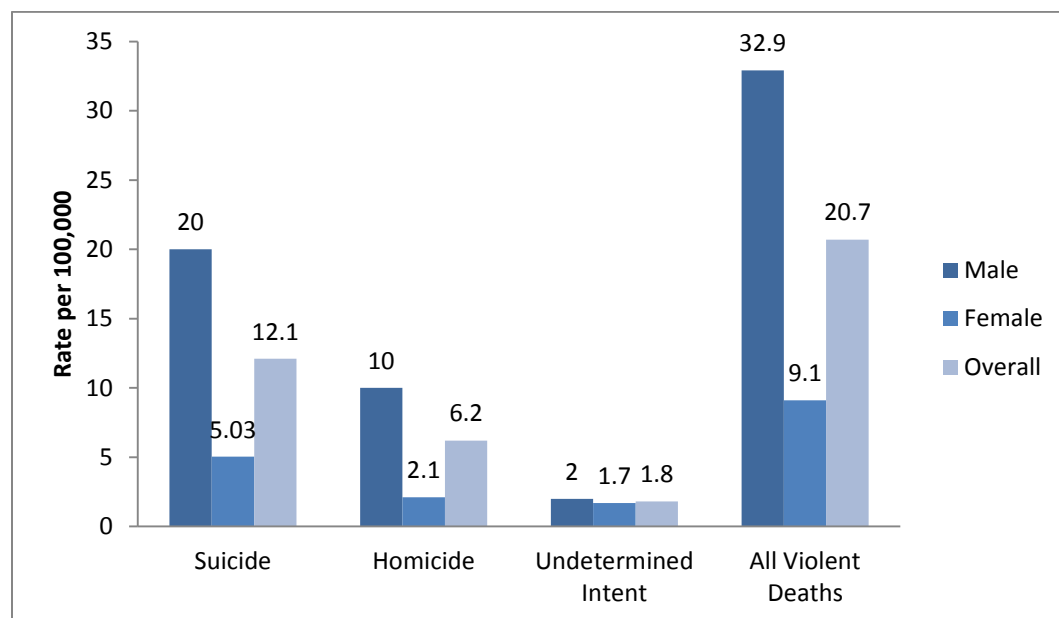
Table 3: Types of Violent Deaths and Number of Victims for Selected Ohio Counties, 2011

Method of Death	Male Count	Percent	Female count	Percent	Total Count	Percent
Suicide	903	61.2	250	58.0	1,153	60.5
Homicide	445	30.1	100	23.2	545	28.6
Unintentional Firearm - Self-Inflicted	9	0.6	0	0	9	0.5
Unintentional Firearm - Inflicted by Other Person	2	0.1	3	0.7	5	0.3
Unintentional Firearm - Unknown who Inflicted	1	0.1	0	0	1	0.05
Legal Intervention	25	1.7	0	0	25	1.3
Undetermined Intent	91	6.2	78	18.1	169	8.9
Total Deaths	1,476	100	431	100	1,907	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

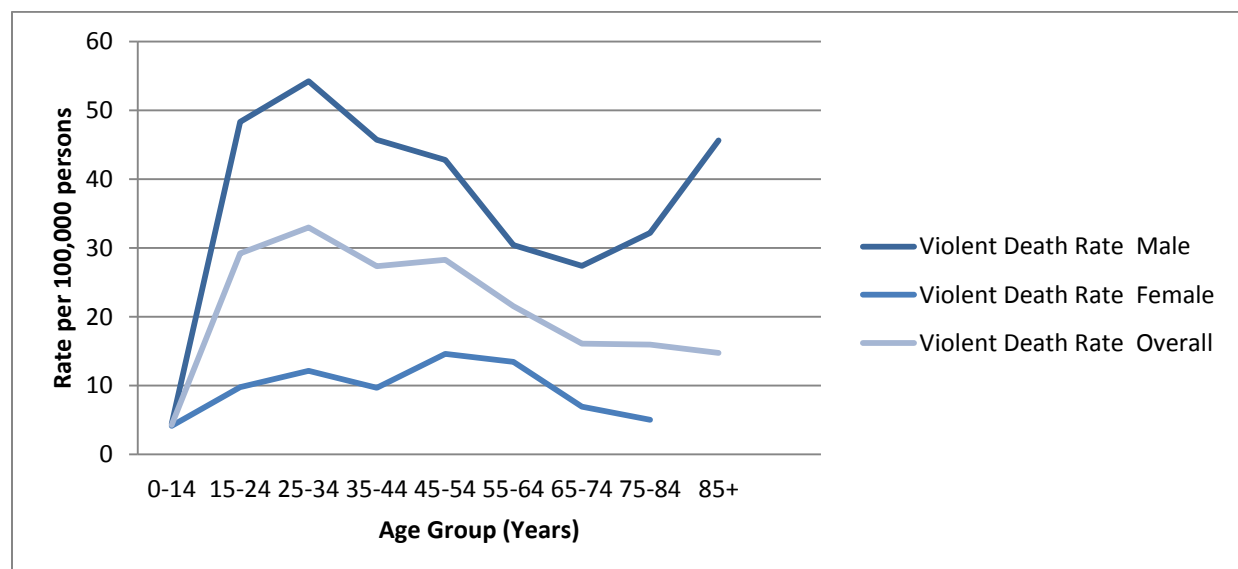
Figure 1: Age-Adjusted Violent Death Rates for Selected Ohio Counties, 2011



Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Figure 2: Age-Specific Violent Death Rates by Sex for Selected Ohio Counties, 2011



*Rates suppressed for counts <10. Rates not available for other/unknown racial groups. Rates are expressed per 100,000 persons.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood. Sources: ODH, OH-VDRS and Vital Statistics

Table 4: Demographics of Violent Deaths for Selected Ohio Counties by Race and Sex, 2011

Race/Ethnicity	Male			Female			Total		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
White, Non-Hispanic	1,005	68.1	27.6	348	71.5	9.3	1,353	70.9	18.1
Black, Non-Hispanic	418	28.3	62.4	74	22.8	9.6	492	25.8	34.4
Hispanic	28	1.9	18.9	4	2.9	*	32	1.7	11.3
Other, Unknown	25	1.7	*	9	2.9	*	34	1.8	-
Total	1,476	100	32.9	431	100	9.1	1,907	100	20.7

*Rates suppressed for counts <10. Rates not available for other/unknown racial groups. Rates are expressed per 100,000 persons.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: Ohio Department of Health, OH-VDRS and Vital Statistics

Table 5: Demographics of Violent Deaths for Selected Ohio Counties by Educational Level and Sex, 2011

Educational Level	Male Count	Percent	Female Count	Percent	Total Count	Percent
8 th grade or less	74	5.0	29	6.7	103	5.4
9 th to 12 th grade	280	19.0	52	12.1	332	17.4
High School Diploma/GED	712	48.2	175	40.6	887	46.5
Some College	181	12.3	55	12.8	236	12.3
Associate's Degree	70	4.7	39	9.0	109	5.7
Bachelor's Degree	96	6.5	49	11.4	145	7.6
Master's Degree	29	2.0	22	5.1	51	2.7
Doctorate/Professional	15	1.0	3	0.7	18	0.9
Unknown	19	1.3	7	1.6	26	1.4
Total	1,476	100	431	100	1,907	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Methods

Table 6: Method of Death for Violent Death by Sex for Selected Ohio Counties, 2011

Method of Death	Male Count	Percent	Female Count	Percent	Total Count	Percent
Firearm	868	58.8	130	30.2	998	52.3
Hanging/Strangulation	280	19.0	79	18.3	359	18.8
Poisoning	139	9.4	139	32.3	278	14.6
Sharp Instrument	54	3.7	10	2.3	64	3.4
Fall	17	1.2	4	0.9	21	1.1
Motor Vehicle	11	0.7	2	0.5	13	0.7
Blunt Instrument	19	1.3	8	1.9	27	1.4
Personal Weapons	25	1.7	8	1.9	33	1.7
Other	23	1.6	12	2.8	31	1.6
Unknown	40	2.7	39	9.0	79	4.1
Total Deaths	1,476	100	431	100	1,907	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 7: Violent Deaths by Selected Ohio Counties: Number and Rate, 2011

County	Deaths	Rate	County	Deaths	Rate	County	Deaths	Rate
Allen	18	17.0	Franklin	279	23.7	Portage	16	9.9
Ashtabula	22	21.7	Greene	20	12.3	Richland	25	20.2
Athens	11	17.0	Hamilton	209	26.1	Ross	16	20.4
Butler	68	18.4	Highland	9	*	Scioto	8	*
Clark	28	20.3	Lake	48	20.9	Stark	75	20.0
Clermont	42	21.1	Licking	29	17.3	Summit	115	21.3
Columbiana	23	21.4	Lorain	53	17.6	Trumbull	49	23.4
Cuyahoga	285	22.4	Lucas	95	21.6	Union	8	*
Darke	10	18.9	Mahoning	49	20.7	Warren	21	9.8
Delaware	23	12.9	Medina	23	13.3	Wood	17	13.5
Erie	12	15.6	Montgomery	153	28.5	Total	1,907	20.7
Fairfield	24	16.3	Muskingum	24	27.8			

*Rates suppressed for counts <10. Rates are expressed per 100,000 persons.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Section 2: Suicides

Data Highlights

Demographic Characteristics

- A total of 1,153 Ohio residents, of selected counties, died by suicide. The age-adjusted suicide rate for these selected Ohio counties was 12.2 per 100,000.
- Males were almost four times more likely than females to die from a suicide (19.8 vs. 5.2 per 100,000).
- Among men, the highest suicide rate was observed for white, non-Hispanics (22.0 per 100,000), followed by black, non-Hispanics (11.0 per 100,000).
- Among women, the highest suicide rate was observed for white, non-Hispanics (6.0 per 100,000), followed by black, non-Hispanics (2.4 per 100,000).
- Ohioans aged 45 to 54 had the highest suicide rates (20.6 per 100,000). Among men, the highest suicide rate was seen among those aged 85 and above (38.4 per 100,000), followed those aged 45 to 54 (32.8 per 100,000). Among women, the highest suicide rate was observed for those aged 45 to 54 (9.0 per 100,000) followed by 35 to 44-year-olds (7.5 per 100,000).
- In terms of educational attainment, most suicide victims had a high school education or GED equivalent (47.4 percent). Those with a bachelor's degree or higher accounted for almost one-fifth of all suicides (15.8 percent).

Method of Death and Locality

- Firearms were the most common method of death (47.9 percent) overall, followed by hanging, suffocation, or strangulation (29.1 percent) and poisoning (18 percent).
- Among men, firearms were used for more than half of suicides (53.5 percent) but for only 27.6 percent of suicides among women.
- Poisonings were the most common method of suicides for women (41.2 percent).
- Hanging, suffocation and strangulation was about constant for men and women, accounting for 29.8 percent and 26.8 percent of suicides, respectively.
- Other methods such as sharp and blunt instruments, fire/burns, and drowning accounted for less than 10 percent of all suicides.
- County-specific suicide rates were highest for Brown County (22.4 per 100,000), followed by Muskingum County (22.0 per 100,000). The lowest suicide rate was observed in Warren County (6.0 per 100,000).

Table 8: Demographics of Suicides for Selected Ohio Counties by Race and Sex, 2011

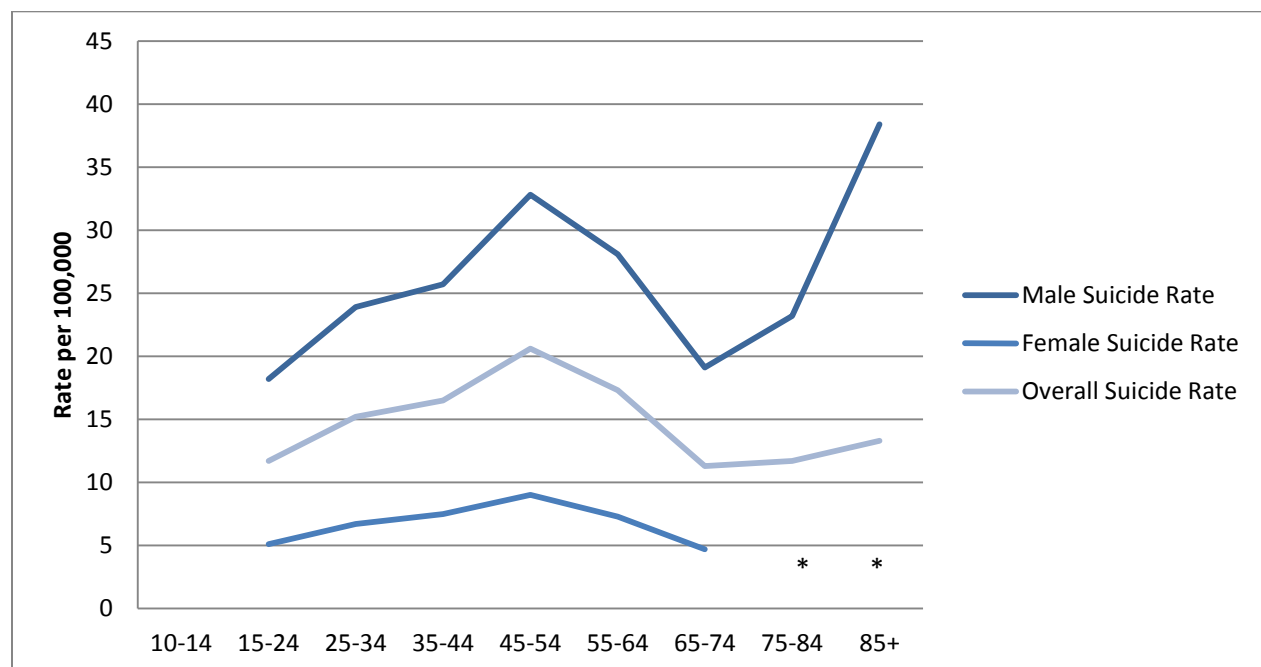
Race/Ethnicity	Male			Female			Total		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
White, Non-Hispanic	809	89.6	22.0	229	91.6	6.0	1038	90.0	13.7
Black, Non-Hispanic	70	7.8	11.0	17	6.8	2.4	87	7.5	6.3
Hispanic	12	1.3	9.2	2	0.8	*	14	1.2	5.2
Other, Unknown	12	1.3	*	2	0.8	*	14	-	-
Total	903	100	19.8	250	100	5.2	1,153	100	12.2

*Rates suppressed for counts <10. Rates not available for other/unknown racial groups. Rates are expressed per 100,000 persons.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Figure 3: Age-Specific Suicide Rates by Sex for Selected Ohio Counties, 2011



*Rate was suppressed for ages 10 to 14 due to counts lower than 10. Female rates for those aged 75 and above were suppressed due to counts lower than 10.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 9: Demographics of Suicides for Selected Ohio Counties by Educational Level and Sex, 2011

Educational Level	Male Count	Percent	Female Count	Percent	Total Count	Percent
8 th grade or less	29	3.2	2	0.8	31	2.7
9 th to 12 th grade	135	15.0	27	10.8	162	14.1
High School Diploma/GED	441	48.8	105	42.0	546	47.4
Some College	125	13.8	34	13.6	159	13.8
Associates Degree	53	5.9	20	8.0	73	6.3
Bachelors' Degree	81	9.0	40	16.0	121	10.5
Masters' Degree	21	2.3	15	6.0	36	3.1
Doctorate/Professional	11	1.2	3	1.2	14	1.2
Unknown	7	0.8	4	1.6	11	1.0
Total	903	100	250	100	1,153	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union , Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Locality

Table 10: County-specific Suicide Rates for Selected Ohio Counties, 2011

County	Deaths	Rate	County	Deaths	Rate	County	Deaths	Rate
Allen	15	14.1	Franklin	132	11.2	Portage	14	8.7
Ashtabula	17	16.8	Greene	12	7.4	Richland	18	14.6
Athens	7	*	Hamilton	97	12.1	Ross	11	14.1
Butler	50	13.5	Highland	7	*	Scioto	5	*
Clark	17	12.3	Lake	41	17.8	Stark	52	13.9
Clermont	34	17.1	Licking	23	13.8	Summit	71	13.2
Columbiana	18	16.7	Lorain	45	15.0	Trumbull	32	15.3
Cuyahoga	143	11.3	Lucas	55	12.5	Union	7	*
Darke	9	*	Mahoning	26	11.0	Warren	13	6.0
Delaware	18	10.1	Medina	13	12.6	Wood	15	11.9
Erie	10	13.0	Montgomery	87	16.2	Total	1,153	12.6
Fairfield	20	13.6	Muskingum	19	22.0			

Rates are suppressed for counts less than 10. Rates are expressed per 100,000 persons.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union , Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Methods

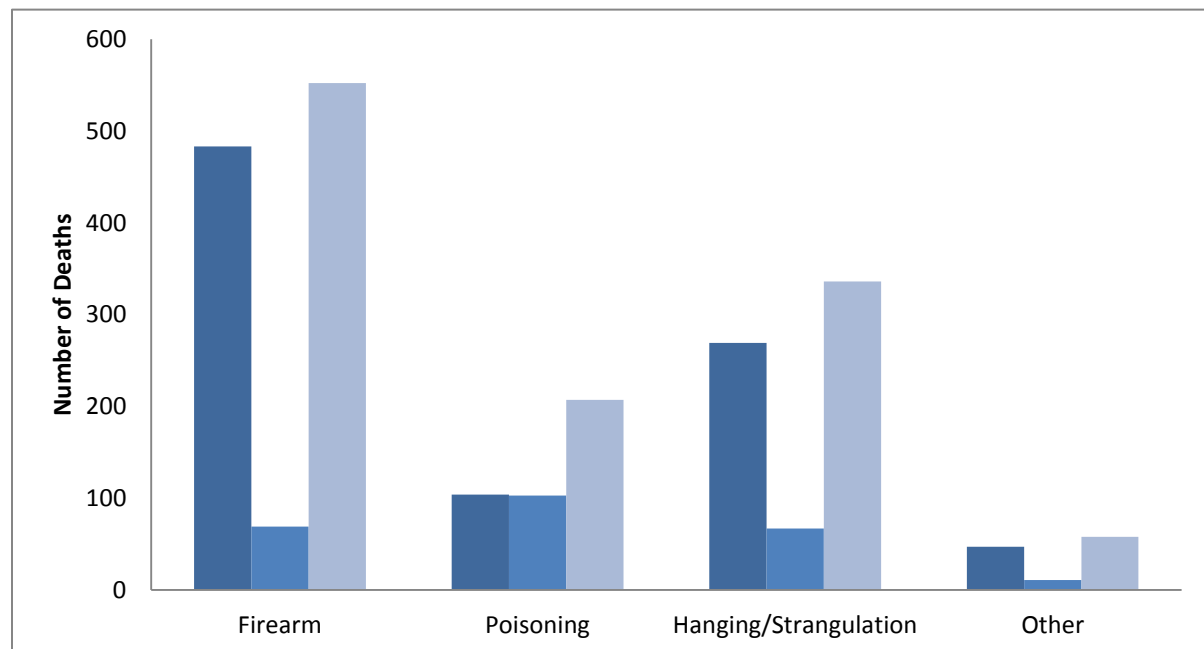
Table 11: Method of Death for Suicide Victims by Sex in Selected Ohio Counties, 2011

Method of Death	Male Count	Percent	Female count	Percent	Total Count	Percent
Firearm	483	53.5	69	27.6	552	47.9
Hanging/Strangulation	269	29.8	67	26.8	336	29.1
Poisoning	104	11.5	103	41.2	207	18.0
Sharp Instrument	13	1.4	2	0.8	15	1.3
Fall	16	1.8	3	1.2	19	1.6
Drowning	4	0.4	2	0.8	6	0.5
Burns/Fire	1	0.1	0	0	1	0.1
Motor Vehicle	3	0.3	1	0.4	4	0.3
Other Transport Vehicle	7	0.8	1	0.4	8	0.7
Other	0	0	1	0.4	1	0.1
Blunt Instrument	2	0.2	1	0.4	3	0.3
Non-powder Gun	1	0.1	0	0	1	0.1
Total Deaths	903	100	250	100	1,153	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Figure 4: Method of Death for Suicide Victims by Sex for Selected Ohio Counties, 2011



*Other method refers to suicide deaths from falls, non-powder guns, drowning, fire/burns, motor vehicles, other transport vehicles and sharp instruments.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood. Sources: ODH, OH-VDRS and Vital Statistics

Data Highlights

Injury Location

- The most common suicide locations were in a house or apartment (80 percent)
- Other suicide locations included a street or a road (2.3 percent), motor vehicle (3.0 percent), jail or prison (1.5 percent), park or playground (1.9 percent) and a natural area (2.3 percent).

Circumstances

- Nearly 95 percent (1,089/1,153) of all suicide victims had circumstances documented in either law enforcement or coroner reports.
- Among men, the most common mental health circumstances included a current mental health problem (44.3 percent), left a suicide note (36.9 percent), current depressed mood (35.5 percent), history of mental issues (33.8 percent) and an intimate partner problem (33.3 percent).
- Among women, the most common mental health circumstances included a current mental health problem (64.0 percent), a history of mental health issues (52.4 percent), current mental health treatment (50.4 percent), left a suicide note (46.2 percent) and a suicide attempt history (37.3 percent).
- In terms of suicide event circumstances, 38.9 percent of suicide victims left a suicide note, with a greater likelihood among women compared to men (46.2 percent vs. 36.9 percent). Suicide victims disclosed the intent to commit suicide in 26.2 percent of the cases. Women had a higher percentage of history of suicide attempts compared to men (37.3 percent vs. 17.9 percent).
- Other circumstances associated with suicide victims included an alcohol problem (17.2 percent), a health problem (14.4 percent), an intimate partner problem (31.1 percent), a substance abuse problem (18.9 percent) and financial problems (11.5 percent).

Toxicology Testing

- Of the 1,153 total suicide victims, 1,135 were tested for amphetamines, antidepressants, cocaine, marijuana, opiates and alcohol.
- Nearly 25 percent of suicide decedents tested positive for alcohol (23.5 percent), with a similar likelihood in men compared to women (23.4 percent vs. 23.9 percent).
- Positive tests for antidepressants and opiates were found in about 14 percent of suicides (10.9 percent and 23.0 percent, respectively).
- Women were more likely than men to test positive for opiates (24.7 percent vs. 12.9 percent).
- Ten percent of suicide decedents tested positive for marijuana, and less than 5 percent tested positive for either amphetamines or cocaine.
- Among those testing positive for alcohol, nearly 70 percent had a blood alcohol concentration (BAC) greater than 0.08. Fifteen percent of these suicide decedents had a BAC of 0.24-0.32.

Table 12: Commonly Occurring Suicide Locations for Selected Ohio Counties, 2011

Injury Location	Male Count	Percent	Female Count	Percent	Total Count	Percent
House/Apartment	718	79.5	204	81.6	922	80.0
Street/Road	22	2.4	4	1.6	26	2.3
Motor Vehicle	32	3.5	3	1.2	35	3.0
Jail/Prison	14	1.6	3	1.2	17	1.5
Park/Playground	16	1.8	6	2.4	22	1.9
Natural Area	21	2.3	6	2.4	27	2.3
Hotel/Motel	13	1.4	4	1.6	17	1.5
Other	61	6.8	12	4.8	73	6.3
Unknown	6	0.7	8	3.2	14	1.2
Total	903	100	250	100	1,153	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 13: Mental Health Circumstances of Suicide Victims by Sex for Selected Ohio Counties, 2011¹

Circumstance	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Alcohol Problem	136	15.9	21	8.9	157	14.4
Current Depressed Mood	303	35.5	76	32.2	379	34.8
History of Mental Health Problem	288	33.8	128	54.2	416	38.2
Current Diagnosed Mental Problem	378	44.3	151	64.0	529	48.6
Other Substance Abuse	155	18.2	51	21.6	206	18.9
Currently Receiving Mental Health Treatment	260	30.5	119	50.4	379	34.8

¹The denominator used for calculating percentage of specific circumstances is based on the number of suicide victims reporting at least one circumstance. Suicide victims may report more than one circumstance. Nearly 94 percent of suicide victims had circumstances available (n=1,089).

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 14: Life Stressor and Suicide Event Circumstances of Suicide Victims by Sex for Selected Ohio Counties, 2011¹

Circumstance	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Health Problem	152	17.8	35	14.8	187	17.2
Job Problem	141	16.5	20	8.5	161	14.8
Crisis in Past Two Weeks	165	19.3	39	16.5	204	18.7
Financial Problem	105	12.3	20	8.5	125	11.5
Recent Criminal Legal Problem	69	6.9	5	2.1	74	6.8
Non-criminal Legal Problem	70	8.2	13	5.5	83	7.6
School Problem	11	1.3	2	0.8	13	1.2
Other Argument	149	17.5	35	14.8	184	16.9
Substance Use	155	18.2	51	21.6	206	18.9
Alcohol Problem	136	15.9	21	8.9	157	14.4
Left a Suicide Note	315	36.9	109	46.2	424	38.9
Suicide Attempt History	153	17.9	88	37.3	241	22.1
Suicide Intent	226	26.5	59	25.0	285	26.2

¹The denominator used for calculating percentage of specific circumstances is based on the number of suicide victims reporting at least one circumstance. Suicide victims may report more than one circumstance. Nearly 94 percent of suicide victims had circumstances available (n=1,089).

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 15: Relationship Circumstances of Suicide Victims by Sex for Selected Ohio Counties, 2011¹

Circumstance	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Intimate Partner Problem	284	33.3	55	23.3	339	31.1
Other Relationship (non-intimate)	65	7.6	22	9.3	77	7.1
Suicide of Family Member in Past 5 Years	12	1.4	7	3.0	19	1.7
Other Death of Family Member within 5 Years	66	7.7	20	8.5	86	7.9

¹The denominator used for calculating percentage of specific circumstances is based on the number of suicide victims reporting at least one circumstance. Suicide victims may report more than one circumstance. Nearly 94 percent of suicide victims had circumstances available (n=1,089).

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Toxicology

Table 16: Toxicology Results for Suicide Victims for Selected Ohio Counties, 2011.

Positive Toxicology Test	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Amphetamines	14	1.6	8	3.3	22	1.9
Antidepressants	97	10.9	56	23.0	153	13.5
Cocaine	36	4.0	8	3.3	44	3.9
Marijuana	95	10.7	19	7.8	114	10.0
Opiates	115	12.9	60	24.7	175	15.4
Alcohol	209	23.4	58	23.9	267	23.5

The denominator for toxicology results is based on the number of suicide victims tested for each respective substance (n=1,135). It is possible for a suicide victim to test positive for more than one substance.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 17: Blood Alcohol Concentration Results for Suicide Victims Testing Positive for Alcohol for Selected Ohio Counties, 2011

Blood Alcohol Concentration	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Less than 0.080	55	28.8	20	36.4	75	30.5
0.080-0.160	61	31.9	15	27.3	76	30.9
0.160-0.240	47	24.6	11	20.0	58	23.6
0.240-0.320	28	14.7	9	16.4	37	15.0

A total of 267 suicide victims tested positive for alcohol. Blood alcohol concentrations were grouped into quartiles. BAC results were missing for 21 victims.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Section 3: Homicides

Data Highlights

Demographic Characteristics

- A total of 545 Ohio residents, of selected Ohio counties, died as a result of homicides. The age-adjusted homicide rate for selected Ohio counties in 2011 was 6.2 per 100,000 persons.
- Males were more than four times more likely than females to die from a homicide (10.2 vs. 2.2 per 100,000).
- Among men, the highest homicide rate was observed for black, non-Hispanics (46.9 per 100,000), followed by Hispanics (7.9 per 100,000).
- Among women, the highest homicide rate was similarly observed for black, non-Hispanics (5.7 per 100,000), followed by white, non-Hispanics (1.4 per 100,000).
- Ohioans aged 15 to 24 had the highest homicide rates (12.8 per 100,000 persons). Among men, the highest homicide rate was seen among those aged 25-34 (21.3 per 100,000), followed by those aged 15 to 24 (21.1 per 100,000).
- Among women, the highest homicide rate was observed for those aged 15-24 (4.3 per 100,000) followed by 35 to 44-year-olds (2.2 per 100,000).
- In terms of educational attainment, most homicide victims had a high school education or GED equivalent (46.8 percent). Those with less than a high school education accounted for one third of all suicides (34.1 percent).

Method of Death and Locality

- Firearms were the most common method of death (74.7 percent) for homicides, followed by sharp instruments (8.8 percent), and personal weapons (5.0 percent).
- Among men, firearms were used for more than three-quarters of homicides (78.4 percent) but for half of homicides among women (58 percent).
- Other homicide methods such as blunt instruments, hanging/strangulation, and motor vehicles accounted for less than 12 percent of all homicides.
- County-specific homicide rates were highest for Hamilton County (10.1 per 100,000), followed by Cuyahoga County (8.9 per 100,000). The lowest homicide rate was observed in Stark County (5.1).

Demographics

Table 18: Demographics of Homicides for Selected Ohio Counties by Race and Sex, 2011

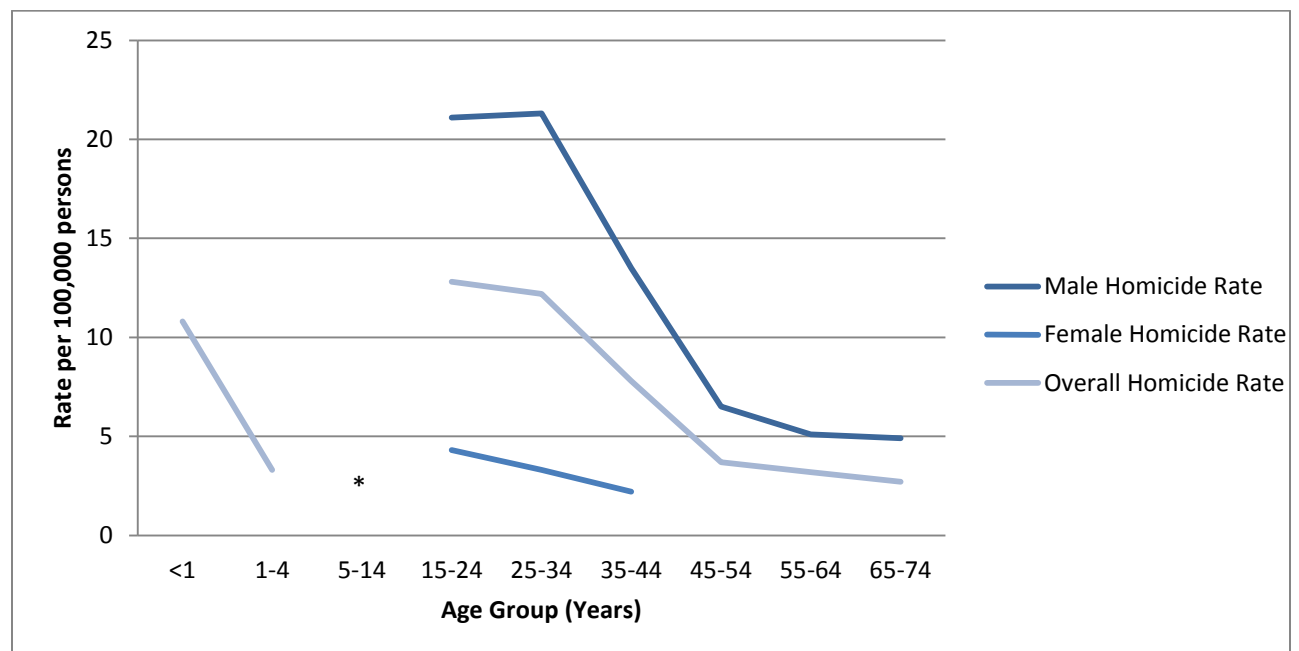
Race/Ethnicity	Male			Female			Total		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
White, Non-Hispanic	105	23.6	3.1	51	51.0	1.4	156	28.6	2.2
Black, Non-Hispanic	317	71.2	46.9	45	45.0	5.7	362	66.4	25.1
Hispanic	13	2.9	7.9	1	1.0	*	14	2.6	4.4
Other, Unknown	10	2.2	*	3	3.0	*	13	2.4	-
Total	445	100	10.2	100	100	2.2	545	100	6.2

*Rates suppressed for counts <10. Rates not available for other/unknown racial groups. Rates are expressed per 100,000 persons.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Figure 5: Age-Specific Homicide Rates by Sex for Selected Ohio Counties, 2011



*Rate was suppressed for counts lower than 10. Female homicide rate line graph appears interrupted due to suppressed rates.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood. Sources: ODH, OH-VDRS and Vital Statistics

Table 19: Demographics of Homicides for Selected Ohio Counties by Educational Level and Sex, 2011

Educational Level	Male Count	Percent	Female Count	Percent	Total Count	Percent
8 th grade or less	27	6.1	16	16.0	43	7.9
9 th to 12 th grade	126	28.3	17	17.0	143	26.2
High School Diploma/GED	213	47.9	42	42.0	255	46.8
Some College	41	9.2	11	11.0	52	9.5
Associates Degree	16	3.6	8	8.0	24	4.4
Bachelor's Degree	9	2.0	3	3.0	12	2.2
Master's Degree	6	1.3	2	2.0	8	1.5
Doctorate/Professional	1	0.2	0	0	1	0.2
Unknown	6	1.3	2	2.0	8	1.5
Total	445	100	83	100	545	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union , Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Methods

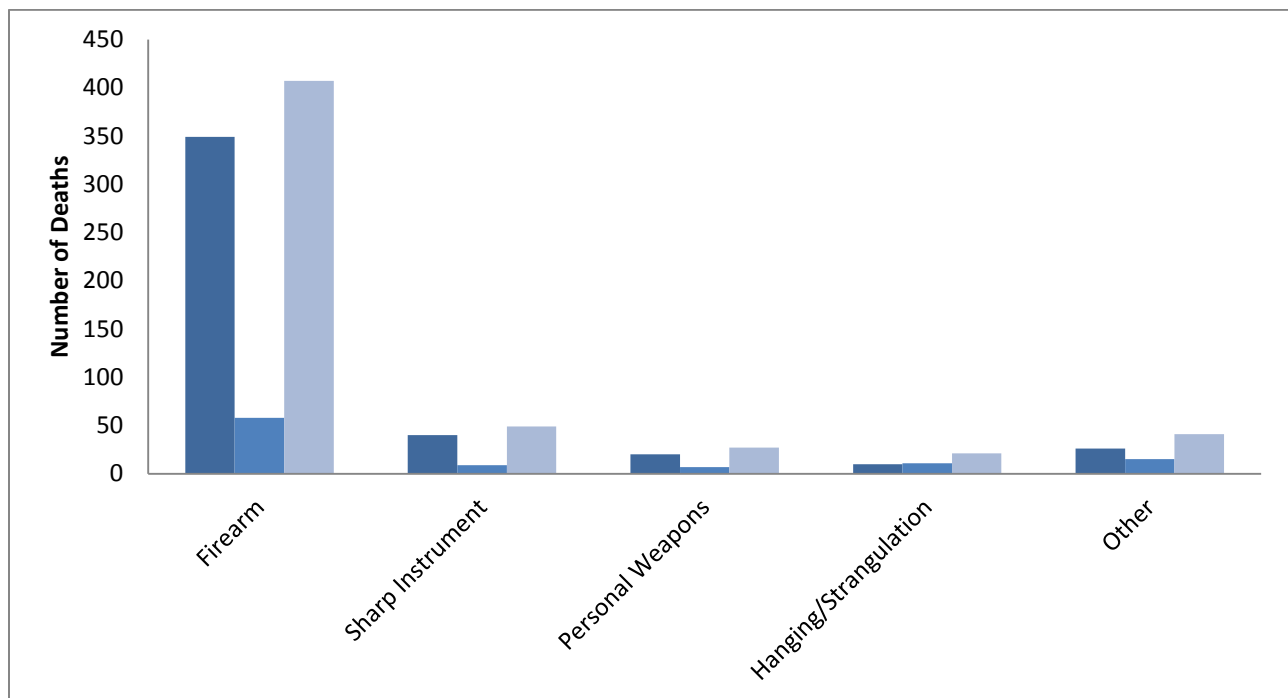
Table 20: Method of Death for Homicide Victims by Sex for Selected Ohio Counties, 2011

Method of Death	Male Count	Percent	Female Count	Percent	Total Count	Percent
Firearm	349	78.4	58	58.0	407	74.7
Hanging/Strangulation	10	2.2	11	11.0	21	3.9
Poisoning	1	0.2	2	2.0	3	0.6
Sharp Instrument	40	9.0	8	8.0	48	8.8
Blunt Instrument	15	3.4	6	6.0	21	3.9
Personal Weapons	20	4.5	7	7.0	27	5.0
Intentional Neglect	0	0	3	3.0	3	0.6
Burns/Fire	2	0.4	0	0	2	0.4
Motor Vehicle	4	0.9	0	0	4	0.8
Other	3	0.7	1	1.0	4	0.7
Unknown	1	0.2	4	4.0	5	0.9
Total Deaths	445	100	100	100	545	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union , Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Figure 6: Method of Death for Homicide Victims by Sex for Selected Ohio Counties, 2011



*Other method refers to suicide deaths from blunt instrument, poisoning, intentional neglect, fire/burns, motor vehicles, and unknown methods.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Locality

Table 21: County-Specific Crude Homicide Rates for Selected Ohio Counties, 2011

County	Deaths	Rate	County	Deaths	Rate	County	Deaths	Rate
Allen	2	*	Franklin	97	8.3	Portage	2	*
Ashtabula	5	*	Greene	4	*	Richland	4	*
Athens	2	*	Hamilton	81	10.1	Ross	4	*
Butler	8	*	Highland	1	*	Scioto	3	*
Clark	6	*	Lake	5	8	Stark	19	5.1
Clermont	3	*	Licking	5	*	Summit	34	6.3
Columbiana	3	*	Lorain	8	*	Trumbull	16	7.6
Cuyahoga	113	8.9	Lucas	34	7.7	Union	1	*
Darke	0	*	Mahoning	20	8.4	Warren	4	*
Delaware	3	*	Medina	1	*	Wood	1	*
Erie	2	*	Montgomery	50	9.3	Total	545	6.0
Fairfield	1	*	Muskingum	3	*			

*Rate was suppressed for counts lower than 10. Rates are expressed per 100,000 persons.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Data Highlights

Injury Location

- The most common homicide locations were in a house or apartment (54.9 percent).
- Other common suicide locations included a street or a road (23.1 percent), motor vehicle (4.4 percent), bar or nightclub (3.1 percent), another commercial establishment (3.3 percent) and a parking lot/garage (2.9 percent).

Circumstances

- Circumstances were documented from law enforcement and/or coroner/ME reports for 85.1 percent (464/545) of all homicide victims.
- Among men, the most common circumstances included another argument not related to property or money (36.8 percent), association with another crime (34.7 percent), substance problems (20.4 percent), drug involvement (13.5 percent) and use of a weapon (10.3 percent).
- Among women, nearly half of homicides were associated with intimate partner violence (44.2 percent), other common circumstances included an intimate partner problem (38.4 percent), association with another crime (27.9 percent), other argument not related to property or money (19.8 percent), and other substance problems (11.6 percent).
- Other circumstances associated with homicide victims included an alcohol problem (2.2 percent), a crisis in the past two weeks (2.2 percent), and an argument related to either money or property (5.2 percent).

Toxicology Testing

- Out of 545 total homicide victims, 533 were tested for amphetamines, antidepressants, cocaine, marijuana, opiates and alcohol.
- Nearly 30 percent of homicide decedents tested positive for alcohol (26.5 percent), with a higher likelihood in men compared to women (28.4 percent vs. 17.5 percent).
- Positive tests for antidepressants and opiates were found in about 11 percent of homicides (2.1 percent and 9.2 percent, respectively).
- Men were more likely than women to test positive for marijuana (39.9 percent vs. 17.5 percent).
- Almost 40 percent of homicide decedents tested positive for marijuana, but less than 15 percent tested positive for either amphetamines or cocaine.
- Among those testing positive for alcohol, more than 50 percent had a BAC greater than 0.08. 5.8 percent of these homicide decedents had a BAC of 0.24-0.32.

Table 22: Commonly Occurring Homicide Locations for Selected Ohio Counties, 2011

Injury Location	Male Count	Percent	Female Count	Percent	Total Count	Percent
House/Apartment	218	49.0	81	81.0	299	54.9
Street/Road	99	22.2	4	4.0	103	23.1
Motor Vehicle	19	4.3	5	5.0	24	4.4
Bar/Nightclub	17	3.8	0	0	17	3.1
Other Commercial Establishment	16	3.6	2	2.0	18	3.3
Parking Lot/Garage	16	3.6	0	0	16	2.9
Natural Area	3	0.7	1	1.0	4	0.7
Other	27	6.1	4	4.0	31	5.7
Unknown	30	6.7	3	3.0	33	6.1
Total	445	100	100	100	545	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Circumstances

Table 23: Crime-Related Circumstances of Homicide Victims by Sex for Selected Ohio Counties, 2011

Circumstance	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Drug Involvement	51	13.5	5	5.8	56	12.1
Precipitated by Another Crime	131	34.7	24	27.9	155	33.4
Other Substance Abuse Problem	77	20.4	10	11.6	88	19.0
Brawl	3	0.8	1	1.2	4	0.9
Drive-by Shooting	12	3.2	2	2.3	14	3.0
Bystander	6	1.6	4	4.7	10	2.2
Gang-Related	12	3.2	1	1.2	13	2.8
Hate Crime	1	0.3	0	0	1	0.2
Used Weapon	39	10.3	2	2.3	41	8.8
Mentally Ill Suspect	0	0	2	2.3	2	0.4

The denominator used for calculating percentage of specific circumstances is based on the number of homicide victims reporting circumstances (n=464). Homicide victims may report more than one circumstance.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood. Sources: ODH, OH-VDRS and Vital Statistics

Table 24: Arguments and Conflicts Circumstances of Homicide Victims by Sex for Selected Ohio Counties, 2011

Circumstance	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Argument over Money/Property	21	5.6	3	3.5	24	5.2
Intimate Partner Violence	35	9.3	38	44.2	73	15.7
Jealousy (Lover's Triangle)	7		6		13	
Other Argument, Abuse, Conflict	139	36.8	17	19.8	156	33.6
Other Substance Problem	77	20.4	10	11.6	88	19.0
Used Weapon	39	10.3	2	2.3	41	8.8
Alcohol Suspected	9	2.4	1	1.2	10	2.2

The denominator used for calculating percentage of specific circumstances is based on the number of homicide victims reporting circumstances (n=464). Homicide victims may report more than one circumstance.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Toxicology

Table 25: Toxicology Results for Homicide Victims for Selected Ohio Counties, 2011.

Positive Toxicology Test	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Amphetamines	7	1.6	3	3.1	10	1.9
Antidepressants	6	1.4	5	5.2	11	2.1
Cocaine	53	12.2	7	7.2	60	11.3
Marijuana	174	39.9	17	17.5	191	35.8
Opiates	42	9.6	7	7.2	49	9.2
Alcohol	124	28.4	17	17.5	141	26.5

The denominator used for calculating percentage of specific circumstances is based on the number of homicide victims who were tested for each respective substance (n=533). It is possible for a homicide victim to test positive for more than one substance.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 26: Blood Alcohol Concentration Results for Homicide Victims Testing Positive for Alcohol for Selected Ohio Counties, 2011

Blood Alcohol Concentration	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Less than 0.080	50	41.0	12	70.6	62	44.6
0.080-0.160	43	35.2	2	11.8	45	32.4
0.160-0.240	21	17.2	3	17.6	24	17.3
0.240-0.320	8	6.6	0	0	8	5.8

A total of 141 homicide victims were tested for alcohol. Blood alcohol concentrations were grouped into quartiles. Blood alcohol concentrations results were missing for two victims.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union , Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Victim-Suspect Relationship

Seventy-four percent (406/545) of homicide victims had suspect information. The victim-suspect relationship was available from both law enforcement reports and medical examiner/coroners' records, however data from the police reports tended to be more complete than those from coroners' reports. The data presented below are given for the primary victim-suspect relationship only. There were considerably fewer instances where multiple suspects were associated with a homicide. The victim-suspect relationship is the description of the relationship of the victim to the suspect, for example, when a parent (suspect) kills a child (victim), the relationship is described as child, not parent.

Table 27: Common Victim-Suspect Relationships for Homicide Victims in Selected Ohio Counties, 2011

Relationship to the Suspect	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Spouse	5	1.1	15	15.0	20	3.7
Ex-Spouse	1	0.2	1	1.0	2	0.4
Girlfriend/Boyfriend	8	1.8	13	13.0	21	3.9
Ex-Girlfriend/Boyfriend	2	0.4	2	2.0	4	0.7
Child of Suspect's Boyfriend/Girlfriend	0	0	5	5.0	5	0.9
Parent	1	0.2	2	2.0	3	0.6
Child	7	1.6	5	5.0	12	2.2
Sibling	1	0.2	3	3.0	4	0.7
Babysitter	2	0.4	2	2.0	4	0.7
Step-parent	1	0.2	0	0	1	0.2
Child of suspect's boyfriend/girlfriend	1	0.2	2	2.0	3	0.6
Intimate partner of suspects parents	1	0.2	0	0	1	0.2
Other Family Member	4	0.9	0	0	4	0.7
Friend	1	0.2	0	0	1	0.2
Acquaintance	27	6.1	4	4.0	31	5.7
Roommate	4	0.9	0	0	4	0.7
Other Person, Known to Victim	6	1.3	2	2.0	8	1.5
Victim was injured by law enforcement officer	6	1.3	0	0	6	1.1
Victim was law enforcement officer in line of duty	2	0.4	1	1.0	3	0.6
Relationship Unknown	241	54.2	28	28.0	269	49.4

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood. Sources: ODH, OH-VDRS and Vital Statistics

Section 4: Deaths of Undetermined Intent, Selected Counties

Data Highlights

Demographic Characteristics

- There were total of 169 deaths of undetermined intent for resident of selected Ohio counties in 2011. The overall rate was 1.8 per 100,000.
- Males were more likely than females to die from a death of undetermined intent (2.0 vs. 1.7 per 100,000).
- Among men, the highest undetermined death rate was observed for black, non-Hispanics (2.6 per 100,000), followed by white, non-Hispanics (1.8 per 100,000).
- Among women, the highest undetermined death rate was observed for black, non-Hispanics (1.3 per 100,000), followed by white, non-Hispanics (1.2 per 100,000).
- Ohioans aged 45 to 54 years had the highest undetermined death rates (3.3 per 100,000). Among men, the highest rate was seen among those aged 35 to 44 years (4.8 per 100,000), followed those aged 45 to 54 years (3.7 per 100,000).
- Among women, the highest undetermined death rate was observed for those aged 45 to 54 (2.9 per 100,000) followed by 55 to 64-year-olds (2.4 per 100,000).
- In terms of educational attainment, most victims a high school education or GED equivalent (39.6 percent). Those with a college education and above accounted for 16.5 percent of all undetermined deaths.

Method of Death and Locality

- Most deaths of undetermined intent were committed with unknown methods (43 percent).
- Poisonings accounted for 39.6 percent of all undetermined deaths.
- Among men, the method was unknown for more than 40 percent of all deaths of undetermined intent (42.9 percent) but for almost half of undetermined deaths among women (44.9 percent).
- Other methods such as firearms, drowning and motor vehicles accounted for less than 20 percent of all deaths of undetermined intent.
- County-specific undetermined death rates were highest for Hamilton County (3.4 per 100,000), followed by Franklin County (3.3 per 100,000). The lowest undetermined death rate was observed in Cuyahoga County (1.7 per 100,000).

Table 28: Demographics of Deaths of Undetermined Intent for Selected Ohio Counties by Age and Sex, 2011

Age Group	Male Count	Rate	Female Count	Rate	Total Count	Rate
<1	4	*	8	*	12	10.8
1-4	7	*	0	*	7	*
5-14	3	*	1	*	4	*
15-24	7	*	3	*	10	0.8
25-34	15	2.6	8	*	23	2.0
35-44	11	1.9	14	2.4	25	2.2
45-54	28	4.3	18	2.6	46	3.4
55-64	10	1.8	17	2.8	27	2.3
65-74	3	*	4	*	7	*
75-84	2	*	3	*	5	*
85+	1	*	2	*	3	*
Total	91	2.0	78	1.7	169	1.8

*Rates suppressed for counts <10. Rates are expressed per 100,000 persons.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 29: Demographics of Deaths of Undetermined Intent for Selected Ohio Counties by Race and Sex, 2011

	Male			Female			Total		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Race/Ethnicity									
White, Non-Hispanic	71	78.0	2.0	67	85.9	1.8	138	81.7	1.9
Black, Non-Hispanic	17	18.7	2.6	10	12.8	1.3	27	16.0	1.9
Hispanic	1	1.1	*	0	0	*	1	0.6	-
Other, Unknown	2	2.2	*	1	1.3	*	3	1.8	-
Total	91	100	2.6	78	100	1.7	169	100	1.8

*Rates suppressed for counts <10. Rates not available for other/unknown racial groups. Rates are expressed per 100,000 persons.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 30: Demographics of Deaths of Undetermined Intent for Selected Ohio Counties by Educational Level and Sex, 2011

Educational Level	Male Count	Percent	Female Count	Percent	Total Count	Percent
8 th grade or less	16	17.6	11	14.1	27	16.0
9 th to 12 th grade	10	11.0	7	9.0	17	10.1
High School Diploma/GED	41	45.1	26	33.3	67	39.6
Some College	9	9.9	10	12.8	19	11.2
Associates Degree	0	0	11	14.1	11	6.5
Bachelor's Degree	6	6.6	6	7.7	12	7.1
Master's Degree	2	2.2	5	6.4	7	4.1
Doctorate/Professional	1	1.1	0	0	1	0.6
Unknown	6	6.6	2	2.6	8	4.7
Total	91	100	78	100	169	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Methods

Table 31: Method of Death for Deaths of Undetermined Intent by Sex for Selected Ohio Counties, 2011

Method of Death	Male Count	Percent	Female Count	Percent	Total Count	Percent
Firearm	3	3.3	0	1.8	3	2.2
Drowning	5	5.5	0	0	5	3.0
Burns/Fire	0	0	2	2.6	2	1.2
Poisoning	34	37.4	34	43.6	68	40.2
Motor Vehicle	2	2.2	1	1.3	3	1.8
Other	8	8.8	6	7.7	14	8.3
Unknown	39	42.9	35	44.9	74	43.8
Total Deaths	91	100	78	100	169	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Locality

Table 32: County-Specific Rates for Deaths of Undetermined Intent for Selected Ohio Counties, 2011

County	Deaths	Rate	County	Deaths	Rate	County	Deaths	Rate
Allen	0	*	Franklin	39	3.3	Portage	0	*
Ashtabula	0	*	Greene	4	*	Richland	3	*
Athens	2	*	Hamilton	27	3.4	Ross	1	*
Butler	7	*	Highland	1	*	Scioto	0	*
Clark	4	*	Lake	2	*	Stark	3	*
Clermont	4	*	Licking	0	*	Summit	9	*
Columbiana	2	*	Lorain	0	*	Trumbull	1	*
Cuyahoga	22	1.7	Lucas	5	*	Union	0	*
Darke	0	*	Mahoning	2	*	Warren	4	*
Delaware	1	*	Medina	9	*	Wood	0	*
Erie	0	*	Montgomery	14	2.6	Total	169	1.8
Fairfield	2	*	Muskingum	1	*			

Rates are suppressed for counts less than 10. Rates are expressed per 100,000 persons.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Data Highlights

Injury Location

- The most common location for deaths of undetermined intent was in a house or an apartment (42.6 percent)
- Other common locations included a street or a road (3.6 percent), motor vehicle (1.5 percent), hotel or motel (1.5 percent), and unknown sites (45.6 percent).

Circumstances

- Nearly 72 percent of undetermined deaths had circumstances documented from law enforcement and/or coroner/ME reports (121/169).
- Among men, the most common mental health circumstances included a current mental health problem (62.1 percent), a history of mental health issues (50 percent), current mental health treatment (43.9 percent), substance abuse (42.4 percent) and an alcohol problem (30.3 percent).
- Among women, the most common mental health circumstances included a current mental health problem (69.1 percent), a history of mental health issues (50.9 percent), current mental health treatment (47.3 percent), current depressed mood (7.3 percent) and substance abuse (32.7 percent).
- Other circumstances included job problems (4.1 percent), intimate partner problem (10.7 percent) and health problem (11.6 percent)

Toxicology Testing

- Out of a total of 169 victims, 163 were tested for amphetamines, antidepressants, cocaine, marijuana, opiates, and alcohol.
- Nearly 25 percent of decedents tested positive for alcohol (23.3 percent), with a higher likelihood in men compared to women (28.1 percent vs. 17.6 percent).
- Positive tests for antidepressants and opiates were found in about 50 percent of undetermined deaths (22.7 percent and 31.9 percent, respectively).
- Men were more likely than women to test positive for marijuana (4.5 percent vs. 1.4 percent).
- Less than 10 percent tested positive for either amphetamines or cocaine.
- Among those testing positive for alcohol, 45.7 percent had a BAC of less than 0.08. Nearly 6 percent of these undetermined deaths had a BAC of 0.24-0.32.

Circumstances

Table 33: Common Circumstances for Deaths of Undetermined Intent by Sex for Selected Ohio Counties, 2011

Circumstance	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Current Treatment for Mental Illness	29	43.9	26	47.3	55	45.5
Current Mental Health Problem	41	62.1	38	69.1	79	65.3
Job Problem	4	6.1	1	1.8	5	4.1
Other Substance Abuse Problem	28	42.4	18	32.7	46	38.0
Intimate Partner Problem	5	7.6	8	3.6	13	10.7
Suicide History	7	10.6	10	14.5	17	14.0
History of Mental Health Problems	33	50.0	28	50.9	61	50.4
Physical Health Problem	9	13.6	5	9.1	14	11.6
Current Depressed Mood	10	15.2	4	7.3	14	11.6
Alcohol Suspected	20	30.3	11	20.0	31	25.6

The denominator used for calculating percentage of specific circumstances is based on the number of victims reporting circumstances (n=121). Victims may have reported more than one circumstance.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Locality

Table 34: Commonly Occurring Locations for Deaths of Undetermined Intent for Selected Ohio Counties, 2011

Injury Location	Male Count	Percent	Female Count	Percent	Total Count	Percent
House/Apartment	33	36.3	39	50.0	72	42.6
Street/Road	5	5.5	1	1.3	6	3.6
Motor Vehicle	1	1.1	1	1.3	2	1.5
Park/Playground	1	1.1	0	0	1	0.7
Natural Area	6	1.3	1	1.3	7	1.5
Hotel/Motel	1	1.1	1	1.3	2	1.5
Jail/Prison	1	1.1	1	0	2	0.7
Unknown	43	47.3	34	43.5	77	45.6
Total	91	100	78	100	169	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Toxicology

Table 35: Toxicology Results for Victims for Selected Ohio Counties, 2011

Positive Toxicology Test	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Amphetamines	3	3.4	4	5.4	7	4.3
Antidepressants	17	19.1	20	27.0	37	22.7
Cocaine	4	4.5	4	5.4	8	4.9
Marijuana	4	4.5	1	1.4	5	3.1
Opiates	27	30.3	25	33.8	52	31.9
Alcohol	25	28.1	13	17.6	38	23.3

It is possible for a victim to test positive for more than one substance. 163 victims underwent toxicology tests.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 36: Blood Alcohol Concentration Results for Victims Testing Positive for Alcohol for Selected Ohio Counties, 2011

Blood Alcohol Concentration	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Less than 0.080	9	39.1	7	58.3	16	45.7
0.080-0.160	7	30.4	4	33.3	11	31.4
0.160-0.240	5	21.7	1	8.3	6	17.1
0.240-0.320	2	8.7	0	0	2	5.7

A total of 38 victims tested positive for alcohol. Blood alcohol concentrations were grouped into quartiles. Blood alcohol concentrations results were missing for three victims.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Section 5: Firearm-Related Deaths, Selected Counties

Data Highlights

Demographic Characteristics

- A total of 998 Ohio residents of the selected counties died as a result of a firearm. The overall firearm-related death rate for selected Ohio counties in 2011 was 10.8 per 100,000.
- Firearms were the most common mechanism in suicides (52.3 percent) and homicides (74.7 percent).
- Males were almost seven times more likely than females to die at the hand of a firearm (19.4 vs. 2.8 per 100,000).
- Among men, the highest firearm death rate was observed for black, non-Hispanics (50.8 per 100,000), followed by white, non-Hispanics (13.5 per 100,000).
- Among women, the highest firearm death rate was observed for black, non-Hispanics (4.5 per 100,000), followed by black, non-Hispanics (2.4 per 100,000).
- Ohioans aged 35 to 44 years had the highest firearm-related death rates (18.1 per 100,000). Among men, the highest firearm rate was observed among those aged 25 to 34 years (31.7 per 100,000), followed those aged 15 to 24 years (30.3 per 100,000). Among women, the highest firearm related death rate was observed for those aged 35 to 44 years (4.6 per 100,000) followed by 15 to 24-year-olds (4.5 per 100,000).
- In terms of educational attainment, most victims had a high school education or GED equivalent (49.1 percent). Those with a less than a high school education accounted for almost a quarter of all firearm-related deaths (22.4 percent).

Locality

- County specific firearm-related death rates were highest for Montgomery County (28.5 per 100,000), followed by Muskingum County (27.8 per 100,000). The lowest firearm-related death rate was observed in Warren County (9.8 per 100,000).

Table 37: Types of Firearm Deaths and Number of Victims for Selected Ohio Counties, 2011

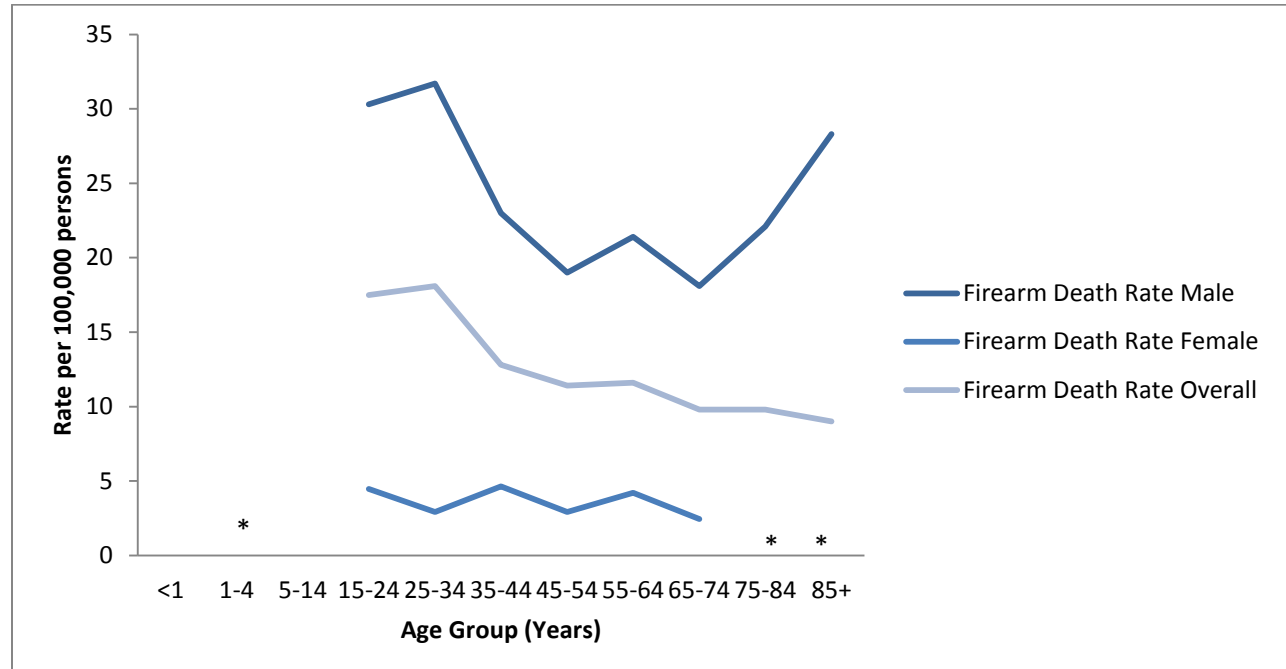
Method of Death	Male Count	Percent	Female count	Percent	Total Count	Percent
Suicide	483	55.6	69	53.1	552	55.3
Homicide	349	40.2	58	44.6	407	40.8
Unintentional Firearm - Self-Inflicted	9	1.0	0	0	9	0.9
Unintentional Firearm - Inflicted by Other Person	2	0.2	3	2.3	5	0.5
Unintentional Firearm - Inflicted by Unknown Person	1	0.1	0	0	1	0.1
Legal Intervention	21	2.4	0	0	21	2.1
Undetermined Intent	3	0.3	0	0	3	0.3
Total Deaths	868	100	130	100	998	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Demographics

Figure 7: Age-Specific Firearm Death Rates by Sex for Selected Ohio Counties, 2011



*Rates suppressed for counts less than 10.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood. Sources: ODH, OH-VDRS and Vital Statistics

Table 38: Demographics of Firearm-Related Deaths for Selected Ohio Counties by Race and Sex, 2011

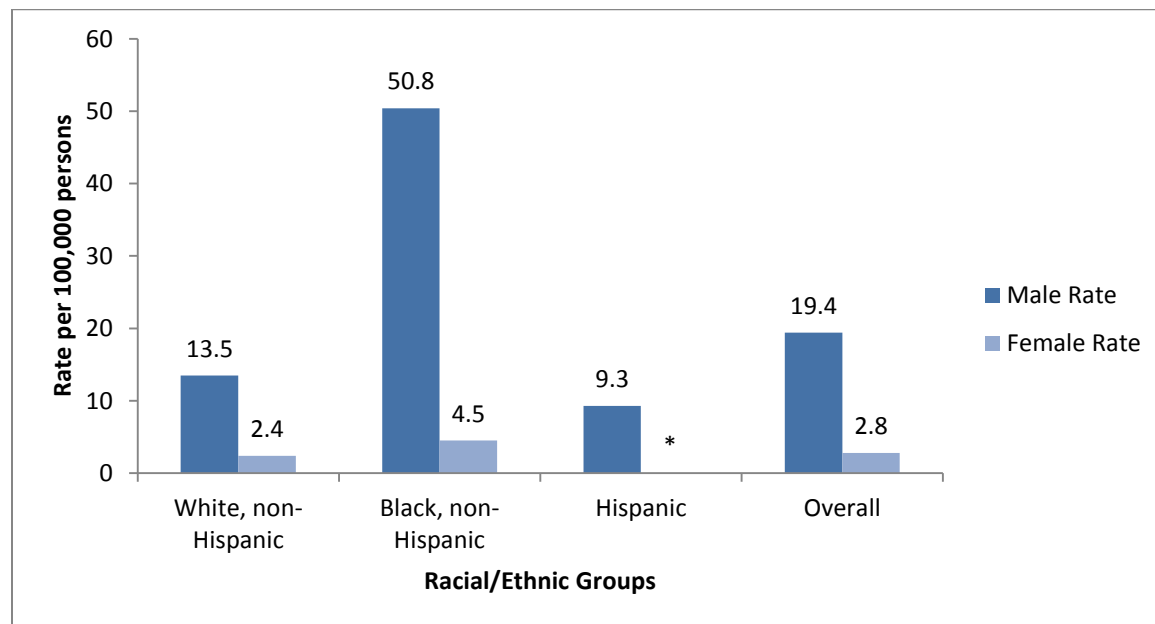
Race/Ethnicity	Male			Female		
	Number	Percent	Rate	Number	Percent	Rate
White, Non-Hispanic	503	53.5	13.5	92	66.7	2.4
Black, Non-Hispanic	340	43.2	50.8	35	27.8	4.5
Hispanic	15	2.1	9.3	2	2.2	*
Other, Unknown	10	1.3	*	1	0.8	*
Total	868	100	19.4	130	100	2.8

Rates suppressed for counts <10. *Rates not available for Hispanic females and other/unknown racial groups. Rates are expressed per 100,000 persons.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Figure 8: Firearm Death Rates by Race and Sex for Selected Ohio Counties, 2011



*Rate suppressed due to counts less than 10. Rates for other racial groups not calculated due to insufficient counts.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 39: Demographics of Firearm-Related Deaths for Selected Ohio Counties by Educational Level and Sex, 2011

Educational Level	Male Count	Percent	Female Count	Percent	Total Count	Percent
8 th grade or less	25	2.9	1	0.8	26	2.6
9 th to 12 th grade	176	20.3	22	16.9	198	19.8
High School Diploma/GED	431	49.7	59	45.4	490	49.1
Some College	106	12.2	20	15.4	126	12.6
Associates Degree	48	5.5	10	7.7	58	5.8
Bachelors' Degree	51	5.9	12	9.2	63	6.3
Masters' Degree	15	1.7	3	2.3	18	1.8
Doctorate/Professional	9	0.9	1	0.8	10	1.0
Unknown	7	0.7	2	1.5	9	0.9
Total	868	100	130	90	998	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 40: County-Specific Crude Rates for Firearm-Related Deaths for Selected Ohio Counties, 2011

County	Deaths	Rate	County	Deaths	Rate	County	Deaths	Rate
Allen	11	10.4	Franklin	150	12.7	Portage	10	6.2
Ashtabula	15	14.8	Greene	10	6.1	Richland	11	8.9
Athens	5	*	Hamilton	116	14.5	Ross	6	*
Butler	27	7.3	Highland	6	*	Scioto	4	*
Clark	12	8.7	Lake	19	8.3	Stark	47	12.5
Clermont	17	8.5	Licking	15	9.0	Summit	59	10.9
Columbiana	9	*	Lorain	20	6.6	Trumbull	27	12.9
Cuyahoga	155	12.2	Lucas	53	12.0	Union	5	*
Darke	5	*	Mahoning	36	15.2	Warren	7	*
Delaware	8	*	Medina	8	*	Wood	7	*
Erie	8	*	Montgomery	82	15.3	Total	998	10.8
Fairfield	15	10.2	Muskingum	13	15.1			

Rates are suppressed for counts < 10. Rates are expressed per 100,000 persons.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Data Highlights

Injury Location

- The most common locations for firearm-related deaths were in a house or apartment (68.0 percent)
- Other common locations included a street or a road (10.4 percent), motor vehicle (4.8 percent), another commercial establishment (2.8 percent), and other/unknown sites (8.9 percent).

Circumstances

- Nearly 90 percent (897/998) of all firearm deaths had circumstances documented from law enforcement and/or coroner/ME reports.
- Among men, the most common circumstances included a current mental health problem (24.2 percent), a history of mental health issues (19.3 percent), current mental health treatment (16.6 percent), other argument (23.3 percent) and a current depressed mood (20.2 percent).
- Among women, the most common circumstances included a current mental health problem (36.1 percent), receiving current mental health treatment (27.7 percent), a history of mental health issues (26.9 percent), current depressed mood (20.2 percent) and left a suicide note (28.6 percent).
- Other circumstances included crisis in the last two weeks (13.3 percent), precipitation of another crime (19.5 percent) and physical health problem (14.2 percent)

Toxicology Testing

- Out of a total of 998 victims, 975 were tested for amphetamines, antidepressants, cocaine, marijuana, opiates, and alcohol.
- Nearly 25 percent of decedents tested positive for alcohol (23.7 percent), with a similar likelihood in men compared to women (23.9 percent vs. 20 percent).
- Positive tests for antidepressants or opiates were found in about 15 percent of firearm-related deaths (5.6 percent and 10.9 percent, respectively).
- Men were more likely than women to test positive for marijuana (25.6 percent vs. 14.4 percent).
- About 25 percent of decedents tested positive for marijuana, but less than 10 percent tested positive for either amphetamines or cocaine.
- Among those testing positive for alcohol, 36.8 percent had a BAC of less than 0.08 and 13 percent of these firearm-related deaths had a BAC of 0.24-0.32.

Circumstances

Table 41: Mental Health Circumstances of Firearm Victims by Sex for Selected Ohio Counties, 2011¹

Circumstance	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Alcohol Problem	56	7.2	5	4.2	61	6.8
Current Depressed Mood	162	20.8	24	20.2	186	20.7
History of Mental Health Problem	150	19.3	32	26.9	182	20.3
Current Diagnosed Mental Health Problem	188	24.2	43	36.1	231	25.8
Other Substance Abuse	113	14.5	14	11.8	127	14.2
Currently Receiving Mental Health Treatment	129	16.6	33	27.7	162	18.1

¹The denominator used for calculating percentage of specific circumstances is based on the number of firearm victims reporting at least one circumstance. Firearm victims may report more than one circumstance. Nearly 90 percent of firearm victims had circumstances available (n=897).

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 42: Crime-Related Circumstances of Firearm Victims by Sex for Selected Ohio Counties, 2011

Circumstance	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Drug Involvement	44	5.7	3	2.5	47	5.2
Precipitated by Another Crime	157	20.2	18	15.1	175	19.5
Crime in Progress	111	14.3	12	10.1	123	13.7

The denominator used for calculating percentage of specific circumstances is based on the number of firearm victims reporting circumstances (n=897). Firearm victims may report more than one circumstance.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood. Sources: ODH, OH-VDRS and Vital Statistics

Table 43: Life Stressor and Suicide Event Circumstances of Firearm Victims by Sex for Selected Ohio Counties, 2011¹

Circumstance	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Physical Health Problem	112	14.4	15	12.6	127	14.2
Job Problem	78	10.0	9	7.6	87	9.7
Crisis in Past Two Weeks	104	13.4	15	12.6	119	13.3
Financial Problem	53	6.8	6	5.0	59	6.6
Recent Criminal Legal Problem	44	5.7	2	1.7	46	5.1
Non-criminal Legal Problem	40	5.1	3	2.5	43	4.8
Left a Suicide Note	165	21.2	34	28.6	199	22.2
Suicide Attempt History	48	6.2	16	13.4	64	7.1
Suicide Intent	113	14.5	15	12.6	128	14.3

¹The denominator used for calculating percentage of specific circumstances is based on the number of firearm victims reporting at least one circumstance. Firearm victims may report more than one circumstance. Nearly 90 percent of firearm victims had circumstances available (n=897).

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 44: Arguments and Conflicts Circumstances of Firearm Victims by Sex for Selected Ohio Counties, 2011

Circumstance	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Argument over Money/Property	23	3.0	2	1.7	25	2.8
Intimate Partner Violence	24	3.1	20	16.8	44	4.9
Jealousy (Lover's Triangle)	18	2.3	4	3.4	22	2.5
Other Argument, Abuse, Conflict	181	23.3	19	16.0	200	22.3
Other Substance Problem	80	10.3	19	16.0	99	11.0
Used Weapon	53	6.8	1	0.8	54	6.0

The denominator used for calculating percentage of specific circumstances is based on the number of firearm victims reporting circumstances (n=897). Homicide victims may report more than one circumstance. Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Locality

Table 45: Commonly Occurring Locations for Firearm Deaths for Selected Ohio Counties, 2011

Injury Location	Male Count	Percent	Female Count	Percent	Total Count	Percent
House/Apartment	572	65.9	107	82.3	679	68.0
Street/Road	99	11.4	5	3.8	104	10.4
Parking Lot Garage	21	2.4	0	0	21	2.1
Motor Vehicle	44	5.1	4	3.1	48	4.8
Other Commercial Establishment	27	3.1	1	0.8	28	2.8
Park/Playground	10	1.2	4	3.1	14	1.4
Natural Area	12	1.4	3	2.3	15	1.5
Other	57	6.6	4	3.1	61	6.1
Unknown	26	3.0	2	1.5	28	2.8
Total	868	100	130	100	998	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Toxicology

Table 46: Toxicology Results for Victims in Selected Ohio Counties, 2011

Positive Toxicology Test	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Amphetamines	10	1.1	3	2.4	13	1.3
Antidepressants	39	4.6	16	12.8	55	5.6
Cocaine	53	6.2	5	4	58	5.9
Marijuana	218	25.6	18	14.4	236	24.2
Opiates	90	10.6	16	12.8	106	10.9
Alcohol	203	23.9	25	20	231	23.7

It is possible for a victim to test positive for more than one substance. A total of 694 victims underwent toxicology tests.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 47: Blood Alcohol Concentration Results for Victims Testing Positive for Alcohol, Selected Ohio Counties, 2011

Blood Alcohol Concentration	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Less than 0.080	71	36.2	10	41.7	81	36.8
0.080-0.160	58	29.6	3	12.5	61	27.7
0.160-0.240	43	21.9	7	29.2	50	22.7
0.240-0.320	24	12.2	4	16.7	28	12.7

A total 231 victims tested positive for alcohol. Blood alcohol concentrations were grouped into quartiles. Blood alcohol concentrations results were missing for 11 victims.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Section 6: Merged Incidents

Data Highlights

Demographic Characteristics

- There were a total of 32 merged incidents in selected counties in 2011, resulting in 68 deaths. These incidents were either multiple homicides or homicides followed by suicides (61 percent and 39 percent, respectively).
- Victims in merged incidents were more likely to be male than female (66 percent vs. 34 percent).
- Most victims were aged 15 to 24 (27.9 percent), followed by 25 to 34-year-olds (23.5 percent).
- Victims were more common among non-Hispanic whites (65 percent) compared to non-Hispanic blacks (34 percent).

Demographics

Table 48: Demographics of Merged Incident Deaths for Selected Ohio Counties by Age and Sex, 2011

Age Group	Male Count	Percent	Female Count	Percent	Total Count	Percent
0-14	2	4.4	0	0	2	2.9
15-24	12	26.7	7	30.4	19	27.9
25-34	11	24.4	5	21.7	16	23.5
35-44	4	8.9	4	17.4	8	11.8
45-54	7	15.6	2	8.7	9	13.2
55-64	6	13.3	2	8.7	10	14.7
65-74	2	4.4	2	8.7	4	5.9
75-84	1	2.2	1	4.3	2	2.9
85+	0	0	0	0	0	0
Total	45	100	23	100	68	100

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Table 49: Demographics of Merged Incident Deaths for Selected Ohio Counties by Race and Sex, 2011

	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Race/Ethnicity						
White, Non-Hispanic	26	57.8	18	78.3	44	64.7
Black, Non-Hispanic	18	40.0	5	21.7	23	33.8
Hispanic	0	0	0	0	0	0
Other, Unknown	1	2.2	0	0	1	1.5
Total	45	100	23	100	68	100

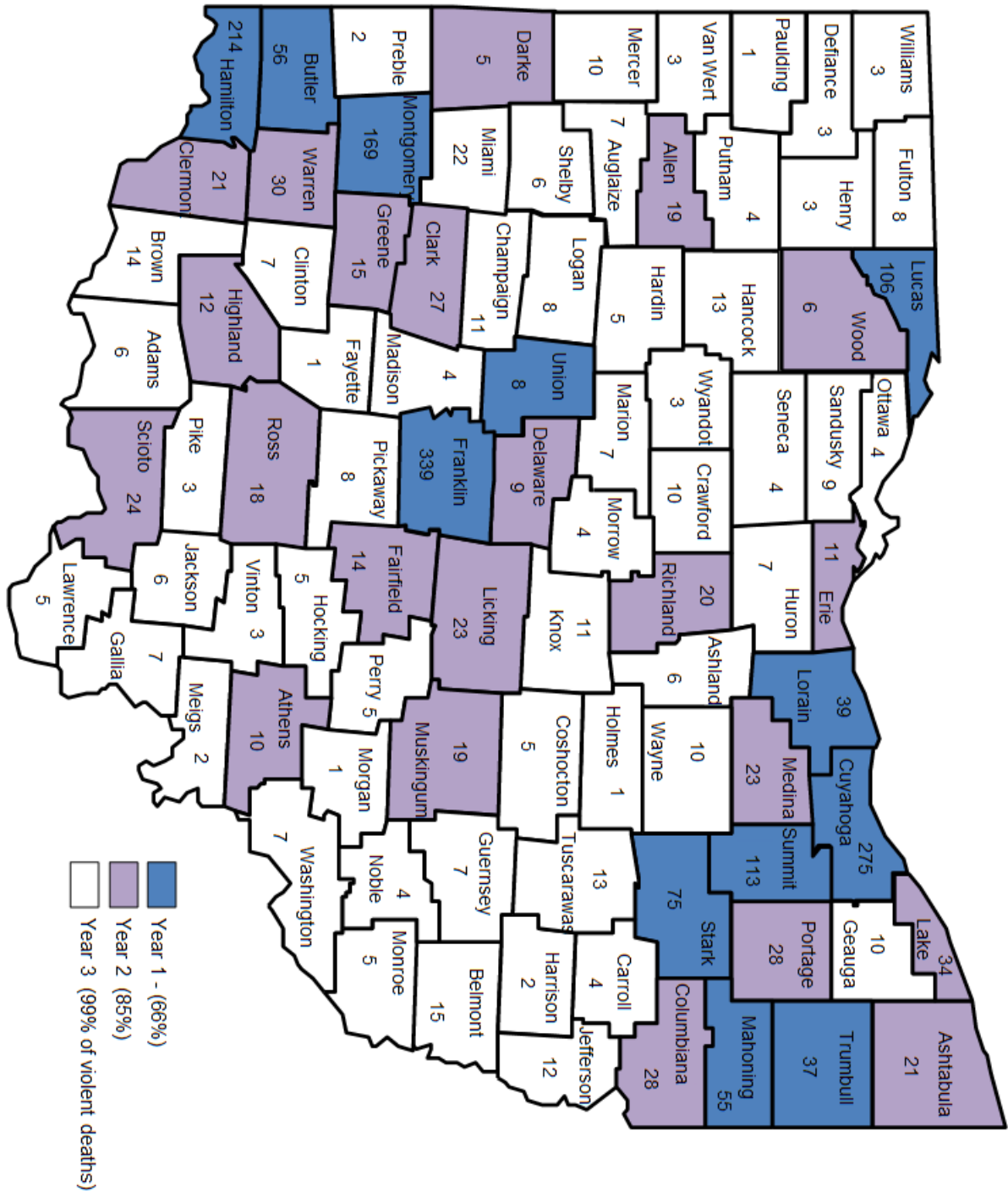
There were a total of 32 merged incidents. Rates suppressed for counts <10. *Rates not available for other/unknown racial groups. Rates are expressed per 100,000 persons.

Selected Ohio counties in 2011 included Allen, Ashtabula, Athens, Butler, Clark, Clermont, Columbiana, Cuyahoga, Darke, Delaware, Erie, Fairfield, Franklin, Greene, Hamilton, Highland, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Montgomery, Muskingum, Portage, Richland, Ross, Scioto, Stark, Summit, Trumbull, Union, Warren, and Wood.

Sources: ODH, OH-VDRS and Vital Statistics

Appendix A: Violent Deaths by County of Death, 2010 -Data Phase-In¹

¹Includes homicides, suicides and deaths from undetermined intent, unintentional firearms, legal intervention. There were no terrorism-related deaths in 2010.



Appendix B: Calculating Rates

Crude and Age-Adjusted Rates

Rates, both crude and age-adjusted, are prevalence measures that are used to quantify the burden of disease in a population. Unlike percentages and counts, rates are relative to the total population of the group of interest (e.g. age, race, sex, etc.) in a given time period. Rates also allow for comparisons between different populations such as men and women, Hispanics and non-Hispanics and urban and rural regions. Crude rates are calculated by dividing the count of events by the total population of interest and multiplying it by 100,000. Rates are typically given as estimates per 100,000 persons. Age-adjusted rates are calculated in lieu of crude rates in order to adjust for differences in age distributions in the population of interest. In order to do so, crude rates are first calculated for age-specific groups. Each of these age-specific crude rates is then multiplied by a population weight, obtained from a reference population. The reference population distribution used in this report was the US standard million for 2000. Once each age-specific crude rate is multiplied by its corresponding weight, these products are then summed to yield an overall age-adjusted rate for the population of interest⁴.

⁴ Rothman, Kenneth J. *Modern Epidemiology*, 3rd Edition: Lippincott Williams and Wilkins, Philadelphia. 2008.

Appendix C: Violent Deaths Rates

All Violent Deaths

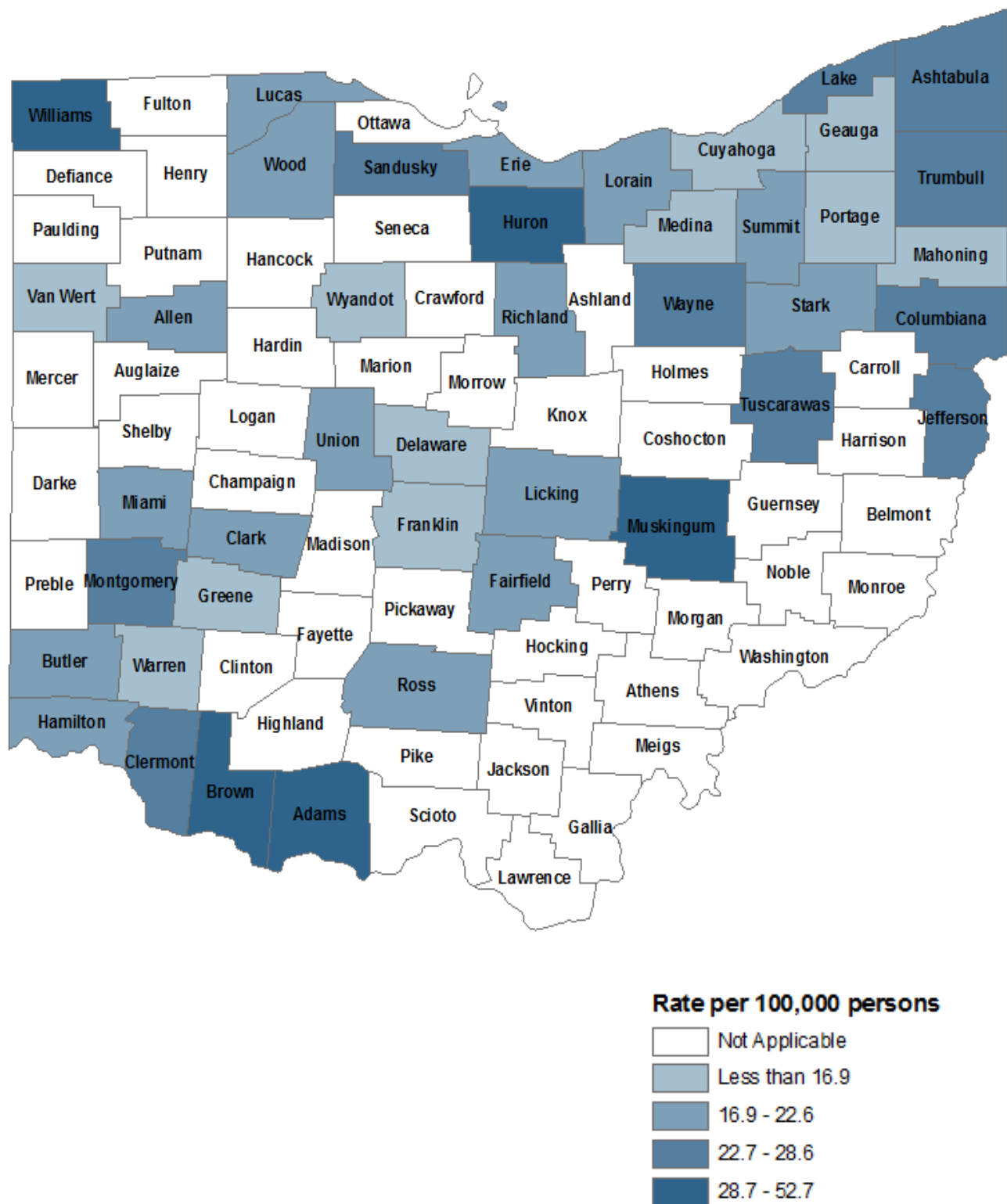
Table: Violent Death Rates by County of Residence in Ohio, 2011

County	Deaths	Rate	County	Deaths	Rate	County	Deaths	Rate
Adams	15	52.7	Hamilton	209	26.1	Noble	4	*
Allen	18	17.0	Hancock	8	*	Ottawa	10	24.2
Ashland	11	20.7	Hardin	3	*	Paulding	2	*
Ashtabula	22	21.7	Harrison	2	*	Perry	8	*
Athens	11	17.0	Henry	6	*	Pickaway	10	17.9
Auglaize	6	*	Highland	9	*	Pike	6	*
Belmont	8	*	Hocking	7	*	Portage	16	9.9
Brown	12	25.0	Holmes	4	*	Preble	6	*
Butler	68	18.4	Huron	14	23.5	Putnam	3	*
Carroll	3	*	Jackson	8	*	Richland	25	20.2
Champaign	8	*	Jefferson	14	20.3	Ross	16	20.4
Clark	28	20.3	Knox	10	16.3	Sandusky	12	19.8
Clermont	42	21.1	Lake	48	20.9	Scioto	8	*
Clinton	12	28.6	Lawrence	3	*	Seneca	7	*
Columbiana	23	21.4	Licking	29	17.3	Shelby	9	*
Coshocton	4	*	Logan	9	23.7	Stark	75	20
Crawford	7	*	Lorain	53	17.6	Summit	115	21.3
Cuyahoga	285	22.4	Lucas	95	21.6	Trumbull	49	23.4
Darke	10	18.9	Madison	8	*	Tuscarawas	21	22.7
Defiance	6	*	Mahoning	49	20.7	Union	8	*
Delaware	23	12.9	Marion	8	*	Van Wert	3	*
Erie	12	15.6	Medina	23	13.3	Vinton	2	*
Fairfield	24	16.3	Meigs	6	*	Warren	21	9.8
Fayette	4	*	Mercer	7	*	Washington	8	*
Franklin	279	23.7	Miami	14	14.6	Wayne	24	20.9
Fulton	4	*	Monroe	2	*	Williams	9	*
Gallia	8	*	Montgomery	153	28.5	Wood	17	13.5
Geauga	14	15.0	Morgan	2	*	Wyandot	4	*
Greene	20	12.3	Morrow	10	28.7	Total	2332	20.2
Guernsey	10	25.0	Muskingum	24	27.8			

*Rates suppressed for counts <10. Rates are expressed per 100,000 persons.

Sources: ODH, OH-VDRS and Vital Statistics

Map: Violent Death Rates by County of Residence in Ohio, 2011



Sources: ODH, OH-VDRS and Vital Statistics

Suicides

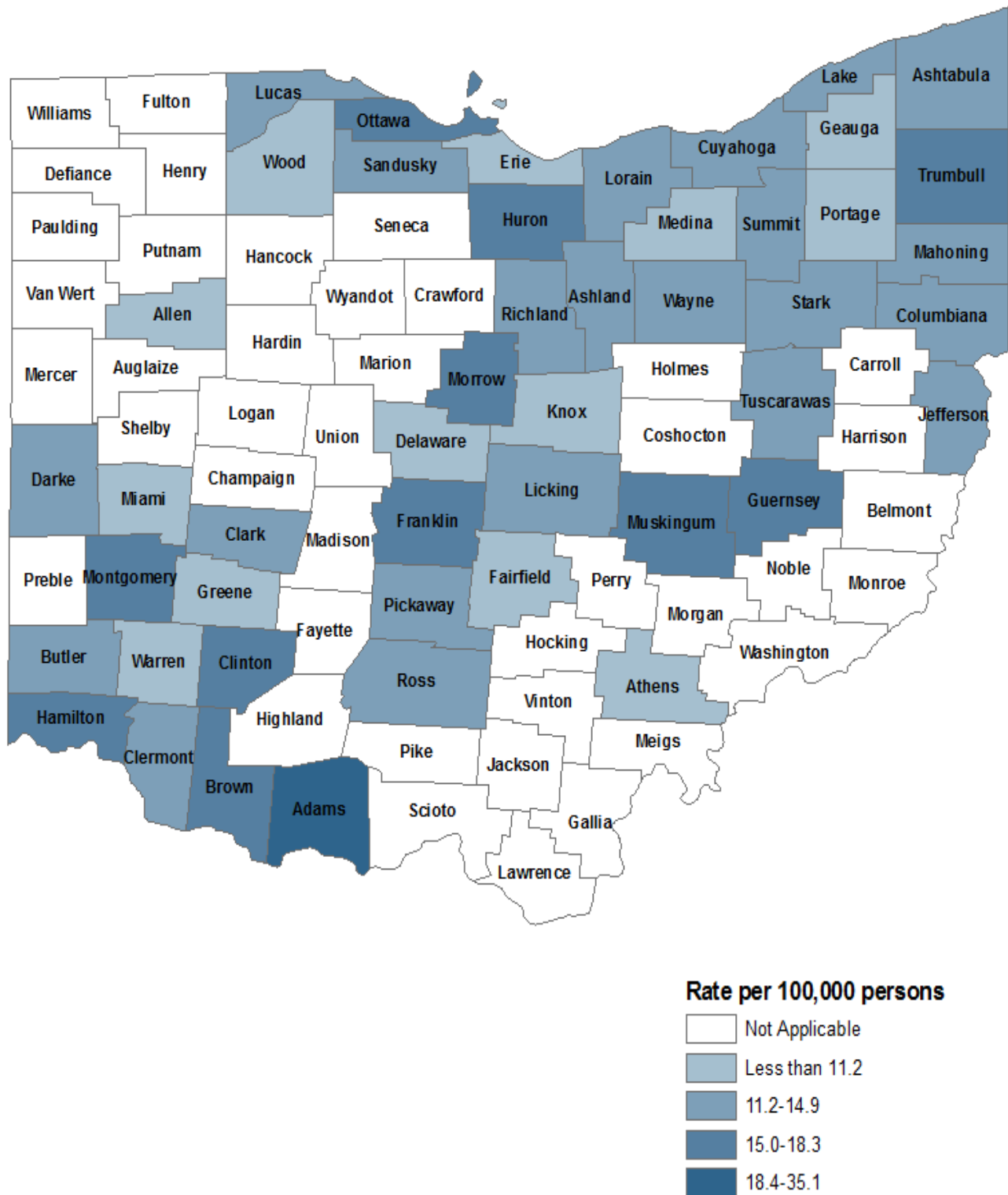
Table: Suicide Rates by County of Residence in Ohio, 2011

County	Deaths	Rate	County	Deaths	Rate	County	Deaths	Rate
Adams	10	35.1	Hamilton	97	12.1	Noble	3	*
Allen	15	14.1	Hancock	6	*	Ottawa	6	*
Ashland	8	*	Hardin	2	*	Paulding	2	*
Ashtabula	17	16.8	Harrison	2	*	Perry	7	*
Athens	7	*	Henry	6	*	Pickaway	9	*
Auglaize	3	*	Highland	7	*	Pike	4	*
Belmont	7	*	Hocking	3	*	Portage	14	8.7
Brown	10	22.4	Holmes	2	*	Preble	3	*
Butler	50	13.5	Huron	13	21.9	Putnam	3	*
Carroll	3	*	Jackson	5	*	Richland	18	14.6
Champaign	4	*	Jefferson	12	17.4	Ross	11	14.1
Clark	17	12.3	Knox	6	*	Sandusky	10	16.5
Clermont	34	17.1	Lake	41	17.8	Scioto	5	*
Clinton	7	*	Lawrence	3	*	Seneca	7	*
Columbiana	18	16.8	Licking	23	13.2	Shelby	9	*
Coshocton	3	*	Logan	7	*	Stark	52	13.9
Crawford	6	*	Lorain	45	14.9	Summit	71	13.2
Cuyahoga	143	11.3	Lucas	55	12.5	Trumbull	32	15.3
Darke	9	*	Madison	5	*	Tuscarawas	17	18.4
Defiance	5	*	Mahoning	26	11.0	Union	7	*
Delaware	18	10.1	Marion	7	*	Van Wert	3	*
Erie	10	14.2	Medina	13	12.6	Vinton	0	*
Fairfield	20	13.8	Meigs	4	*	Warren	13	6.0
Fayette	4	*	Mercer	4	*	Washington	7	*
Franklin	132	11.2	Miami	13	12.6	Wayne	18	15.7
Fulton	4	*	Monroe	2	*	Williams	9	*
Gallia	6	*	Montgomery	87	16.2	Wood	15	11.9
Geauga	10	10.7	Morgan	2	*	Wyandot	2	*
Greene	12	7.4	Morrow	8	*	Total	1481	12.3
Guernsey	7	*	Muskingum	19	22.0			

*Rates suppressed for counts <10. Rates are expressed per 100,000 persons.

Sources: ODH, OH-VDRS and Vital Statistics

Map: Suicide Rates by County of Residence in Ohio, 2011



Sources: ODH, OH-VDRS and Vital Statistics

Homicides

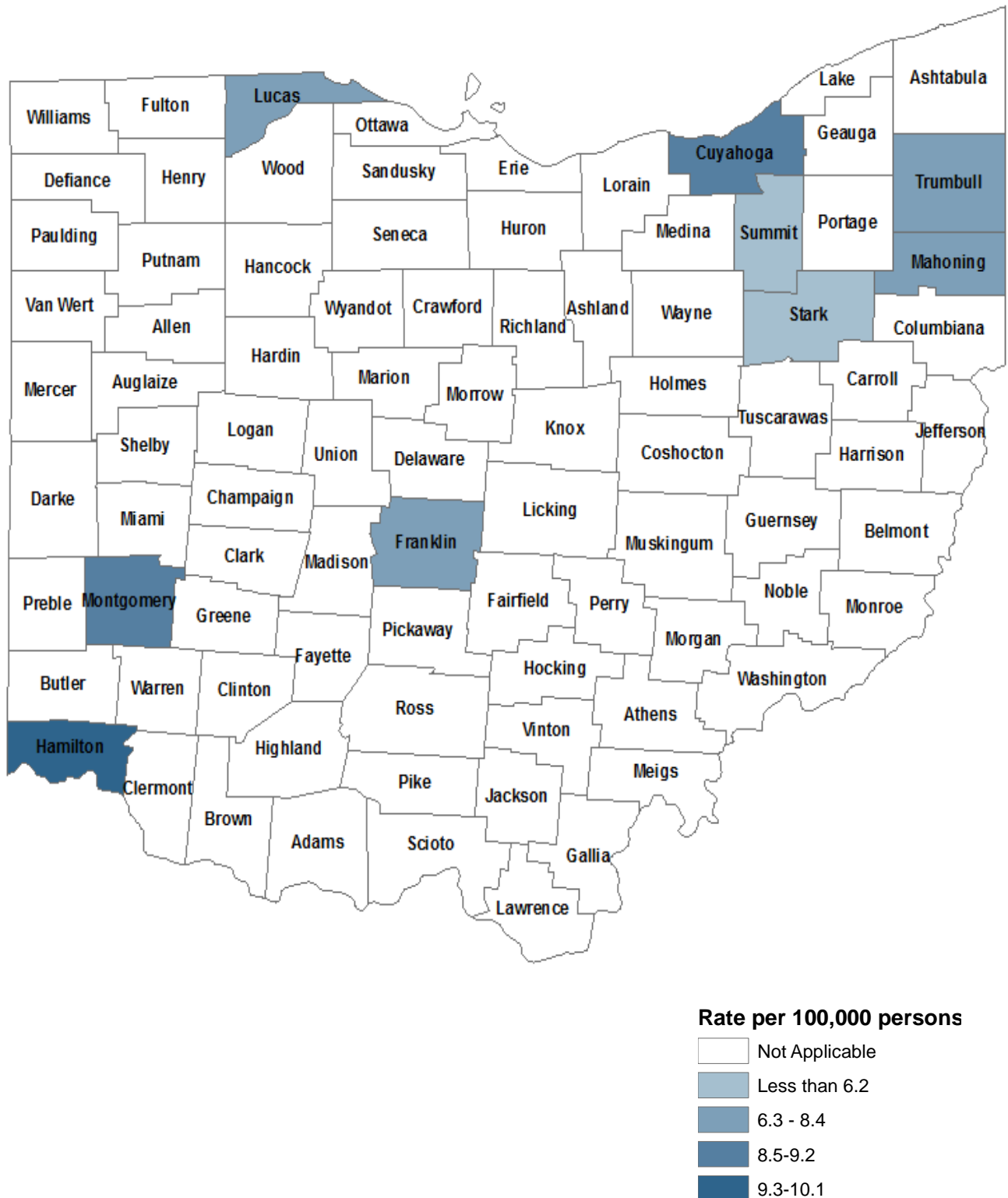
Table: Homicide Rates by County of Residence in Ohio, 2011

County	Deaths	Rate	County	Deaths	Rate	County	Deaths	Rate
Adams	4	*	Hamilton	81	10.1	Noble	0	*
Allen	2	*	Hancock	2	*	Ottawa	4	*
Ashland	0	*	Hardin	0	*	Paulding	0	*
Ashtabula	5	*	Harrison	0	*	Perry	1	*
Athens	2	*	Henry	0	*	Pickaway	1	*
Auglaize	0	*	Highland	1	*	Pike	1	*
Belmont	1	*	Hocking	3	*	Portage	2	*
Brown	0	*	Holmes	1	*	Preble	1	*
Butler	8	*	Huron	1	*	Putnam	0	*
Carroll	0	*	Jackson	1	*	Richland	4	*
Champaign	1	*	Jefferson	2	*	Ross	4	*
Clark	6	*	Knox	1	*	Sandusky	1	*
Clermont	3	*	Lake	5	*	Scioto	3	*
Clinton	3	*	Lawrence	0	*	Seneca	0	*
Columbiana	3	*	Licking	5	*	Shelby	0	*
Coshocton	0	*	Logan	2	*	Stark	19	5.3
Crawford	0	*	Lorain	8	*	Summit	34	6.8
Cuyahoga	113	8.9	Lucas	34	8.2	Trumbull	16	9.2
Darke	0	*	Madison	1	*	Tuscarawas	1	*
Defiance	1	*	Mahoning	20	9.4	Union	1	*
Delaware	3	*	Marion	1	*	Van Wert	0	*
Erie	2	*	Medina	1	*	Vinton	1	*
Fairfield	1	*	Meigs	1	*	Warren	4	*
Fayette	0	*	Mercer	3	*	Washington	0	*
Franklin	97	8.2	Miami	1	*	Wayne	4	*
Fulton	0	*	Monroe	0	*	Williams	0	*
Gallia	1	*	Montgomery	50	9.8	Wood	1	*
Geauga	2	*	Morgan	0	*	Wyandot	1	*
Greene	4	*	Morrow	1	*	Total	598	5.2
Guernsey	3	*	Muskingum	3	*			

*Rates suppressed for counts <10. Rates are expressed per 100,000.

Sources: ODH, OH-VDRS and Vital Statistics

Map: Homicide Rates by County of Residence in Ohio, 2011



Sources: ODH, OH-VDRS and Vital Statistics

Deaths of Undetermined Intent

Table: Deaths of Undetermined Intent Rates by County of Residence in Ohio, 2011

County	Deaths	Rate	County	Deaths	Rate	County	Deaths	Rate
Adams	1	*	Hamilton	27	3.2	Noble	1	*
Allen	0	*	Hancock	0	*	Ottawa	0	*
Ashland	3	*	Hardin	1	*	Paulding	0	*
Ashtabula	0	*	Harrison	0	*	Perry	0	*
Athens	2	*	Henry	0	*	Pickaway	0	*
Auglaize	1	*	Highland	1	*	Pike	0	*
Belmont	0	*	Hocking	1	*	Portage	0	*
Brown	2	*	Holmes	1	*	Preble	2	*
Butler	7	*	Huron	0	*	Putnam	0	*
Carroll	0	*	Jackson	2	*	Richland	3	*
Champaign	3	*	Jefferson	0	*	Ross	1	*
Clark	4	*	Knox	3	*	Sandusky	1	*
Clermont	4	*	Lake	2	*	Scioto	0	*
Clinton	2	*	Lawrence	0	*	Seneca	0	*
Columbiana	2	*	Licking	0	*	Shelby	0	*
Coshocton	1	*	Logan	0	*	Stark	3	*
Crawford	1	*	Lorain	0	*	Summit	9	*
Cuyahoga	22	1.7	Lucas	5	*	Trumbull	1	*
Darke	0	*	Madison	1	*	Tuscarawas	2	*
Defiance	0	*	Mahoning	2	*	Union	0	*
Delaware	1	*	Marion	0	*	Van Wert	0	*
Erie	0	*	Medina	9	*	Vinton	1	*
Fairfield	2	*	Meigs	1	*	Warren	4	*
Fayette	0	*	Mercer	0	*	Washington	1	*
Franklin	39	4.1	Miami	0	*	Wayne	1	*
Fulton	0	*	Monroe	0	*	Williams	0	*
Gallia	1	*	Montgomery	14	*	Wood	0	*
Geauga	2	*	Morgan	0	*	Wyandot	0	*
Greene	4	*	Morrow	1	*	Total	206	1.7
Guernsey	0	*	Muskingum	1	*			

*Rates suppressed for counts <10. Rates are expressed per 100,000 persons.

Sources: ODH, OH-VDRS and Vital Statistics

Appendix D: Additional Acknowledgments

Law Enforcement Agencies

Adams County Sheriff's Office	Bedford Heights Police Department
Addyston Police Department	Bedford Police Department
Adena Health System Police Department	Bellbrook Police Department
Akron Police Department	Bellville Police Department
Albany Police Department	Bentleyville Police Department
Allen County Sheriff's Office	Berea Police Department
Alliance Police Department	Berkey Police Department
Amberley Village Police Department	Berlin Heights Police Department
Amelia Police Department	Bethel Police Department
American Twp. Police Department	Bexley Police Department
Amesville Police Department	Blendon Twp. Police Department
Amherst Police Department	Bloomdale Police Department
Andover Police Department	Blue Ash Police Department
Ansonia Police Department	Bluffton Police Department
Appalachian Behavioral Healthcare Police Department	Boardman Twp. Police Department
Arcanum Police Department	Boone County Sheriff's Office, Kentucky
Arlington Heights Police Department	Boston Heights Police Department
Ashley Police Department	Bowersville Police Department
Ashtabula County Sheriff's Office	Bowling Green Police Department
Ashtabula Police Department	Bowling Green State University Police Department
Athens County Sheriff's Office	Braceville Police Department
Athens Police Department	Bradner Police Department
Aurora Police Department	Brady Lake Police Department
Austintown Twp. Police Department	Bratenahl Police Department
Avon Lake Police Department	Brecksville Police Department
Avon Police Department	Brecksville Veterans Administration Police Dept.
Baltimore Police Department	Brewster Police Department
Barberton Police Department	Brice Police Department
Batavia Police Department	Brimfield Police Department
Bath Twp. Police Department	Brimfield Twp. Police Department
Bay View Police Department	Broadview Heights Police Department
Bay Village Police Department	Brook Park Police Department
Bazetta Twp. Police Department	Brookfield Twp. Police Department
Beach City Police Department	Brooklyn Heights Village Police Department
Beachwood Police Department	Brooklyn Police Department
Beaver Township Police Department	Brookville Police Department
Beavercreek Police Department	Brunswick Hills Police Department
	Brunswick Police Department
	Bryan Police Department
	Buchtel Police Department

Buckeye Lake Police Department
 Butler County Metro Parks
 Butler County Sheriff's Office
 Butler Police Department
 Butler Twp. Police Department
 Campbell Police Department
 Canal Fulton Police Department
 Canfield Police Department
 Canton Police Department
 Capital University Police Department
 Carlisle Police Department
 Carroll Police Department
 Case Western Reserve University Police Dept.
 Castalia Police Department
 Catawba Police Department
 Cedarville Police Department
 Centerville Police Department
 Central State University Police Department
 Chagrin Falls Police Department
 Champion Twp. Police Department
 Cheviot Police Department
 Chillicothe Police Department
 Cincinnati Police Department
 Cincinnati State College Campus Police Dept.
 Clark County Park District
 Clark County Sheriff's Office
 Clay Twp. Police Department
 Clayton Police Department
 Clearcreek Twp. Police Department
 Clearfork Reservoir Police Department
 Clermont County Sheriff's Office
 Cleveland Clinic Police Department
 Cleveland Heights Police Department
 Cleveland Metro Housing Police Dept.
 Cleveland Metroparks Ranger Department
 Cleveland Police Department
 Cleveland State University Police Department
 Cleves Police Department
 Clyde Police Department
 Clinton Twp. Police Department
 Coitsville Twp. Police Department
 Colerain Twp. Police Department
 College of Mount St. Joseph Police Department

Columbiana County Sheriff's Office
 Columbiana Police Department
 Columbus Airport Authority
 Columbus and Franklin County Metro Parks
 Columbus Police Department
 Columbus State Community College Police Dept.
 Conneaut Police Department
 Coolville Police Department
 Copley Police Department
 Cortland Police Department
 Coshocton County Sheriff's Office
 Covington Kentucky Police Department
 Craig Beach Police Department
 CSX Railroad Police Department
 Cuyahoga Community College Police Department
 Cuyahoga County Correctional Center
 Cuyahoga County Sheriff's Office
 Cuyahoga Falls Police Department
 Cuyahoga Heights Police Department
 Cuyahoga Metropolitan Housing Authority Police Dept.
 Darke County Sheriff's Office
 Dayton International Airport Police Department
 Dayton Police Department
 Dearborn County Sheriff's Office
 Deer Park Police Department
 Defiance County Sheriff's Office
 Delaware County Sheriff's Office
 Delaware Police Department
 Delhi Twp. Police Department
 Delphos Police Department
 Denison University Police Department
 Donnelsville Police Department
 Dover Police Department
 Dresden Police Department
 Dublin Police Department
 East Canton Police Department
 East Cleveland Police Department
 East Liverpool Police Department
 East Palestine Police Department
 Eastlake Police Department
 Edgerton Police Department
 Elida Police Department
 Elmwood Place Police Department
 Elyria Police Department

Englewood Police Department
 Enon Police Department
 Erie County Sheriff's Office
 Erie MetroParks Police Department
 Erlanger Police Department
 Euclid Police Department
 Evendale Police Department
 Fairborn Police Department
 Fairfax Police Department
 Fairfield County Sheriff's Office
 Fairfield Medical Center Police
 Fairfield Police Department
 Fairfield Twp. Police Department
 Fairlawn Police Department
 Fairport Harbor Police Department
 Fairview Park Police Department
 Felicity Police Department
 Findlay Police Department
 Five Rivers Metro Parks Police Dept.
 Florence Police Department, Kentucky
 Forest Park Police Department
 Fort Mitchell Police Department
 Fort Shawnee Police Department
 Fowler Township Police Department
 Franklin County Sheriff's Office
 Franklin Police Department
 Franklin Twp. Police Department - Franklin
 Frazesburg Police Department
 Fremont Police Department
 Fulton County Sheriff's Office
 Gahanna Police Department
 Garfield Heights Police Dept.
 Garrettsville Police Department
 Gates Mills Village Police Department
 Geauga County Sheriff's Office
 Genesis Healthcare Police Department
 Geneva Police Department
 Geneva-on-the-Lake Police Department
 Genoa Twp. Police Department
 German Twp. Police Department - Clark
 German Twp. Police Department - Montgomery
 Germantown Police Department
 Girard Police Department
 Glendale Police Department

Glenwillow Police Department
 Glouster Police Department
 Golf Manor Police Department
 Goshen Police Department
 Goshen Twp Police Department - Clermont
 Goshen Twp. Police Department - Mahoning
 Grafton Police Department
 Grand River Police Department
 Grandview Heights Police Department
 Grandview Medical Center Police Department
 Granville Police Department
 Great Parks of Hamilton County
 Greater Cleveland Regional Transit Authority
 Green Twp. Police Department
 Greene County Park District Ranger Unit
 Greene County Sheriff's Office
 Greenfield City Police Department
 Greenhills Police Department
 Greenville Police Department
 Grove City Police Department
 Groveport Police Department
 Hamilton County District Park Rangers
 Hamilton County Sheriff's Office
 Hamilton Police Department
 Hamilton Twp. Police Department
 Hancock County Sheriff's Office
 Hanoverton Police Department
 Harrisburg Police Department
 Harrison Police Department
 Hartford Twp. Police Department
 Hartford Village Police Department
 Hartville Police Department
 Harveysburg Police Department
 Haskins Police Department
 Heartland Behavioral Health Care
 Heath Police Department
 Hebron Police Department
 Highland County Sheriff's Office
 Highland Heights Police Department
 Highland Hills Police Department
 Highland Police Department
 Hilliard Police Department
 Hills And Dales Police Department

Hillsboro Police Department
Hinckley Twp. Police Department
Hiram Police Department
Hocking College Police Department
Holden Arboretum Police Department
Holland Police Department
Holmes County Sheriff's Office
Howland Twp. Police Department
Hubbard City Police Department
Hubbard Twp. Police Department
Huber Heights Police Department
Hudson Police Department
Humility of Mary Health Partners
Hunting Valley Police Department
Huron Police Department
Independence Police Department
Indian Hill Police Department
Jackson Twp. Police Department - Mahoning
Jackson Twp. Police Department - Montgomery
Jackson Twp. Police Department - Stark
Jamestown Police Department
Jefferson Police Department
John Carroll University Campus Safety
Johnny Appleseed Metropolitan Park District
Johnstown Police Department
Kelleys Island Police Department
Kent Police Department
Kent State University Police Department
Kettering Police Department
KeyBank Police Department
Kinsman Twp. Police Department
Kipton Police Department
Kirkersville Police Department
Kirtland Hills Police Department
Kirtland Police Department
LaGrange Police Department
Lake County Sheriff's Office
Lake Metroparks Police Department
Lake Township Police Department - Wood
Lakeland Community College Police Department
Lakewood Police Department
Lancaster Police Department
Lawrence Twp. Police Department

Lebanon Police Department
Leesburg Police Department
Leetonia Police Department
Lexington Police Department
Liberty Twp. Police Department
Licking County Sheriff's Office
Licking Memorial Hospital Police Department
Lima Parks Department
Lima Police Department
Lincoln Heights Police Department
Lindner Center of Hope Police Department
Linndale Village Police Department
Lisbon Police Department
Lithopolis Police Department
Liverpool Twp. Police Department
Lockland Police Department
Lodi Police Department
Lorain County Metro Parks
Lorain County Sheriff's Office
Lorain Police Department
Lordstown Village Police Department
Louisville Police Department
Loveland Police Department
Lowellville Police Department
Lucas County Sheriff's Office
Luckey Police Department
Lynchburg Police Department
Lyndhurst Police Department
Macedonia Police Department
Madeira Police Department
Madison Police Department
Madison Twp. Police Department - Franklin
Madison Twp. Police Department - Lake
Madison Village Police Department
Magnolia Police Department
Mahoning County Sheriff's Office
Maineville Police Department
Mansfield City Park Police
Mansfield Police Department
Mantua Police Department
Maple Heights Police Department
Mariemont Police Department
Marion Twp. Police Department

Marlboro Twp. Police Department	Mount Healthy Police Department
Marysville Police Department	Mowrystown Police Department
Mason Police Department - Warren	Munroe Falls Police Department
Massillon Police Department	Muskingum County Sheriff's Office
Maumee Police Department	Muskingum University Police Department
Mayfield Heights Police Department	Navarre Police Department
Mayfield Village Police Department	Nelsonville Police Department
McDonald Police Department	New Albany Police Department
Medina County Park District	New Boston Police Department
Medina County Sheriff's Office	New Concord Police Department
Medina Police Department	New Franklin Police Department
Medina Twp. Police Department	New Lebanon Police Department
Mentor Police Department	New Lexington Police Department
Mentor-on-the-Lake Police Department	New Madison Police Department
Mercy Health Partners Public Safety Department	New Miami Police Department
Mercy Regional Police	New Middletown Police Department
Metro Parks, Serving Summit County	New Richmond Police Department
MetroHealth Police Department	New Waterford Police Department
Miami County Sheriff's Office	Newark Police Department
Miami Twp. Police Department - Clermont	Newburgh Heights Police Department
Miami Twp. Police Department - Montgomery	Newport Police Department, Kentucky
Miami University Police Department	Newton Falls Police Department
Miamisburg Police Department	Newtonsville Police Department
Middleburg Heights Police Department	Newtown Police Department
Middletown Police Department	Niles Police Department
Mifflin Twp. Police Department	Norfolk Southern Railway Police Department
Milan Police Department	North Baltimore Police Department
Milford Police Department	North Canton Police Department
Mill Creek MetroParks Police Department	North College Hill Police Department
Millersport Police Department	North Hampton Police Department
Milton Twp. Police Department	North Kingsville Police Department
Minerva Park Police Department	North Olmsted Police Department
Minerva Police Department	North Perry Police Department
Mogadore Police Department	North Randall Police Department
Monroe County Sheriff's Office	North Ridgeville Police Department
Monroe Police Department	North Royalton Police Department
Montgomery County Sheriff's Office	Northcoast Behavioral Healthcare - Cleveland Campus
Montgomery Developmental Center	Northcoast Behavioral Healthcare - Northfield Campus
Montgomery Police Department	Northfield Village Police Department
Montville Township Police Department	Northwest Ohio Developmental Center
Moraine Police Department	Northwest Ohio Psychiatric Hospital Police Department
Moreland Hills Police Department	Northwood Police Department
Morrow Police Department	Norton Police Department

Norwood Police Department
Notre Dame College Police Department
Oakwood Police Department - Montgomery
Oakwood Village Police Department
Oberlin Police Department
Obetz Police Department
ODPS - Investigative Unit Headquarters
Ohio Casino Control Commission
Ohio Dept. of Natural Resources
Ohio Dept. of Natural Resources - Division of Forestry
Ohio Dept. of Taxation
Ohio Health Police Department
Ohio House of Representatives
Ohio Senate
Ohio State Fire Marshal
Ohio State Highway Patrol
Ohio University Police Department
Ohio Veterans Home Police Department
Ohio Wesleyan University
Olmsted Falls Police Department
Olmsted Township Police Department
Ontario Police Department
Orange Village Police Department
Oregon Police Department
Orwell Police Department
Ostrander Police Department
Ottawa County Sheriff's Office
Ottawa Hills Police Department
Otterbein Police Department
Owens Community College Dept. of Public Safety
Owensville Police Department
Oxford Police Department
Oxford Twp. Police Department
Painesville Police Department
Parma Heights Police Department
Parma Police Department
Pataskala Police Department
Pemberville Police Department
Pendleton County Sheriff's Office
Peninsula Police Department
Pepper Pike Police Department
Perkins Twp. Police Department
Perry County Sheriff's Office

Perry Twp. Police Department - Allen
Perry Twp. Police Department - Columbiana
Perry Twp. Police Department - Franklin
Perry Twp. Police Department - Montgomery
Perry Twp. Police Department - Stark
Perry Village Police Department
Perrysburg Police Department
Perrysburg Twp. Police Department
Phillipsburg Police Department
Pickerington Police Department
Pierce Twp. Police Department
Pioneer Police Department
Piqua Police Department
Poland Twp. Police Department
Poland Village Police Department
Portage County Sheriff's Office
Portage Police Department
Portsmouth Police Department
Powell Police Department
Preble County Sheriff's Office
Preservation Parks of Delaware County
Ravenna Police Department
Reading Police Department
Reminderville Police Department
Republic N&T Railway (Republic Steel)
Reynoldsburg Police Department
Richfield Police Department
Richland County Sheriff's Office
Richmond Heights Police Department
Richwood Police Department
Ripley County Sheriff's Office
Risingsun Police Department
Rittman Police Department
Riverside Police Department
Roaming Shores Police Department
Robinson Memorial Hospital Police Department
Rocky River Police Department
Rogers Police Department
Roseville Police Department
Ross County Sheriff's Office
Ross Township Police Department
Rossford Police Department
Sagamore Hills Twp. Police Department
Saint Bernard Police Department

Saint Clair Twp. Police Department
 Saint Louisville Police Department
 Saint Rita's Medical Center
 Salem Police Department
 Salem Township Police Department
 Salineville Police Department
 Sandusky Police Department
 Sandusky Police/Cedar Point Division
 Scioto County Sheriff's Office
 Sebring Police Department
 Seven Hills Police Department
 Seven Mile Police Department
 Seville Police Department
 Shaker Heights Police Department
 Sharon Twp. Police Department
 Sharonville Police Department
 Shawnee Hills Police Department
 Shawnee State University
 Shawnee Twp. Police Department
 Sheffield Lake Police Department
 Sheffield Village Police Department
 Shelby County Sheriff's Office
 Shelby Police Department
 Silver Lake Police Department
 Silverton Police Department
 Sinclair Community College Police Department
 Smith Twp. Police Department
 Solon Police Department
 South Amherst Police Department
 South Charleston Police Department
 South Euclid Police Department
 South Vienna Police Department
 South Zanesville Police Department
 Southwest General Police Department
 Southwest Ohio Developmental Center
 Spencer Police Department
 Spencerville Police Department
 Springboro Police Department
 Springdale Police Department
 Springfield Police Department
 Springfield Twp. Police Department - Hamilton
 Springfield Twp. Police Department - Mahoning
 Springfield Twp. Police Department – Summit

St. Bernard Police Department
 St. Mary's Police Department
 Stark County Park District Enforcement Division
 Stark County Sheriff's Office
 State of Ohio Auditor's Office
 Stow Police Department
 Streetsboro Police Department
 Strongsville Police Department
 Struthers Police Department
 Sugar Grove Police Department
 Sugarcreek Twp. Police Department
 Summa Health Protective Services/Police
 Summit Behavioral Healthcare Police
 Summit County Sheriff's Office
 Summitville Police Department
 Sunbury Police Department
 Swanton Police Department
 Sylvania Police Department
 Sylvania Twp. Police Department
 Tallmadge Police Department
 Terrace Park Police Department
 The Ohio State University Police Division
 Tiffin Police Department
 Timberlake Police Department
 Toledo Metropolitan Park District/Ranger Department
 Toledo Police Department
 Toledo/Lucas County Port Authority Police Dept.
 Tremont City Police Department
 Trenton Police Department
 Trotwood Police Department
 Trumbull County Sheriff's Office
 Tuscarawas County Sheriff's Office
 Twin Valley Behavioral Healthcare - Franklin
 Twinsburg Police Department
 UC Health Department of Public Safety
 Union City Police Department
 Union County Sheriff's Office
 Union Police Department
 Union Twp. Police Department - Clermont
 Union Twp. Police Department - Licking
 Uniontown Police Department
 University Circle Police Department
 University Heights Police Department
 University Hospitals Cleveland Medical Center

University of Akron Police Department
University of Cincinnati Campus Police Department
University of Dayton Police Department
University of Toledo Police Department
Upper Arlington Police Department
Utica Police Department
Valley View Police Department
Valleyview Police Department
Vandalia Police Department
Vermilion Police Department
Versailles Police Department
Vienna Twp. Police Department
Wadsworth Police Department
Waite Hill Police Department
Walbridge Police Department
Walsh University Police Department
Walton Hills Police Department
Warren County Sheriff's Office
Warren Police Department
Warren Twp. Police Department
Warrensville Developmental Center
Warrensville Heights Police Department
Washington Twp. Police Department - Lucas
Washingtonville Police Department
Waterville Police Department
Waterville Twp. Police Department
Wayne County Sheriff's Office
Wayne Police Department
Waynesburg Police Department
Waynesville Police Department
Weathersfield Twp. Police Department
Wellington Police Department
Wellsville Police Department
West Carrollton Police Department
West Chester Police Department
West Farmington Police Department
West Millgrove Police Department
Westerville Police Department
Westfield Center Police Department
Westlake Police Department
Whitehall Police Department
Whitehouse Police Department
Wickliffe Police Department

Wilberforce University Police Department
Williamsburg Police Department
Willoughby Hills Police Department
Willoughby Police Department
Willowick Police Department
Wilmington Police Department
Wilmot Police Department
Windham Police Department
Wittenberg University Police Department
Wood County Park District
Wood County Sheriff's Office
Woodlawn Police Department
Woodmere Police Department
Wooster Police Department
Worthington Police Department
Wright State University Police Department
Wyoming Police Department
Xavier University Police Department
Xenia Police Department
Yellow Springs Police Department
Youngstown Developmental Center
Youngstown Police Department
Youngstown State University Police Department
Zanesville Police Department

Coroner's/Medical Examiner's Offices

Allen County Coroner's Office
Ashtabula County Coroner's Office
Athens County Coroner's Office
Butler County Coroner's Office
Clark County Coroner's Office
Clermont County Coroner's Office
Columbiana County Coroner's Office
Cuyahoga County Medical Examiner's Office
Darke County Coroner's Office
Delaware County Coroner's Office
Erie County Coroner's Office
Fairfield County Coroner's Office
Franklin County Coroner's Office
Greene County Coroner's Office
Hamilton County Coroner's Office
Highland County Coroner's Office
Lake County Coroner's Office
Licking County Coroner's Office
Logan County Coroner's Office
Lorain County Coroner's Office
Lucas County Coroner's Office
Mahoning County Coroner's Office
Medina County Coroner's Office
Montgomery County Coroner's Office
Muskingum County Coroner's Office
Portage County Coroner's Office
Ross County Coroner's Office
Scioto County Coroner's Office
Stark County Coroner's Office
Summit County Medical Examiner's Office
Trumbull County Coroner's Office
Union County Coroner's Office
Warren County Coroner's Office
Wood County Coroner's Office

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Akron Children's Hospital

Thomas Brewer, PhD
*College of Public Health
Kent State University*

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*Columbus Violence Prevention Collaborative
and The Ohio State University*

Gary Heath
*Family Violence Prevention Center
Office of Criminal Justice Services
Ohio Department of Public Safety*

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Franklin County Coroner's Office

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Hamilton County Coroner's Office

Andrea Hatten
Hamilton County Coroner's Office

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and the Cincinnati Police Department*

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Ohio Domestic Violence Network

David Corey
Ohio State Coroner's Association

Amanda Archer
Stark County Coroner's Office

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Association of Ohio Health Commissioners

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Ohio Department of Mental Health

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Department of Public Safety*

Kent E. Harshbarger, MD, JD
Montgomery County Coroner's Office

Lisa Shoaf, PhD
*Office of Criminal Justice Services
Department of Public Safety*

Cynthia Peterman, CCA
*Bureau of Criminal Identification & Investigation
Ohio Attorney General's Office*

Ohio Public Health Association

Kenneth Steinman, PhD
Galade Research and Project Management, LLC

Vicki Fleming
Stark County Coroner's Office

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Glossary

Violent death - A death due to the intentional use of physical force against oneself, another person, or against a community or group.

Incident - The national reporting system is incident-based rather than victim-based. Incidents include a single violent death, two or more suicides, two or more homicides, homicides followed by suicides, or an unintentional firearm death combined with one or more suicides. The inclusion of two or more deaths in a single incident is based on the timing of the injuries rather than the timing of the deaths and the establishment of a clear link between victims. In order to be considered as the same incident, the fatal injuries must have been inflicted within a 24-hour period.

Manner of death - The way in which the death was caused. This could be due to a suicide, homicide, unintentional or undetermined death.

Method of death - The weapon or instrument employed to administer the fatal injury.

Suicide - A death resulting from the intentional use of force against oneself. A preponderance of evidence should indicate that the use of force was intentional. Only persons ages 10 or older can have the violent death classified as a suicide.

Homicide - A death resulting from the intentional use of force or power, threatened or actual, against another person, group or community. A preponderance of evidence must indicate that the use of force was intentional.

Blunt instruments – Clubs, bats, rocks or other similar objects used to inflict the injury.

Alcohol problem – There is evidence that the victim has been diagnosed as suffering with alcohol dependence.

Criminal legal problem – The victim had recent criminal problems such as an arrest, or police pursuit that appeared to contribute to the death.

Depressed mood –The victim had been perceived by self or others as having recent depression symptoms at the time of the injury.

Drug involvement – Drug dealing or illegal drug use is suspected to have played a role in precipitating the incident.

Financial problem – The victim was experiencing financial problems such as bankruptcy, overwhelming debt, or a home or business foreclosure at the time of the incident and these problems contributed to their death.

Gang-related – Gang rivalry or gang activities are suspected to have played a role in precipitating the incident.

Mental health problem – The victim had been identified as having a current mental health problem.

Mental health treatment –The victim had been currently receiving mental health treatment. Treatment can include seeing a psychiatrist for a mental health problem or receiving a prescription for psychiatric drugs.

Physical health problem – The victim was experiencing physical health problems that appeared to have contributed to the death. Physical health problems could include a debilitating disease, chronic pain or a terminal disease.

Other relationship problem – The victim had problems with a family member, friend or associate (other than intimate partner) that appeared to have contributed to the death.

Substance use problem – The victim was perceived to have a problem with drugs other than alcohol.

Crisis – The victim experienced a crisis within two weeks of the incident or a crisis was imminent within two weeks of the incident.

Intimate partner violence – The death is related to a conflict between current or former intimate partners.

Personal weapons - include fists, feet, and hands in actions such as punching, kicking or hitting. Manual strangulation is not categorized as personal weapons, but rather as strangulation.

Undetermined intent - A death resulting from the use of force or power against oneself or another person for which the evidence indicating manner of death is insufficient to determine intent.

Unintentional firearm death- A death resulting from a penetrating injury or gunshot wound from a weapon that uses a powder charge to fire a projectile and for which a preponderance of evidence indicates that the shooting was not directed intentionally at the victim.

Legal intervention - A death when the decedent was killed by a police officer, military police officer or other peace officer (person with specified legal authority to use deadly force) acting in the line of duty. Legal executions are not included in the national system (NVDRS) or in the state system (OHVDRS) as legal intervention deaths.

Terrorism-related death - Homicides or suicides that result from events that are labeled by the Federal Bureau of Investigation (FBI) as acts of terrorism.

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