

# Office of the Chief Medical Examiner's Annual Report, 2009



Commonwealth of Virginia  
Virginia Department of Health  
Office of the Chief Medical Examiner  
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# OFFICE OF THE CHIEF MEDICAL EXAMINER'S ANNUAL REPORT, 2009

**Leah L. E. Bush, MD**  
**Chief Medical Examiner**

## **Central District**

400 East Jackson Street  
Richmond, VA 23219  
(804) 786-3174

[OCME\\_CENT@vdh.virginia.gov](mailto:OCME_CENT@vdh.virginia.gov)

### **Assistant Chief Medical Examiners**

William T. Gormley, MD, PhD  
Deborah Kay, MD  
Kevin D. Whaley, MD

## **Northern District**

10850 Pyramid Place, Suite 121  
Manassas, VA 20110  
(703) 530-2600

[OCME\\_NOVA@vdh.virginia.gov](mailto:OCME_NOVA@vdh.virginia.gov)

### **Assistant Chief Medical Examiners**

Frances P. Field, MD  
Constance R. DiAngelo, MD  
Shane Chittenden, DO  
A. William Williams, MD

<http://www.vdh.state.va.us/medexam/index.asp>

## **Tidewater District**

830 Southampton Ave., Suite 100  
Norfolk, VA 23510  
(757) 683-8366

[OCME\\_TIDE@vdh.virginia.gov](mailto:OCME_TIDE@vdh.virginia.gov)

### **Assistant Chief Medical Examiners**

Elizabeth L. Kinnison, MD  
Wendy M. Gunther, MD  
Jeffery Gofton, MD

## **Western District**

6600 Northside High School Road  
Roanoke, VA 24019  
(540) 561-6615

[OCME\\_WEST@vdh.virginia.gov](mailto:OCME_WEST@vdh.virginia.gov)

### **Assistant Chief Medical Examiners**

Amy Tharp, MD  
Christena Roberts, MD  
Paul Benson, MD

# Office of the Chief Medical Examiner's Annual Report, 2009

## Department of Health

### Commonwealth of Virginia

# Table of Contents

Table of Contents .....	1
Letter from the Chief Medical Examiner .....	7
Introduction .....	9
Data Collection and Preparation.....	9
Statistical Summary .....	9
SECTION 1: OVERVIEW – OFFICE OF THE CHIEF MEDICAL EXAMINER .....	10
<i>Jurisdictional Authority</i> .....	10
<i>Medicolegal Mission</i> .....	11
<i>Public Health Mission</i> .....	11
<i>Virginia 2009</i> .....	11
Fatality Review and Surveillance Programs .....	12
Training and Education.....	16
<i>Forensic Pathology Training Programs</i> .....	16
National Association of Medical Examiners Accreditation.....	17
SECTION 2: TOTAL CASES (N=5608) .....	18
Figure 1. Total Cases by Year of Death, 1999-2009 .....	18
Figure 2. Total Cases by Year of Death by Manner of Death, 1999-2009 .....	19
Figure 3. Total Cases by Manner of Death, 2009.....	19
Table 1. Total Cases by OCME District by Manner of Death, 2009 .....	20
Table 2. Total Cases by Autopsy Status by OCME District, 2009 .....	20
Table 3. Total Cases by Manner of Death by Autopsy Status, 2009.....	20
Table 4. Total Cases by Race/Ethnicity, 2009 .....	20
Figure 4. Total Cases by Manner of Death by Race/Ethnicity, 2009 .....	21
Figure 5. Total Cases by Age Group, 2009.....	22
Table 5. Total Cases by Gender, 2009.....	22

Table 6. Total Cases by Manner of Death by Gender, 2009.....	22
Figure 6. Total Cases by Manner of Death by Gender, 2009 .....	23
Table 7. Total Cases by Manner of Death by Gender by Age Group, 2009.....	24
Figure 7. Total Cases by Month of Death, 2009 .....	25
Figure 8. Total Cases by Month of Death by Manner of Death, 2009 .....	25
Figure 9. Total Cases by Day of Death, 2009 .....	26
Figure 10. Total Cases by Day of Death by Manner of Death, 2009 .....	26
Table 8. Total Cases by Manner by City/County of Residence, 2009 .....	27
Figure 11. Total Cases by City/County of Residence, 2009.....	32
Figure 12. Rate of Total Cases by City/County of Residence, 2009.....	33
Table 9. Total Cases by Manner by City/County of Injury/Acute Illness, 2009.....	34
Figure 13. Total Cases by City/County of Injury/Acute Illness, 2009 .....	38
Table 10. Total Cases by Manner by City/County of Death, 2009 .....	39
Figure 14. Total Cases by City/County of Death, 2009.....	43
Table 11. Total Cases by Cause of Death, 2009 .....	44
SECTION 3: MANNER OF DEATH .....	47
NATURAL DEATH (N=1906).....	47
Figure 15. Natural Deaths & Rate by Year of Death, 1999-2009 .....	47
Figure 16. Natural Deaths by Age Group by Gender, 2009.....	48
Figure 17. Natural Deaths by Race/Ethnicity, 2009 .....	48
ACCIDENTAL DEATHS (N=2175) .....	49
Figure 18. Accidental Deaths & Rate by Year of Death, 1999-2009 .....	49
Figure 19. Accidental Deaths by Age Group by Gender, 2009.....	50
Figure 20. Accidental Deaths by Race/Ethnicity, 2009 .....	50
Table 12. Accidental Deaths by Method of Death, 2009 .....	51
Table 13. Top 5 Accidental Methods of Death by Age Group with Corresponding Rates, 2009.....	52
Figure 21. Accidental Deaths by Month of Death, 2009 .....	53
Figure 22. Accidental Deaths by Day of Death, 2009 .....	53
Table 14. Accidental Deaths by City/County of Injury by Year of Death, 2006-2009 .....	54
SUICIDE DEATHS (N=974).....	58
Figure 23. Suicide Deaths & Rate by Year of Death, 1999-2009 .....	58
Figure 24. Suicide Deaths by Age Group by Gender, 2009.....	59
Figure 25. Suicide Deaths by Race/Ethnicity, 2009 .....	59
Figure 26. Suicide Deaths & Rate by Race/Ethnicity, 2009 .....	60
Table 15. Suicide Deaths by Method of Death, 2009 .....	61
Figure 27. Suicide Deaths by Month of Death, 2009 .....	62
Figure 28. Suicide Deaths by Day of Death, 2009 .....	62

Table 16. Suicide Deaths & Rates by City/County of Residence, 2009.....	63
Figure 29. Suicide Deaths by City/County of Residence, 2009 .....	65
Figure 30. Suicide Rates by City/County of Residence, 2009 .....	65
Table 17. Suicide Deaths by City/County of Injury by Year of Death, 2006-2009 .....	66
<b>HOMICIDE DEATHS (N=410) .....</b>	<b>70</b>
Figure 31. Homicide Deaths & Rate by Year of Death, 1999-2009.....	70
Figure 32. Homicide Deaths & Rates by Age Group by Gender, 2009.....	71
Figure 33. Homicide Deaths by Race/Ethnicity, 2009.....	71
Figure 34. Homicide Deaths & Rates by Race/Ethnicity by Gender, 2009 .....	72
Table 18. Homicide Deaths by Method of Death, 2009 .....	73
Figure 35. Homicide Deaths by Leading Methods of Death, 2009 .....	74
Table 19. Homicide Deaths by City/County of Residence, 2009.....	74
Table 20. Top 10 Homicide Deaths by City/County of Residence, 2009.....	76
Table 21. Top 10 Homicide Rates by City/County of Residence, 2009.....	76
Table 22. Homicide Deaths by City/County of Injury, 2006-2009 .....	77
Table 23. Top 10 Homicide Deaths by City/County of Injury, 2009 .....	80
Figure 36. Homicide Deaths by City/County of Injury, 2009.....	81
<b>UNDETERMINED DEATHS (N=143) .....</b>	<b>82</b>
Figure 37. Undetermined Deaths & Rate by Year of Death, 1999-2009.....	82
Figure 38. Undetermined Deaths by Age Group by Gender, 2009 .....	83
Figure 39. Undetermined Deaths by Race/Ethnicity, 2009.....	83
Table 24. Undetermined Deaths by Cause of Death, 2009 .....	84
<b>SECTION 4: DEATHS OF CHILDREN (17 Years of Age &amp; Younger) (N=336).....</b>	<b>85</b>
Figure 40. Child Deaths by Manner, 2009.....	85
Figure 41. Child Deaths by Age by Gender, 2009 .....	86
Figure 42. Child Deaths by Race/Ethnicity, 2009 .....	86
Figure 43. Child Death by Manner of Death by Race/Ethnicity, 2009 .....	87
Table 25. Child Deaths by Cause of Death, 2009 .....	87
<b>NATURAL DEATHS OF CHILDREN (N=74).....</b>	<b>90</b>
Figure 44. Natural Child Deaths by Age Group by Gender, 2009 .....	90
Figure 45. Natural Child Deaths by Race/Ethnicity, 2009.....	90
<b>ACCIDENTAL DEATHS OF CHILDREN (N=112).....</b>	<b>91</b>
Figure 46. Accidental Child Deaths by Age Group by Gender, 2009 .....	91
Figure 47. Accidental Child Deaths by Race/Ethnicity, 2009.....	91
Figure 48. Accidental Child Deaths by Month of Death, 2009.....	92
Figure 49. Accidental Child Deaths by Day of Death, 2009.....	92
Table 26. Accidental Child Deaths by Method of Death, 2009 .....	93

SUICIDE DEATHS OF CHILDREN (N=23) .....	94
Figure 50. Child Suicide Deaths by Year of Death, 1999-2009.....	94
Figure 51. Child Suicide Deaths by Age by Gender, 2009.....	95
Figure 52. Child Suicide Deaths by Race/Ethnicity, 2009.....	95
Figure 53. Child Suicide Deaths by Month of Death, 2009.....	96
Figure 54. Child Suicide Deaths by Day of Death, 2009.....	96
Table 27. Child Suicide Deaths by Method of Death, 2009.....	97
HOMICIDE DEATHS OF CHILDREN (N=41) .....	98
Figure 55. Child Homicide Deaths & Rate by Year of Death, 1999-2009.....	98
Figure 56. Child Homicide Deaths by Age by Gender, 2009.....	99
Figure 57. Child Homicides by Race/Ethnicity, 2009.....	100
Figure 58. Child Homicide Deaths by Month of Death, 2009.....	100
Figure 59. Child Homicide Deaths by Day of Death, 2009.....	101
Table 28. Child Homicide Deaths by Method of Death, 2009.....	101
UNDETERMINED DEATHS OF CHILDREN (N=86).....	102
Figure 60. Undetermined Child Deaths by Age by Gender, 2009.....	102
Figure 61. Undetermined Child Deaths by Race/Ethnicity, 2009.....	103
Table 29. Undetermined Child Deaths by Cause of Death and by Age, 2009.....	103
SECTION 5: ETHANOL ASSOCIATED DEATHS (N=1218).....	104
Figure 62. Alcohol Presence by Manner of Death, 2009.....	104
Figure 63. Ethanol Presence by Age Group by Gender, 2009.....	105
Figure 64. Ethanol Associated Deaths by Age Group by Gender, 2009.....	105
Figure 65. Ethanol Associated Deaths by Race/Ethnicity, 2009.....	106
Figure 66. Ethanol Associated Deaths by Measured Ethanol Level, 2009.....	106
Table 30. Ethanol Presence in Natural and Unnatural Deaths by Cause of Death, 2009.....	107
ETHANOL ASSOCIATED ACCIDENTAL DEATHS (N=539).....	110
Figure 67. Accidental Deaths by Age Group by Ethanol Level, 2009.....	110
Table 31. Accidental Deaths by Method of Death by Ethanol Level, 2009.....	111
ETHANOL ASSOCIATED SUICIDE DEATHS (N=295).....	113
Figure 68. Suicide Deaths by Age Group by Ethanol Level, 2009.....	113
Table 32. Suicide Deaths by Method of Death by Ethanol Level, 2009.....	114
ETHANOL ASSOCIATED HOMICIDE DEATHS (N=124).....	115
Figure 69. Homicide Deaths by Age Group by Ethanol Level, 2009.....	115
Table 33. Homicide Deaths by Method of Death by Ethanol Level, 2009.....	116
ETHANOL ASSOCIATED UNDETERMINED DEATHS (N=20).....	117
Figure 70. Undetermined Deaths by Age Group by Ethanol Level, 2009.....	117
Table 34. Undetermined Deaths by Cause of Death by Ethanol Level, 2009.....	118

SECTION 6: MOTOR VEHICLE COLLISIONS RELATED DEATHS (N=845) .....	119
Figure 71. Motor Vehicle Deaths & Rate by Year of Death, 2003-2009 .....	119
Figure 72. Motor Vehicle Deaths by Manner, 2009 .....	120
Figure 73. Motor Vehicle Deaths by Age Group by Gender, 2009 .....	120
Figure 74. Motor Vehicle Deaths by Age Group by Gender by Ethanol Presence, 2009 .....	121
Figure 75. Motor Vehicle Deaths by Race/Ethnicity, 2009 .....	121
Figure 76. Motor Vehicle Deaths by Race/Ethnicity by Ethanol Presence, 2009.....	122
Table 35. Motor Vehicle Deaths by Age Group by Position In or Out of Vehicle, 2009 .....	122
Table 36. Motor Vehicle Deaths by Position in or Out of Vehicle by Ethanol Level, 2009 .....	123
Table 37. Motor Vehicle Deaths by Decedent Status by Vehicle Type by Ethanol Level, 2009 .....	124
SECTION 7: DRUG/POISON CAUSED DEATHS.....	126
OVERALL DRUG/POISON DEATHS (N=713) .....	126
Figure 77. Total Drug/Poison Deaths & Rate by Year of Death, 1999-2009 .....	126
Table 38. Drug/Poison Deaths by OCME District, 2009.....	127
Figure 78. Drug/Poison Deaths by Manner of Death, 2009.....	127
Figure 79. Drug/Poison Deaths by Age Group by Gender, 2009.....	128
Table 39. Drug/Poison Deaths by Age Group by Manner of Death, 2009 .....	128
Figure 80. Drug/Poison Deaths by Race/Ethnicity, 2009 .....	129
Table 40. Drug/Poison Deaths by Cause of Death by OCME District, 2009 .....	129
Table 41. Drug/Poison Death by Cause of Death by Manner of Death, 2009 .....	130
Figure 81. Drug/Poison Deaths by Drug Type by Gender, 2009 .....	130
Figure 82. Specific Type of Drug/Poison Deaths & Rates by Race/Ethnicity, 2009 .....	131
Figure 83. Drug/Poison Caused Deaths by Drug Type by Ethanol Level, 2009.....	131
Figure 84. Classes of All Drugs/Poisons Present in Drug/Poison Deaths, 2009.....	132
Table 42. All Drug Deaths by Whether or Not Alcohol Also Caused Death, 2009 .....	132
Table 43. All Drugs/Poisons/Active Metabolites Present in Drug/Poison Deaths, 2009 .....	133
Table 44. Drugs/Poison/Active Metabolites Causing Death in Drug/Poison Deaths, 2009 .....	136
Table 45. Drug/Poison Deaths by City/County of Residence, 2009.....	139
Figure 85. Drug/Poison Deaths by City/County of Residence, 2009 .....	141
Figure 86. Drug/Poison Death Rates by City/County of Residence, 2009 .....	141
FENTANYL, HYDROCODONE, METHADONE & OXYCODONE DEATHS (N=325) .....	142
Table 46. FHMO Combinations Causing Death, 2009.....	142
Table 47. FHMO Combinations Causing Death by Race/Ethnicity, 2009 .....	143
Table 48. FHMO Combinations Causing Death by OCME District, 2009.....	143
Table 49. FHMO Combinations Causing Death by Gender, 2009.....	144
Table 50. FHMO Combinations Causing Death by Whether Alcohol Caused Death, 2009 .....	144
Table 51. FHMO Deaths & Rates by City/County of Residence, 2009 .....	145

Figure 87. FHMO Deaths by City/County of Residence, 2009 .....	147
Figure 88. FHMO Death Rates by City/County of Residence, 2009.....	148
COCAINE & HEROIN DEATHS (N=168) .....	149
Table 52. Cocaine & Heroin Combinations Causing Death, 2009.....	149
Table 53. Cocaine & Heroin Combinations Causing Death by Race/Ethnicity, 2009 .....	149
Table 54. Cocaine & Heroin Combinations Causing Death by Gender, 2009.....	149
Table 55. Cocaine & Heroin Combinations Causing Death by OCME District, 2009 .....	150
Table 56. Cocaine & Heroin Deaths by City/County of Residence, 2009.....	150
Figure 89. Cocaine & Heroin Deaths by City/County of Residence, 2009 .....	152
Figure 90. Cocaine & Heroin Death Rates by City/County of Residence, 2009 .....	152
SECTION 8: IN CUSTODY (PRISONER) POPULATION (N=137) .....	153
Figure 91. Prisoner Deaths by Manner of Death, 2009 .....	153
Figure 92. Prisoner Deaths by Race/Ethnicity, 2009.....	154
Figure 93. Prisoner Deaths by Age Group by Gender, 2009 .....	154
Figure 94. Prisoner Deaths by Manner of Death by Race/Ethnicity, 2009.....	155
Table 57. Prisoner Deaths by Cause of Death, 2009 .....	155
SECTION 9: STATE MENTAL HEALTH FACILITIES (N=76).....	157
Figure 95. State Mental Health Deaths by Manner of Death, 2009 .....	157
Figure 96. State Mental Health Deaths by Race/Ethnicity, 2009.....	158
Figure 97. State Mental Health Deaths by Age Group by Gender, 2009 .....	158
Table 58. State Mental Health Deaths by Cause of Death, 2009 .....	159
SECTION 10: RECOVERED UNREPORTED CASES (N=165) .....	160
Figure 98. Retrospective Cases by Manner of Death, 2009.....	160
Figure 99. Retrospective Cases by Race/Ethnicity, 2009.....	161
Figure 100. Retrospective Cases by Age Group by Gender, 2009.....	161
Table 59. Retrospective Cases by Method of Death and by Classification of Death, 2009.....	162
GLOSSARY .....	163



## Letter from the Chief Medical Examiner

In keeping with the Virginia Department of Health's Office of the Chief Medical Examiner's (OCME) public health mission of prevention by documenting potentially preventable injury and death and preparing reports to be used by our leaders to protect and improve the lives of Virginia's citizens, the OCME is pleased to present our annual report for 2009. The data presented in this report is gathered from the Virginia OCME statewide case management database and is prepared and interpreted by our statewide epidemiologist, Anna Noller, Ph.D., after careful analysis.

The OCME, by the Code of Virginia, § 32.1-283, is required to investigate deaths that occur in Virginia suddenly and unexpectedly, while unattended by a physician, violently, under suspicious circumstances or in law enforcement custody. Upon case notification by law enforcement, hospitals, funeral directors and others, the OCME staff determines if the case falls under the jurisdiction of the OCME and enters it into our Virginia Medical Examiner Database (VMEDS). Dr. Noller uses the data stored within VMEDS, along with selected case file review, to prepare this OCME annual report. The result of Dr. Noller's analysis of the data has revealed some interesting trends that I wanted to be sure were shared publicly.

These trends include:

- For the first time in 6 years the number of deaths related to drugs has decreased.
- Accidental deaths have also declined for the second year in a row with motor vehicle collisions accounting for much of the decrease observed.
- In past years, Richmond City has had the unfortunate distinction as the Virginia city with the most homicides; in 2009 Norfolk City surpassed Richmond City.
- The number of cases categorized as Sudden Unexpected Infant Death (SUID) has increased slightly from the previous year but the numbers have stabilized now that the term has been in use for a full 3 years in Virginia. SUID is a diagnosis made in cases in which autopsy does not reveal a definitive cause of death and the circumstances of death suggest there is an associated risk factor for dying such as unsafe sleep, or some other external factor, but the contribution of this factor cannot be determined with certainty. Many cases formerly called SIDS are now categorized as SUID when associated risk factors are present.

It is our hope that in those categories where we have seen reductions in preventable deaths, the trend will continue in the years to come.

Let me also take a moment to highlight the medical examiner system here in Virginia. Virginia's status as a fully and independently accredited system in all four district offices by the National Association of Medical Examiners (NAME) is one of the factors that make the Virginia OCME a unique and model death investigation

system. Virginia is also a leader in the field as only 25-30% of death investigation systems within the United States are NAME accredited. In Virginia, the district Assistant Chief Medical Examiners must become board certified in forensic pathology by the American Board of Pathology and the medicolegal death investigators must obtain their certification by the American Board of Medicolegal Death Investigators within two years of hire or leave the Virginia state system. These requirements provide assurance that only properly trained individuals perform death investigations and forensic autopsies leading to competent determinations of the cause and manner of death in medical examiner cases across Virginia.

The work of the medical examiner's office is critical as the OCME provides answers to citizens about the death of their loved ones however; the work is also very hard as our patients often die violent and cruel deaths. The men and women who perform the task of medicolegal death investigation in Virginia are a highly skilled and compassionate group who always do their best to provide information and solace to our often grieving and confused decedent families. Virginia is fortunate to have leaders who value competent death investigation and support the OCME.

Leah L. E. Bush, M.S., M.D.  
Chief Medical Examiner  
Commonwealth of Virginia  
February 22, 2011

## Introduction

This report represents the deaths investigated by the Virginia Department of Health, Office of the Chief Medical Examiner in 2009.

## Data Collection and Preparation

The data in this report reflects deaths accepted by the Office of the Chief Medical Examiner (OCME) pursuant to §32.1-283 of the Code of Virginia for the 2009 calendar year. These deaths are both Virginia residents and non-residents whose deaths generally occurred within the borders of the Commonwealth of Virginia. The Virginia OCME classifies these deaths by its own coding schema which differs from mortality data published by other OCME surveillance groups, law enforcement agencies, the Virginia Center for Health Statistics, and the Centers for Disease Control & Prevention. Therefore, any discrepancies between data presented by the OCME and other nosology groups are the result of data collection and analytic variations among these groups.

## Statistical Summary

- Data entitled “Total Cases” is based on both Virginia residents and non-Virginia residents who have come under the jurisdiction of the Office of the Chief Medical Examiner
- Rates
  - Based on only Virginia residents (Residential Rates)
  - Are per 100,000 of the specific population being described
- Race/Ethnicity
  - Hispanic ethnicity may be of any race
  - All races represent those who are not of Hispanic ethnicity
- Percents may equal to above or below 100 percent due to rounding

## SECTION 1: OVERVIEW – OFFICE OF THE CHIEF MEDICAL EXAMINER

The General Assembly of Virginia abolished the Office of Coroner's Physician in 1946 and appointed a Chief Medical Examiner. Four years later, the Office of the Chief Medical Examiner (OCME) became an agency within the Virginia Department of Health. The VA OCME is very stable and, including the current Chief Medical Examiner, has had only 4 Chief Medical Examiners in 63 years. The OCME has 4 district offices, all accredited by the National Association of Medical Examiners, to serve the citizens of the Commonwealth.

### *Jurisdictional Authority*

Pursuant to § 32.1-283 of the Code of Virginia, all of the following deaths are investigated by the OCME:

- Any death from trauma, injury, violence, or poisoning attributable to accident, suicide or homicide
- Sudden deaths of persons in apparent good health and deaths unattended by a physician
- Deaths of persons in jail, prison, or another correctional institution, or in police custody (this includes deaths during legal intervention such as a death following a police pursuit)
- Deaths of patients/residents of state mental health facilities
- Sudden death of any infant less than eighteen months of age whose death might be attributable to Sudden Infant Death Syndrome and
- Any other suspicious, unusual, or unnatural death

In Virginia local medical examiners, the backbone of our medical examiner system, conduct medicolegal death investigations, serving as the principal case investigators in their localities for deaths falling within their jurisdiction and statutory authority. The OCME currently supports approximately 230 local medical examiners who receive the majority of initial notifications of death and determine if the death should come under the jurisdiction of the medical examiner. After information gathering, local medical examiners may examine the body, collect a toxicology sample, and sign the certificate of death on medical examiner cases or, using professionally established guidelines, refer certain classes of cases for more intensive death investigation and medicolegal autopsy.

When an autopsy is required, it is conducted at one of four district offices: Northern, Tidewater, Central or Western. Each district is staffed by American Board of Pathology certified forensic pathologists, investigators certified by the American Board of Medicolegal Death Investigators and administrative and morgue personnel.

The Chief Medical Examiner, Dr. Leah L.E. Bush, is based in the Richmond office and is responsible for the overall operations of the state's medical examiner system.

The overall vision of the Virginia OCME is to be the best medical examiner system in the world. There are two separate parts of the mission that form the core of OCME staff members' efforts in accomplishing this goal:

### ***Medicolegal Mission***

- Conduct medicolegal death investigations
- Perform autopsies to certify cause and manner of death and recover evidence
- Testify in court proceedings
- Provide public service to citizens and professional colleagues throughout the Commonwealth
- Educate peers and professionals on subjects related to death investigation

### ***Public Health Mission***

- Reduce violent death by conducting surveillance and fatality review
- Provide support and technical assistance to local fatality review teams
- Identify index cases and pathogens in disease outbreaks in the interest of public health
- Cooperate with organ procurement organizations to save and enhance lives through organ donation and transplantation
- Administer the State Anatomical Program to provide cadavers for medical education

Virginia's local medical examiners and forensic pathologists are committed to public safety and public health. To promote public safety, they testify to their findings in criminal and civil courts throughout the Commonwealth. They advance public health through their investigations of deaths that present a hazard to Virginia's citizens, such as emerging infections and bioterrorism. This report describes medical examiner activities for the 2009 calendar year.

### ***Virginia 2009***

In 2009, the estimated population of the Commonwealth was 7,882,590, ranking 12<sup>th</sup> among the states. Virginia has a land area of 39,594 square miles, ranking 37<sup>th</sup> among the states. Virginia's population density is 199 persons per square mile, although an estimated 85.5 percent of the population lives in urban areas. Non-Hispanic whites constituted 67.1 percent of the population, non-Hispanic blacks 20.0 percent, non-Hispanic

Asians 5.3 percent, non-Hispanic Native Americans 0.3 percent and Hispanics, who may be of any race, were 7.2 percent of Virginia's people. The median household income in 2009 was \$61,120.

## Fatality Review and Surveillance Programs

In addition to conducting medico-legal death investigations to identify the cause and manner of death, the OCME oversees several public health surveillance projects and fatality review teams. Surveillance projects include the Family and Intimate Partner Violence Homicide Surveillance Project (FIPV) and the Virginia Violent Death Reporting System (VVDRS). Fatality review is performed on child and maternal deaths at the state level, and on child and domestic violence related deaths at the local and regional level.

These activities are designed to provide a better understanding of the circumstances of death so that legislators, policy makers, and other stakeholders can make informed decisions for injury and violence prevention. Surveillance projects and fatality review teams allow for something good to come from the violence and destruction of human life. A description of each of these efforts follows.

The year 2009 represents the ten-year anniversary of the **Family and Intimate Partner Violence Homicide Surveillance Project (FIVP)**. This project was established in 1999 to describe the magnitude of lethal domestic violence in Virginia. Project staff members examine death investigation records and news reports to identify cases in which the alleged offender was an intimate partner or family member. After cases are identified, they are placed in one of six violence-related homicide categories: intimate partner, intimate partner associated, child by caregiver, elder by caregiver, other family, and family associated. Information collected through this project is analyzed and published by the OCME. Reports are disseminated to stakeholders and used to inform public policy and prevention activities.

Ten-years worth of data reveal the following trends:

- A third of all homicides were due to family or intimate partner conflict
- Males and females were both vulnerable; however, women had a greater probability of being killed by current or former intimate partners whereas males had a greater probability of being killed while in the "crossfire" of an intimate partner relationship
- Racial disparities continued to exist: Black Virginians were at significantly greater risk than White

Virginians

- Infants were our most vulnerable citizens
- Most victims were killed with a firearm and while in a residence
- Risk factors associated with intimate partner violence, such as prior acts of violence and periods of separation or divorce, are also associated with intimate partner homicide

Published reports from this project are available at

<http://www.vdh.virginia.gov/medExam/familyintimatepartnerviolencehomicidesurveillance.htm>.

The **Virginia Violent Death Reporting System (VVDRS)** was implemented in 2003 as part of the National Violent Death Report System (NVDRS). Virginia was among the first six states, and the first state-wide medical examiner system, to be funded for this project.

The VVDRS collects information about deaths due to violence (suicide, homicide, legal intervention, accidental firearm discharge, deaths of an undetermined manner, and deaths due to terrorism) and correlates victim information with the circumstances surrounding the death. Data from several sources, among them forensic pathology, forensic science, law enforcement, vital records, and health statistics, are linked to provide a comprehensive picture of violent death in the Commonwealth of Virginia.

Data from the VVDRS have illustrated an increased suicide risk for older adults, especially males; the types of poisons used in suicides; the prevalence of mental health problems and subsequent treatment among persons who commit suicide; the warning signs that precede many suicides, such as disclosing intent to harm oneself or having prior suicide attempts; and an association between homicides with no clear precipitating circumstances and cocaine usage.

The VVDRS is funded by the Centers for Disease Control and Prevention (CDC). Published reports are available at <http://www.vdh.virginia.gov/medExam/NVDRS.htm>.

The **State Child Fatality Review Team** was established in 1995 by the Virginia General Assembly and the Governor of Virginia. Working in the spirit of public health, the Team conducts multidisciplinary, retrospective reviews of the circumstances surrounding violent and unexpected child death and develops consensus

recommendations for the prevention of future deaths. Team members include representatives from pediatrics, emergency medicine, child psychiatry, law enforcement, mental health, social services, forensic pathology, Commonwealth's attorneys, local fire and emergency medical services providers, injury prevention groups, child advocacy organizations, and state agencies.

The Team has completed reviews and developed recommendations for intervention and prevention in the following areas of child death: firearm; suicide; unintentional injury to children under the age of five; caretaker homicide; motor vehicle collision; and child deaths from heat-related motor vehicle entrapment. It is currently reviewing infant deaths attributed to Sudden Infant Death Syndrome and those related to unsafe sleeping environments. Among other findings, the Team has identified family violence and economic instability as risk factors for homicide of young children and the significance of diligent adult supervision in preventing unintentional injury death. It has recognized the prevalence of motor vehicle collisions as the most frequent cause of child unintentional injury deaths.

Child fatality review is supported by the Virginia Department of Health, Office of Family Services with Title V funds from the U.S. Department of Health and Human Services, Maternal and Child Health Bureau. Published reports are available at: <http://www.vdh.virginia.gov/medExam/ChildFatality.htm>.

**Domestic Violence Fatality Review** was established in 1999 when the General Assembly enacted §32.1-283.3 of the Code of Virginia. This statute provides for the establishment of local/regional domestic violence fatality review teams, and directs the OCME to provide technical assistance and support to these teams.

Domestic violence fatality review has gained prominence and momentum in the last decade, both here in Virginia and across the United States. The purpose of domestic violence fatality review is to prevent future deaths by carefully examining the events that led to a fatality; by analyzing system responses to those deaths; and by improving a community's coordinated response to domestic violence. Multidisciplinary teams are formed at the local or regional level. Membership in these teams varies among localities, but generally includes representatives from law enforcement, Commonwealth's attorneys, social services, courts, probation and parole, domestic violence programs, and mental health/healthcare.

Virginia has made great progress in the area of domestic violence fatality review. Fifteen local or regional teams have been established throughout the Commonwealth. Reports published by Virginia's local teams



provide information on the victims and perpetrators in these fatal incidents, as well as the lethality factors that shaped these tragedies. Teams have developed recommendations for improved community response when deadly violence occurs among family members or intimate partners.

The OCME published the *Family and Intimate Partner Violence Fatality Review: Team Protocol and Resource Manual (3<sup>rd</sup> Edition, December 2009)*. This manual, an updated and expanded version of the previous 2002 edition, is a comprehensive and practical “how-to” guide for new and established teams. It features ten detailed chapters covering all aspects of starting and running a team, and includes time-saving, downloadable team documents and resources.

Information on Virginia’s domestic violence fatality review effort, as well as links to state and national resources, can be found at [www.vdh.virginia.gov/medExam/Violence.htm](http://www.vdh.virginia.gov/medExam/Violence.htm).

**Virginia’s Maternal Mortality Review Team** was established in March of 2002 as a partnership between the Office of Family Health Services and the OCME. The OCME provides coordination for the Team.

Virginia’s Team reviews all cases of death occurring in women who were pregnant at the time of death or who died within one year of a pregnancy, regardless of the cause or manner of death or outcome of the pregnancy. Systematic, retrospective review of all maternal deaths is undertaken for the purpose of understanding the circumstances surrounding the death so that recommendations and interventions can be made to prevent future deaths.

The Team is a multidisciplinary group of professionals and includes representatives from the Medical Society of Virginia; Virginia Section of the American College of Obstetricians and Gynecologists; Virginia Chapter of the American College of Nurse Midwives; Association of Women’s Health, Obstetrics and Neonatal Nurses; Virginia Chapter of the National Association of Social Workers; Virginia Hospital and Healthcare Association; Virginia Sexual and Domestic Violence Action Alliance; Virginia Dietetic Association; Regional Perinatal Councils; local health departments; and state planning agencies. To date, the Team has focused on intimate partner violence, substance abuse, mental illness, and obesity as risk factors for premature and preventable maternal death. In addition, motor vehicle incidents were identified as a major cause of death among women within one year of a pregnancy. Recommendations for prevention and intervention to address these factors have been promulgated.

Maternal mortality review is supported by the Virginia Department of Health, Office of Family Health Services with Title V funds from the U.S. Department of Health and Human Services, Maternal and Child Health Bureau. Published reports are available at: <http://www.vdh.virginia.gov/medexam/maternalmortality.htm>.

## Training and Education

### *Forensic Pathology Training Programs*

Website — <http://www.vdh.state.va.us/medExam/training.htm>

The Virginia Commonwealth University School of Medicine (VCU), in conjunction with the OCME, offers an Accreditation Council for Graduate Medical Education (ACGME) accredited fellowship in the subspecialty of forensic pathology. The six board-certified forensic pathologists of the Central and Tidewater District offices are the core faculty of the Department of Legal Medicine at VCU, chaired by the Chief Medical Examiner, Dr. Leah Bush. Medical Examiner's office staff has full access to facilities at VCU and its medical, dental, pharmacy, hospital administration, nursing, and other health science schools. The forensic pathology training program is designed to provide flexibility in training and experience depending upon the individual physician's career objectives.

- A 12-month forensic pathology fellowship for the trainee desiring eligibility to take the American Board of Pathology examination in forensic pathology

It is the aim of the forensic pathology training program that, by the end of the fellowship year, the trainee can adequately manage the great majority of medicolegal deaths with self-assurance and technical competence. The trainee will be ready to accept a position in all types of Medical Examiner/Coroner systems.

- A 1-month rotation for the resident who needs exposure to forensic pathology as part of a general anatomic pathology program. The residents usually are from the VCU and UVA pathology programs, however, residents from out of state may be accepted for training
- Medical students may also rotate through the OCME on month long elective rotations

During the last academic year 2009-2010, the OCME trained two fellows and seven pathology residents as well as several medical students.

## National Association of Medical Examiners Accreditation

The National Association of Medical Examiners (NAME) is the professional organization for physician medical examiners, medicolegal death investigators and death investigation system administrators who investigate deaths of public interest, either legal or public health, in the United States. NAME has developed an accreditation process to improve the quality of death investigation within medical examiner offices and systems. When an office is accredited by NAME, it is an endorsement that the office has provided an environment adequate for a medical examiner to practice his or her profession and that the office can adequately serve its jurisdiction. The accreditation process includes but is not limited to: inspection of facilities, review of facility and personnel safety, qualification of medical examiners, review of medical legal procedures, and review of reports and records. One requirement within the reports and records section is an annual statistical report, which OCME fulfills with this report. The following data is needed for the NAME requirement for the annual statistical report:

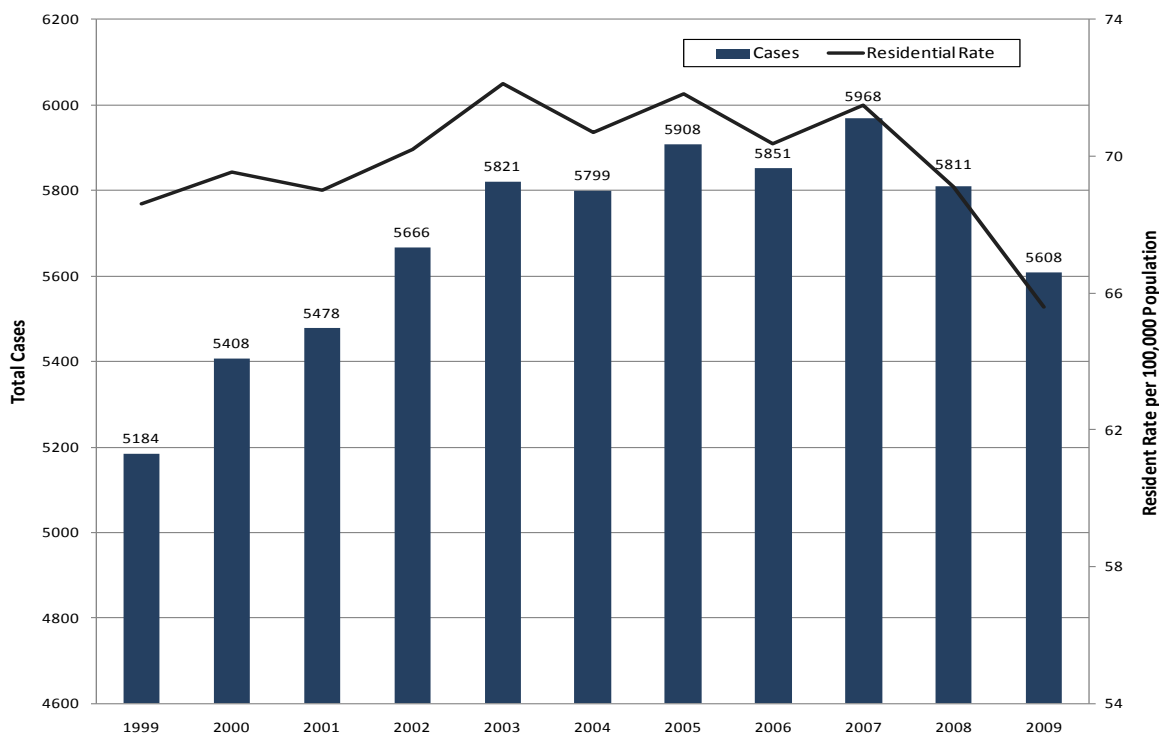
	Central	Northern	Tidewater	Western	Total
A. Deaths reported:	2763	1428	1492	1611	<b>7294</b>
B. Cases accepted:	1683	1266	1246	1413	<b>5608</b>
Retrospectives (handled separately)	22	10	30	103	<b>165</b>
C. Manners of death:					
Accident	683	480	446	566	<b>2175</b>
Homicide	120	53	155	82	<b>410</b>
Natural	567	449	444	446	<b>1906</b>
Suicide	280	255	172	267	<b>974</b>
Undetermined	33	29	29	52	<b>143</b>
D. Scene Visits	374	16	221	190	<b>801</b>
E. Bodies transported by office:	1104	642	795	861	<b>3402</b>
F. External examinations:	892	684	644	685	<b>2905</b>
G. complete examinations (autopsy):	791	582	602	728	<b>2703</b>
H. Partial examinations:	6	5	3	9	<b>23</b>
I. Hospital autopsies under ME jurisdiction:	0	5	0	0	<b>5</b>
J. Cases with toxicology:	1183	1177	1123	1380	<b>4863</b>
K. Unidentified bodies after examination:	2	0	0	0	<b>2</b>
L. Organ, tissue & eye donations	44	54	122	13	<b>233</b>
M. Unclaimed bodies:	34	12	26	25	<b>97</b>
N. Exhumations:	0	0	0	0	<b>0</b>
O. Bodies transported to office:	1147	648	943	898	<b>3636</b>

## SECTION 2: TOTAL CASES (N=5608)

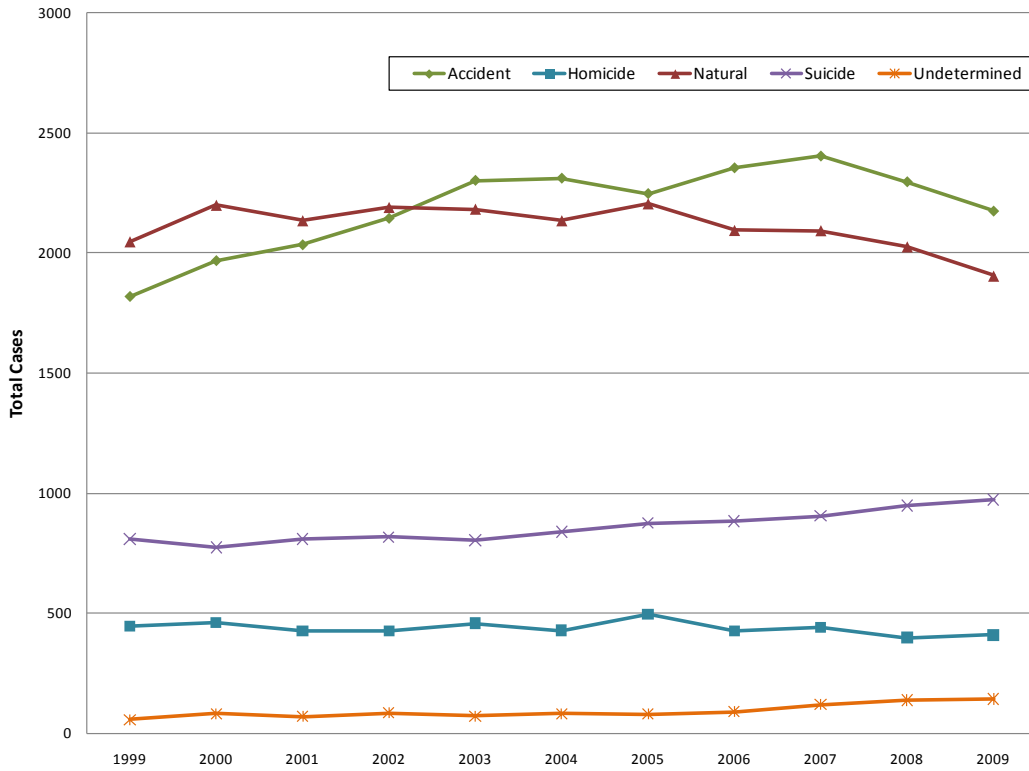
In 2009, the Office of the Chief Medical Examiner (OCME) investigated 5608 deaths, representing 9.6 percent of the estimated total deaths in Virginia and approximately two-thirds of the total number of deaths reported to the OCME, 7,294. [NOTE: Retrospective cases are not included in the total case count, but are examined separately in Section 10 because while these deaths were investigated in 2009, they may not necessarily have occurred in 2009.] The caseload for 2009 represented a 3.5 percent decrease from 2008 but was still an overall increase of 8.2 percent since 1999. Of the deaths investigated by the OCME in 2009:

- The numbers of accidental and natural deathss decreased compared to 2008 while the total numbers of homicide, suicides, and undetermined cases increased
- Autopsies were performed in 48.2 percent of all cases with a low of 34.8 percent for accidents and a high of 99.3 percent of all homicides
- Males represented 70 percent of cases
- Whites accounted for the majority of deaths in all manners except for homicides in which blacks were overrepresented
- The 45-54 year old age group had the greatest number of cases representing 19.9 percent of cases
- Fairfax County had the most number of residents die (n=425) but Southampton County had the highest rate (178.5 residents per 100,000)

**Figure 1. Total Cases by Year of Death, 1999-2009**



**Figure 2. Total Cases by Year of Death by Manner of Death, 1999-2009**



**Figure 3. Total Cases by Manner of Death, 2009**

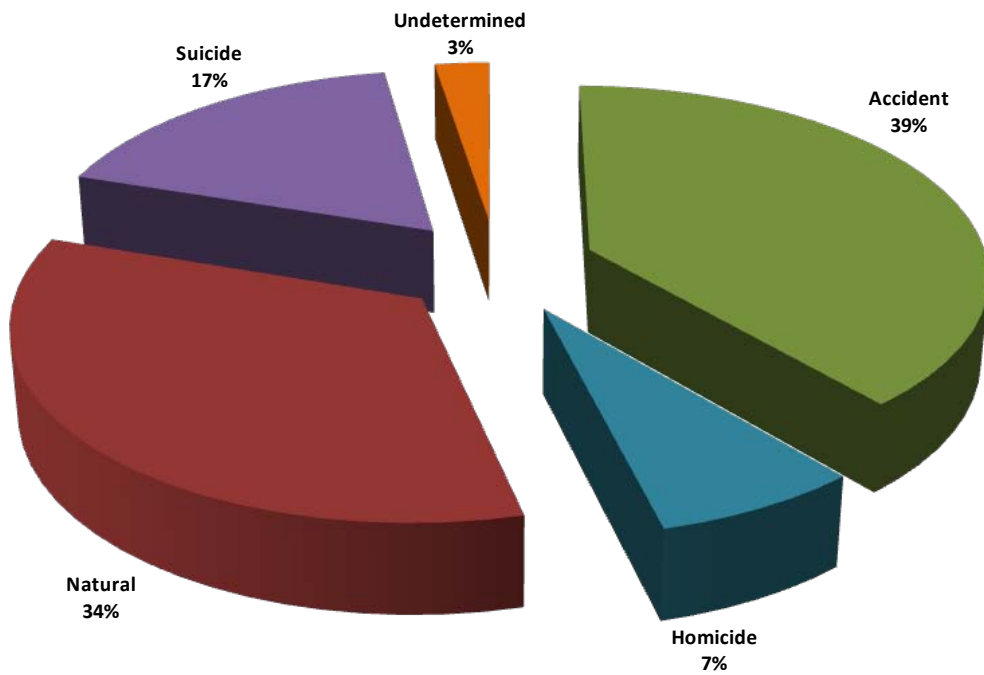


Table 1. Total Cases by OCME District by Manner of Death, 2009

Manner	OCME District				Total
	Central	Northern	Tidewater	Western	
Accident	683	480	446	566	2175
Homicide	120	53	155	82	410
Natural	567	449	444	446	1906
Suicide	280	255	172	267	974
Undetermined	33	29	29	52	143
<b>Total</b>	<b>1683</b>	<b>1266</b>	<b>1246</b>	<b>1413</b>	<b>5608</b>

Table 2. Total Cases by Autopsy Status by OCME District, 2009

OCME District	Autopsy Performed		Total
	Yes	No	
Central	791	892	1683
Northern	582	684	1266
Tidewater	602	644	1246
Western	728	685	1413
<b>Total</b>	<b>2703</b>	<b>2905</b>	<b>5608</b>

Table 3. Total Cases by Manner of Death by Autopsy Status, 2009

Autopsy	Manner of Death					Total
	Accident	Homicide	Natural	Suicide	Undetermined	
Yes	757	407	667	739	133	2703
No	1418	3	1239	235	10	2905
%Yes	34.8%	99.3%	35.0%	75.9%	93.0%	48.2%
<b>Total</b>	<b>2175</b>	<b>410</b>	<b>1906</b>	<b>974</b>	<b>143</b>	<b>5608</b>

Table 4. Total Cases by Race/Ethnicity, 2009

Race/Ethnicity	Cases	Percent
Asian	118	2.10%
Black	1265	22.56%
Hispanic	196	3.50%
Native American	5	0.09%
Other	5	0.09%
White	4019	71.67%
<b>Total</b>	<b>5608</b>	<b>100%</b>

**Figure 4. Total Cases by Manner of Death by Race/Ethnicity, 2009**

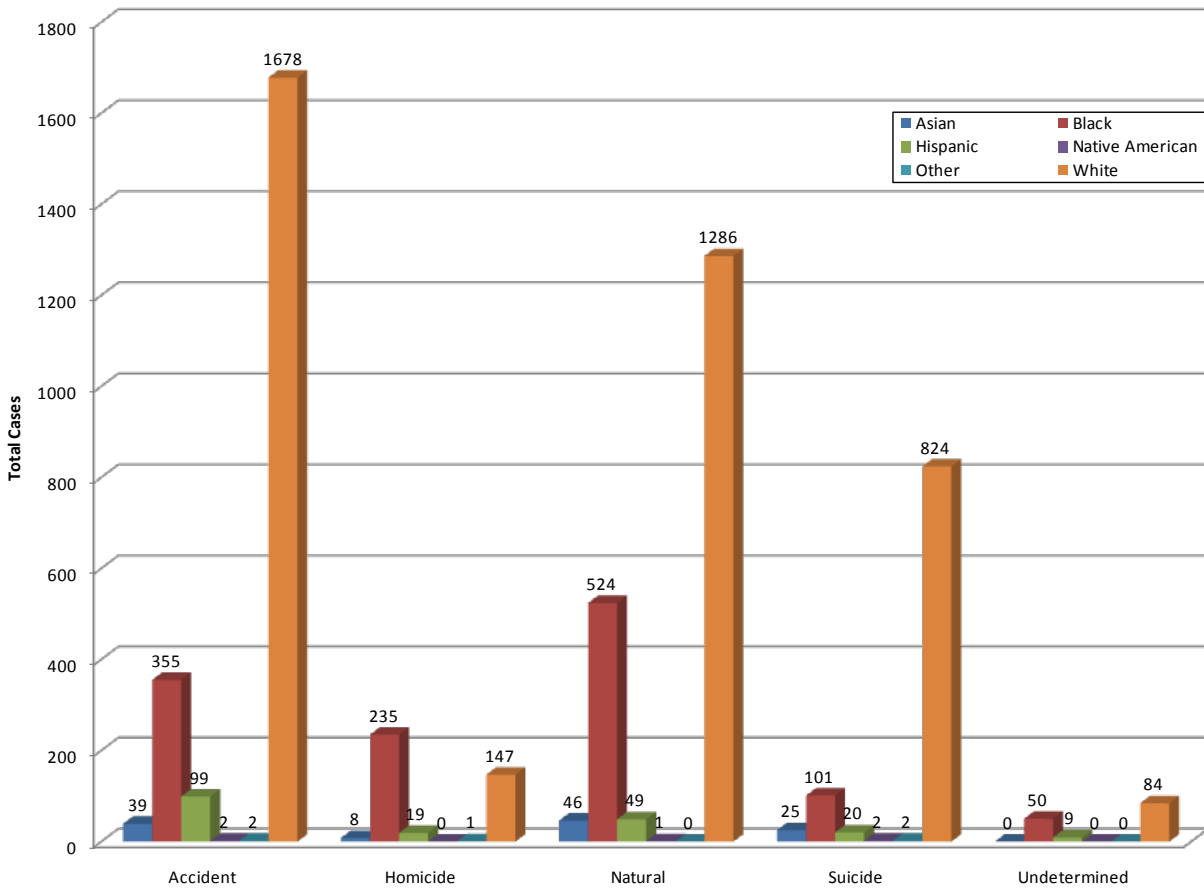


Figure 5. Total Cases by Age Group, 2009

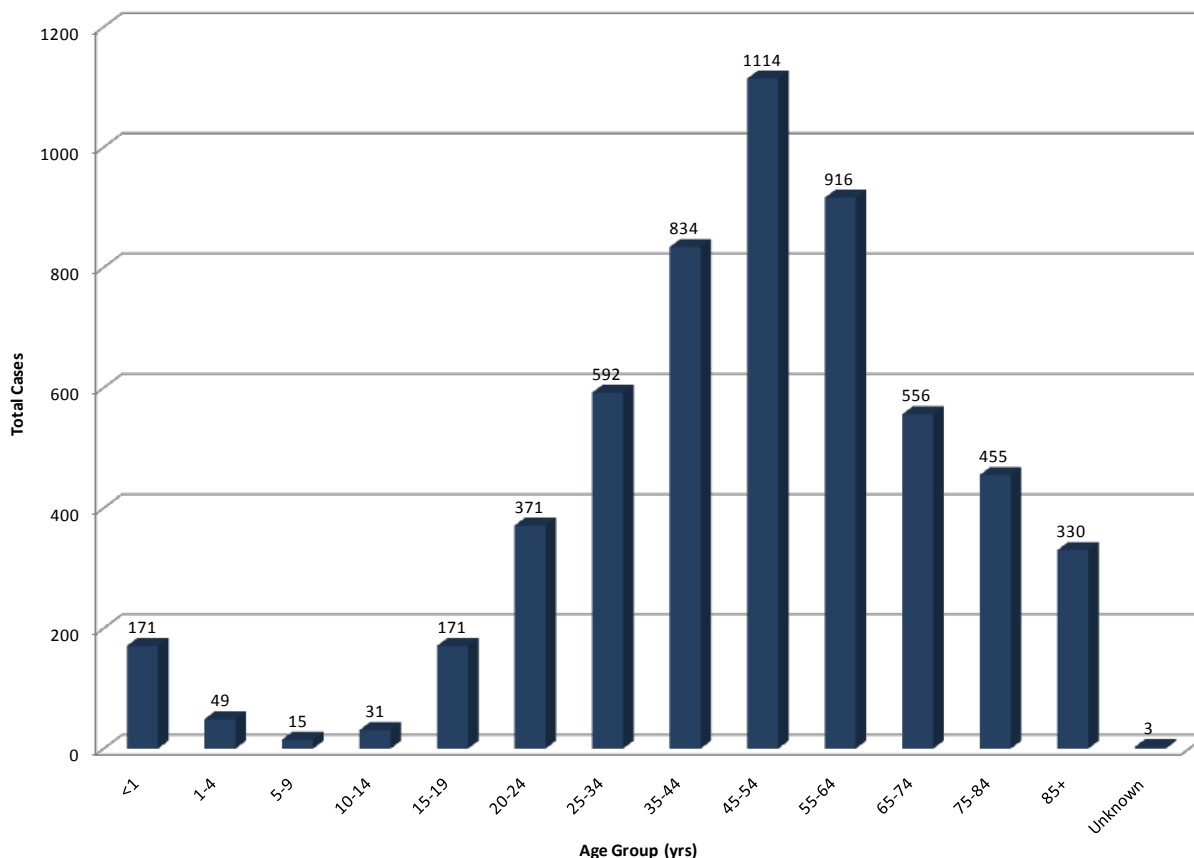


Table 5. Total Cases by Gender, 2009

Gender	Cases	Percent
Male	3948	70.40%
Female	1659	29.58%
Unknown	1	0.02%
<b>Total</b>	<b>5608</b>	<b>100%</b>

Table 6. Total Cases by Manner of Death by Gender, 2009

	Manner of Death					Total
	Accident	Homicide	Natural	Suicide	Undetermined	
<b>Male</b>	1449 (66.6%)	309 (75.4%)	1347 (70.7%)	755 (77.5%)	88 (61.5%)	3948 (70.4%)
<b>Female</b>	726 (33.4%)	101 (24.6%)	558 (29.3%)	219 (22.5%)	55 (38.5%)	1659 (29.6%)
<b>Unknown</b>	0 (0.0%)	0 (0.0%)	1 (0.1%)	0 (0.0%)	0 (0.0%)	1 (0.02%)
<b>Total</b>	<b>2175</b>	<b>410</b>	<b>1906</b>	<b>974</b>	<b>143</b>	<b>5608</b>



Figure 6. Total Cases by Manner of Death by Gender, 2009

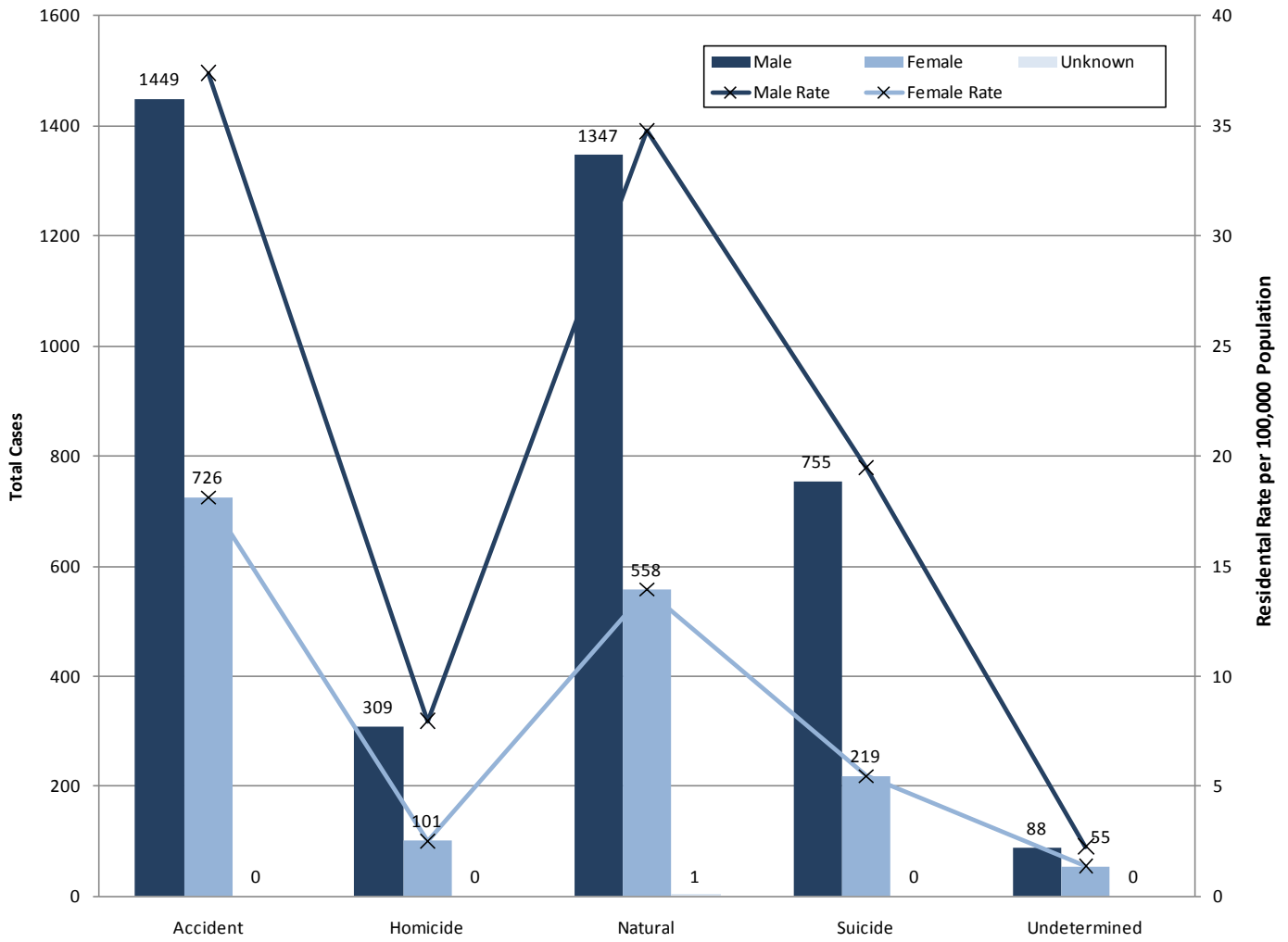
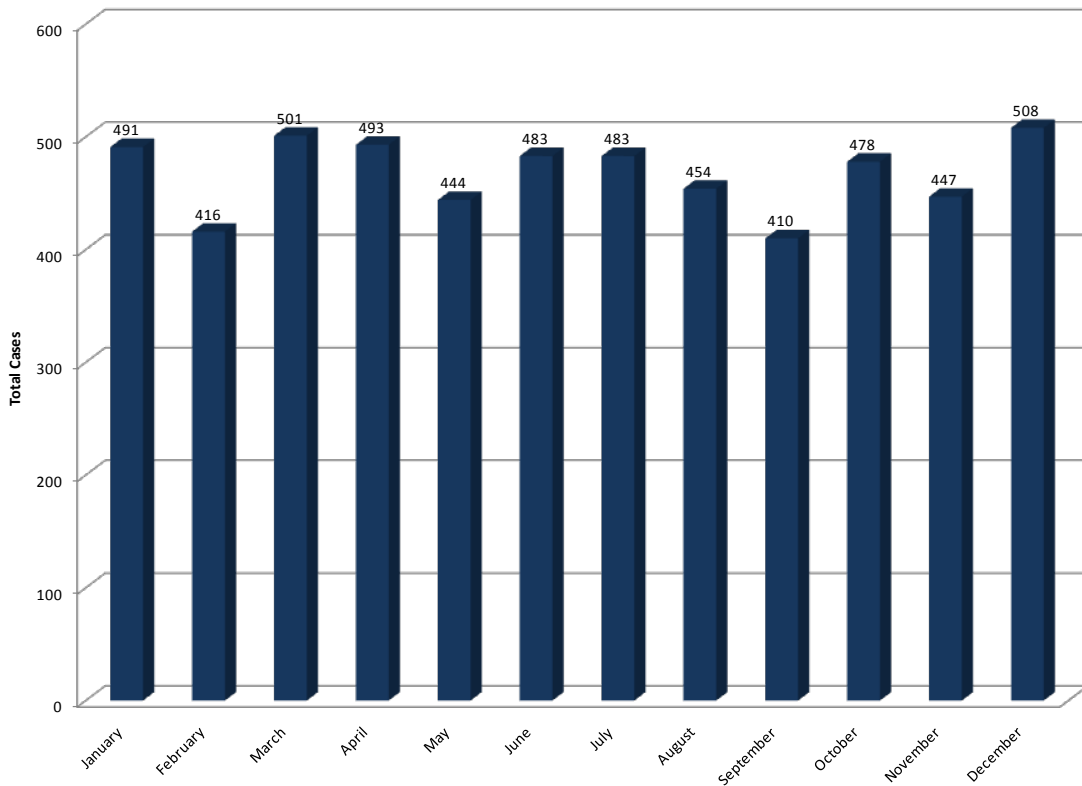


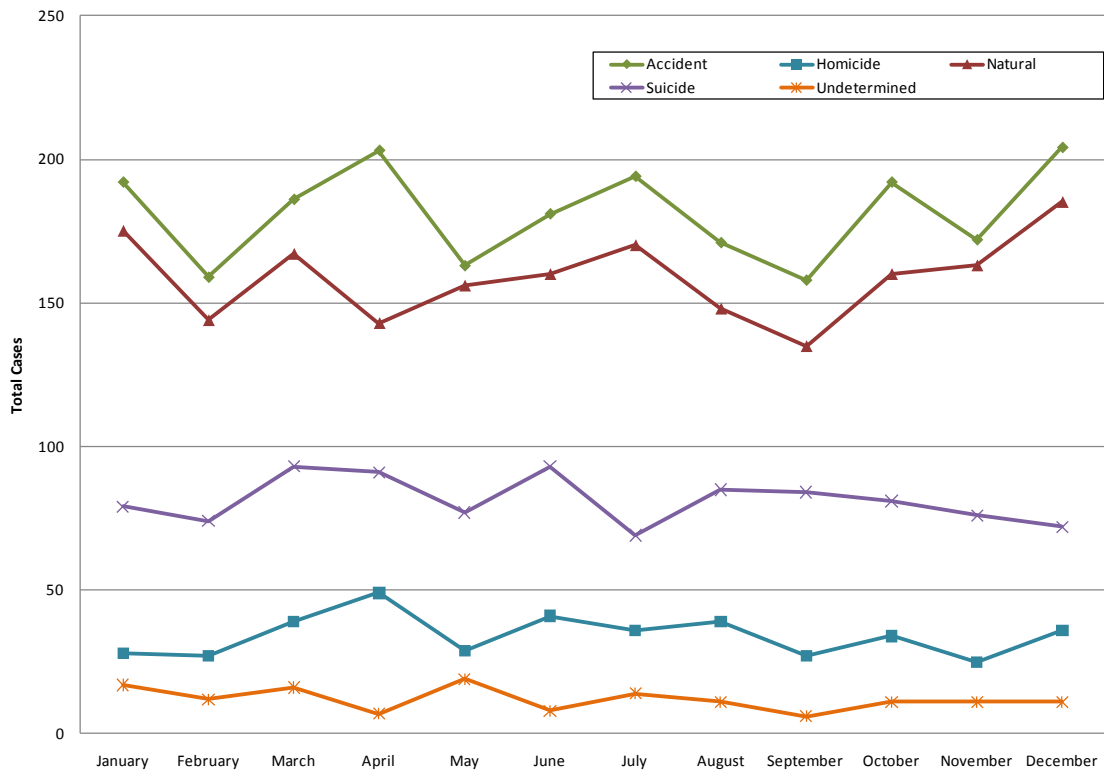
Table 7. Total Cases by Manner of Death by Gender by Age Group, 2009

Gender	Age Group	Manner of Death					Total
		Accident	Homicide	Natural	Suicide	Undetermined	
Male	<1	15	5	31	0	50	101
	1-4	16	5	6	0	5	32
	5-9	5	1	2	0	0	8
	10-14	12	4	2	1	2	21
	15-19	52	29	12	34	1	128
	20-24	154	68	17	57	0	296
	25-34	219	78	52	105	1	455
	35-44	218	58	164	149	3	592
	45-54	255	32	342	169	11	809
	55-64	164	13	370	129	9	685
	65-74	116	10	196	63	1	386
	75-84	128	2	113	31	1	275
	85+	95	2	40	17	3	157
	Unknown	0	2	0	0	1	3
	<b>Subtotal</b>	<b>726</b>	<b>309</b>	<b>1347</b>	<b>755</b>	<b>88</b>	<b>3948</b>
Female	<1	13	9	20	0	27	69
	1-4	8	3	6	0	0	17
	5-9	4	1	1	0	1	7
	10-14	7	2	0	1	0	10
	15-19	28	5	3	7	0	43
	20-24	50	10	5	10	0	75
	25-34	64	16	32	25	0	137
	35-44	92	18	67	55	10	242
	45-54	99	18	121	59	8	305
	55-64	62	12	109	43	5	231
	65-74	76	5	74	13	2	170
	75-84	106	2	66	4	2	180
	85+	117	0	54	2	0	173
		<b>Subtotal</b>	<b>726</b>	<b>101</b>	<b>558</b>	<b>219</b>	<b>55</b>
Unknown	<1	0	0	1	0	0	1
	<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>TOTAL</b>		<b>1452</b>	<b>410</b>	<b>1906</b>	<b>974</b>	<b>143</b>	<b>5608</b>

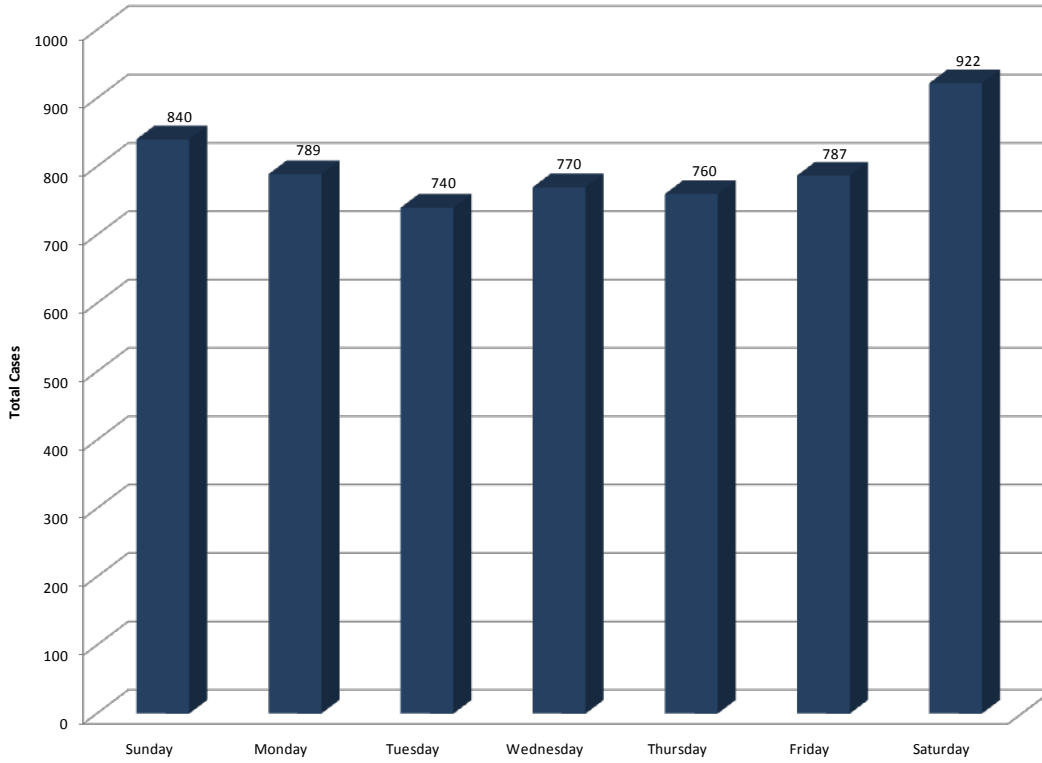
**Figure 7. Total Cases by Month of Death, 2009**



**Figure 8. Total Cases by Month of Death by Manner of Death, 2009**



**Figure 9. Total Cases by Day of Death, 2009**



**Figure 10. Total Cases by Day of Death by Manner of Death, 2009**

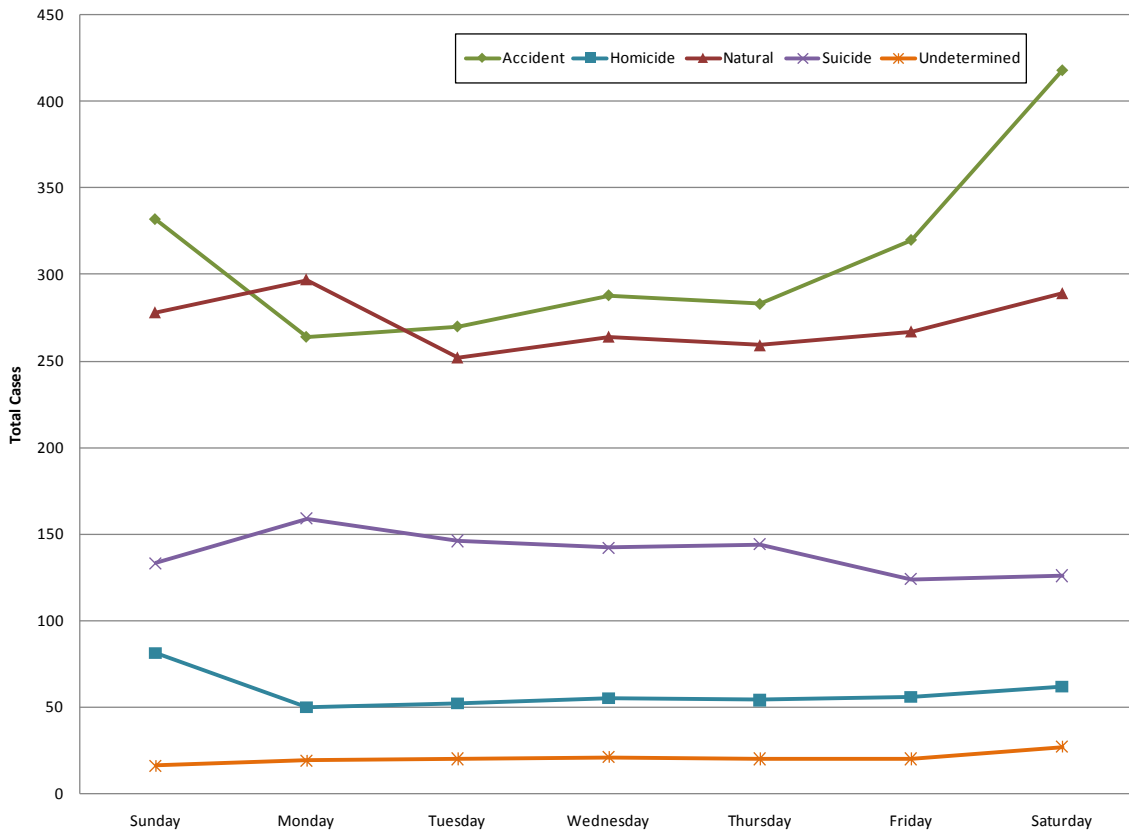


Table 8. Total Cases by Manner by City/County of Residence, 2009

## Manner of Death

County/City of Residence	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undetermined Total	Undetermined Rate	Total	Total Rate
Accomack	14	36.4	2	5.2	13	33.8	4	10.4	0	0.0	33	85.8
Albemarle	21	22.1	0	0.0	14	14.8	12	12.6	0	0.0	47	49.5
Alexandria	20	13.3	4	2.7	30	20.0	12	8.0	1	0.7	67	44.7
Alleghany	4	24.6	1	6.2	5	30.8	4	24.6	0	0.0	14	86.2
Amelia	10	77.6	0	0.0	3	23.3	4	31.0	0	0.0	17	131.9
Amherst	14	43.1	1	3.1	27	83.1	6	18.5	1	3.1	49	150.9
Appomattox	6	41.2	2	13.7	2	13.7	3	20.6	0	0.0	13	89.3
Arlington	26	12.0	1	0.5	32	14.7	9	4.1	0	0.0	68	31.3
Augusta	29	40.3	2	2.8	13	18.1	14	19.4	3	4.2	61	84.7
Bath	3	66.9	1	22.3	3	66.9	0	0.0	0	0.0	7	156.2
Bedford City	5	78.7	0	0.0	3	47.2	2	31.5	1	15.7	11	173.2
Bedford	27	40.2	1	1.5	9	13.4	14	20.8	2	3.0	53	78.9
Bland	5	73.6	1	14.7	0	0.0	3	44.2	0	0.0	9	132.5
Botetourt	6	18.4	1	3.1	7	21.5	7	21.5	1	3.1	22	67.6
Bristol	3	17.0	1	5.7	9	50.9	3	17.0	1	5.7	17	96.1
Brunswick	4	22.8	0	0.0	11	62.8	1	5.7	1	5.7	17	97.1
Buchanan	11	48.1	6	26.2	7	30.6	7	30.6	0	0.0	31	135.6
Buckingham	3	18.7	1	6.2	7	43.5	2	12.4	1	6.2	14	87.1
Buena Vista	1	16.1	0	0.0	1	16.1	1	16.1	0	0.0	3	48.2
Campbell	12	22.7	3	5.7	11	20.8	5	9.4	0	0.0	31	58.5
Caroline	9	32.3	0	0.0	14	50.2	3	10.8	0	0.0	26	93.3
Carroll	9	31.0	1	3.4	6	20.7	9	31.0	2	6.9	27	93.0
Charles City	4	55.4	0	0.0	4	55.4	3	41.6	0	0.0	11	152.4
Charlotte	7	58.1	1	8.3	3	24.9	3	24.9	1	8.3	15	124.6
Charlottesville	16	37.9	0	0.0	14	33.2	5	11.8	1	2.4	36	85.3
Chesapeake	56	25.2	17	7.6	40	18.0	25	11.2	3	1.3	141	63.4
Chesterfield	62	20.2	9	2.9	35	11.4	31	10.1	3	1.0	140	45.7

County/City of Residence	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undetermined Total	Undetermined Rate	Total Total	Total Rate
Clarke	7	48.0	1	6.9	7	48.0	2	13.7	0	0.0	17	116.5
Colonial Heights	4	22.4	0	0.0	4	22.4	1	5.6	0	0.0	9	50.5
Covington	2	32.5	0	0.0	1	16.3	1	16.3	0	0.0	4	65.1
Craig	3	60.4	0	0.0	2	40.2	1	20.1	0	0.0	6	120.7
Culpeper	15	32.3	0	0.0	13	28.0	10	21.5	0	0.0	38	81.7
Cumberland	6	61.5	2	20.5	1	10.2	3	30.7	0	0.0	12	123.0
Danville	22	49.5	8	18.0	19	42.8	7	15.8	1	2.3	57	128.4
Dickenson	5	31.1	1	6.2	4	24.9	7	43.5	0	0.0	17	105.7
Dinwiddie	9	34.2	1	3.8	8	30.4	1	3.8	0	0.0	19	72.1
Emporia	2	35.5	0	0.0	2	35.5	0	0.0	0	0.0	4	71.0
Essex	9	80.4	0	0.0	3	26.8	2	17.9	0	0.0	14	125.1
Fairfax City	10	40.5	0	0.0	11	44.6	6	24.3	1	4.1	28	113.5
Fairfax	144	13.9	19	1.8	149	14.4	105	10.1	8	0.8	425	41.0
Falls Church	0	0.0	0	0.0	2	16.7	0	0.0	0	0.0	2	16.7
Fauquier	27	39.7	4	5.9	17	25.0	9	13.2	2	2.9	59	86.8
Floyd	7	46.6	2	13.3	6	40.0	3	20.0	1	6.7	19	126.6
Fluvanna	7	27.2	0	0.0	4	15.5	1	3.9	0	0.0	12	46.6
Franklin City	1	11.3	1	11.3	1	11.3	0	0.0	0	0.0	3	34.0
Franklin	25	48.1	3	5.8	8	15.4	7	13.5	3	5.8	46	88.6
Frederick	26	34.7	3	4.0	13	17.3	5	6.7	2	2.7	49	65.4
Fredericksburg	3	12.9	0	0.0	6	25.9	2	8.6	1	4.3	12	51.7
Galax	1	14.5	1	14.5	2	29.1	1	14.5	1	14.5	6	87.2
Giles	7	40.3	0	0.0	6	34.6	4	23.0	0	0.0	17	97.9
Gloucester	6	15.3	0	0.0	8	20.4	5	12.8	0	0.0	19	48.5
Goochland	11	51.6	1	4.7	4	18.8	3	14.1	0	0.0	19	89.2
Grayson	5	31.7	0	0.0	1	6.3	2	12.7	0	0.0	8	50.7
Greene	5	27.1	0	0.0	2	10.9	4	21.7	0	0.0	11	59.7
Greensville	6	49.8	3	24.9	8	66.4	1	8.3	0	0.0	18	149.4
Halifax	12	34.0	0	0.0	17	48.2	5	14.2	1	2.8	35	99.3
Hampton	25	17.3	14	9.7	51	35.4	14	9.7	4	2.8	108	74.9
Hanover	12	12.0	1	1.0	16	16.0	16	16.0	0	0.0	45	45.0

County/City of Residence	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undetermined Total	Undetermined Rate	Total Total	Total Rate
Harrisonburg	6	13.3	0	0.0	3	6.6	6	13.3	0	0.0	15	33.2
Henrico	67	22.6	14	4.7	49	16.5	38	12.8	6	2.0	174	58.7
Henry	22	40.1	5	9.1	20	36.4	15	27.3	5	9.1	67	122.1
Highland	1	42.8	0	0.0	0	0.0	0	0.0	0	0.0	1	42.8
Hopewell	7	30.3	2	8.6	6	25.9	3	13.0	0	0.0	18	77.8
Isle of Wight	10	27.9	3	8.4	7	19.5	3	8.4	0	0.0	23	64.1
James City	16	25.1	0	0.0	18	28.2	5	7.8	0	0.0	39	61.2
King and Queen	4	58.9	0	0.0	1	14.7	1	14.7	0	0.0	6	88.3
King George	7	29.7	1	4.2	9	38.2	5	21.2	0	0.0	22	93.4
King William	8	49.3	0	0.0	6	37.0	5	30.8	0	0.0	19	117.1
Lancaster	3	26.7	0	0.0	2	17.8	0	0.0	0	0.0	5	44.5
Lee	13	51.7	1	4.0	8	31.8	4	15.9	1	4.0	27	107.3
Lexington	2	29.0	0	0.0	0	0.0	2	29.0	0	0.0	4	58.0
Loudoun	28	9.3	4	1.3	25	8.3	27	9.0	2	0.7	86	28.6
Louisa	13	39.3	2	6.0	6	18.1	5	15.1	1	3.0	27	81.6
Lunenburg	6	46.9	1	7.8	2	15.6	3	23.4	1	7.8	13	101.6
Lynchburg	18	24.3	2	2.7	16	21.6	6	8.1	3	4.1	45	60.9
Madison	2	14.6	1	7.3	2	14.6	1	7.3	1	7.3	7	51.1
Manassas	9	24.6	0	0.0	7	19.2	1	2.7	3	8.2	20	54.8
Martinsville	6	41.0	0	0.0	4	27.3	0	0.0	1	6.8	11	75.2
Mathews	3	33.4	1	11.1	3	33.4	0	0.0	0	0.0	7	77.9
Mecklenburg	13	40.7	2	6.3	12	37.5	3	9.4	1	3.1	31	97.0
Middlesex	4	37.3	0	0.0	1	9.3	5	46.6	0	0.0	10	93.2
Montgomery	20	22.0	4	4.4	27	29.7	5	5.5	2	2.2	58	63.7
Nelson	9	58.1	1	6.5	2	12.9	3	19.4	0	0.0	15	96.9
New Kent	6	33.1	1	5.5	3	16.6	2	11.0	0	0.0	12	66.3
Newport News	43	22.3	25	12.9	42	21.7	16	8.3	5	2.6	131	67.8
Norfolk	54	23.1	45	19.3	87	37.3	23	9.9	7	3.0	216	92.6
Northampton	7	51.9	0	0.0	5	37.1	0	0.0	0	0.0	12	88.9
Northumberland	4	30.8	0	0.0	3	23.1	0	0.0	0	0.0	7	53.9
Norton	2	53.9	0	0.0	2	53.9	0	0.0	0	0.0	4	107.7

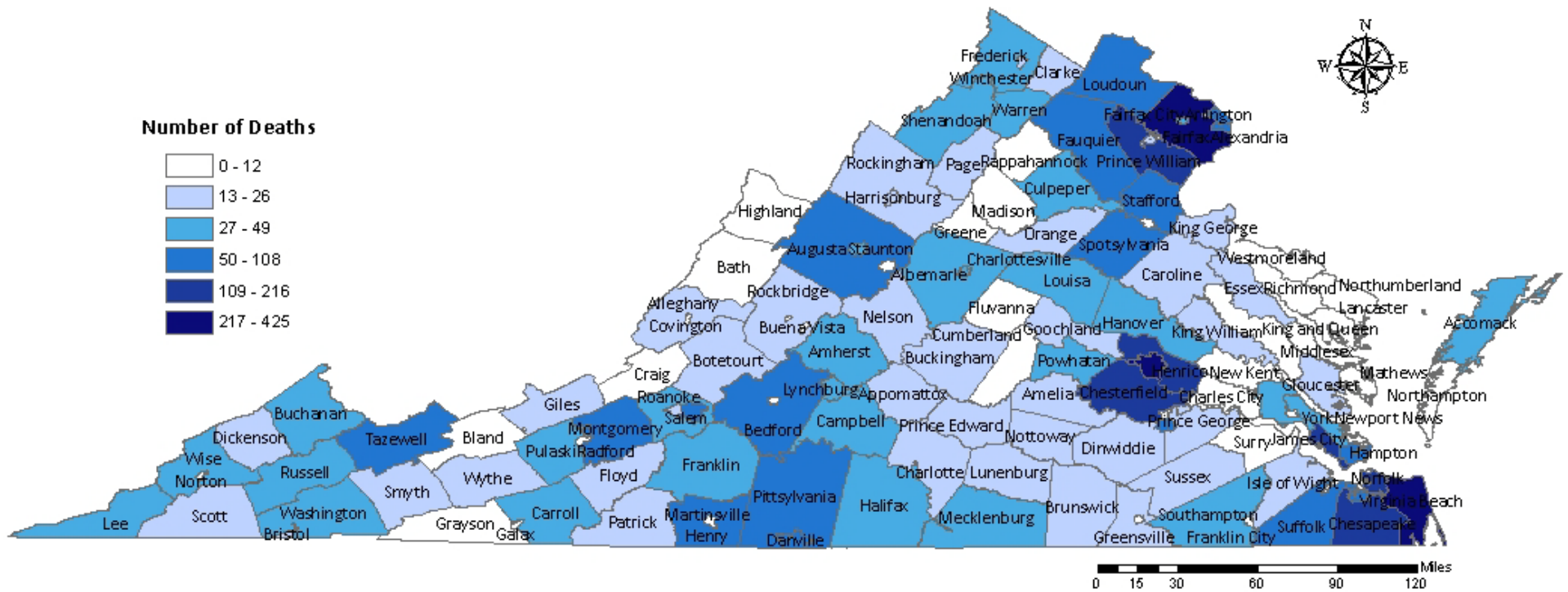
County/City of Residence	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undetermined Total	Undetermined Rate	Total Total	Total Rate
Nottoway	9	56.5	1	6.3	4	25.1	4	25.1	1	6.3	19	119.3
Orange	10	29.8	1	3.0	3	8.9	2	6.0	1	3.0	17	50.6
Page	9	37.4	0	0.0	4	16.6	3	12.5	2	8.3	18	74.8
Patrick	6	32.2	0	0.0	4	21.5	4	21.5	0	0.0	14	75.1
Petersburg	17	51.5	13	39.4	17	51.5	3	9.1	2	6.1	52	157.6
Pittsylvania	26	42.3	3	4.9	23	37.5	14	22.8	1	1.6	67	109.1
Poquoson	3	25.4	0	0.0	2	17.0	0	0.0	0	0.0	5	42.4
Portsmouth	29	29.2	16	16.1	39	39.3	12	12.1	2	2.0	98	98.7
Powhatan	8	28.6	1	3.6	20	71.5	2	7.2	0	0.0	31	110.9
Prince Edward	8	35.8	4	17.9	6	26.8	4	17.9	0	0.0	22	98.3
Prince George	11	29.6	2	5.4	4	10.8	7	18.9	0	0.0	24	64.7
Prince William	67	17.7	11	2.9	44	11.6	42	11.1	3	0.8	167	44.0
Pulaski	14	40.0	1	2.9	8	22.8	7	20.0	3	8.6	33	94.2
Radford	4	24.7	0	0.0	1	6.2	0	0.0	1	6.2	6	37.1
Rappahannock	3	42.6	0	0.0	3	42.6	2	28.4	0	0.0	8	113.7
Richmond City	81	39.6	33	16.1	95	46.5	33	16.1	6	2.9	248	121.3
Richmond	2	22.3	0	0.0	5	55.8	0	0.0	0	0.0	7	78.1
Roanoke City	43	45.5	11	11.6	24	25.4	14	14.8	3	3.2	95	100.5
Roanoke	18	19.8	2	2.2	12	13.2	7	7.7	1	1.1	40	44.0
Rockbridge	7	32.9	0	0.0	8	37.6	3	14.1	1	4.7	19	89.2
Rockingham	15	20.0	1	1.3	6	8.0	4	5.3	0	0.0	26	34.6
Russell	11	37.6	1	3.4	10	34.2	7	23.9	2	6.8	31	106.0
Salem	8	31.4	1	3.9	3	11.8	1	3.9	1	3.9	14	55.0
Scott	9	39.8	0	0.0	4	17.7	3	13.3	2	8.9	18	79.7
Shenandoah	8	19.5	1	2.4	12	29.2	7	17.1	1	2.4	29	70.7
Smyth	8	25.2	0	0.0	11	34.7	3	9.5	2	6.3	24	75.6
Southampton	12	64.9	2	10.8	16	86.6	3	16.2	0	0.0	33	178.5
Spotsylvania	29	24.0	5	4.1	20	16.5	9	7.4	2	1.7	65	53.7
Stafford	22	17.7	7	5.6	12	9.7	14	11.3	1	0.8	56	45.1
Staunton	8	33.5	4	16.7	10	41.9	6	25.1	1	4.2	29	121.4
Suffolk	18	21.5	7	8.4	19	22.7	7	8.4	1	1.2	52	62.2



County/City of Residence	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undetermined Total	Undetermined Rate	Total Total	Total Rate
Surry	0	0.0	0	0.0	1	14.1	4	56.4	0	0.0	5	70.5
Sussex	5	41.3	0	0.0	7	57.8	3	24.8	0	0.0	15	123.8
Tazewell	20	44.5	4	8.9	20	44.5	12	26.7	0	0.0	56	124.7
Virginia Beach	105	24.2	18	4.2	78	18.0	54	12.5	7	1.6	262	60.4
Warren	12	32.7	0	0.0	10	27.2	6	16.3	1	2.7	29	79.0
Washington	11	20.7	1	1.9	19	35.8	12	22.6	1	1.9	44	83.0
Waynesboro	6	27.0	0	0.0	1	4.5	2	9.0	1	4.5	10	45.0
Westmoreland	6	33.9	0	0.0	4	22.6	0	0.0	0	0.0	10	56.5
Williamsburg	8	62.8	0	0.0	2	15.7	1	7.9	0	0.0	11	86.4
Winchester	10	38.0	1	3.8	11	41.8	2	7.6	0	0.0	24	91.2
Wise	18	43.1	1	2.4	16	38.3	3	7.2	1	2.4	39	93.4
Wythe	10	34.6	0	0.0	4	13.9	5	17.3	0	0.0	19	65.8
York	6	9.8	2	3.3	14	22.9	6	9.8	0	0.0	28	45.8
<b>Total for State Residents</b>	<b>1964</b>	<b>24.9</b>	<b>391</b>	<b>5.0</b>	<b>1733</b>	<b>22.0</b>	<b>944</b>	<b>12.0</b>	<b>137</b>	<b>1.7</b>	<b>5169</b>	<b>65.6</b>
Out of Country	1	ND*	2	ND	7	ND	0	ND	0	ND	10	ND
Out of State	209	ND	15	ND	164	ND	28	ND	4	ND	420	ND
Unknown	1	ND	2	ND	2	ND	2	ND	2	ND	9	ND
<b>Total for Non-Residents</b>	<b>211</b>	<b>ND</b>	<b>19</b>	<b>ND</b>	<b>173</b>	<b>ND</b>	<b>30</b>	<b>ND</b>	<b>6</b>	<b>ND</b>	<b>439</b>	<b>ND</b>
<b>TOTAL</b>	<b>2175</b>	<b>ND</b>	<b>410</b>	<b>ND</b>	<b>1906</b>	<b>ND</b>	<b>974</b>	<b>ND</b>	<b>143</b>	<b>ND</b>	<b>5608</b>	<b>ND</b>

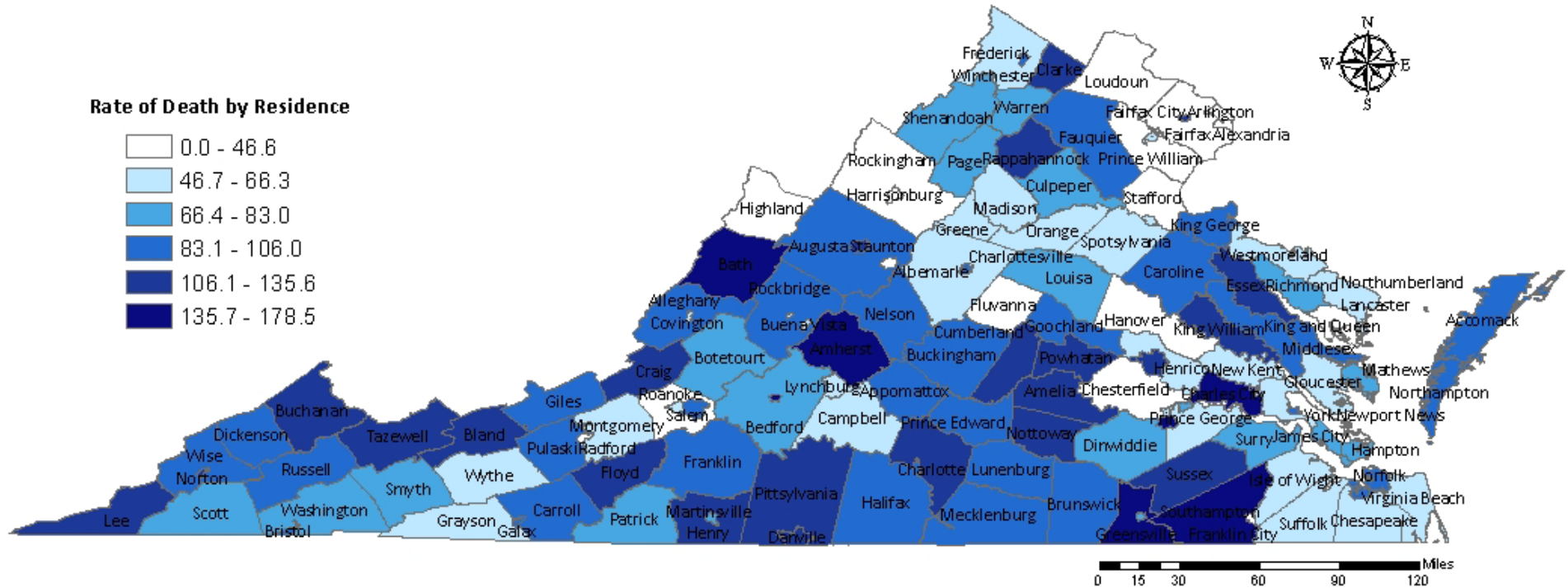
\*ND = No Denominator

Figure 11. Total Cases by City/County of Residence, 2009



Map shows City/County of residence but not necessarily where injury and/or death occurred.  
A total of 439 cases were from non-Virginia residents or where residency was unknown.

Figure 12. Rate of Total Cases by City/County of Residence, 2009



Rate is per 100,000 population.  
 Map shows City/County of residence but not necessarily where injury and/or death occurred.  
 A total of 439 cases were from non-Virginia residents or where residency was unknown.

Table 9. Total Cases by Manner by City/County of Injury/Acute Illness, 2009

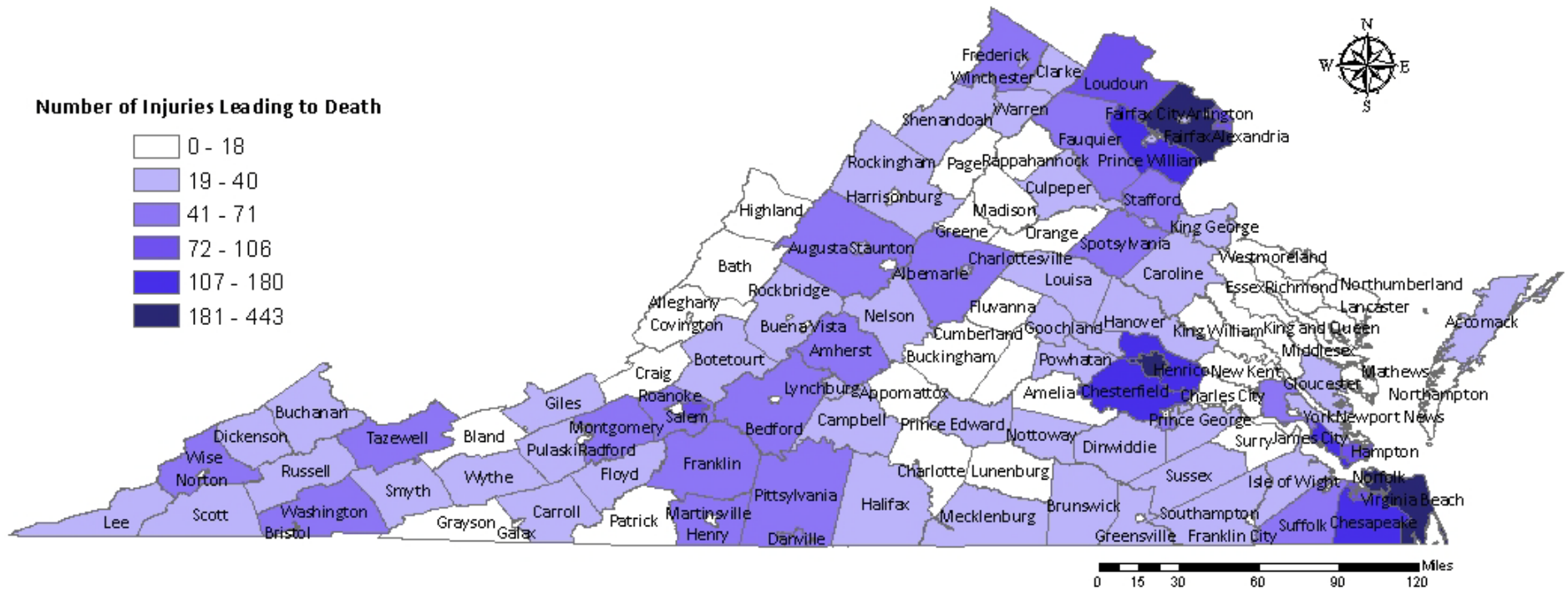
County/City of Injury/Acute Illness	Manner of Death					Total
	Accident Total	Homicide Total	Natural Total	Suicide Total	Undetermined Total	
Accomack	19	2	14	4	1	40
Albemarle	25	1	15	13	1	55
Alexandria	22	5	41	14	1	83
Alleghany	5	0	4	4	0	13
Amelia	9	0	3	3	0	15
Amherst	9	0	28	7	1	45
Appomattox	4	0	1	3	0	8
Arlington	34	2	44	10	0	90
Augusta	33	2	13	16	4	68
Bath	4	2	4	0	0	10
Bedford City	4	0	3	2	1	10
Bedford	30	0	9	14	3	56
Bland	7	1	2	3	0	13
Botetourt	11	1	7	5	1	25
Bristol	3	0	10	2	1	16
Brunswick	8	1	15	1	1	26
Buchanan	11	6	8	7	0	32
Buckingham	3	0	6	1	0	10
Buena Vista	2	0	1	1	0	4
Campbell	12	5	9	6	1	33
Caroline	9	0	13	3	0	25
Carroll	11	1	6	10	2	30
Charles City	7	0	4	2	0	13
Charlotte	5	1	5	3	1	15
Charlottesville	16	0	13	4	2	35
Chesapeake	53	17	40	25	1	136
Chesterfield	68	4	42	32	3	149
Clarke	8	1	7	3	0	19
Colonial Heights	2	0	4	1	0	7
Covington	2	0	1	0	0	3
Craig	4	0	2	4	0	10
Culpeper	12	0	15	11	0	38
Cumberland	3	2	0	2	0	7
Danville	20	8	20	8	1	57
Dickenson	5	1	5	8	0	19
Dinwiddie	12	1	9	1	0	23

County/City of Injury/Acute Illness	Accident Total	Homicide Total	Natural Total	Suicide Total	Undetermined Total	Total
Emporia	1	0	4	1	0	6
Essex	7	0	3	2	0	12
Fairfax City	11	0	4	6	1	22
Fairfax	149	19	163	104	8	443
Falls Church	1	0	3	0	0	4
Fauquier	33	3	19	9	2	66
Floyd	8	2	7	3	1	21
Fluvanna	7	0	6	2	0	15
Franklin City	1	2	2	0	0	5
Franklin	26	4	8	7	3	48
Frederick	31	2	15	8	2	58
Fredericksburg	6	1	11	2	2	22
Galax	0	1	3	1	1	6
Giles	9	0	6	5	0	20
Gloucester	10	0	7	4	0	21
Goochland	14	0	4	4	0	22
Grayson	6	0	1	2	0	9
Greene	4	0	1	3	0	8
Greensville	5	4	12	2	0	23
Halifax	14	0	17	5	1	37
Hampton	25	11	49	16	5	106
Hanover	13	0	14	11	0	38
Harrisonburg	5	0	4	6	0	15
Henrico	73	12	49	39	7	180
Henry	22	5	21	13	5	66
Highland	2	0	0	0	0	2
Hopewell	7	4	7	3	0	21
Isle of Wight	12	1	10	3	0	26
James City	16	1	23	7	0	47
King and Queen	8	0	1	1	0	10
King George	10	2	7	3	0	22
King William	9	0	3	4	0	16
Lancaster	2	0	3	1	0	6
Lee	13	1	7	5	2	28
Lexington	2	0	0	0	0	2
Loudoun	29	4	30	24	3	90
Louisa	21	1	5	5	1	33
Lunenburg	5	1	1	3	2	12
Lynchburg	16	0	15	5	1	37
Madison	3	0	4	1	1	9
Manassas	12	1	7	3	3	26
Martinsville	6	0	2	1	1	10

County/City of Injury/Acute Illness	Accident Total	Homicide Total	Natural Total	Suicide Total	Undetermined Total	Total
Mathews	4	1	3	0	0	8
Mecklenburg	16	1	10	5	1	33
Middlesex	6	0	2	5	0	13
Montgomery	24	7	29	5	2	67
Nelson	11	1	5	4	0	21
New Kent	8	1	2	3	0	14
Newport News	53	24	40	14	4	135
Norfolk	67	50	93	22	8	240
Northampton	9	0	6	0	0	15
Northumberland	4	0	2	0	0	6
Norton	1	0	2	1	0	4
Nottoway	14	1	7	4	2	28
Orange	10	1	3	2	1	17
Page	7	0	2	3	2	14
Patrick	8	0	6	4	0	18
Petersburg	14	11	18	3	2	48
Pittsylvania	29	4	24	13	1	71
Poquoson	3	0	2	0	0	5
Portsmouth	29	18	39	11	2	99
Powhatan	5	1	24	2	0	32
Prince Edward	14	7	9	5	0	35
Prince George	10	3	5	7	0	25
Prince William	64	11	46	41	3	165
Pulaski	15	1	8	6	3	33
Radford	3	0	1	0	1	5
Rappahannock	3	0	2	1	0	6
Richmond City	69	44	107	35	4	259
Richmond	2	0	4	0	0	6
Roanoke City	41	12	26	13	2	94
Roanoke	19	2	17	9	2	49
Rockbridge	13	0	14	5	1	33
Rockingham	16	1	8	4	0	29
Russell	11	1	10	7	1	30
Salem	8	1	3	0	1	13
Scott	9	0	5	4	3	21
Shenandoah	13	1	15	8	1	38
Smyth	7	1	12	3	2	25
Southampton	10	2	16	3	0	31
Spotsylvania	29	4	22	10	0	65
Stafford	24	6	13	15	1	59
Staunton	7	3	10	6	1	27
Suffolk	17	8	17	6	1	49

County/City of Injury/Acute Illness	Accident Total	Homicide Total	Natural Total	Suicide Total	Undetermined Total	Total
Surry	1	0	2	4	0	7
Sussex	11	0	5	4	0	20
Tazewell	19	6	20	12	0	57
Virginia Beach	110	17	83	60	6	276
Warren	9	1	10	6	1	27
Washington	14	1	19	13	0	47
Waynesboro	6	0	2	4	0	12
Westmoreland	6	0	7	2	0	15
Williamsburg	6	0	9	1	0	16
Winchester	10	0	12	2	0	24
Wise	22	1	15	4	1	43
Wythe	12	0	6	5	0	23
York	7	2	21	6	0	36
<b>Total for In-State</b>	<b>2105</b>	<b>403</b>	<b>1881</b>	<b>969</b>	<b>138</b>	<b>5496</b>
Out of Country	2	0	1	0	0	3
Out of State	50	1	17	4	2	74
Unknown	18	6	7	1	3	35
<b>TOTAL</b>	<b>2175</b>	<b>410</b>	<b>1906</b>	<b>974</b>	<b>143</b>	<b>5608</b>

Figure 13. Total Cases by City/County of Injury/Acute Illness, 2009



Map shows City/County of injury but not necessarily residency and/or where death occurred.  
 A total of 112 cases had the fatal injury or acute illness location occur outside of Virginia borders or was unknown.



Table 10. Total Cases by Manner by City/County of Death, 2009

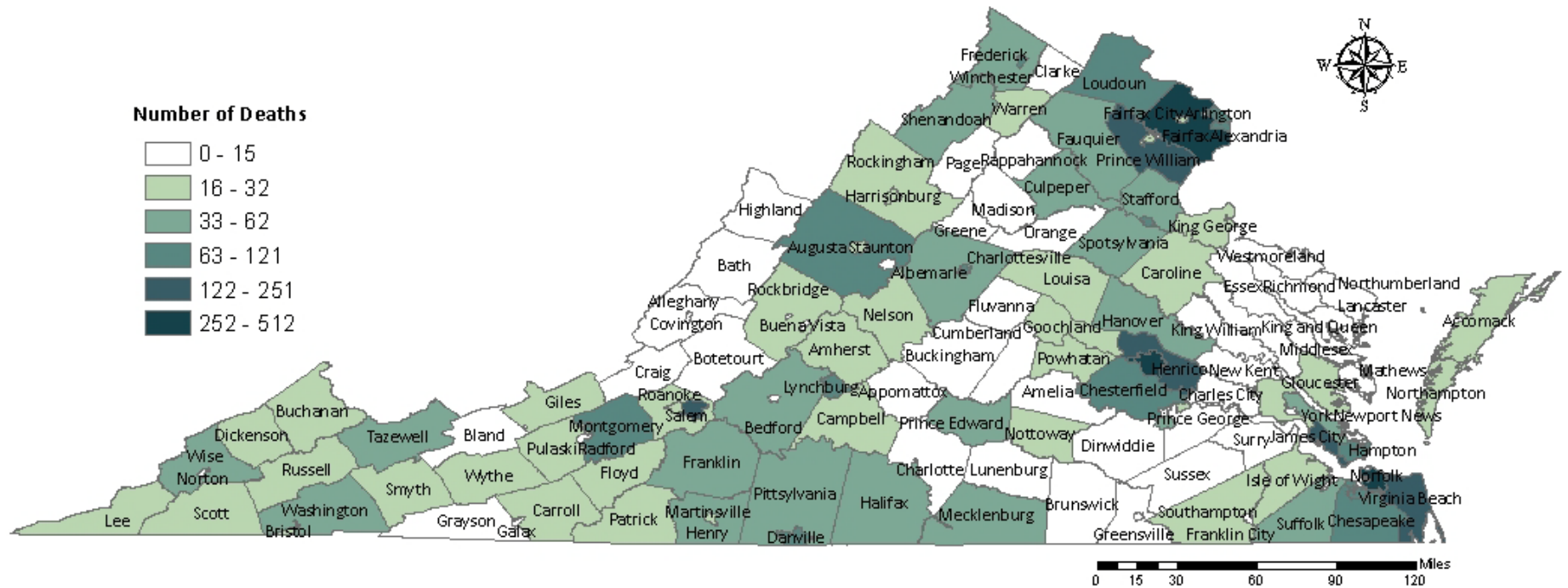
County/City of Death	Manner of Death					Total
	Accident Total	Homicide Total	Natural Total	Suicide Total	Undetermined Total	
Accomack	13	2	10	4	0	29
Albemarle	17	0	12	11	0	40
Alexandria	20	4	44	13	2	83
Alleghany	3	0	4	4	0	11
Amelia	6	0	3	3	0	12
Amherst	3	1	16	4	0	24
Appomattox	1	0	2	2	0	5
Arlington	32	2	44	9	0	87
Augusta	32	1	13	16	6	68
Bath	4	2	4	0	0	10
Bedford City	2	0	2	2	2	8
Bedford	19	0	6	12	2	39
Bland	4	1	0	3	0	8
Botetourt	6	0	5	4	0	15
Bristol	3	0	10	2	1	16
Brunswick	7	0	7	1	0	15
Buchanan	9	6	6	6	0	27
Buckingham	3	0	4	1	0	8
Buena Vista	1	0	1	1	0	3
Campbell	7	5	9	5	1	27
Caroline	7	0	8	3	0	18
Carroll	9	1	5	10	2	27
Charles City	5	0	4	2	0	11
Charlotte	4	1	3	3	0	11
Charlottesville	67	3	24	9	3	106
Chesapeake	46	10	36	21	1	114
Chesterfield	51	3	38	26	3	121
Clarke	5	1	5	3	0	14
Colonial Heights	2	0	3	1	0	6
Covington	1	0	1	0	0	2
Craig	4	0	2	4	0	10
Culpeper	12	0	13	11	0	36
Cumberland	0	2	0	2	0	4
Danville	24	10	26	8	1	69
Dickenson	5	1	5	8	0	19
Dinwiddie	7	0	4	1	0	12
Emporia	0	1	8	1	0	10
Essex	7	0	4	2	0	13

County/City of Death	Accident Total	Homicide Total	Natural Total	Suicide Total	Undetermined Total	Total
Fairfax City	3	0	5	8	1	17
Fairfax	208	24	168	105	7	512
Falls Church	1	1	2	0	0	4
Fauquier	29	2	20	9	2	62
Floyd	6	1	5	3	1	16
Fluvanna	5	0	5	2	0	12
Franklin City	4	2	4	0	0	10
Franklin	20	4	7	7	2	40
Frederick	19	2	10	6	2	39
Fredericksburg	36	4	23	4	2	69
Galax	0	1	4	1	1	7
Giles	10	0	7	5	0	22
Gloucester	11	0	8	3	1	23
Goochland	10	0	4	2	0	16
Grayson	6	0	1	2	0	9
Greene	4	0	1	3	0	8
Greensville	4	4	5	2	0	15
Halifax	14	0	18	5	1	38
Hampton	20	7	49	13	5	94
Hanover	9	0	16	11	0	36
Harrisonburg	6	0	4	6	0	16
Henrico	53	7	48	37	5	150
Henry	17	5	15	12	1	50
Highland	1	0	0	0	0	1
Hopewell	6	2	10	4	0	22
Isle of Wight	7	1	7	3	0	18
James City	9	0	13	6	0	28
King and Queen	8	0	1	1	0	10
King George	7	1	6	3	0	17
King William	5	0	3	3	0	11
Lancaster	3	0	3	0	0	6
Lee	13	1	7	5	2	28
Lexington	1	0	0	0	0	1
Loudoun	19	3	28	24	3	77
Louisa	12	1	3	3	1	20
Lunenburg	3	1	0	1	2	7
Lynchburg	42	0	29	10	4	85
Madison	3	0	4	1	1	9
Manassas	14	2	10	5	1	32
Martinsville	10	0	8	2	3	23
Mathews	2	1	1	0	0	4
Mecklenburg	14	3	14	5	2	38

County/City of Death	Accident Total	Homicide Total	Natural Total	Suicide Total	Undetermined Total	Total
Middlesex	6	0	2	6	0	14
Montgomery	22	8	31	5	2	68
Nelson	8	1	5	3	0	17
New Kent	6	1	0	3	0	10
Newport News	62	31	44	18	4	159
Norfolk	139	63	107	30	12	351
Northampton	7	0	10	0	1	18
Northumberland	2	0	2	0	0	4
Norton	3	0	1	1	0	5
Nottoway	7	0	4	3	2	16
Orange	6	0	3	2	1	12
Page	7	0	2	3	2	14
Patrick	7	0	7	4	0	18
Petersburg	12	11	28	3	2	56
Pittsylvania	16	2	18	11	0	47
Poquoson	2	0	2	0	0	4
Portsmouth	21	16	40	10	1	88
Powhatan	4	1	12	2	0	19
Prince Edward	13	7	11	5	0	36
Prince George	6	1	1	5	0	13
Prince William	45	9	42	38	5	139
Pulaski	12	1	8	6	3	30
Radford	4	0	1	0	1	6
Rappahannock	1	0	1	1	0	3
Richmond City	173	58	152	51	7	441
Richmond	2	0	1	0	0	3
Roanoke City	98	14	40	21	5	178
Roanoke	10	1	11	8	1	31
Rockbridge	8	0	14	4	1	27
Rockingham	7	2	8	4	0	21
Russell	11	1	10	8	1	31
Salem	11	0	4	0	1	16
Scott	9	0	5	4	3	21
Shenandoah	10	1	15	8	1	35
Smyth	7	0	12	3	2	24
Southampton	5	2	12	3	0	22
Spotsylvania	13	3	14	11	0	41
Stafford	17	4	12	13	1	47
Staunton	5	2	9	6	0	22
Suffolk	13	5	20	6	1	45
Surry	1	0	0	4	0	5
Sussex	8	0	1	4	0	13

County/City of Death	Accident Total	Homicide Total	Natural Total	Suicide Total	Undetermined Total	Total
Tazewell	20	5	20	12	0	57
Virginia Beach	99	15	74	59	4	251
Warren	9	1	10	5	1	26
Washington	14	1	18	13	0	46
Waynesboro	3	0	0	4	0	7
Westmoreland	3	0	7	2	0	12
Williamsburg	3	0	8	1	0	12
Winchester	37	0	24	6	0	67
Wise	19	2	16	4	1	42
Wythe	10	0	8	5	0	23
York	8	0	31	6	0	45
<b>Total for In-State</b>	<b>2173</b>	<b>406</b>	<b>1905</b>	<b>974</b>	<b>140</b>	<b>5598</b>
Out of State	2	4	1	0	2	9
Unknown	0	0	0	0	1	1
<b>TOTAL</b>	<b>2175</b>	<b>410</b>	<b>1906</b>	<b>974</b>	<b>143</b>	<b>5608</b>

Figure 14. Total Cases by City/County of Death, 2009



Map shows City/County of death but not necessarily residency and/or where injury/acute illness occurred.  
 A total of 10 cases occurred outside of Virginia borders, ex. death at sea.

**Table 11. Total Cases by Cause of Death, 2009**

<b>Natural Deaths</b>	<b>Total Cases</b>	<b>Autopsied</b>
<b>Pulmonary Diseases/Disorders</b>	<b>167</b>	<b>88</b>
Asthma	8	4
COPD	34	11
Emboli	32	23
Pneumonia	60	37
Pulmonary Malignancy	26	9
Other Pulmonary Disease/Disorder	7	4
<b>Central Nervous System Diseases/Disorders</b>	<b>86</b>	<b>47</b>
Seizure Disorder	23	14
Vascular Disease	39	21
Degenerative Disease	8	1
Meningitis (Bacterial or Viral)	2	2
CNS Malignancy	3	3
Other CNS Disease/Disorder	11	6
<b>Cardiovascular Diseases/Disorders</b>	<b>1271</b>	<b>358</b>
Atherosclerosis	700	104
Hypertension	212	84
Atherosclerosis & Hypertension	157	97
Congenital Defect	14	12
Vascular Dissection/Ruptures	10	5
Valvular	5	3
Acute Coronary Insufficiency	118	7
Other Cardiac Disease/Disorder	55	46
<b>Gastrointestinal Diseases/Disorders</b>	<b>59</b>	<b>24</b>
GI Hemorrhage	10	1
Cirrhosis	8	2
Hepatitis	3	1
GI Malignancy	19	10
Other GI Disease/Disorder	19	10
<b>Genitourinal Diseases/Disorders</b>	<b>14</b>	<b>2</b>
Renal Disease	4	0
Genitourinal Malignancy	8	1
Other GU Disease/Disorder	2	1
<b>Perinatal and Pediatric Diseases/Disorders</b>	<b>34</b>	<b>32</b>
Maternal Complications	1	1
Fetal Complications	5	4
Sudden Infant Death Syndrome (SIDS)	23	23
Other Perinatal or Pediatric Disorder	5	4
<b>Systemic Diseases/Disorders</b>	<b>254</b>	<b>105</b>
Blood Disorders	6	0
Diabetes	57	23
AIDS/HIV	12	4

Sepsis	15	7
Other Infectious Disease	13	9
Metastatic Malignancy Unknown Primary	6	2
Chronic Alcoholism	114	40
Chronic Drug Abuse	5	3
Other Systemic Disease/Disorder	26	17
<b>Other Natural Diseases/Disorders</b>	<b>21</b>	<b>11</b>
Other Malignancy	7	2
Other Natural Disease/Disorder	14	9
<b>Natural Subtotal</b>	<b>1906</b>	<b>667</b>
<b>Unnatural Deaths</b>	<b>Total Cases</b>	<b>Autopsied</b>
<b>Asphyxia</b>	<b>433</b>	<b>169</b>
Choking (Aspiration: Food or Foreign Object)	24	4
Drowning	95	59
Hanging	201	50
Mechanical	21	8
Positional	8	4
Strangulation/Neck Compression	16	15
Suffocation/Smothering	13	13
Oxygen Replacement/Displacement	6	3
Helium	11	2
Plastic Bag	12	3
CO Poisoning (MV Exhaust)	16	5
CO Poisoning (Other)	8	2
Other Asphyxia	2	1
<b>Electrocution</b>	<b>8</b>	<b>7</b>
High Voltage	6	5
Low Voltage	2	2
<b>Exposure</b>	<b>28</b>	<b>11</b>
Hyperthermia	5	2
Hypothermia	23	9
<b>Fire Injuries</b>	<b>96</b>	<b>48</b>
Thermal Burns	21	3
Inhalation of Combustion Products	20	10
Thermal Burns & Inhalation of Combustions Products	55	35
<b>Judicial Execution</b>	<b>3</b>	<b>2</b>
Lethal Injection	2	2
Electrocution	1	0
<b>Gunshot Wound</b>	<b>843</b>	<b>841</b>
GSW to Head/Neck	550	549
GSW to Chest	137	136
GSW to Abdomen	22	22
GSW to Truck	80	80
GSW to Extremities	4	4
GSW Multiple	50	50

<b>Blunt Force Injuries</b>	<b>1395</b>	<b>210</b>
BFT to Head/Neck	724	106
BFT to Chest	70	8
BFT to Abdomen	19	8
BFT to Trunk	67	18
BFT to Extremities	118	6
BFT to Multiple	397	64
<b>Penetrating Injuries</b>	<b>69</b>	<b>62</b>
Incised	18	15
Stab	47	45
Other Penetrating Injuries	4	2
<b>Substance Abuse</b>	<b>713</b>	<b>578</b>
Ethanol Poisoning	29	17
Prescription Drug Poisoning	433	351
Illegal (Street) Drug Poisoning	130	117
Mixed Category Drug Poisoning	80	66
Inhalant Poisoning	7	7
OTC Poisoning	22	13
Ethylene Glycol Poisoning	3	2
Not Otherwise Specified Poisoning	5	4
Other Poisons (Heavy Metals, etc.)	4	1
<b>Other Unnatural Deaths</b>	<b>13</b>	<b>8</b>
Other Unnatural	13	8
<b><i>Unnatural Subtotal</i></b>	<b>3601</b>	<b>1936</b>
<b>Undetermined Deaths</b>	<b>Total Cases</b>	<b>Autopsied</b>
<b>Undetermined After Autopsy and/or Investigation</b>	<b>101</b>	<b>100</b>
Sudden Unexpected Infant Death (SUID)	65	65
Skeletal/Mummified Remains	8	8
Other Undetermined	28	27
<b><i>Undetermined Subtotal</i></b>	<b>101</b>	<b>100</b>
<b>TOTAL</b>	<b>5608</b>	<b>2703</b>



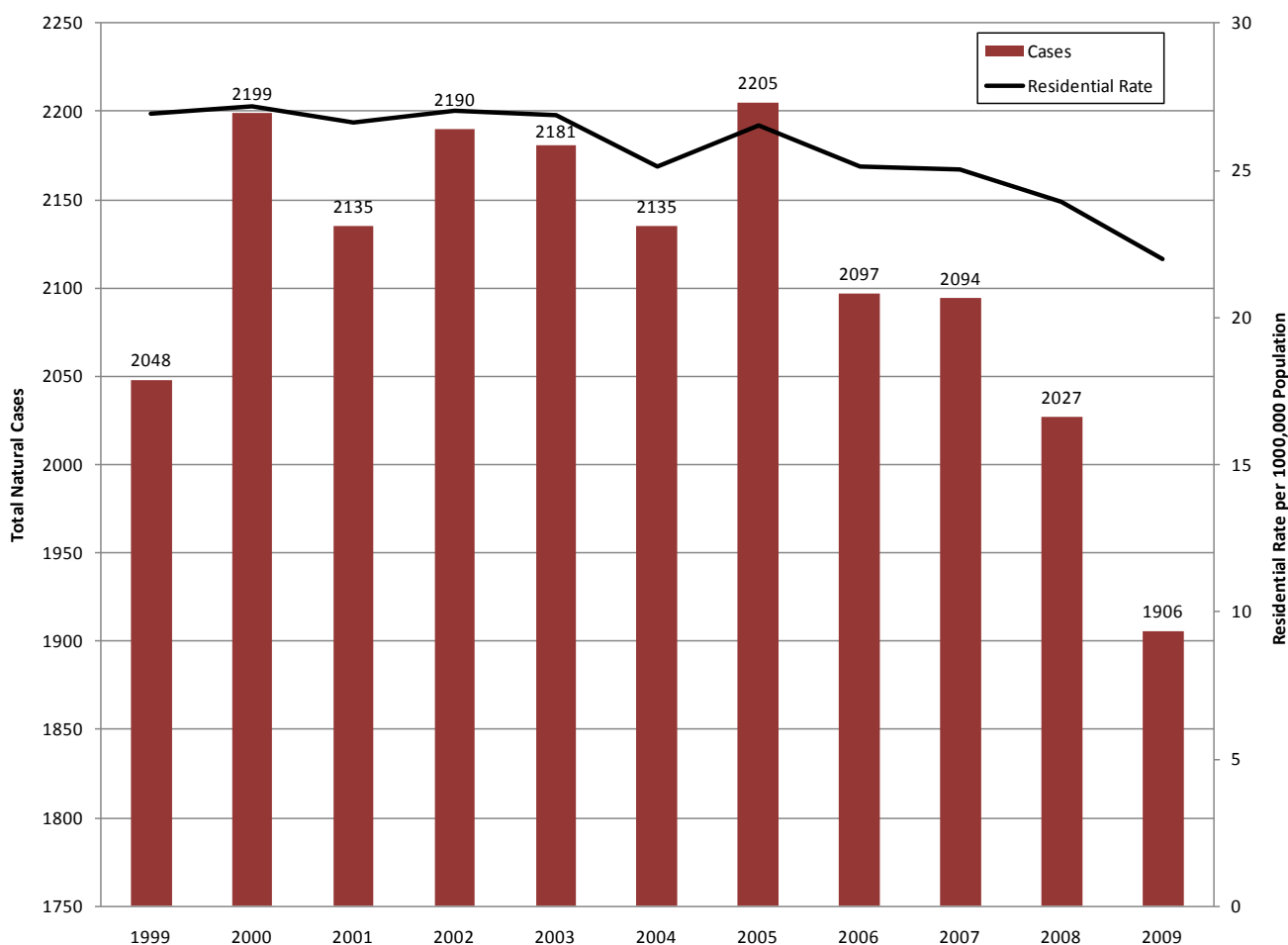
## SECTION 3: MANNER OF DEATH

### NATURAL DEATH (N=1906)

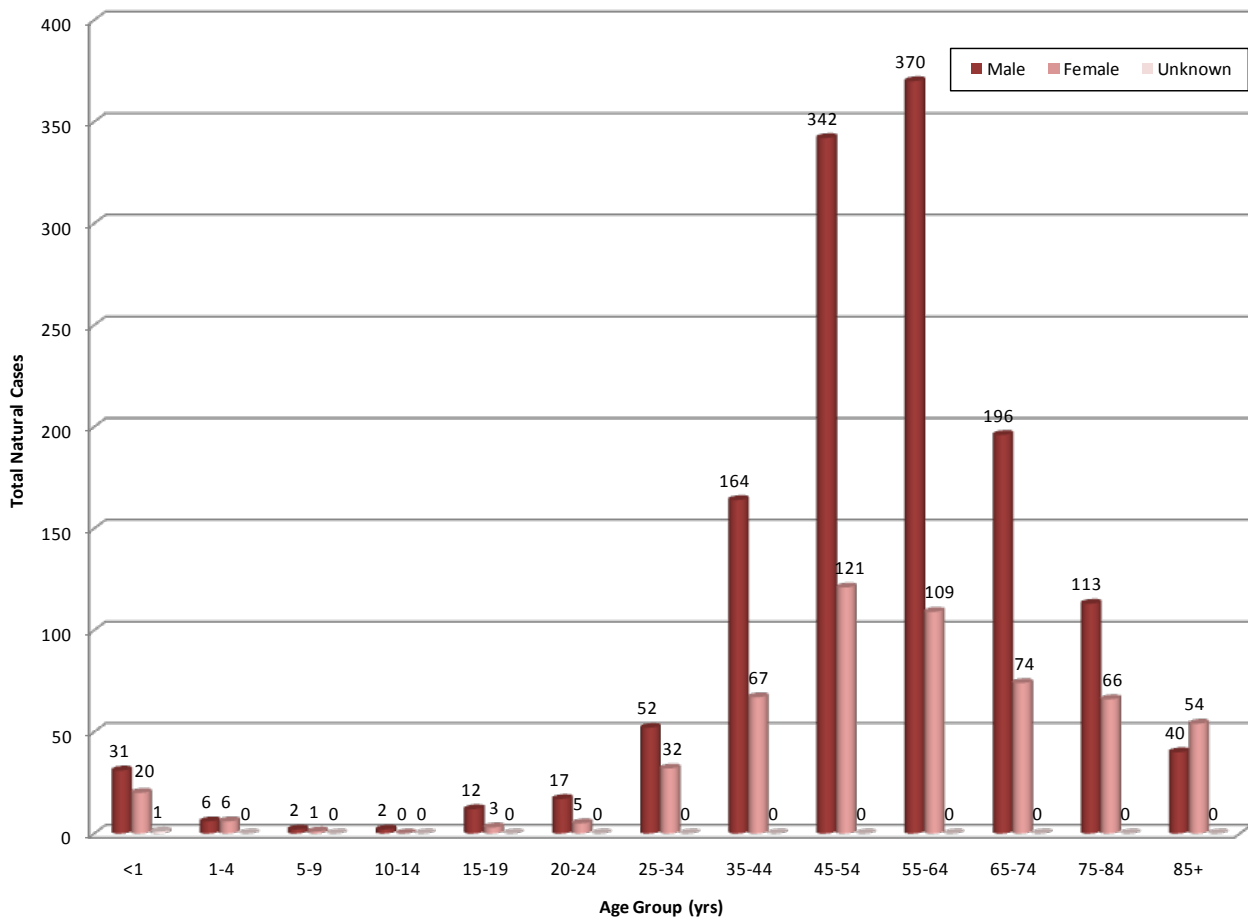
Natural deaths enter the medical examiner system as deaths that are sudden, unexpected or suspicious, which upon examination and investigation are established as natural. These deaths may also fall under the OCME's jurisdiction as the individuals may not have had a primary care physician.

- Natural deaths accounted for 34% of all deaths investigated by the OCME in 2009
- The number of natural deaths investigated by the OCME is at an 11-year low, likely due to a policy instituted by OCME and VDH in mid-2008 in which local health directors, not local MEs, are now called by funeral homes for assistance when a private practice physician is delinquent in signing natural deaths certificates on their private patients

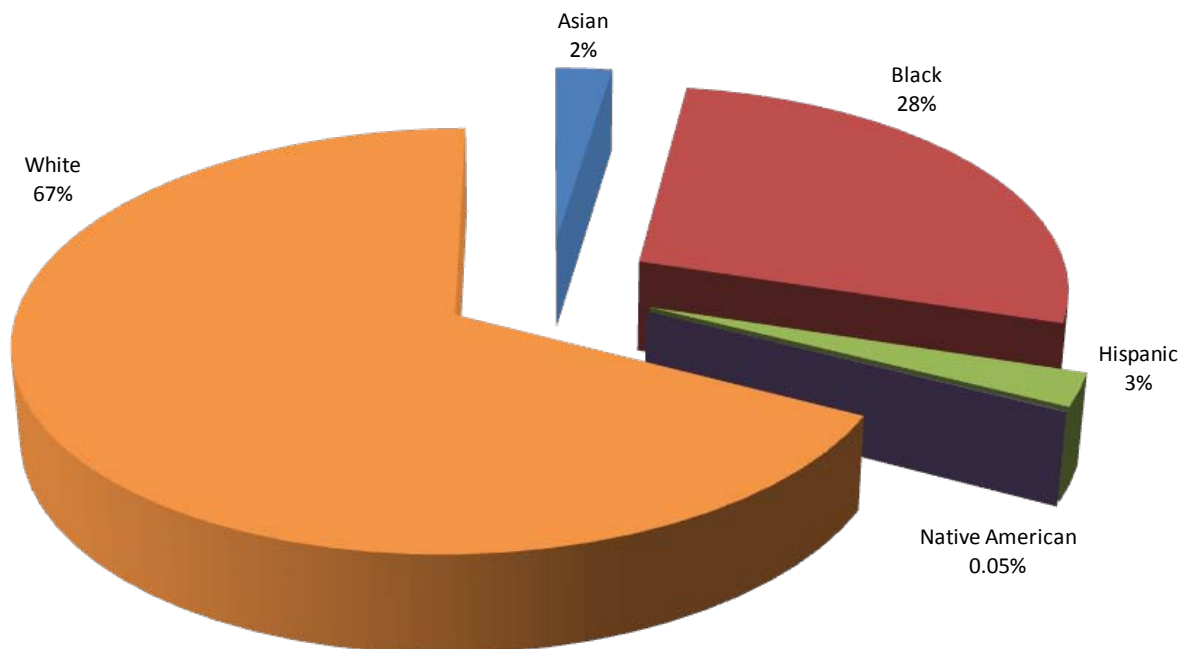
**Figure 15. Natural Deaths & Rate by Year of Death, 1999-2009**



**Figure 16. Natural Deaths by Age Group by Gender, 2009**



**Figure 17. Natural Deaths by Race/Ethnicity, 2009**

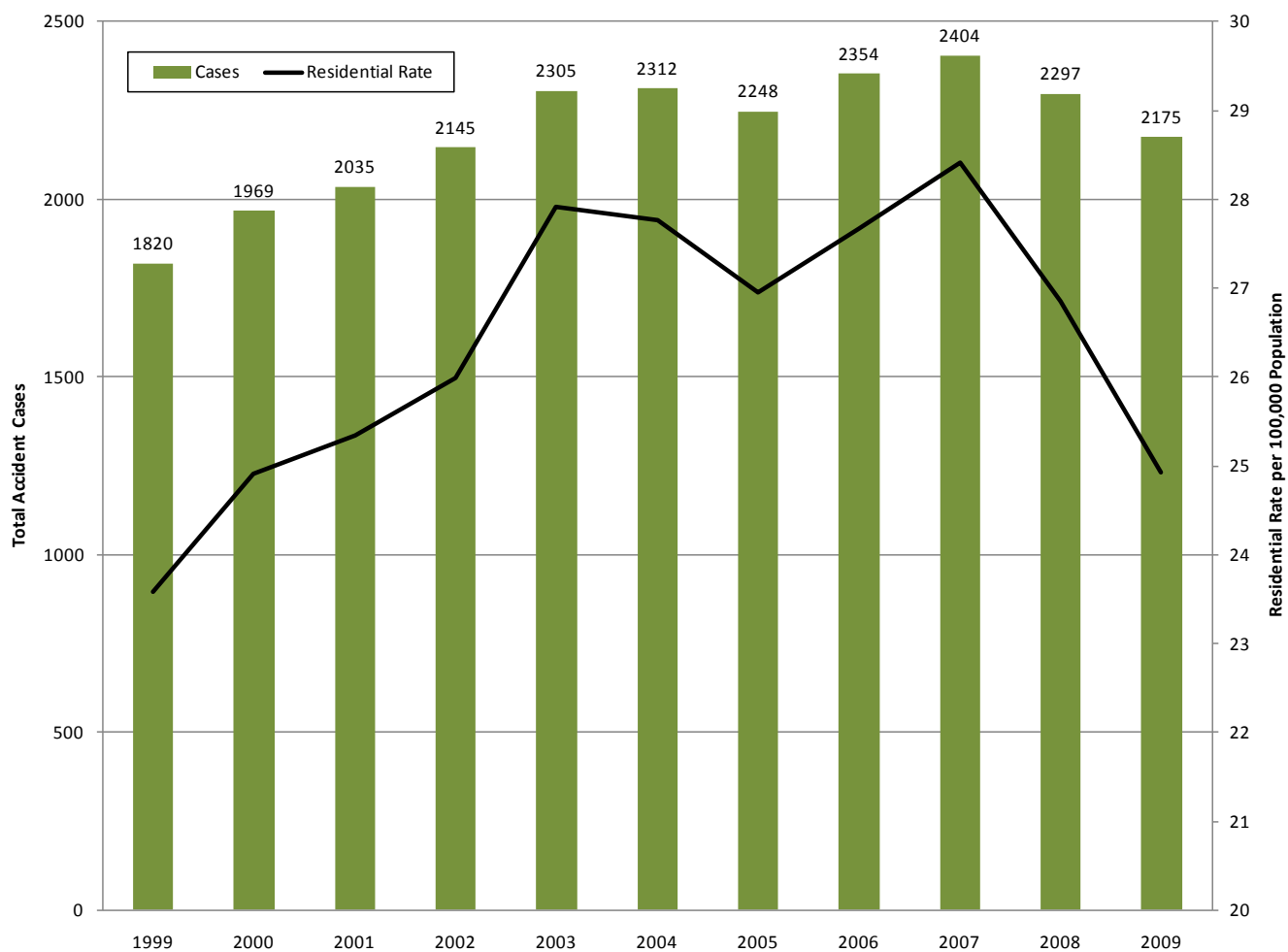


## ACCIDENTAL DEATHS (N=2175)

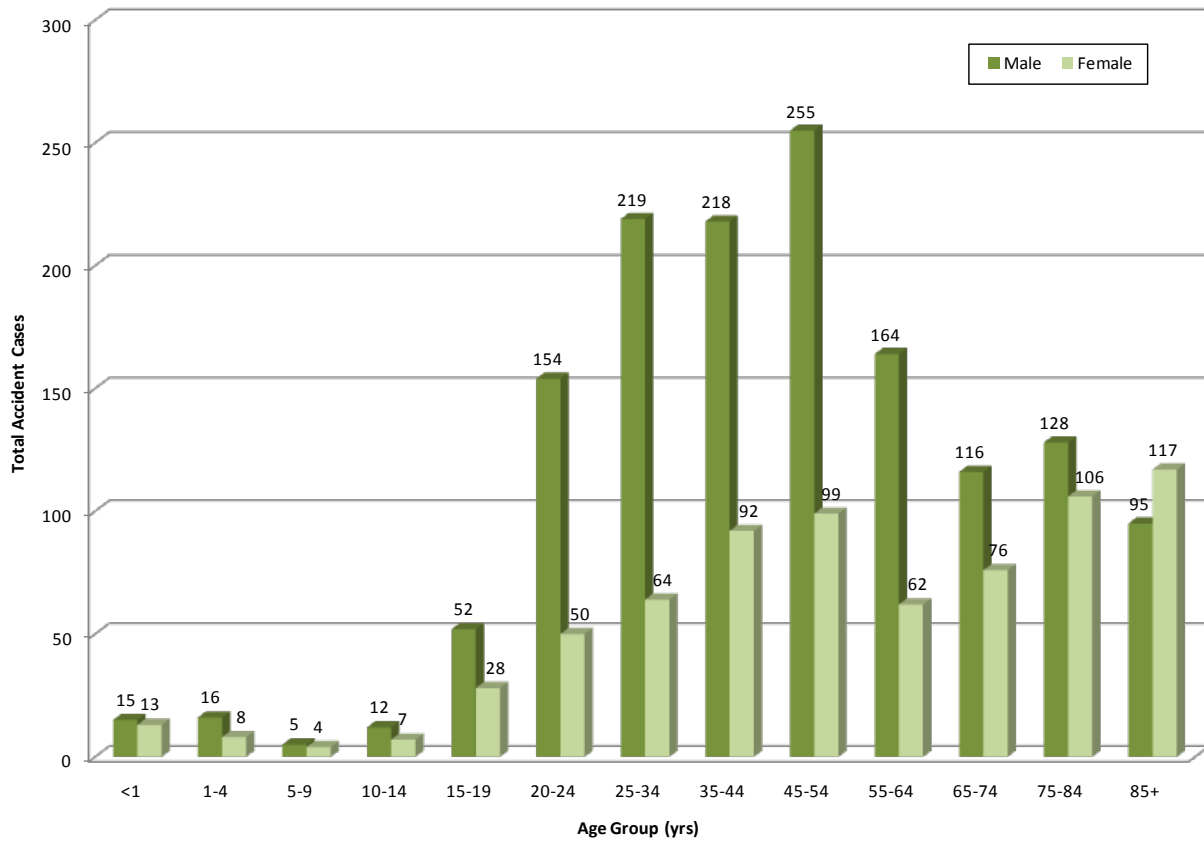
Accidents account for 38.8 percent of the deaths investigated by the OCME in 2009: the greatest proportion of deaths by any manner.

- The total number of accidental deaths has decreased for the second year in a row
- Residential rates decreased to 24.9 per 100,000
- Motor vehicle deaths were the most common cause of accidental deaths with 38.1 percent of all accidents followed by drug use with 24.2 percent
- Seniors, 85 and older, had the highest rate of accidental falls (129 per 100,000)

**Figure 18. Accidental Deaths & Rate by Year of Death, 1999-2009**



**Figure 19. Accidental Deaths by Age Group by Gender, 2009**



**Figure 20. Accidental Deaths by Race/Ethnicity, 2009**

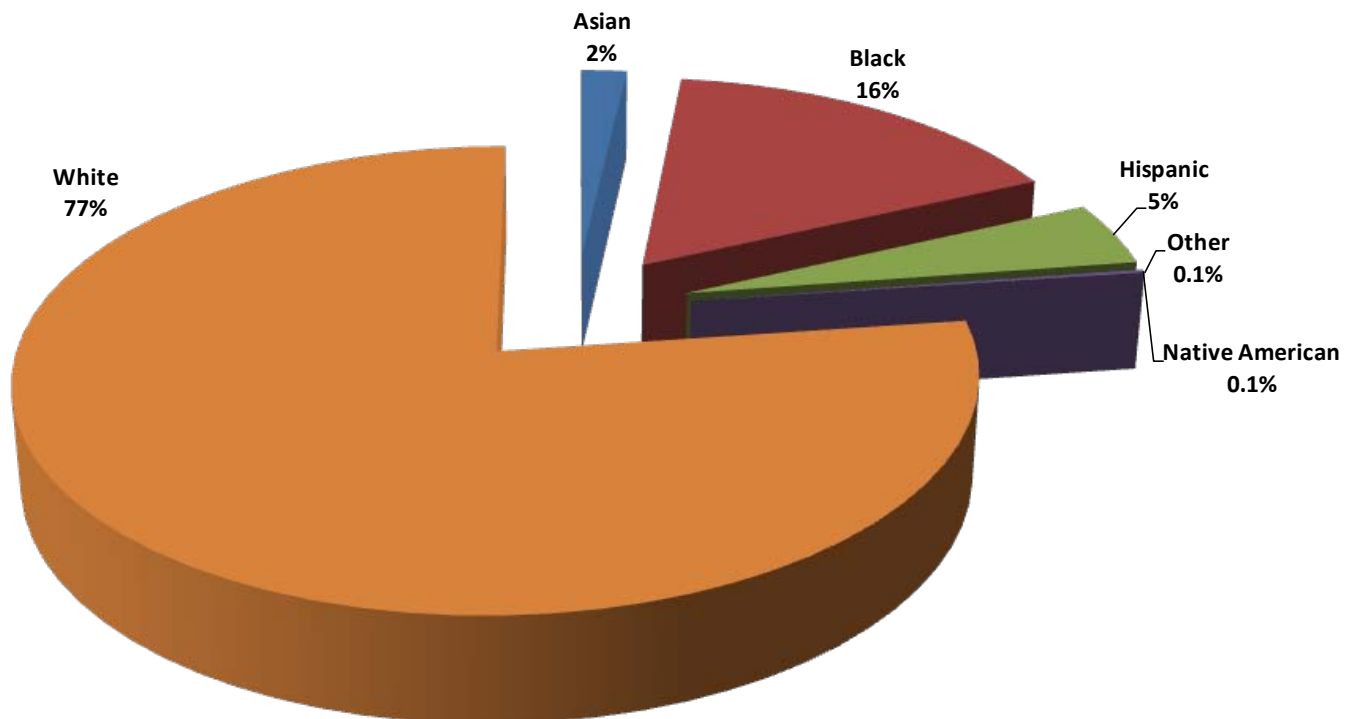


Table 12. Accidental Deaths by Method of Death, 2009

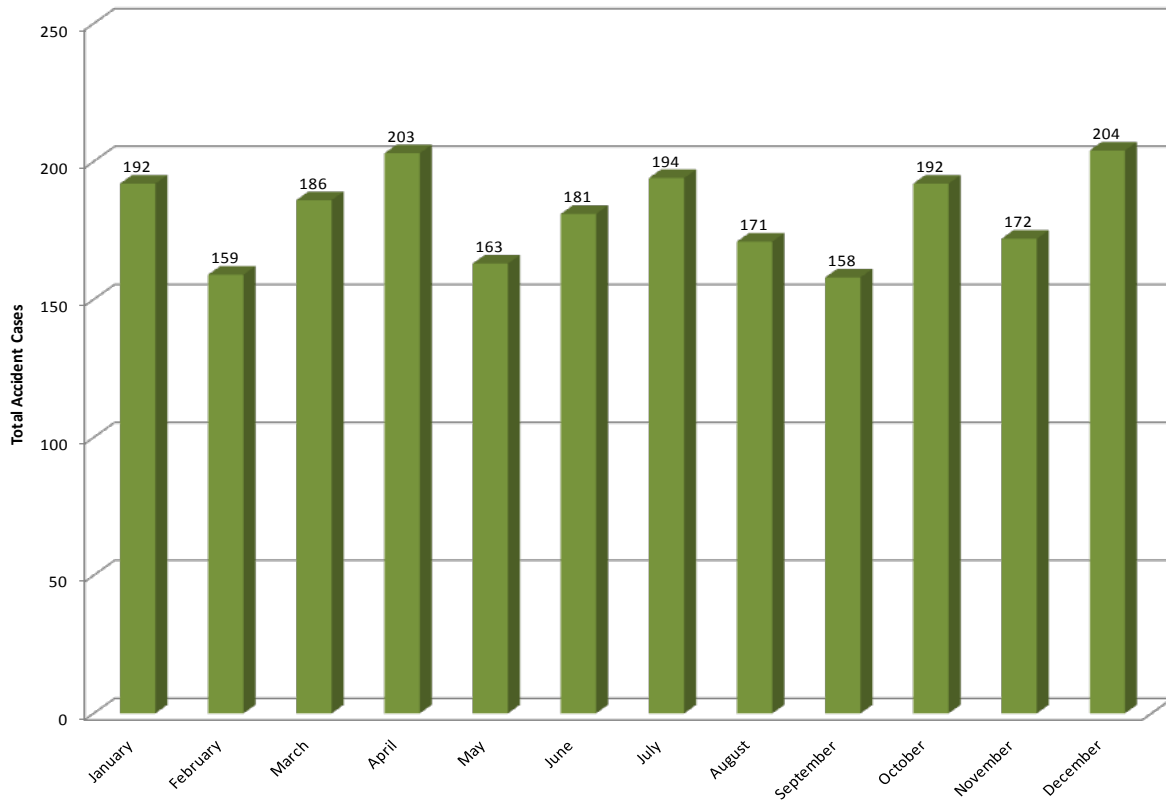
Method of Death	Total Cases	Autopsied
<i>Animal/Insect</i>		
Animal/Insect related (bitten, stung, kicked)	7	3
<i>Asphyxia</i>		
Choked on food/foreign object	24	4
Drowned	81	49
Hanging	8	5
Mechanical/Positional	12	9
Other	3	2
Strangled	2	1
Suffocation/Smothering	12	12
<i>Drug Use</i>		
Ingested ethanol of other alcohol	27	16
Ingested and/or injected illicit, prescription, and/or other type of drug	527	438
<i>Electrical</i>		
Contacted electrical current	7	6
<i>Exposure</i>		
Exposed to cold	23	9
Exposed to heat	4	1
<i>Fall/Jump</i>		
Fall from any height	467	45
Jump from any height	3	0
<i>Fire</i>		
Inhalation of Combustion Products	17	8
Steam/Scald	2	0
Thermal Burns	18	2
Thermal Burns & Inhalation of Combustion Products	40	22
<i>Motor Vehicle</i>		
Aircraft	6	6
All terrain vehicle	16	1
Bicycle	14	5
Boat	1	0
Bus	4	2
Car	420	38
Construction equipment	5	1
Farm equipment	9	1
Mo-ped	7	0
Motorcycle	72	3
Multiple vehicles	3	1
Pickup truck	96	11
Recreational vehicle	1	0
Scooter	2	0

Method of Death	Total Cases	Autopsied
Sport utility vehicle	96	4
Tractor trailer	17	8
Trailer	1	0
Train	6	4
Truck other	13	5
Van	32	3
Unknown	8	0
<i>Poisoned</i>		
Inhaled toxic agent (Carbon monoxide)	7	1
<i>Traumatic Injury</i>		
Accidental discharge of firearm	10	10
Handgun	(3)	(3)
Rifle	(3)	(3)
Shotgun	(4)	(4)
Accidental cut injury	3	0
Beatings/Blows	3	2
Falling object	26	12
<i>Unknown/Other</i>		
Accidental - Unknown/Other	13	7
<b>TOTAL</b>	<b>2175</b>	<b>757</b>

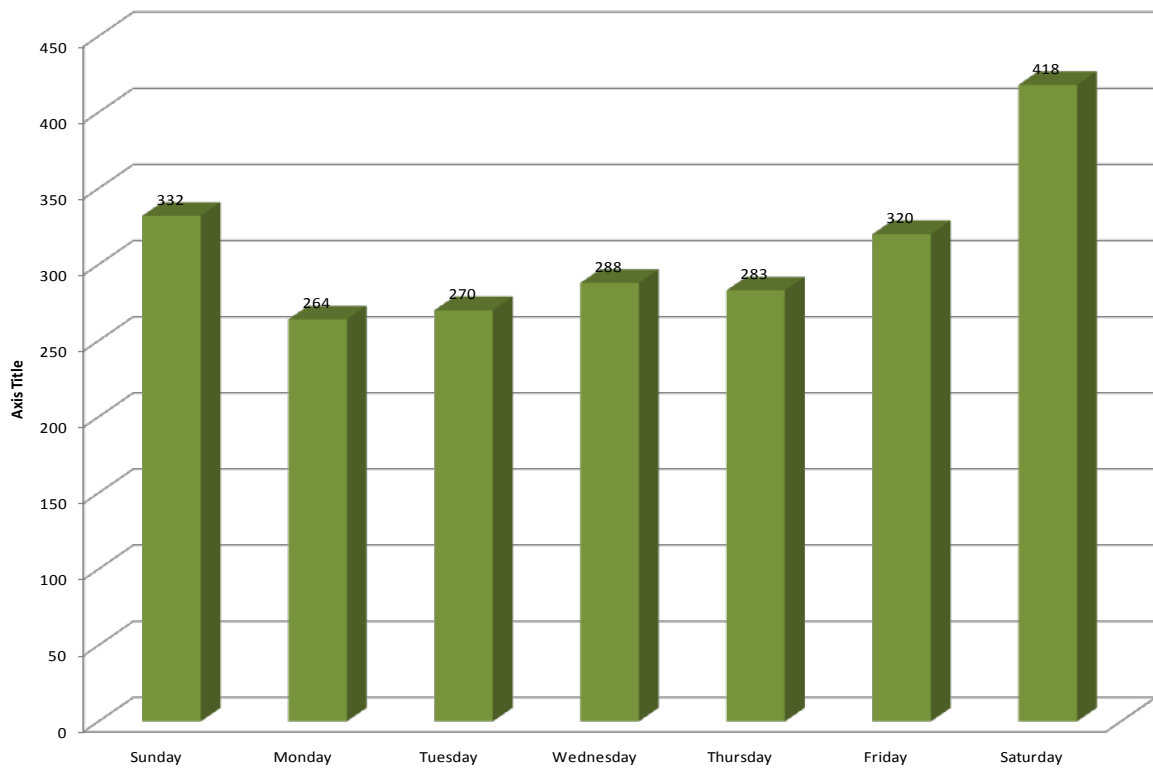
Table 13. Top 5 Accidental Methods of Death by Age Group with Corresponding Rates, 2009

Age Group	Method of Death				
	Fire/Smoke Inhalation (Rate)	Drowning (Rate)	Fall (Rate)	Drug Use (Rate)	Motor Vehicle (Rate)
<1	0 (0)	1 (0.9)	0 (0)	0 (0)	6 (4.7)
1-4	2 (0.5)	8 (1.6)	1 (0.2)	0 (0)	10 (2.1)
5-9	2 (0.4)	0 (0)	0 (0)	0 (0)	5 (0.8)
10-14	0 (0.0)	2 (0.4)	1 (0.2)	0 (0)	10 (1.0)
15-19	3 (0.6)	3 (0.4)	1 (0.2)	8 (1.5)	64 (10.3)
20-24	0 (0)	3 (0.5)	4 (0.5)	53 (8.2)	136 (20.1)
25-34	4 (0.4)	4 (0.2)	5 (0.3)	129 (11.3)	131 (10.5)
35-44	2 (0.2)	12 (0.9)	14 (1.3)	147 (13.1)	108 (8.0)
45-54	8 (0.7)	12 (0.8)	25 (2.1)	145 (11.8)	124 (8.9)
55-64	15 (1.7)	15 (1.4)	43 (4.6)	37 (4.0)	85 (7.7)
65-74	19 (3.4)	9 (1.3)	72 (11.3)	5 (0.9)	63 (10.0)
75-84	11 (3.5)	10 (3.2)	139 (41.0)	1 (0.3)	60 (18.1)
85+	9 (7.5)	2 (1.7)	162 (129.0)	2 (1.7)	27 (19.3)
<b>Total</b>	<b>75 (8.8)</b>	<b>81 (8.1)</b>	<b>467 (51.1)</b>	<b>527 (60.2)</b>	<b>829 (83.7)</b>

**Figure 1. Accidental Deaths by Month of Death, 2009**



**Figure 2. Accidental Deaths by Day of Death, 2009**



**Table 14. Accidental Deaths by City/County of Injury by Year of Death, 2006-2009**

County/City of Injury	Year of Death				Total
	2006	2007	2008	2009	
Accomack	22	20	11	19	53
Albemarle	17	20	33	25	70
Alexandria	21	21	21	22	63
Alleghany	10	14	8	5	32
Amelia	4	7	11	9	22
Amherst	11	8	16	9	35
Appomattox	2	6	7	4	15
Arlington	18	20	30	34	68
Augusta	26	35	38	33	99
Bath	2	3	1	4	6
Bedford City	3	5	5	4	13
Bedford	22	27	16	30	65
Bland	0	6	2	7	8
Botetourt	12	12	13	11	37
Bristol	6	10	3	3	19
Brunswick	16	7	6	8	29
Buchanan	21	18	19	11	58
Buckingham	3	9	6	3	18
Buena Vista	0	0	1	2	1
Campbell	32	16	31	12	79
Caroline	9	14	8	9	31
Carroll	17	15	19	11	51
Charles City	4	8	7	7	19
Charlotte	4	6	6	5	16
Charlottesville	21	28	11	16	60
Chesapeake	55	60	47	53	162
Chesterfield	56	71	92	68	219
Clarke	5	6	5	8	16
Colonial Heights	6	3	4	2	13
Covington	4	0	2	2	6
Craig	7	2	2	4	11
Culpeper	16	24	12	12	52
Cumberland	1	2	4	3	7
Danville	16	13	22	20	51
Dickenson	11	16	13	5	40
Dinwiddie	12	14	20	12	46
Emporia	2	8	2	1	12
Essex	4	7	4	7	15
Fairfax City	3	4	5	11	12



County/City of Injury	Year of Death				Total
	2006	2007	2008	2009	
Fairfax	221	157	144	149	<b>522</b>
Falls Church	2	1	0	1	<b>3</b>
Fauquier	21	32	26	33	<b>79</b>
Floyd	13	10	5	8	<b>28</b>
Fluvanna	9	7	14	7	<b>30</b>
Franklin City	2	2	1	1	<b>5</b>
Franklin	27	22	23	26	<b>72</b>
Frederick	24	25	26	31	<b>75</b>
Fredericksburg	22	14	15	6	<b>51</b>
Galax	0	3	0	0	<b>3</b>
Giles	9	5	9	9	<b>23</b>
Gloucester	21	10	16	10	<b>47</b>
Goochland	6	15	10	14	<b>31</b>
Grayson	13	5	2	6	<b>20</b>
Greene	4	14	5	4	<b>23</b>
Greensville	10	3	2	5	<b>15</b>
Halifax	15	22	27	14	<b>64</b>
Hampton	31	28	28	25	<b>87</b>
Hanover	21	27	26	13	<b>74</b>
Harrisonburg	11	1	3	5	<b>15</b>
Henrico	89	66	76	73	<b>231</b>
Henry	34	15	34	22	<b>83</b>
Highland	1	2	2	2	<b>5</b>
Hopewell	5	8	6	7	<b>19</b>
Isle of Wight	16	16	15	12	<b>47</b>
James City	17	8	24	16	<b>49</b>
King and Queen	5	7	5	8	<b>17</b>
King George	5	7	8	10	<b>20</b>
King William	3	7	5	9	<b>15</b>
Lancaster	9	9	6	2	<b>24</b>
Lee	11	16	10	13	<b>37</b>
Lexington	3	2	1	2	<b>6</b>
Loudoun	23	37	27	29	<b>87</b>
Louisa	16	24	17	21	<b>57</b>
Lunenburg	6	11	9	5	<b>26</b>
Lynchburg	13	24	24	16	<b>61</b>
Madison	3	9	6	3	<b>18</b>
Manassas	8	8	6	12	<b>22</b>
Martinsville	8	3	8	6	<b>19</b>
Mathews	8	4	1	4	<b>13</b>

County/City of Injury	Year of Death				Total
	2006	2007	2008	2009	
Mecklenburg	18	17	11	16	<b>46</b>
Middlesex	3	7	6	6	<b>16</b>
Montgomery	15	24	27	24	<b>66</b>
Nelson	6	12	6	11	<b>24</b>
New Kent	15	6	7	8	<b>28</b>
Newport News	52	36	36	53	<b>124</b>
Norfolk	59	79	59	67	<b>197</b>
Northampton	6	8	10	9	<b>24</b>
Northumberland	2	3	8	4	<b>13</b>
Norton	3	0	1	1	<b>4</b>
Nottoway	6	8	3	14	<b>17</b>
Orange	6	14	13	10	<b>33</b>
Page	4	10	4	7	<b>18</b>
Patrick	5	7	11	8	<b>23</b>
Petersburg	16	22	14	14	<b>52</b>
Pittsylvania	28	30	37	29	<b>95</b>
Poquoson	5	1	1	3	<b>7</b>
Portsmouth	29	20	18	29	<b>67</b>
Powhatan	14	6	7	5	<b>27</b>
Prince Edward	9	16	5	14	<b>30</b>
Prince George	9	12	12	10	<b>33</b>
Prince William	69	57	65	64	<b>191</b>
Pulaski	16	23	19	15	<b>58</b>
Radford	2	5	9	3	<b>16</b>
Rappahannock	0	4	2	3	<b>6</b>
Richmond City	127	132	85	69	<b>344</b>
Richmond	2	2	6	2	<b>10</b>
Roanoke City	37	30	32	41	<b>99</b>
Roanoke	27	22	23	19	<b>72</b>
Rockbridge	12	14	10	13	<b>36</b>
Rockingham	30	21	19	16	<b>70</b>
Russell	19	19	15	11	<b>53</b>
Salem	13	7	8	8	<b>28</b>
Scott	6	8	10	9	<b>24</b>
Shenandoah	14	5	24	13	<b>43</b>
Smyth	13	10	11	7	<b>34</b>
Southampton	10	15	10	10	<b>35</b>
Spotsylvania	29	39	30	29	<b>98</b>
Stafford	18	43	25	24	<b>86</b>
Staunton	7	6	8	7	<b>21</b>

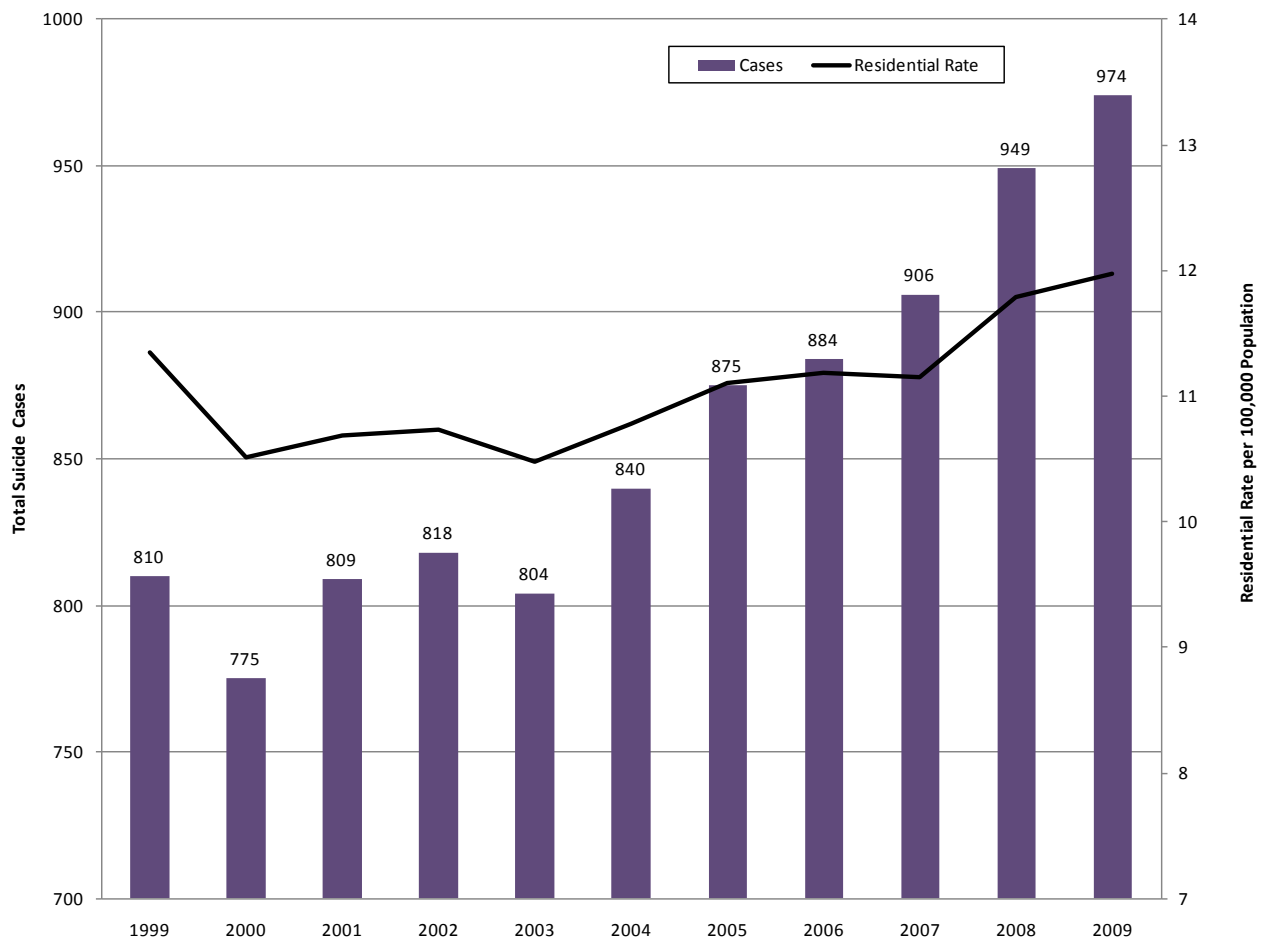
County/City of Injury	Year of Death				Total
	2006	2007	2008	2009	
Suffolk	16	36	26	17	<b>78</b>
Surry	2	7	4	1	<b>13</b>
Sussex	13	15	17	11	<b>45</b>
Tazewell	36	11	16	19	<b>63</b>
Virginia Beach	101	105	102	110	<b>308</b>
Warren	6	11	17	9	<b>34</b>
Washington	18	20	22	14	<b>60</b>
Waynesboro	7	2	7	6	<b>16</b>
Westmoreland	13	10	11	6	<b>34</b>
Williamsburg	6	5	3	6	<b>14</b>
Winchester	15	2	4	10	<b>21</b>
Wise	31	28	15	22	<b>74</b>
Wythe	11	14	24	12	<b>49</b>
York	14	17	14	7	<b>45</b>
<b>TOTAL IN STATE</b>	<b>2316</b>	<b>2334</b>	<b>2224</b>	<b>2105</b>	<b>6874</b>
Out of State	29	52	46	52	<b>179</b>
Unknown	8	18	27	18	<b>71</b>
<b>TOTAL</b>	<b>2353</b>	<b>2404</b>	<b>2297</b>	<b>2175</b>	<b>7124</b>

## SUICIDE DEATHS (N=974)

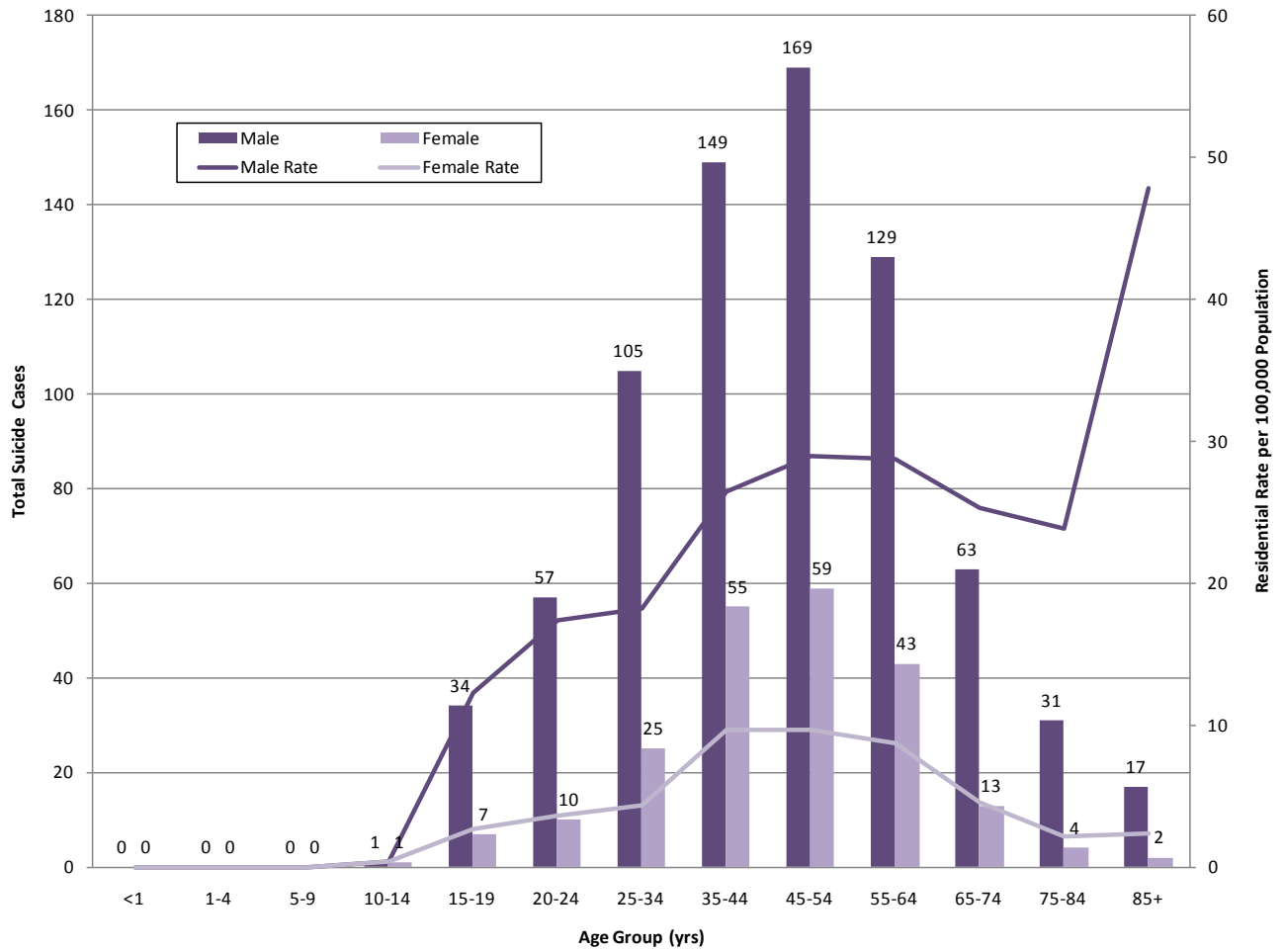
The number of suicides in Virginia overall has been increasing over the past eleven years while the rate has had a modest increase. In 2009, as in previous years, suicides were most frequently in males (77.5%) and those aged 45-54 years old (23.4%).

- Whites committed suicide 4.3 times that of Hispanics, 2.6 times that of blacks and Asians
- Males were 3.5 times more likely to commit suicide than females
- Handguns were used in 55.3 percent of suicides, followed by 19.5 percent by hangings, then 14.6 percent by drug use

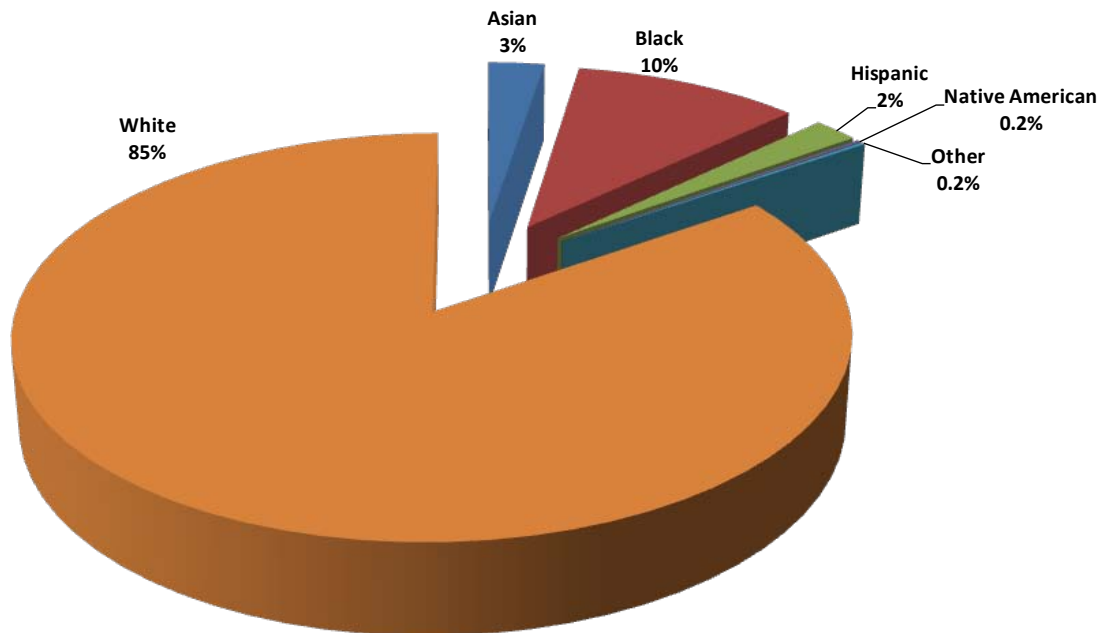
**Figure 23. Suicide Deaths & Rate by Year of Death, 1999-2009**



**Figure 24. Suicide Deaths by Age Group by Gender, 2009**



**Figure 25. Suicide Deaths by Race/Ethnicity, 2009**



**Figure 26. Suicide Deaths & Rate by Race/Ethnicity, 2009**

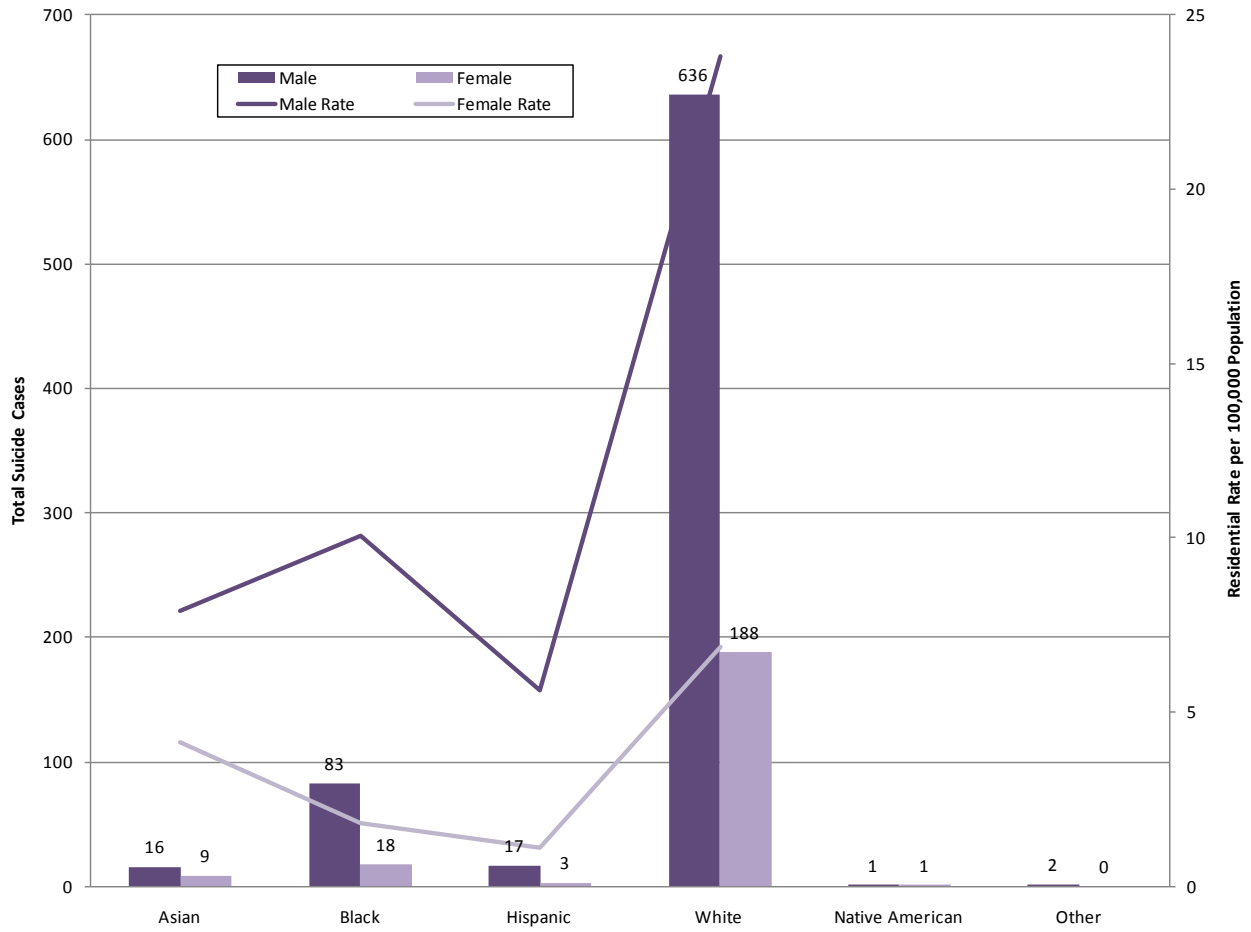
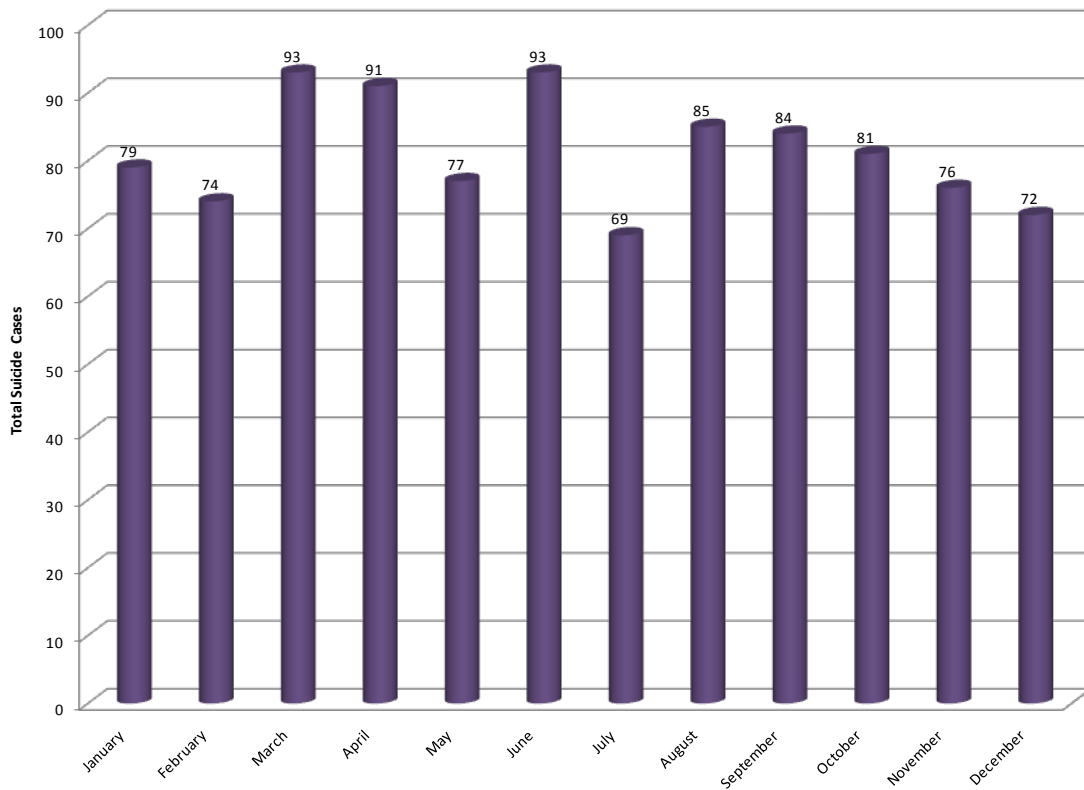


Table 15. Suicide Deaths by Method of Death, 2009

Method of Death	Total Cases	Autopsied
<b>Asphyxia</b>		
Drowned	9	6
Hanging	190	43
Helium	11	2
Plastic bag	11	2
Oxygen replacement/displacement	4	2
<b>Drug Use</b>		
Ingested ethanol or other alcohol	1	1
Ingested and/or injected illicit, prescription, and/or other type of drug	142	113
<b>Electricity</b>		
Contacted electrical current	1	1
<b>Jump</b>		
Jumped from height	16	7
<b>Fire</b>		
Inhalation of Combustion Products	1	1
Thermal Burns & Inhalation of Combustion Products	2	1
<b>Poisoned</b>		
Carbon monoxide poisoning	18	6
<b>Traumatic Injury</b>		
Cut/Stabbed self	17	14
Shot self with firearm	539	537
Handgun	(403)	(401)
Rifle	(64)	(64)
Shotgun	(70)	(70)
Other	(2)	(2)
<b>Vehicular</b>		
Car	1	0
Train	7	3
Truck-Other	3	0
<b>Other</b>		
Other traumatic causes	1	0
<b>TOTAL</b>	<b>974</b>	<b>739</b>

**Figure 27. Suicide Deaths by Month of Death, 2009**



**Figure 28. Suicide Deaths by Day of Death, 2009**

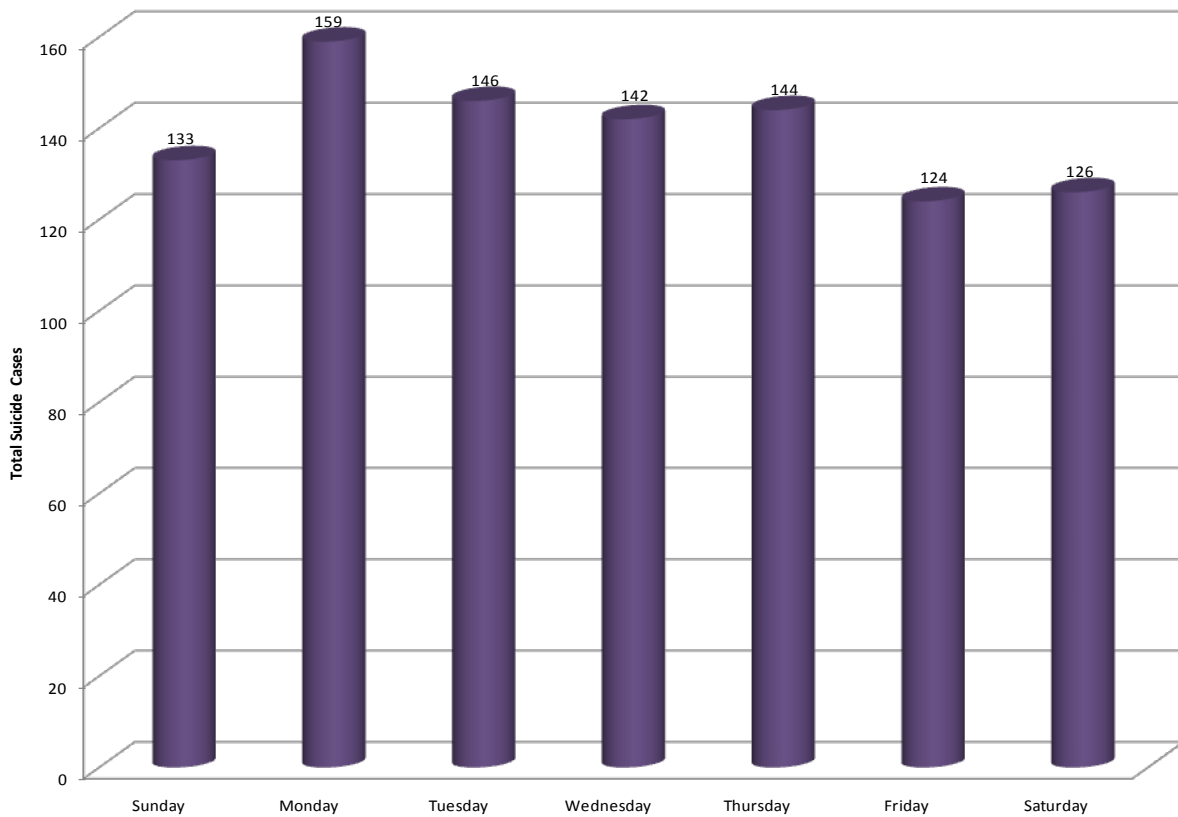




Table 16. Suicide Deaths &amp; Rates by City/County of Residence, 2009

City/County of Residence	Total	Rate
Accomack	4	10.4
Albemarle	12	12.6
Alexandria	12	8.0
Alleghany	4	24.6
Amelia	4	31.0
Amherst	6	18.5
Appomattox	3	20.6
Arlington	9	4.1
Augusta	14	19.4
Bath	0	0.0
Bedford City	2	31.5
Bedford	14	20.8
Bland	3	44.2
Botetourt	7	21.5
Bristol	3	17.0
Brunswick	1	5.7
Buchanan	7	30.6
Buckingham	2	12.4
Buena Vista	1	16.1
Campbell	5	9.4
Caroline	3	10.8
Carroll	9	31.0
Charles City	3	41.6
Charlotte	3	24.9
Charlottesville	5	11.8
Chesapeake	25	11.2
Chesterfield	31	10.1
Clarke	2	13.7
Colonial Heights	1	5.6
Covington	1	16.3
Craig	1	20.1
Culpeper	10	21.5
Cumberland	3	30.7
Danville	7	15.8
Dickenson	7	43.5
Dinwiddie	1	3.8
Emporia	0	0.0
Essex	2	17.9
Fairfax City	6	24.3
Fairfax	105	10.1
Falls Church	0	0.0

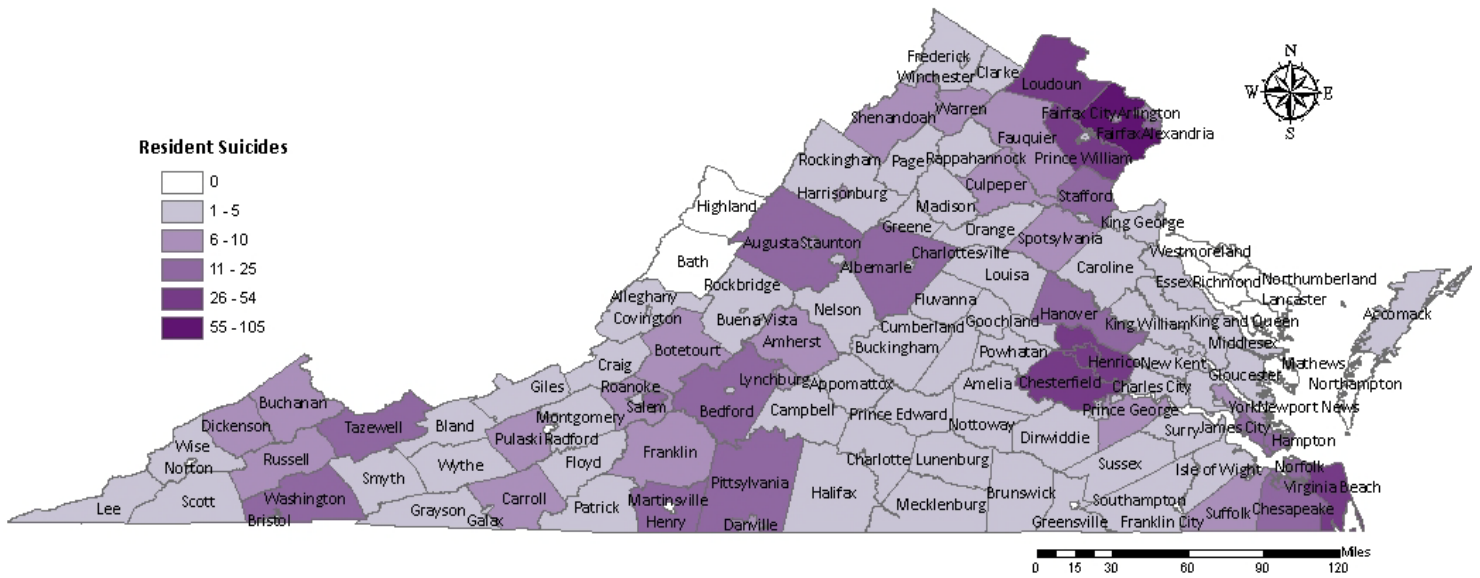
City/County of Residence	Total	Rate
Fauquier	9	13.2
Floyd	3	20.0
Fluvanna	1	3.9
Franklin City	0	0.0
Franklin	7	13.5
Frederick	5	6.7
Fredericksburg	2	8.6
Galax	1	14.5
Giles	4	23.0
Gloucester	5	12.8
Goochland	3	14.1
Grayson	2	12.7
Greene	4	21.7
Greensville	1	8.3
Halifax	5	14.2
Hampton	14	9.7
Hanover	16	16.0
Harrisonburg	6	13.3
Henrico	38	12.8
Henry	15	27.3
Highland	0	0.0
Hopewell	3	13.0
Isle of Wight	3	8.4
James City	5	7.8
King and Queen	1	14.7
King George	5	21.2
King William	5	30.8
Lancaster	0	0.0
Lee	4	15.9
Lexington	2	29.0
Loudoun	27	9.0
Louisa	5	15.1
Lunenburg	3	23.4
Lynchburg	6	8.1
Madison	1	7.3
Manassas	1	2.7
Martinsville	0	0.0
Mathews	0	0.0
Mecklenburg	3	9.4
Middlesex	5	46.6
Montgomery	5	5.5

City/County of Residence	Total	Rate
Nelson	3	19.4
New Kent	2	11.0
Newport News	16	8.3
Norfolk	23	9.9
Northampton	0	0.0
Northumberland	0	0.0
Norton	0	0.0
Nottoway	4	25.1
Orange	2	6.0
Page	3	12.5
Patrick	4	21.5
Petersburg	3	9.1
Pittsylvania	14	22.8
Poquoson	0	0.0
Portsmouth	12	12.1
Powhatan	2	7.2
Prince Edward	4	17.9
Prince George	7	18.9
Prince William	42	11.1
Pulaski	7	20.0
Radford	0	0.0
Rappahannock	2	28.4
Richmond City	33	16.1
Richmond	0	0.0
Roanoke City	14	14.8
Roanoke	7	7.7
Rockbridge	3	14.1
Rockingham	4	5.3

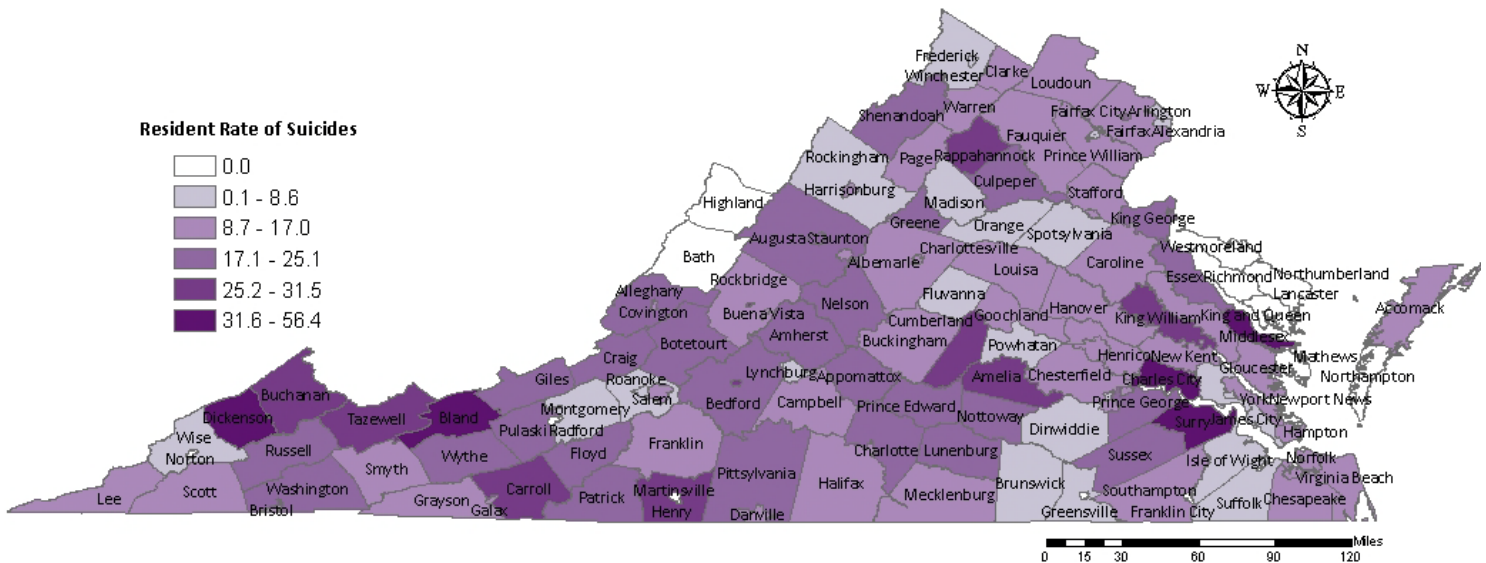
City/County of Residence	Total	Rate
Russell	7	23.9
Salem	1	3.9
Scott	3	13.3
Shenandoah	7	17.1
Smyth	3	9.5
Southampton	3	16.2
Spotsylvania	9	7.4
Stafford	14	11.3
Staunton	6	25.1
Suffolk	7	8.4
Surry	4	56.4
Sussex	3	24.8
Tazewell	12	26.7
Virginia Beach	54	12.5
Warren	6	16.3
Washington	12	22.6
Waynesboro	2	9.0
Westmoreland	0	0.0
Williamsburg	1	7.9
Winchester	2	7.6
Wise	3	7.2
Wythe	5	17.3
York	6	9.8
<b>TOTAL FOR STATE RESIDENTS</b>	<b>944</b>	<b>12.0</b>
Out of State	28	ND†
Unknown	2	ND
<b>TOTAL</b>	<b>974</b>	<b>ND</b>

† ND- No Denominator

**Figure 29. Suicide Deaths by City/County of Residence, 2009**



**Figure 30. Suicide Rates by City/County of Residence, 2009**



**Table 17. Suicide Deaths by City/County of Injury by Year of Death, 2006-2009**

County/City of Injury	Year of Death				Total
	2006	2007	2008	2009	
Accomack	4	2	1	4	11
Albemarle	2	6	8	13	29
Alexandria	12	11	13	14	50
Alleghany	3	2	0	4	9
Amelia	2	1	1	3	7
Amherst	4	6	6	7	23
Appomattox	2	0	0	3	5
Arlington	14	12	28	10	64
Augusta	12	11	13	16	52
Bath	1	0	1	0	2
Bedford City	1	1	1	2	5
Bedford	7	6	9	14	36
Bland	2	1	0	3	6
Botetourt	3	4	3	5	15
Bristol	4	4	1	2	11
Brunswick	2	2	1	1	6
Buchanan	5	6	7	7	25
Buckingham	3	3	5	1	12
Buena Vista	0	0	1	1	2
Campbell	6	3	7	6	22
Caroline	3	6	3	3	15
Carroll	6	8	6	10	30
Charles City	0	0	2	2	4
Charlotte	3	2	1	3	9
Charlottesville	11	7	5	4	27
Chesapeake	19	20	18	25	82
Chesterfield	29	25	32	32	118
Clarke	2	1	3	3	9
Colonial Heights	1	2	3	1	7
Covington	2	2	1	0	5
Craig	0	1	2	4	7
Culpeper	6	10	2	11	29
Cumberland	0	1	2	2	5
Danville	7	3	4	8	22
Dickenson	2	5	5	8	20
Dinwiddie	3	3	1	1	8
Emporia	3	0	2	1	6
Essex	0	1	3	2	6
Fairfax City	2	2	1	6	11
Fairfax	85	86	88	104	363

County/City of Injury	Year of Death				Total
	2006	2007	2008	2009	
Falls Church	0	1	3	0	4
Fauquier	7	4	8	9	28
Floyd	2	2	1	3	8
Fluvanna	2	3	4	2	11
Franklin City	0	0	0	0	0
Franklin	5	8	6	7	26
Frederick	9	7	7	8	31
Fredericksburg	6	4	5	2	17
Galax	1	1	2	1	5
Giles	2	3	3	5	13
Gloucester	7	6	9	4	26
Goochland	2	5	2	4	13
Grayson	3	2	5	2	12
Greene	4	2	2	3	11
Greensville	2	0	0	2	4
Halifax	8	4	4	5	21
Hampton	13	16	18	16	63
Hanover	12	15	17	11	55
Harrisonburg	2	4	4	6	16
Henrico	37	26	25	39	127
Henry	11	12	19	13	55
Highland	0	0	0	0	0
Hopewell	1	1	2	3	7
Isle of Wight	5	1	0	3	9
James City	5	4	9	7	25
King and Queen	2	4	2	1	9
King George	3	2	2	3	10
King William	1	1	1	4	7
Lancaster	0	3	4	1	8
Lee	5	4	7	5	21
Lexington	0	1	0	0	1
Loudoun	20	23	13	24	80
Louisa	5	8	2	5	20
Lunenburg	6	1	1	3	11
Lynchburg	8	6	13	5	32
Madison	2	4	3	1	10
Manassas	2	3	9	3	17
Martinsville	0	4	0	1	5
Mathews	1	0	2	0	3
Mecklenburg	4	6	7	5	22
Middlesex	0	1	1	5	7
Montgomery	11	22	8	5	46

County/City of Injury	Year of Death				Total
	2006	2007	2008	2009	
Nelson	2	1	3	4	10
New Kent	3	3	2	3	11
Newport News	11	15	18	14	58
Norfolk	27	34	29	22	112
Northampton	0	4	1	0	5
Northumberland	1	3	2	0	6
Norton	0	0	2	1	3
Nottoway	1	0	4	4	9
Orange	6	4	5	2	17
Page	6	5	7	3	21
Patrick	3	4	4	4	15
Petersburg	1	4	7	3	15
Pittsylvania	13	9	6	13	41
Poquoson	1	1	1	0	3
Portsmouth	8	14	10	11	43
Powhatan	5	2	4	2	13
Prince Edward	3	3	1	5	12
Prince George	6	7	7	7	27
Prince William	32	29	35	41	137
Pulaski	11	10	2	6	29
Radford	1	0	2	0	3
Rappahannock	0	4	3	1	8
Richmond City	32	25	22	35	114
Richmond	1	1	4	0	6
Roanoke City	10	15	19	13	57
Roanoke	11	7	19	9	46
Rockbridge	5	4	6	5	20
Rockingham	9	10	9	4	32
Russell	5	4	10	7	26
Salem	4	7	5	0	16
Scott	3	12	5	4	24
Shenandoah	7	5	8	8	28
Smyth	3	11	5	3	22
Southampton	4	1	4	3	12
Spotsylvania	13	18	17	10	58
Stafford	6	14	15	15	50
Staunton	4	7	1	6	18
Suffolk	11	1	10	6	28
Surry	0	1	0	4	5
Sussex	1	2	1	4	8
Tazewell	11	4	4	12	31
Virginia Beach	61	50	45	60	216

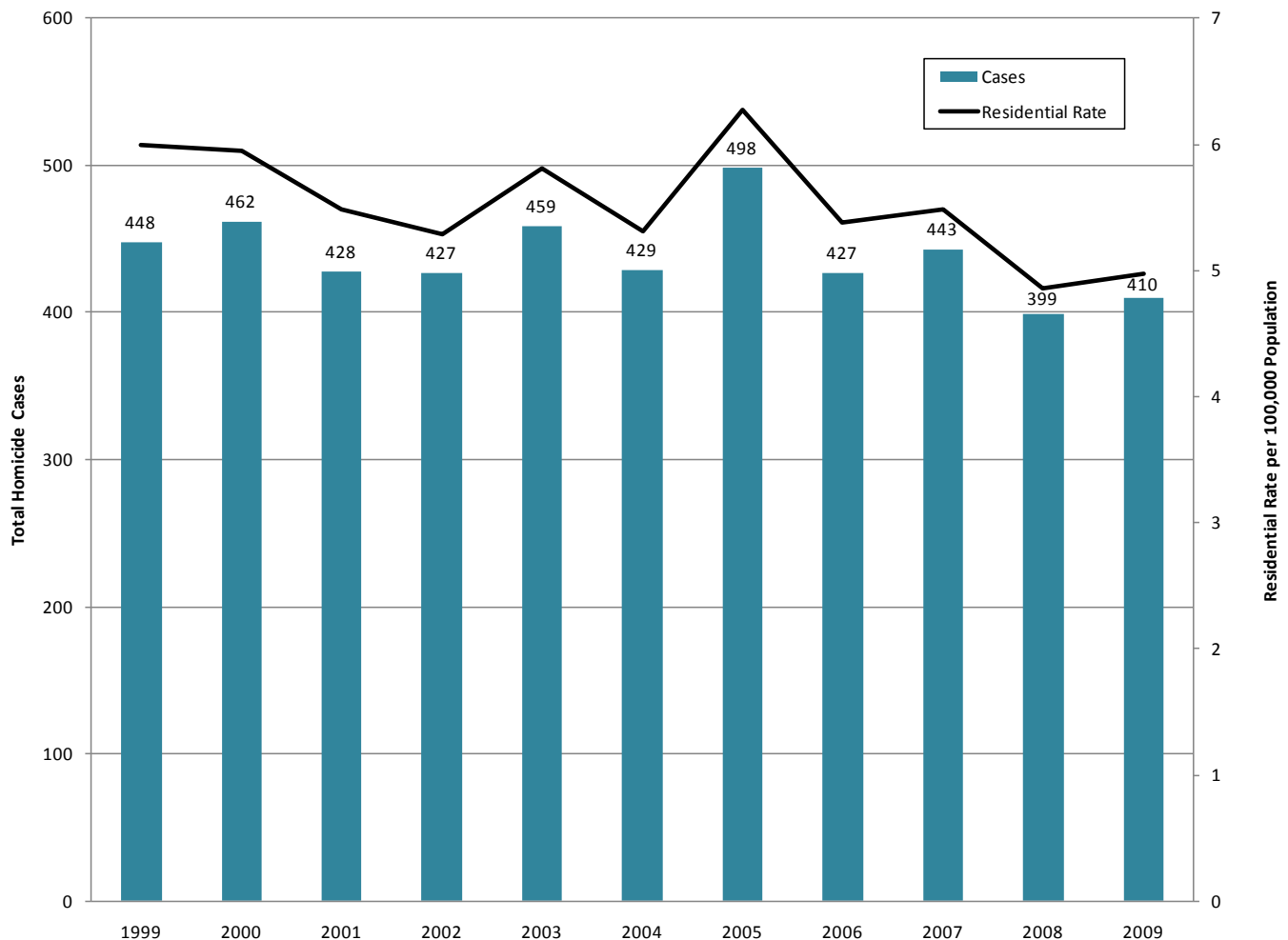
County/City of Injury	Year of Death				Total
	2006	2007	2008	2009	
Warren	3	12	8	6	<b>29</b>
Washington	6	10	11	13	<b>40</b>
Waynesboro	6	3	3	4	<b>16</b>
Westmoreland	4	2	4	2	<b>12</b>
Williamsburg	10	2	1	1	<b>14</b>
Winchester	6	1	7	2	<b>16</b>
Wise	9	13	8	4	<b>34</b>
Wythe	4	4	8	5	<b>21</b>
York	3	8	11	6	<b>28</b>
<b>Total in State</b>	<b>882</b>	<b>900</b>	<b>945</b>	<b>969</b>	<b>3696</b>
Out of State	2	6	3	4	<b>15</b>
Unknown	0	0	1	1	<b>2</b>
<b>TOTAL</b>	<b>884</b>	<b>906</b>	<b>949</b>	<b>974</b>	<b>3713</b>

## HOMICIDE DEATHS (N=410)

The number of homicides increased 2.8 percent from the previous year. As previous years have shown, homicides most frequently occurred in males (75.4%), in blacks (57.3%), and those aged 25-34 years old (22.9%).

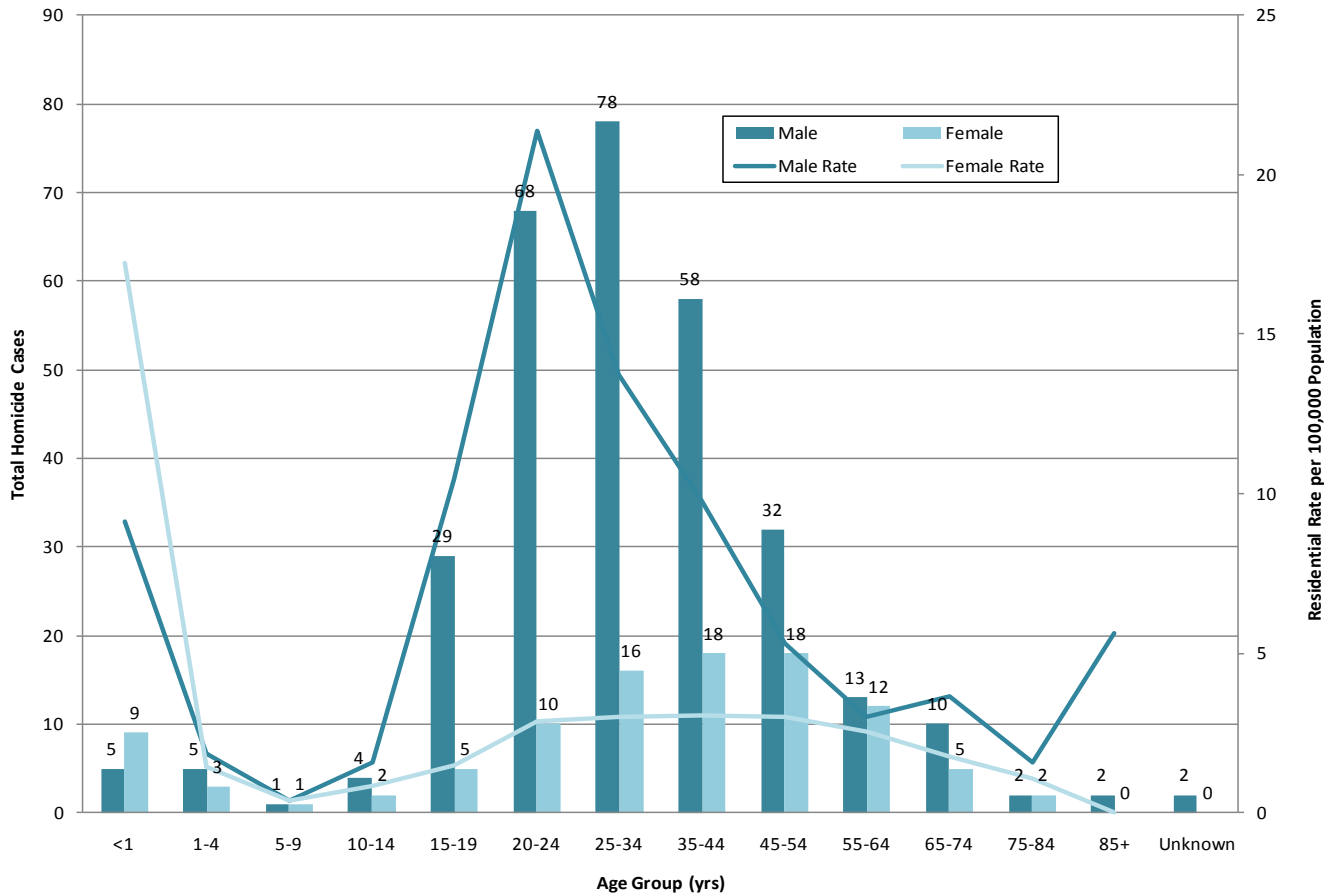
- Black males died from homicidal violence at a rate of 25.3 per 100,000; this was 5.9 times that of Hispanic males, 7.5 times that of white males, and 25.7 times that of Asian males
- Seventy percent of homicides were committed using a firearm, with handguns the most common type used in 52.2 percent of all homicides cases and 74.6 percent of all firearm homicides
- Norfolk now has the greatest number of homicide injuries leading to death with 50 followed by Richmond City with 44 and Newport News with 24

**Figure 31. Homicide Deaths & Rate by Year of Death, 1999-2009**

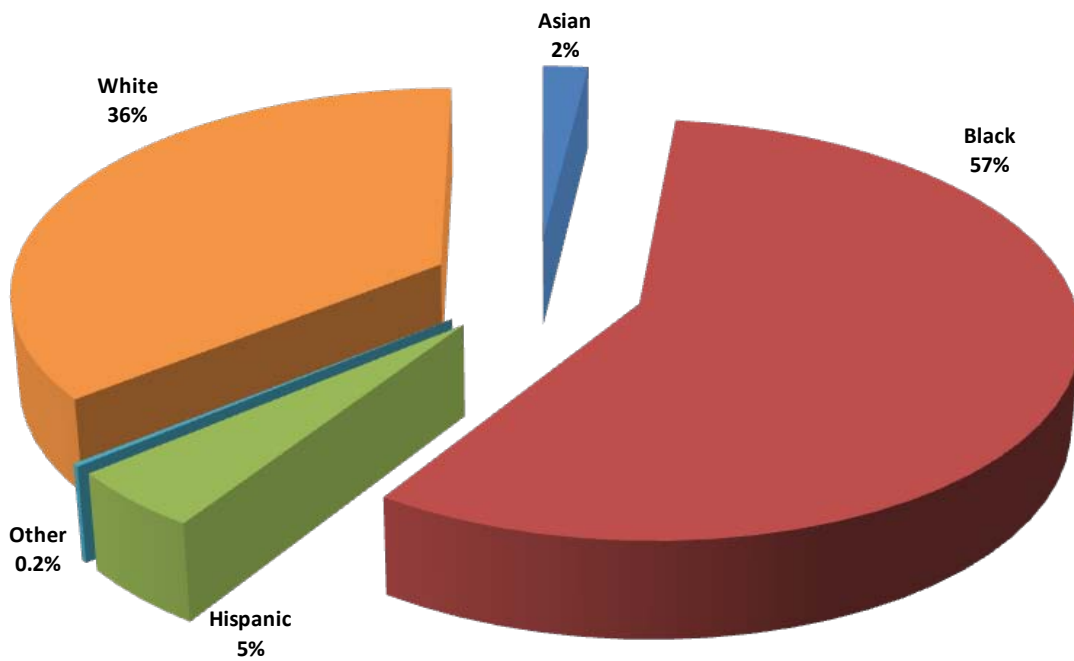




**Figure 32. Homicide Deaths & Rates by Age Group by Gender, 2009**



**Figure 33. Homicide Deaths by Race/Ethnicity, 2009**



**Figure 34. Homicide Deaths & Rates by Race/Ethnicity by Gender, 2009**

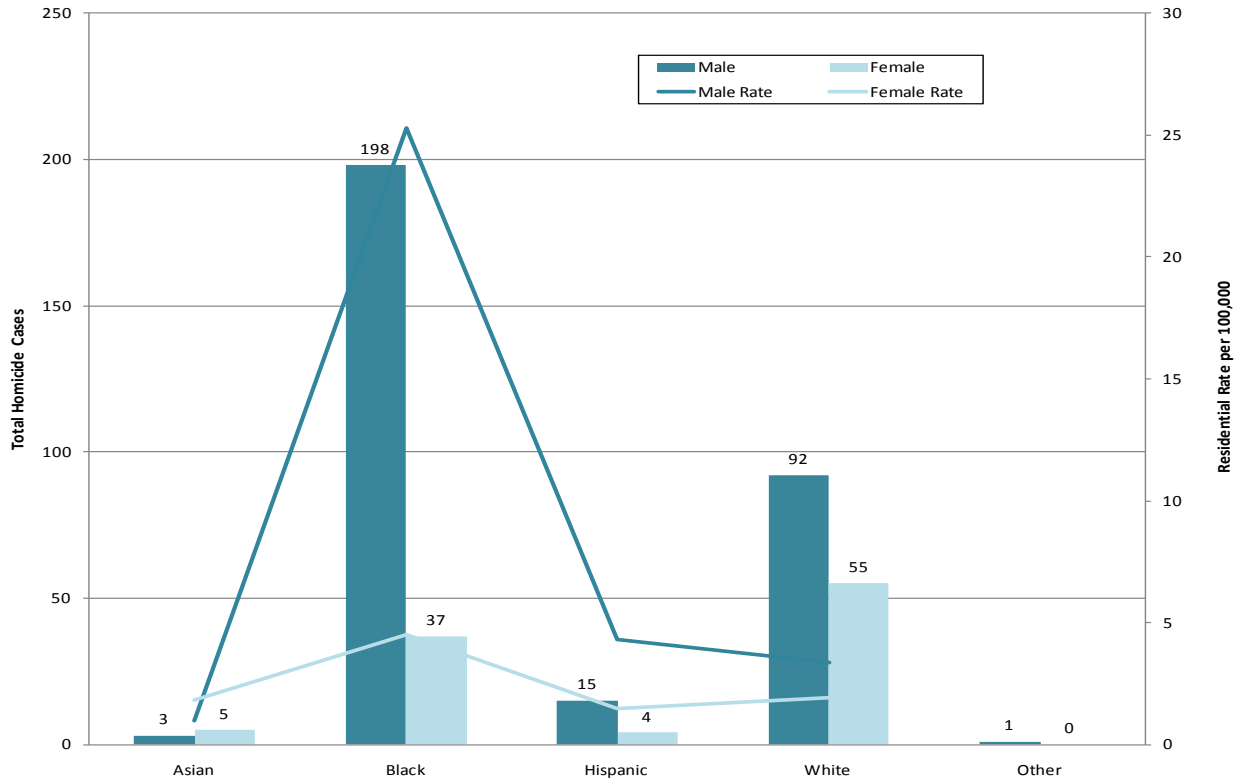
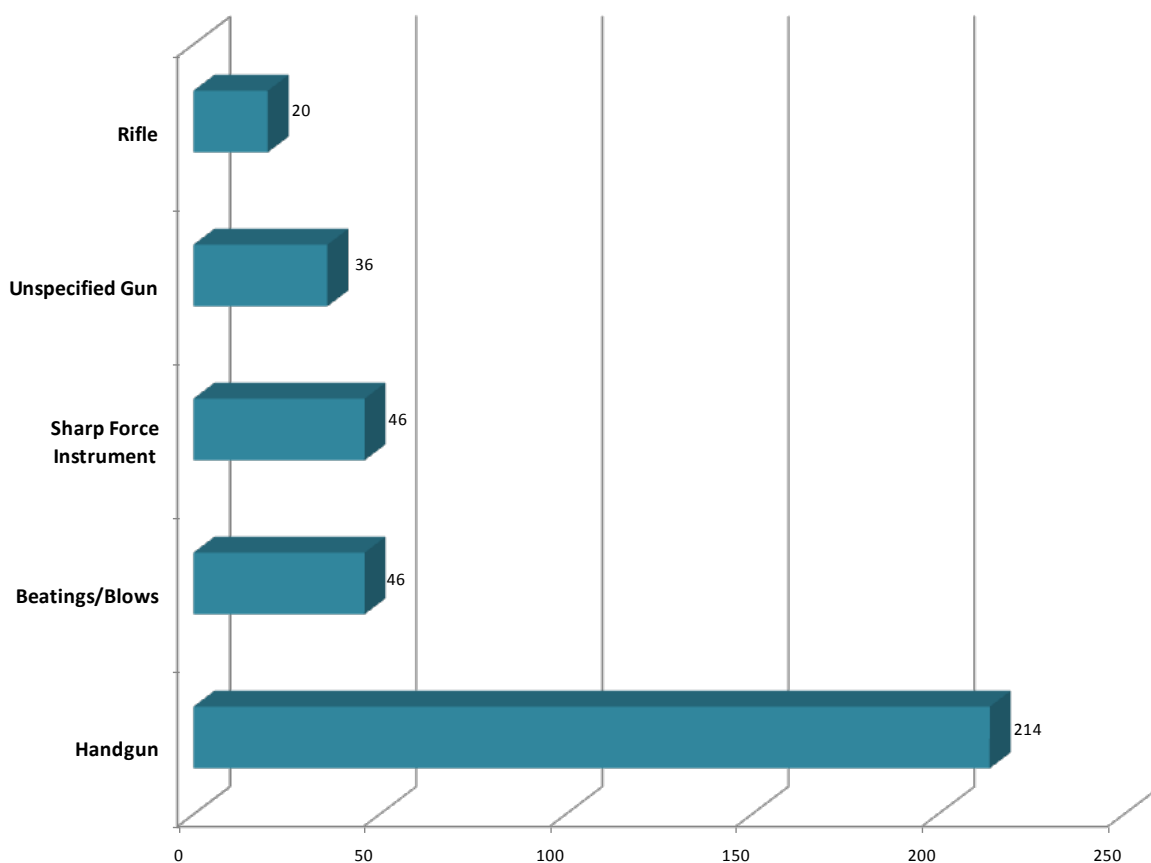


Table 18. Homicide Deaths by Method of Death, 2009

Method of Death	Total Cases	Autopsied
<b><i>Asphyxia</i></b>		
Drowned	1	1
Strangled by assailant(s)	14	14
Suffocate/Smothered by assailant(s)	1	1
Other	2	2
<b><i>Environmental Exposure</i></b>		
Exposed to heat	1	1
<b><i>Legal Intervention</i></b>		
Electrocution	1	0
Lethal injection	2	2
<b><i>Poisoned</i></b>		
Poisoned by ethanol and/or drugs	1	0
<b><i>Traumatic Injury</i></b>		
Beaten by assailant(s)	46	45
Fall/Push	2	2
Other traumatic violence	4	4
Stabbed by assailant(s)	46	46
Shot by assailant(s)	287	287
Handgun	(214)	(214)
Multiple	(1)	(1)
Rifle	(20)	(20)
Shotgun	(16)	(16)
Unspecified	(36)	(36)
<b><i>Unknown</i></b>		
Undetermined method	2	2
<b>TOTAL</b>	<b>410</b>	<b>407</b>

**Figure . Homicide Deaths by Leading Methods of Death, 2009****Table 1 . Homicide Deaths by City/County of Residence, 2009**

County/City of Residency	Total	Rate
Accomack	2	5.2
Albemarle	0	0.0
Alexandria	4	2.7
Alleghany	1	6.2
Amelia	0	0.0
Amherst	1	3.1
Appomattox	2	13.7
Arlington	1	0.5
Augusta	2	2.8
Bath	1	22.3
Bedford City	0	0.0
Bedford	1	1.5
Bland	1	14.7
Botetourt	1	3.1
Bristol	1	5.7
Brunswick	0	0.0
Buchanan	6	26.2

County/City of Residency	Total	Rate
Buckingham	1	6.2
Buena Vista	0	0.0
Campbell	3	5.7
Caroline	0	0.0
Carroll	1	3.4
Charles City	0	0.0
Charlotte	1	8.3
Charlottesville	0	0.0
Chesapeake	17	7.6
Chesterfield	9	2.9
Clarke	1	6.9
Colonial Heights	0	0.0
Covington	0	0.0
Craig	0	0.0
Culpeper	0	0.0
Cumberland	2	20.5
Danville	8	18.0

County/City of Residency	Total	Rate
Dickenson	1	6.2
Dinwiddie	1	3.8
Emporia	0	0.0
Essex	0	0.0
Fairfax City	0	0.0
Fairfax	19	1.8
Falls Church	0	0.0
Fauquier	4	5.9
Floyd	2	13.3
Fluvanna	0	0.0
Franklin City	1	11.3
Franklin	3	5.8
Frederick	3	4.0
Fredericksburg	0	0.0
Galax	1	14.5
Giles	0	0.0
Gloucester	0	0.0
Goochland	1	4.7
Grayson	0	0.0
Greene	0	0.0
Greensville	3	24.9
Halifax	0	0.0
Hampton	14	9.7
Hanover	1	1.0
Harrisonburg	0	0.0
Henrico	14	4.7
Henry	5	9.1
Highland	0	0.0
Hopewell	2	8.6
Isle of Wight	3	8.4
James City	0	0.0
King and Queen	0	0.0
King George	1	4.2
King William	0	0.0
Lancaster	0	0.0
Lee	1	4.0
Lexington	0	0.0
Loudoun	4	1.3
Louisa	2	6.0
Lunenburg	1	7.8
Lynchburg	2	2.7
Madison	1	7.3
Manassas	0	0.0

County/City of Residency	Total	Rate
Martinsville	0	0.0
Mathews	1	11.1
Mecklenburg	2	6.3
Middlesex	0	0.0
Montgomery	4	4.4
Nelson	1	6.5
New Kent	1	5.5
Newport News	25	12.9
Norfolk	45	19.3
Northampton	0	0.0
Northumberland	0	0.0
Norton	0	0.0
Nottoway	1	6.3
Orange	1	3.0
Page	0	0.0
Patrick	0	0.0
Petersburg	13	39.4
Pittsylvania	3	4.9
Poquoson	0	0.0
Portsmouth	16	16.1
Powhatan	1	3.6
Prince Edward	4	17.9
Prince George	2	5.4
Prince William	11	2.9
Pulaski	1	2.9
Radford	0	0.0
Rappahannock	0	0.0
Richmond City	33	16.1
Richmond	0	0.0
Roanoke City	11	11.6
Roanoke	2	2.2
Rockbridge	0	0.0
Rockingham	1	1.3
Russell	1	3.4
Salem	1	3.9
Scott	0	0.0
Shenandoah	1	2.4
Smyth	0	0.0
Southampton	2	10.8
Spotsylvania	5	4.1
Stafford	7	5.6
Staunton	4	16.7
Suffolk	7	8.4

County/City of Residency	Total	Rate
Surry	0	0.0
Sussex	0	0.0
Tazewell	4	8.9
Virginia Beach	18	4.2
Warren	0	0.0
Washington	1	1.9
Waynesboro	0	0.0
Westmoreland	0	0.0
Williamsburg	0	0.0

County/City of Residency	Total	Rate
Winchester	1	3.8
Wise	1	2.4
Wythe	0	0.0
York	2	3.3
<b>Total in State</b>	<b>391</b>	<b>5.0</b>
Out of State	17	ND†
Unknown	2	ND
<b>TOTAL</b>	<b>410</b>	<b>ND</b>
† ND- No Denominator		

**Table 20. Top 10 Homicide Deaths by City/County of Residence, 2009**

City/County of Residency	Total
Norfolk	45
Richmond City	33
Newport News	25
Fairfax	19
Virginia Beach	18
Chesapeake	17
Portsmouth	16
Hampton	14
Henrico	14
Petersburg	13

**Table 21. Top 10 Homicide Rates by City/County of Residence, 2009**

City/County of Residency	Rate
Petersburg	39.4
Buchanan	26.2
Greensville	24.9
Bath	22.3
Cumberland	20.5
Norfolk	19.3
Danville	18.0
Prince Edward	17.9
Staunton	16.7
Richmond City	16.1

Table 22. Homicide Deaths by City/County of Injury, 2006-2009

County/City of Injury	Year of Death				Total
	2006	2007	2008	2009	
Accomack	5	6	2	2	15
Albemarle	1	1	2	1	5
Alexandria	4	7	4	5	20
Alleghany	0	3	1	0	4
Amelia	0	0	0	0	0
Amherst	0	1	1	0	2
Appomattox	0	2	1	0	3
Arlington	3	2	4	2	11
Augusta	3	1	0	2	6
Bath	0	0	0	2	2
Bedford City	0	0	1	0	1
Bedford	1	2	0	0	3
Bland	0	0	0	1	1
Botetourt	0	1	0	1	2
Bristol	4	0	0	0	4
Brunswick	3	1	2	1	7
Buchanan	1	0	2	6	9
Buckingham	1	2	0	0	3
Buena Vista	0	0	0	0	0
Campbell	2	2	2	5	11
Caroline	5	4	0	0	9
Carroll	1	4	1	1	7
Charles City	0	0	1	0	1
Charlotte	0	0	2	1	3
Charlottesville	5	3	5	0	13
Chesapeake	7	15	12	17	51
Chesterfield	5	9	12	4	30
Clarke	0	0	1	1	2
Colonial Heights	0	0	0	0	0
Covington	0	0	0	0	0
Craig	0	0	1	0	1
Culpeper	1	1	0	0	2
Cumberland	0	2	0	2	4
Danville	5	6	10	8	29
Dickenson	0	1	1	1	3
Dinwiddie	5	1	1	1	8
Emporia	1	2	1	0	4
Essex	0	0	0	0	0
Fairfax City	1	1	1	0	3

County/City of Injury	Year of Death				Total
	2006	2007	2008	2009	
Fairfax	29	16	25	19	89
Falls Church	0	0	0	0	0
Fauquier	2	4	1	3	10
Floyd	0	0	2	2	4
Fluvanna	0	0	1	0	1
Franklin City	0	0	0	2	2
Franklin	2	1	1	4	8
Frederick	7	0	2	2	11
Fredericksburg	0	2	2	1	5
Galax	1	1	0	1	3
Giles	1	0	0	0	1
Gloucester	0	1	1	0	2
Goochland	1	0	2	0	3
Grayson	0	1	7	0	8
Greene	0	1	0	0	1
Greensville	5	0	6	4	15
Halifax	1	3	4	0	8
Hampton	14	7	9	11	41
Hanover	2	0	1	0	3
Harrisonburg	4	0	1	0	5
Henrico	10	15	16	12	53
Henry	7	3	6	5	21
Highland	0	0	0	0	0
Hopewell	4	3	3	4	14
Isle of Wight	1	0	2	1	4
James City	1	1	1	1	4
King and Queen	0	0	0	0	0
King George	0	0	0	2	2
King William	0	2	0	0	2
Lancaster	2	0	1	0	3
Lee	0	1	2	1	4
Lexington	0	0	0	0	0
Loudoun	4	2	4	4	14
Louisa	0	4	1	1	6
Lunenburg	1	1	2	1	5
Lynchburg	2	1	4	0	7
Madison	0	0	1	0	1
Manassas	1	1	4	1	7
Martinsville	0	2	2	0	4
Mathews	0	0	0	1	1



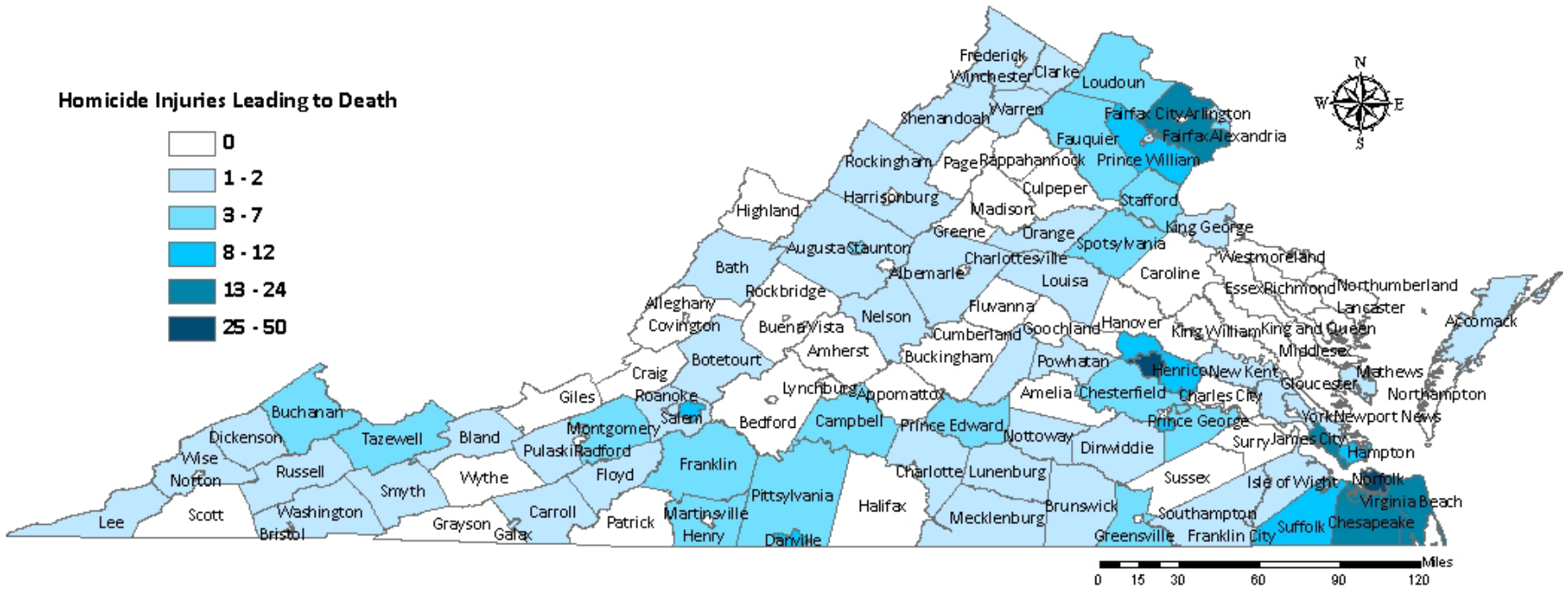
County/City of Injury	Year of Death				Total
	2006	2007	2008	2009	
Mecklenburg	0	1	4	1	6
Middlesex	1	0	0	0	1
Montgomery	3	33	3	7	46
Nelson	0	1	0	1	2
New Kent	0	0	1	1	2
Newport News	20	30	16	24	90
Norfolk	34	53	29	50	166
Northampton	2	1	0	0	3
Northumberland	0	1	0	0	1
Norton	0	0	0	0	0
Nottoway	0	1	0	1	2
Orange	2	1	1	1	5
Page	1	0	0	0	1
Patrick	0	1	0	0	1
Petersburg	10	7	5	11	33
Pittsylvania	2	4	3	4	13
Poquoson	0	0	0	0	0
Portsmouth	18	17	16	18	69
Powhatan	0	0	4	1	5
Prince Edward	0	1	1	7	9
Prince George	0	0	1	3	4
Prince William	12	14	11	11	48
Pulaski	1	0	2	1	4
Radford	1	0	1	0	2
Rappahannock	1	0	0	0	1
Richmond City	85	61	39	44	229
Richmond	0	0	1	0	1
Roanoke City	13	8	13	12	46
Roanoke	1	2	1	2	6
Rockbridge	0	1	1	0	2
Rockingham	1	0	1	1	3
Russell	2	0	1	1	4
Salem	0	0	2	1	3
Scott	0	2	1	0	3
Shenandoah	0	0	0	1	1
Smyth	0	0	3	1	4
Southampton	1	3	0	2	6
Spotsylvania	4	4	0	4	12
Stafford	1	3	6	6	16
Staunton	0	0	2	3	5

County/City of Injury	Year of Death				Total
	2006	2007	2008	2009	
Suffolk	8	3	5	8	24
Surry	0	0	1	0	1
Sussex	1	0	0	0	1
Tazewell	0	3	2	6	11
Virginia Beach	20	18	18	17	73
Warren	2	0	0	1	3
Washington	0	1	2	1	4
Waynesboro	0	1	1	0	2
Westmoreland	2	1	1	0	4
Williamsburg	1	0	0	0	1
Winchester	2	2	0	0	4
Wise	0	2	0	1	3
Wythe	1	0	2	0	3
York	3	1	1	2	7
<b>Total in State</b>	<b>422</b>	<b>435</b>	<b>387</b>	<b>403</b>	<b>1647</b>
Out of State	1	6	4	1	12
Unknown	4	2	8	6	20
<b>TOTAL</b>	<b>427</b>	<b>443</b>	<b>399</b>	<b>410</b>	<b>1679</b>

**Table 23. Top 10 Homicide Deaths by City/County of Injury, 2009**

County/City of Injury	Total Cases
Norfolk	50
Richmond City	44
Newport News	24
Fairfax	19
Portsmouth	18
Chesapeake	17
Virginia Beach	17
Henrico	12
Roanoke City	12
Hampton	11

Figure . Homicide Deaths by City/County of Injury, 2009



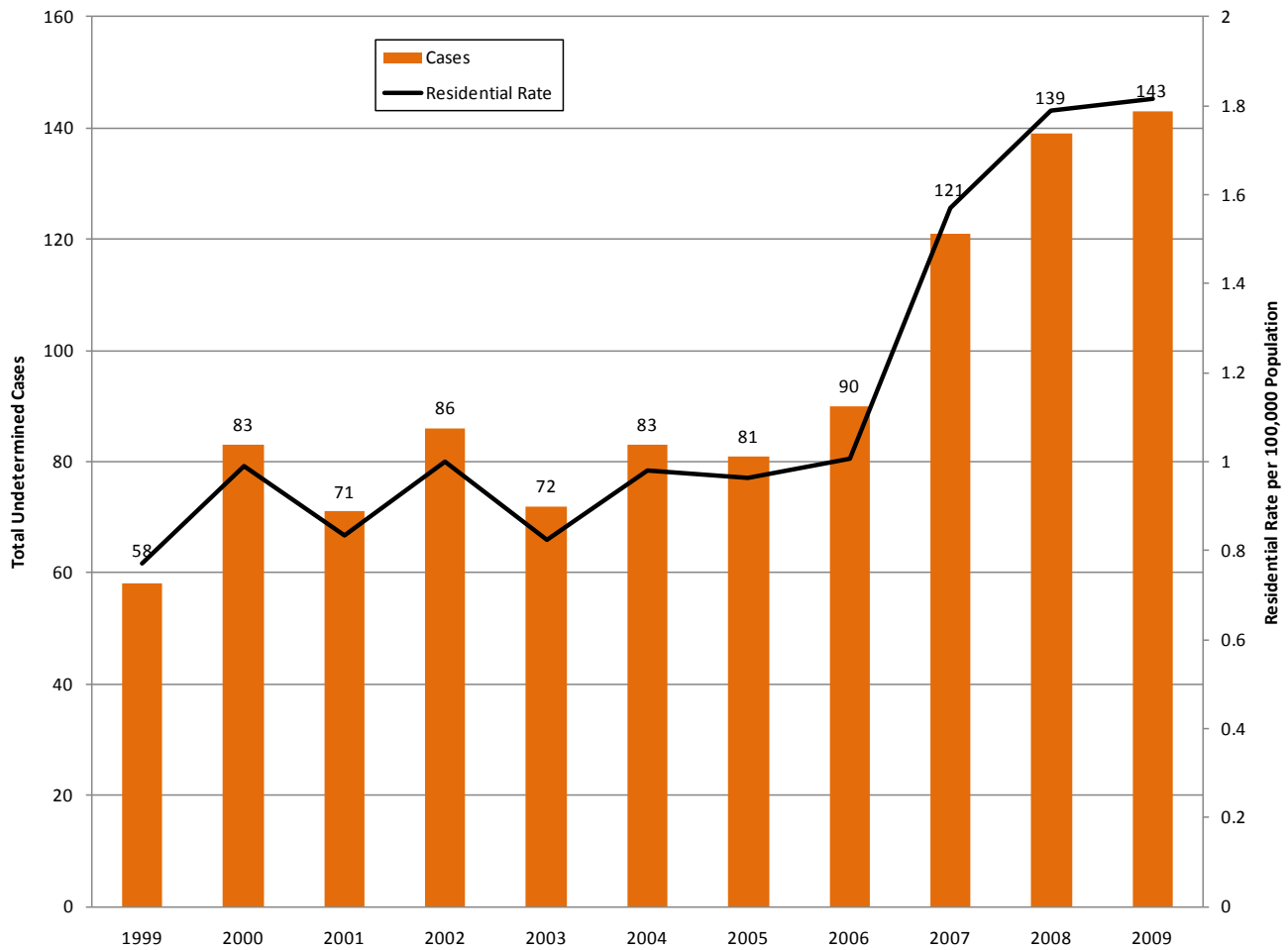
Map shows City/County of injury but not necessarily residency and/or where death occurred.  
A total of 32 cases had the fatal homicide injury occur outside of Virginia borders or was unknown.

## UNDETERMINED DEATHS (N=143)

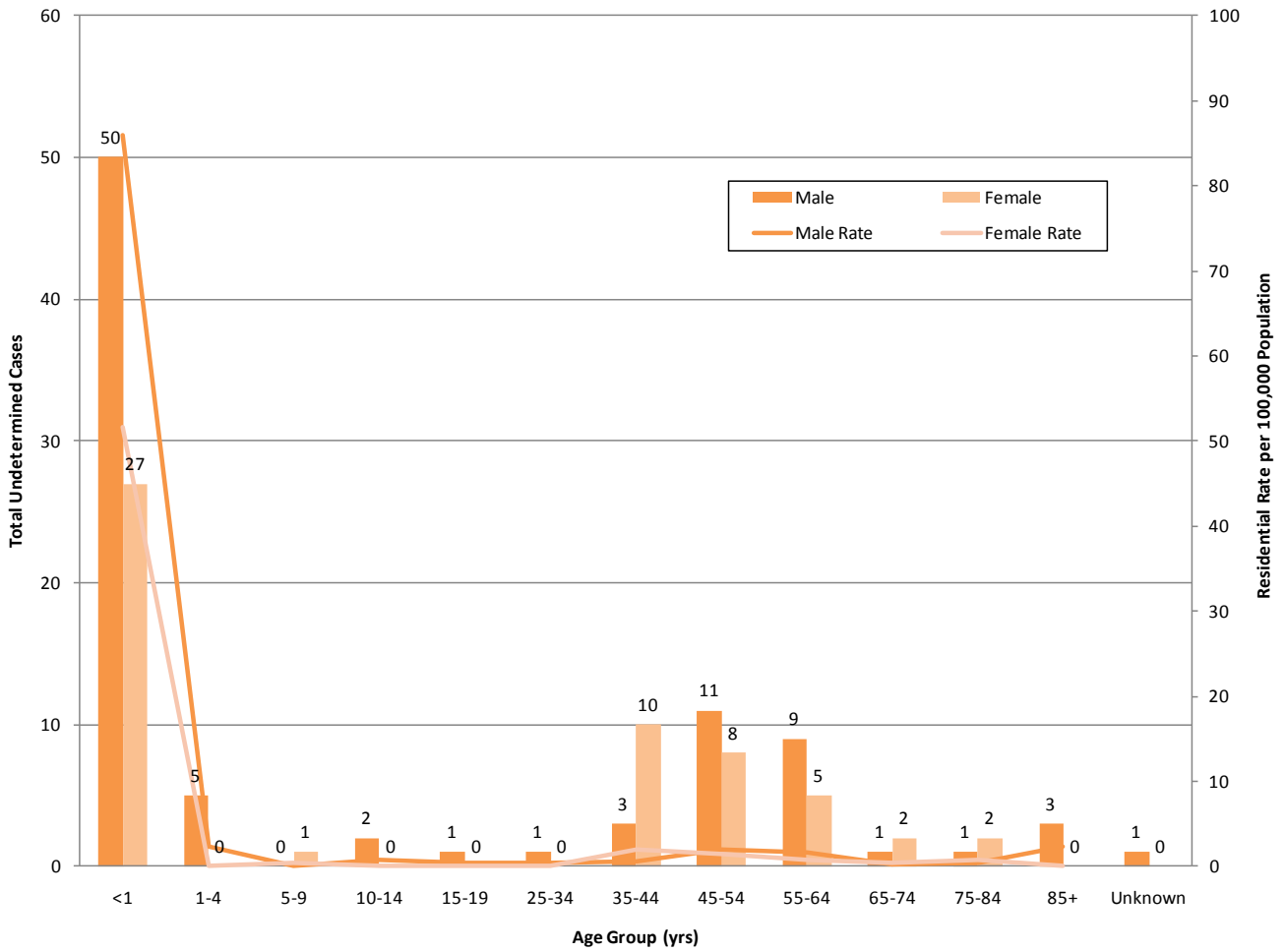
Undetermined deaths have increased substantially in the last few years mostly due to establishing the category of death, Sudden Unexpected Infant Death (SUID). There was a 2.9% increase in undetermined deaths from 2008.

- Fifty-four percent of the undetermined manner and cause of death deaths were in children under the age of one
- Sixty-five percent of the undetermined manner and cause of death cases were designated as SUID
  - SUID cases increased 18.2 percent from 2008

**Figure 37. Undetermined Deaths & Rate by Year of Death, 1999-2009**



**Figure 38. Undetermined Deaths by Age Group by Gender, 2009**



**Figure 39. Undetermined Deaths by Race/Ethnicity, 2009**

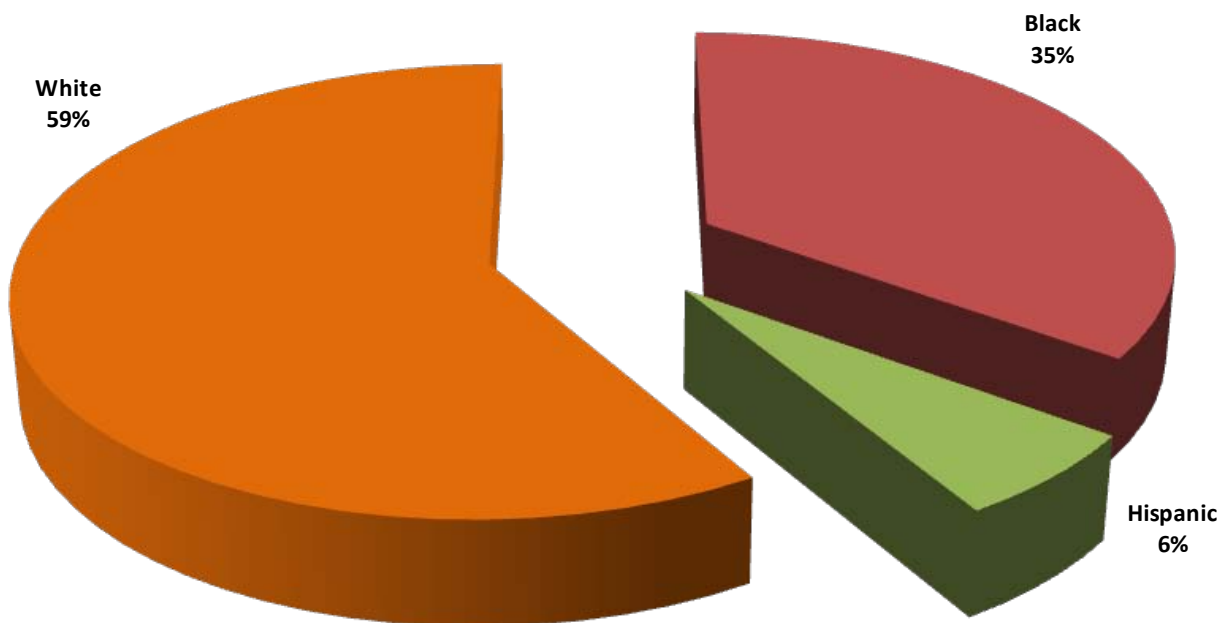


Table 24. Undetermined Deaths by Cause of Death, 2009

	Total Cases	Autopsied
<b>Undetermined Manner &amp; Cause of Death</b>		
Undetermined after autopsy and/or toxicology	100	99
<b><i>Subtotal for Undetermined Manner &amp; Cause of Death</i></b>	<b>100</b>	<b>99</b>
<b>Undetermined Manner but Cause of Death Determined</b>		
<b><i>Asphyxia</i></b>		
Drowning	3	3
Hanging	3	2
<b><i>Drug Use</i></b>		
Ingested ethanol or other alcohol	1	0
Ingested and/or injected illicit, prescription, and/or OTC medication	14	10
<b><i>Fire</i></b>		
Thermal burns and/or inhalation of combustions products	5	4
<b><i>Motor Vehicle</i></b>		
Van	1	1
<b><i>Traumatic Injury</i></b>		
Fall	1	1
Gunshot Wound	7	6
Handgun	(3)	(3)
Rifle	(1)	(1)
Shotgun	(2)	(2)
Unspecified firearm	(1)	(0)
Other Traumatic Causes	8	7
<b><i>Subtotal for Undetermined Manner but Cause of Death Determined</i></b>	<b>43</b>	<b>34</b>
<b>Total</b>	<b>143</b>	<b>133</b>

## SECTION 4: DEATHS OF CHILDREN (17 Years of Age & Younger) (N=336)

The 336 deaths of children represented 6 percent of all deaths investigated by the OCME in 2009. This is a decrease of 10 percent from the number of children deaths in 2008, due mainly to a dramatic decrease in motor vehicle deaths.

- Males represented 62.5 percent of all child cases
- The less than one year age group had the largest percentage of cases (46.8%)
- The leading causes of death were SUID cases (65 or 19.3%), followed by blunt force injuries to the head or neck (49 or 14.6%), then SIDS and handguns both with 23 cases each or 6.8% of cases

**Figure 40. Child Deaths by Manner, 2009**

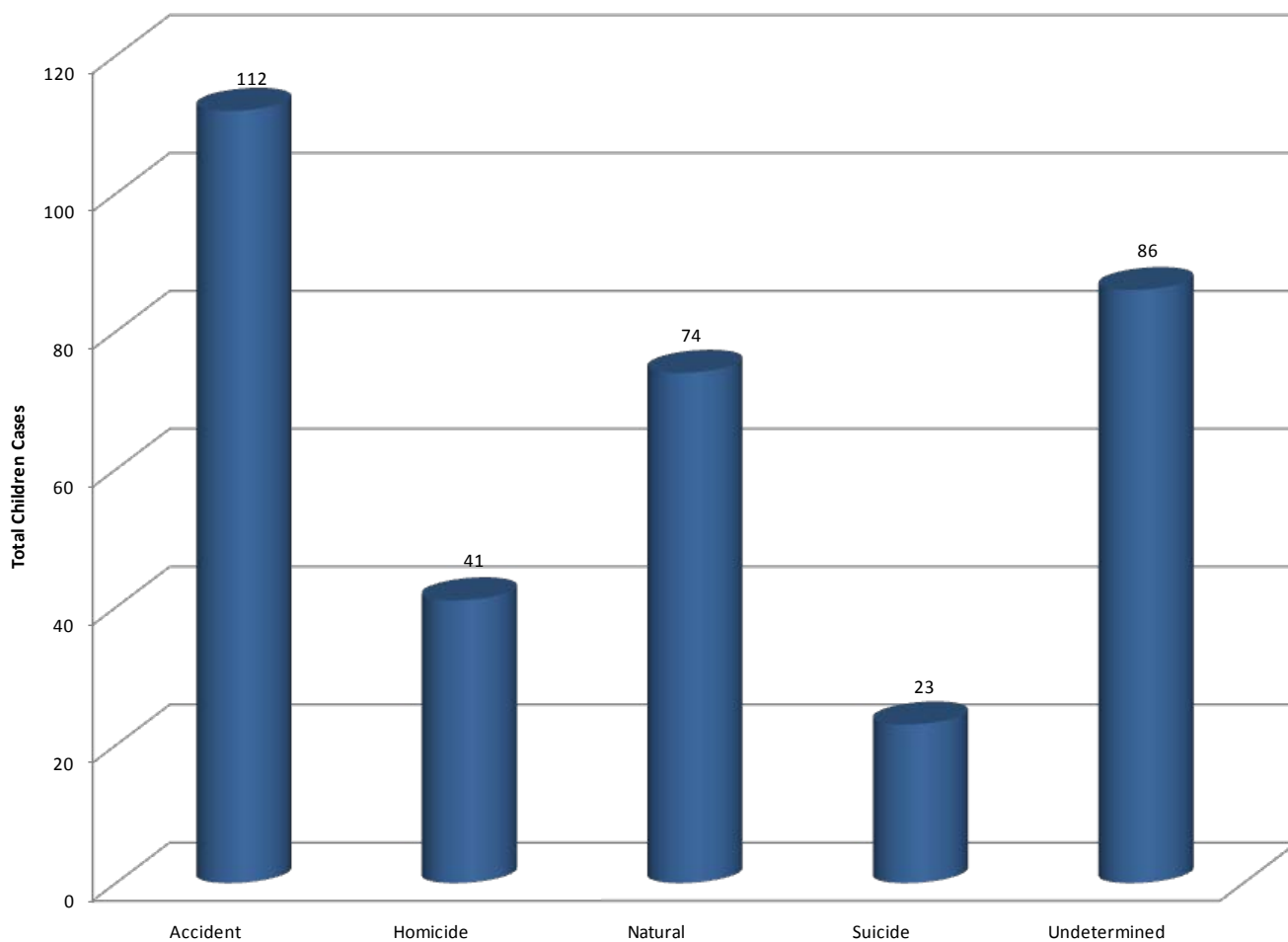


Figure 41. Child Deaths by Age by Gender, 2009

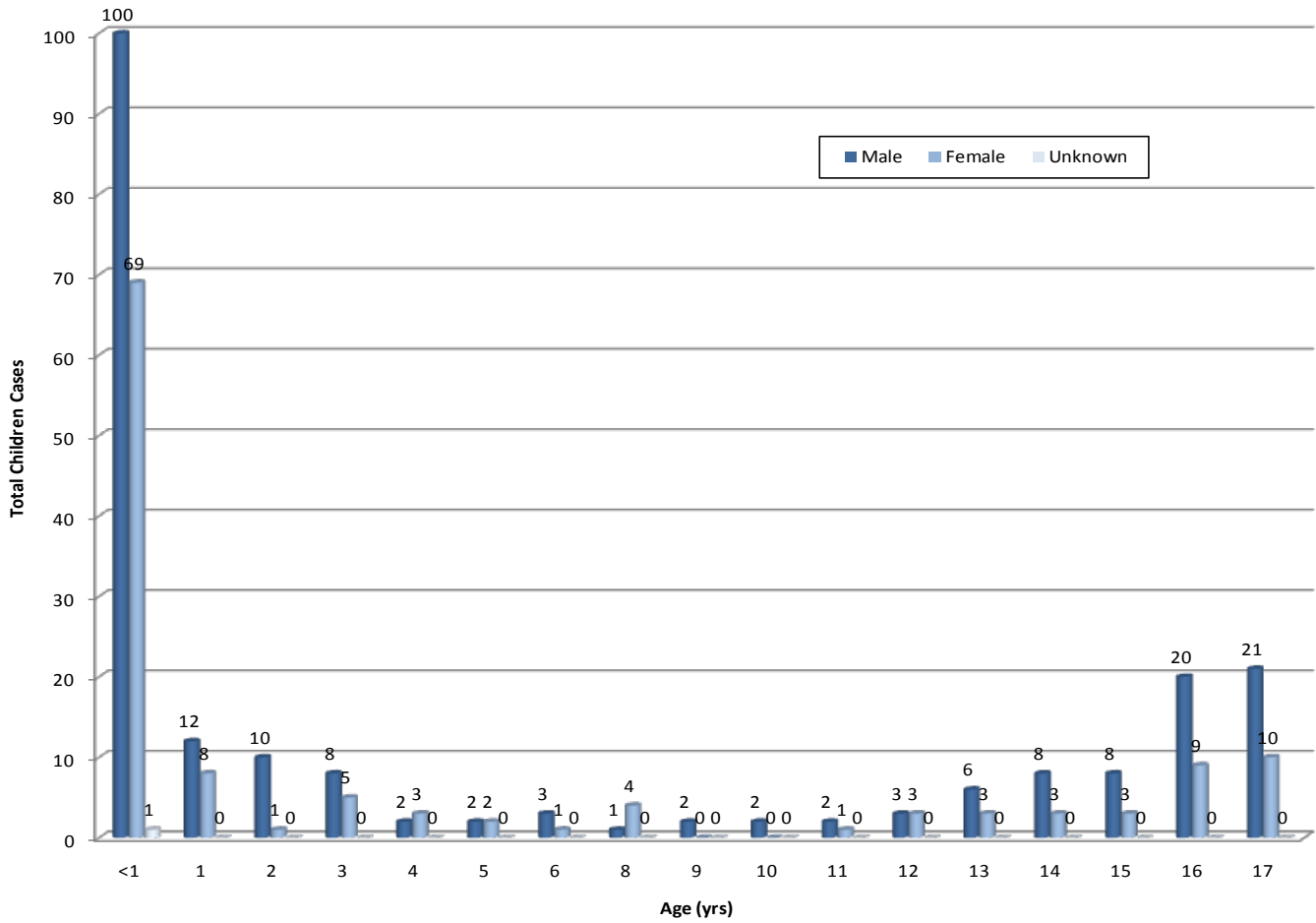


Figure 42. Child Deaths by Race/Ethnicity, 2009

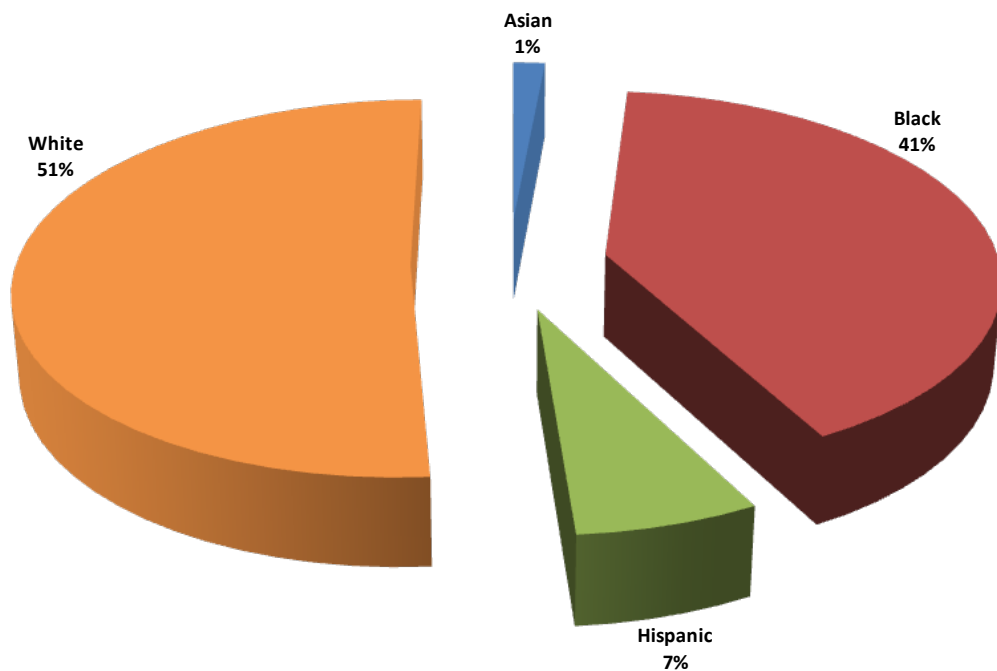




Figure 43. Child Death by Manner of Death by Race/Ethnicity, 2009

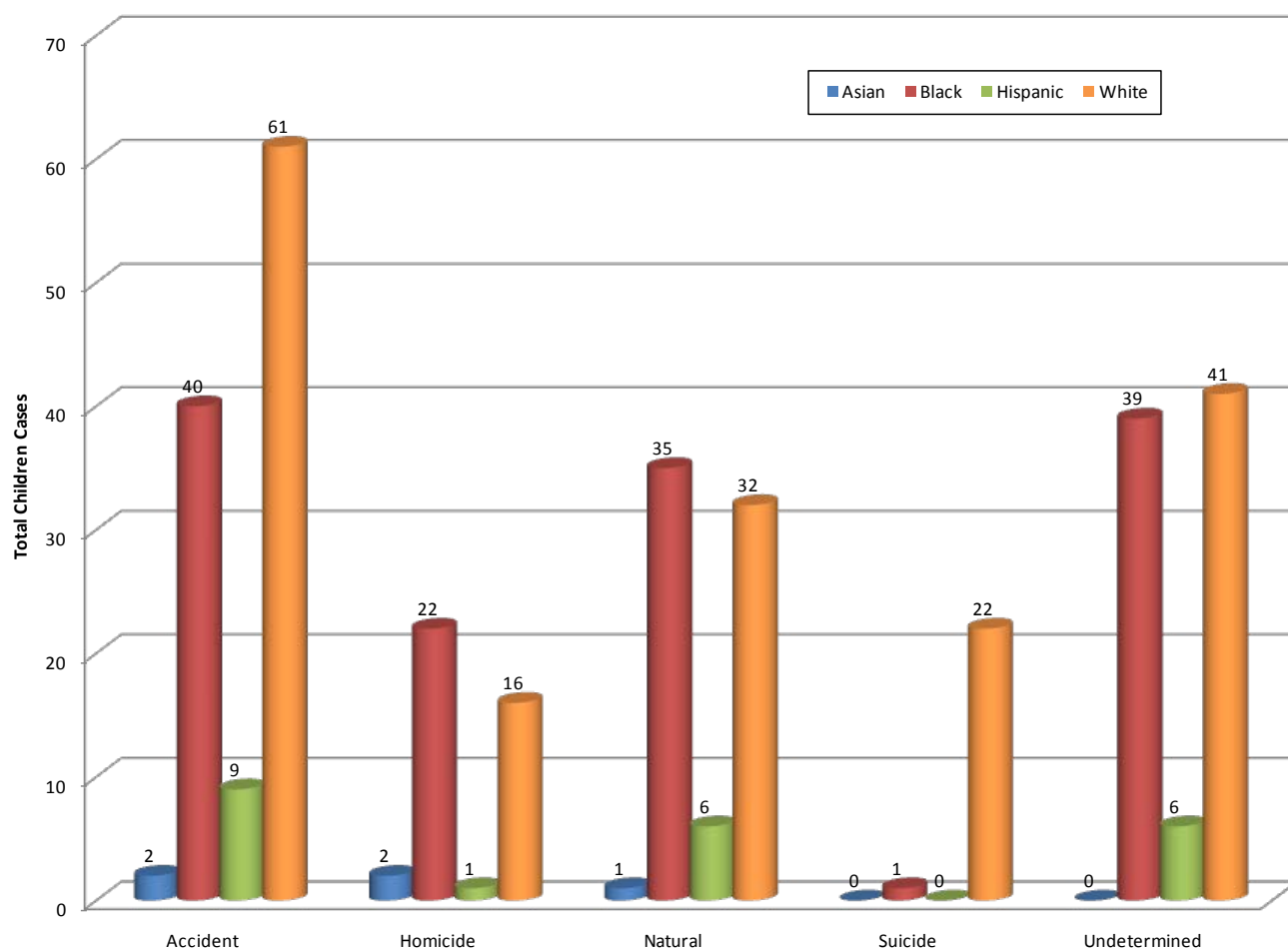


Table 25. Child Deaths by Cause of Death, 2009

	Natural Deaths	Total Cases	Autopsied
<b>Pulmonary Diseases/Disorders</b>			
Asthma		1	1
Emboli		1	1
Pneumonia		6	6
Other Pulmonary Disease/Disorder		2	1
<b>Central Nervous System Diseases/Disorders</b>			
Seizure Disorder		1	0
Meningitis (Bacterial or Viral)		1	1
CNS Malignancy		1	1
Other CNS Disease/Disorder		1	1
<b>Cardiovascular Diseases/Disorders</b>			
Congenital Defect		7	6
Acute Coronary Insufficiency		1	1
Other Cardiac Disease/Disorder		1	1

<b>Gastrointestinal Diseases/Disorders</b>		
Other GI Disease/Disorder	1	1
<b>Perinatal and Pediatric Diseases/Disorders</b>		
Maternal Complications	1	1
Fetal Complications	4	4
Sudden Infant Death Syndrome (SIDS)	23	23
Other Perinatal or Pediatric Disorder	5	4
<b>Systemic Diseases/Disorders</b>		
Sepsis	4	4
Other Infectious Disease	5	5
Other Systemic Disease/Disorder	2	1
<b>Other Natural Diseases/Disorders</b>		
Other Natural Disease/Disorder	6	5
<b>Natural Subtotal</b>	<b>74</b>	<b>68</b>
<b>Unnatural Deaths</b>	<b>Total Cases</b>	<b>Autopsied</b>
<b>Asphyxia</b>		
Choking (Aspiration: Food or Foreign Object)	1	1
Drowning	15	12
Hanging	12	4
Mechanical	5	4
Plastic Bag	1	1
Positional	3	3
Strangulation/Neck Compression	1	1
Suffocation/Smothering	12	12
Other Asphyxia	1	1
<b>Electrocution</b>		
Contacted electrical current	1	1
<b>Exposure</b>		
Hyperthermia	1	1
<b>Fire Injuries</b>		
Inhalation of Combustion Products	4	3
Thermal Burns & Inhalation of Combustions Products	5	3
<b>Gunshot Wound</b>		
Handgun	23	23
Rifle	8	8
Unspecified Gun	1	1
<b>Blunt Force Injuries</b>		
Head/Neck	49	22
Chest	1	0
Abdomen	3	2
Trunk	4	1
Multiple	18	1

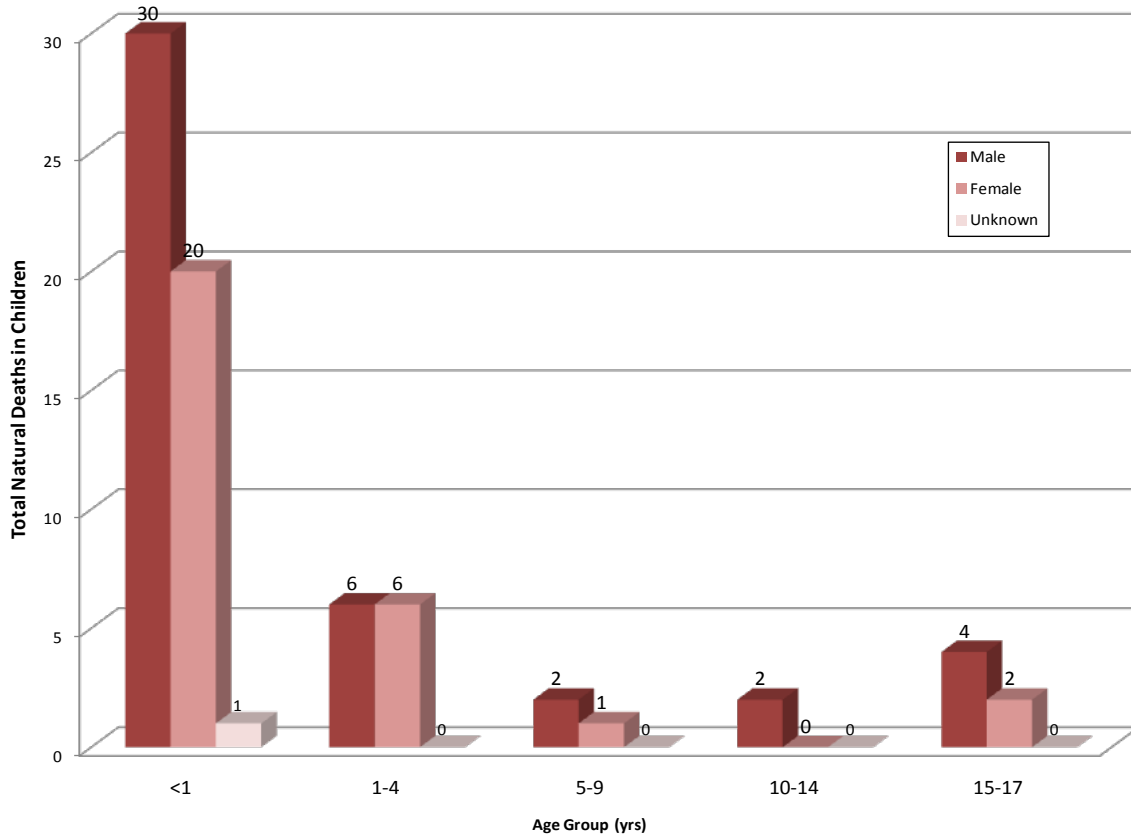
<b>Penetrating Injuries</b>		
Incised	1	1
Other Penetrating Injuries	1	1
<b>Substance Abuse</b>		
Prescription Drug Poisoning	4	4
Inhalant Poisoning	1	1
<b>Other Unnatural Deaths</b>		
Other Unnatural	5	4
<b><i>Unnatural Subtotal</i></b>	<b>181</b>	<b>116</b>
<b>Undetermined Deaths</b>	<b>Total Cases</b>	<b>Autopsied</b>
<b>Undetermined After Autopsy and/or Investigation</b>		
Sudden Unexpected Infant Death (SUID)	65	65
Other Undetermined	16	15
<b><i>Undetermined Subtotal</i></b>	<b>81</b>	<b>80</b>
<b>TOTAL</b>	<b>336</b>	<b>264</b>

**NATURAL DEATHS OF CHILDREN (N=74)**

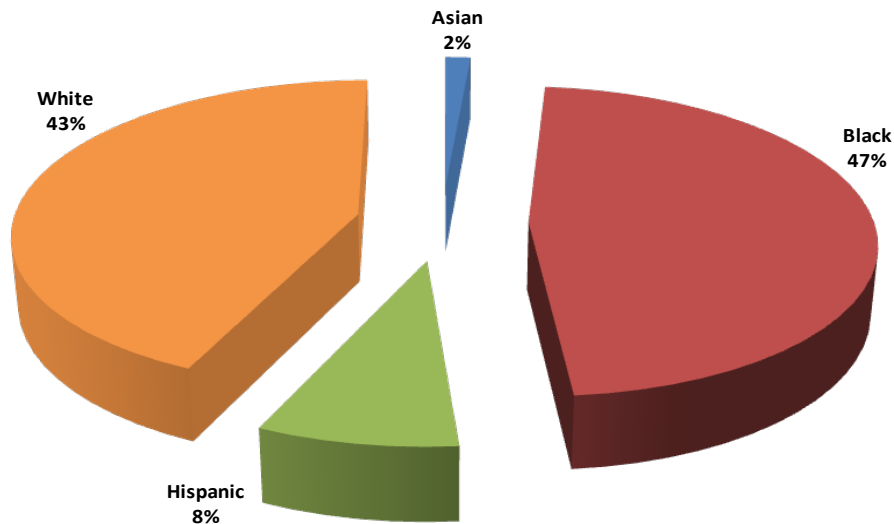
The less than 1 year old age group comprised 68.9 percent of all the natural deaths of children that fell under the OCME’s jurisdiction.

- The number of SIDS cases stayed relatively stable from 2008 to 2009 with a single case increase to 23

**Figure 44. Natural Child Deaths by Age Group by Gender, 2009**



**Figure 45. Natural Child Deaths by Race/Ethnicity, 2009**

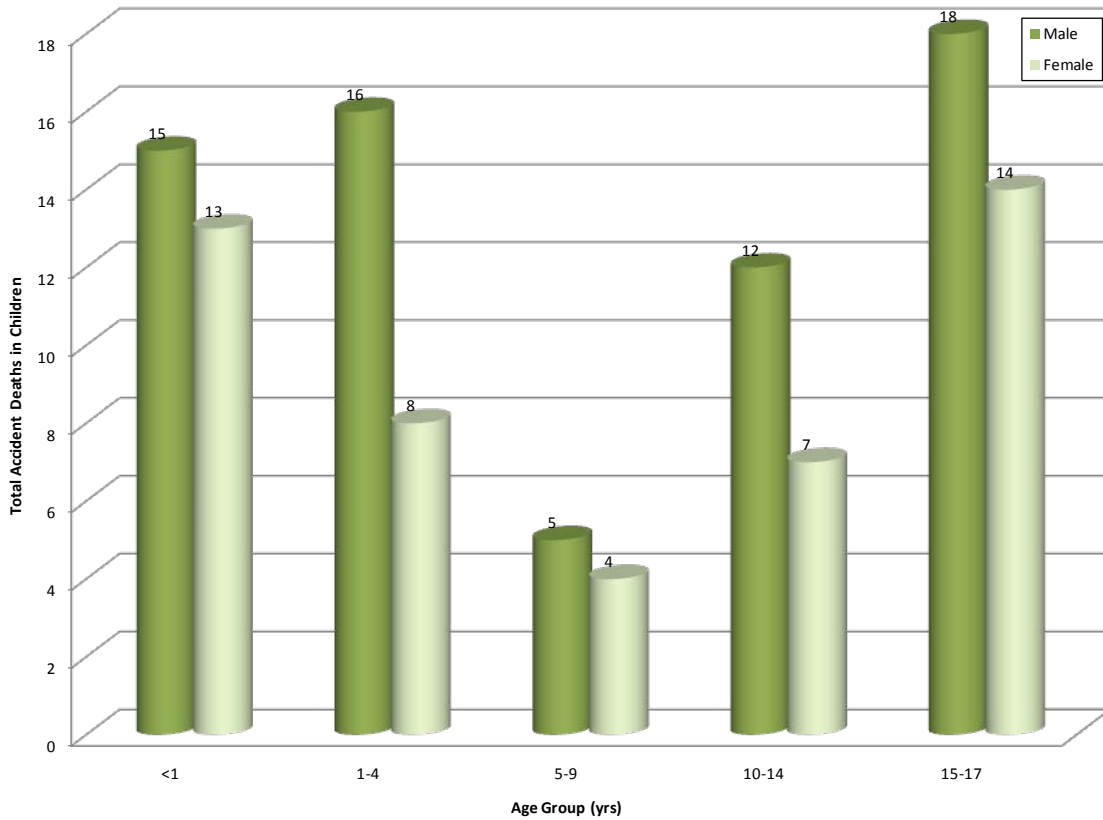


## ACCIDENTAL DEATHS OF CHILDREN (N=112)

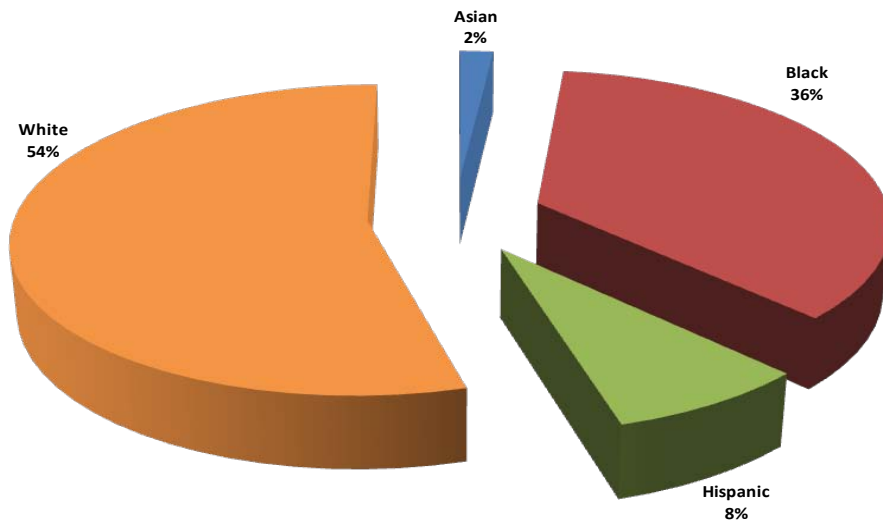
The number of accidental deaths of children decreased in 2009 for the second year in a row.

- More accidental deaths occurred in males (58.9%), whites (54.5%), and those aged 15-17 years (28.6%)
- Out of the 55 motor vehicle accidents, children were drivers 15.2% of the time

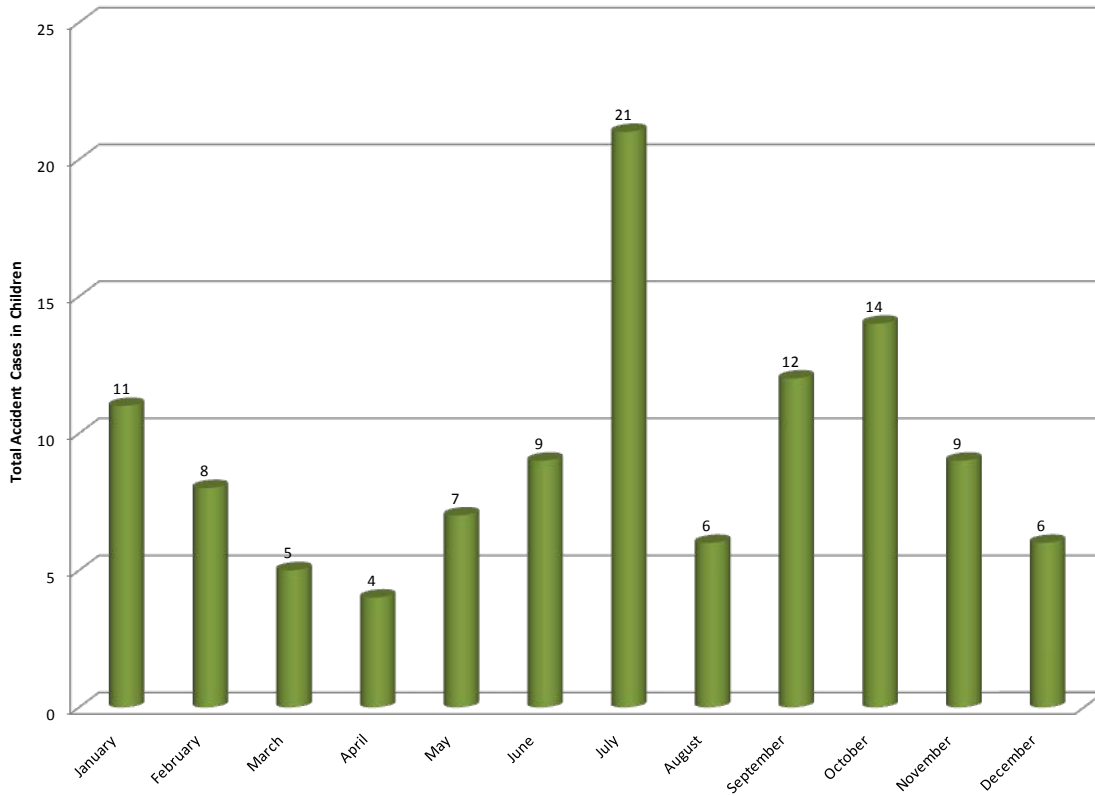
**Figure . Accidental Child Deaths by Age Group by Gender, 2009**



**Figure . Accidental Child Deaths by Race/Ethnicity, 2009**



**Figure 48. Accidental Child Deaths by Month of Death, 2009**



**Figure 49. Accidental Child Deaths by Day of Death, 2009**

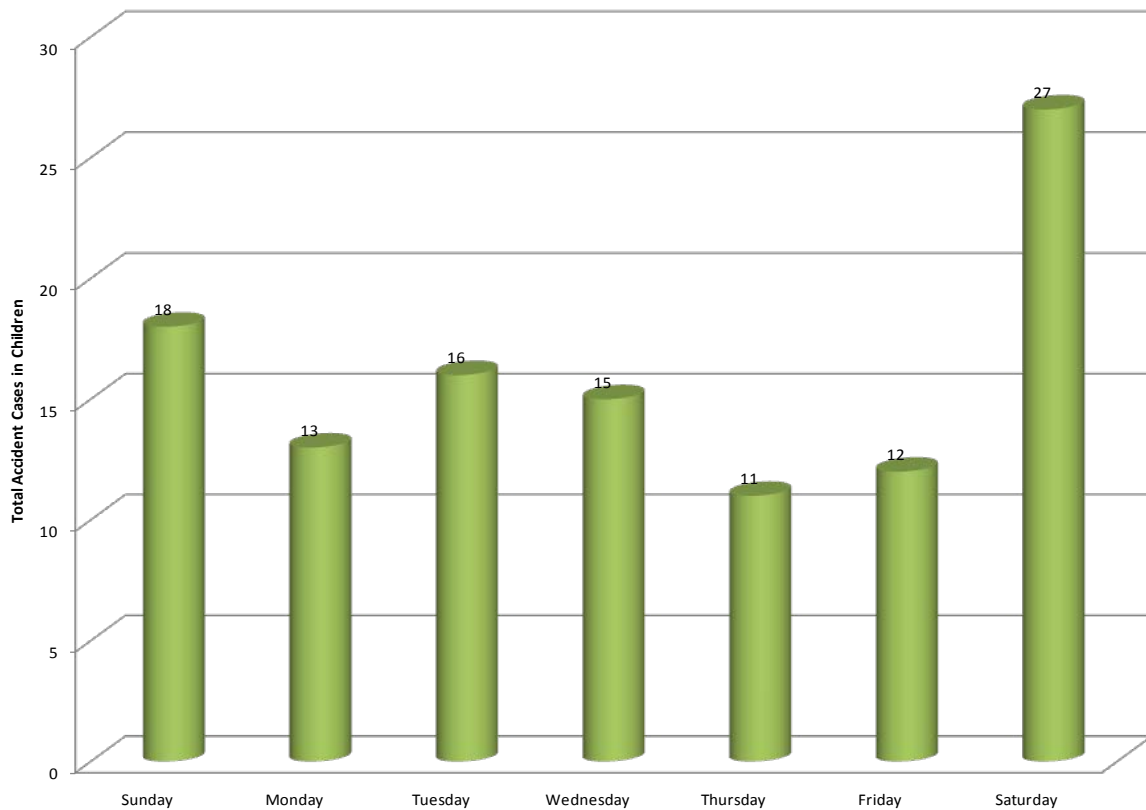


Table 26. Accidental Child Deaths by Method of Death, 2009

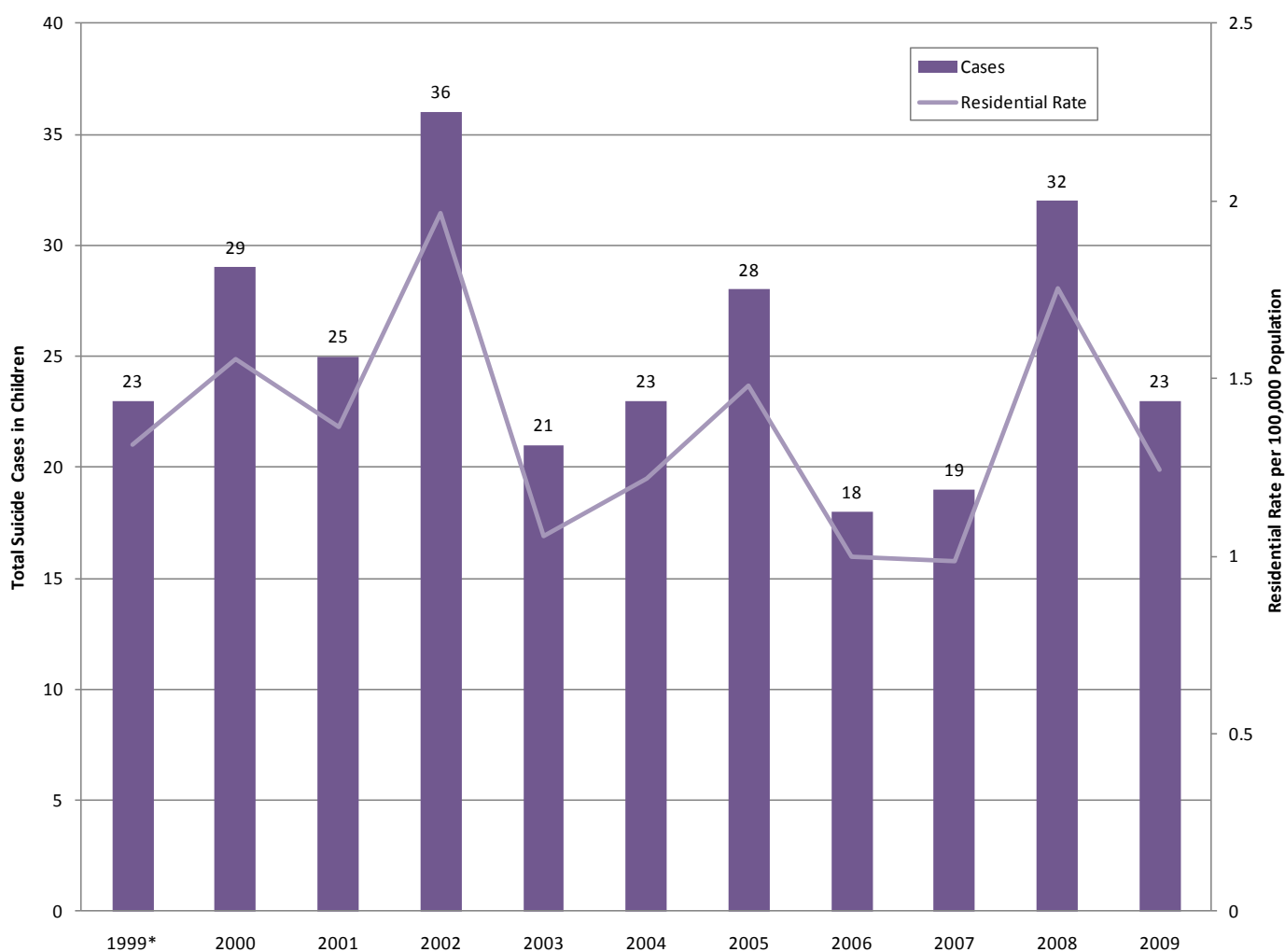
Method of Death	Total Cases	Autopsied
<b>Animal Related</b>		
Animal related (bitten, stung, kicked)	1	1
<b>Asphyxia</b>		
Drowned	13	10
Choked on food/foreign object	1	1
Hanging	4	3
Mechanical/Positional	6	6
Suffocation/Smothering	12	12
Other	2	2
<b>Drug Use</b>		
Ingested and/or injected illicit, prescription, and/or other type of drug	1	1
<b>Electrical</b>		
Contacted electrical current	1	1
<b>Fall</b>		
Fall from any height	2	2
<b>Fire</b>		
Thermal burns and/or inhalation of combustion products	7	4
<b>Poisoned</b>		
Inhaled toxic agent	1	1
<b>Vehicular</b>		
All Terrain Vehicle	1	0
Bus	1	1
Car	27	2
Pickup Truck	8	3
Sport Utility Vehicle	11	1
Trailer	1	0
Van	6	0
<b>Traumatic Injury</b>		
Accidental discharge of firearm	2	2
Handgun	(1)	(1)
Rifle	(1)	(1)
Beatings/Blows	1	0
Falling object	2	1
<b>Other</b>		
	1	1
<b>TOTAL</b>	<b>112</b>	<b>55</b>

## SUICIDE DEATHS OF CHILDREN (N=23)

The number of child suicides in 2009 decreased from the previous year, although child suicides tend to vary year to year.

- Childhood suicides were most frequent in males (73.9%), whites (95.7%), and those 17 years old (43.5%)
- The majority of children (87%) committed suicide either by using a firearm (56.5%) or hanging themselves (30.4%)

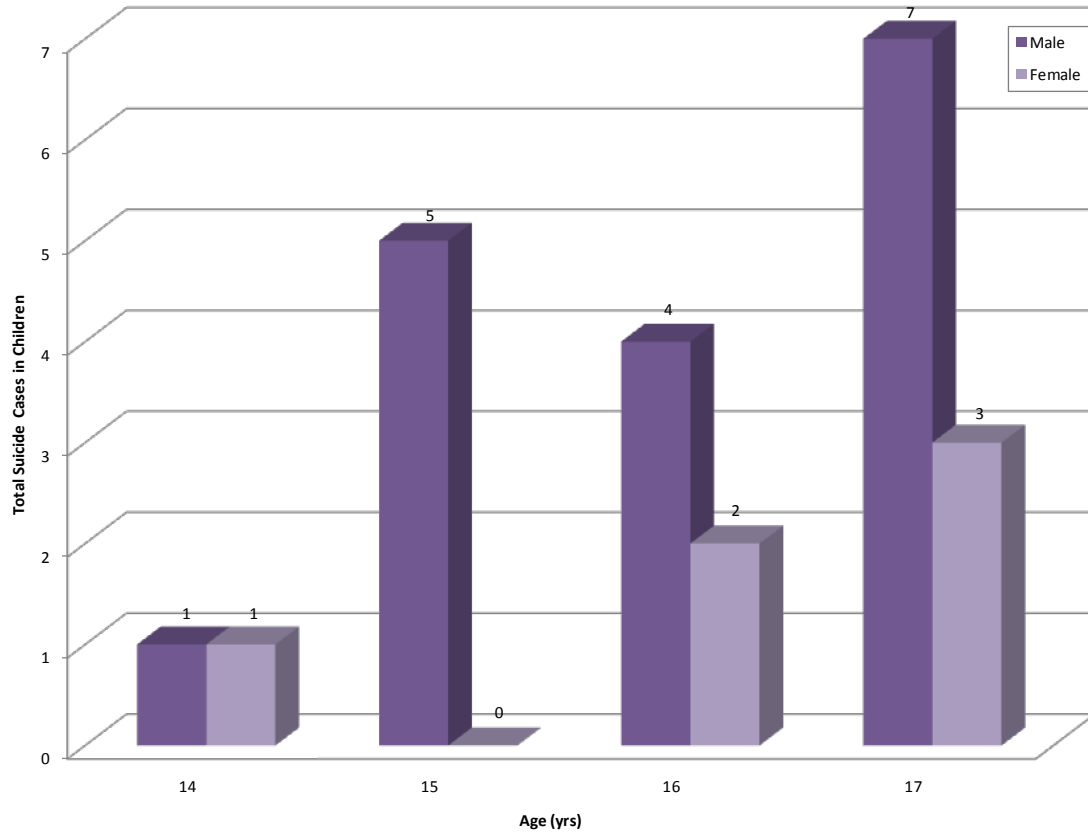
**Figure 50. Child Suicide Deaths by Year of Death, 1999-2009**



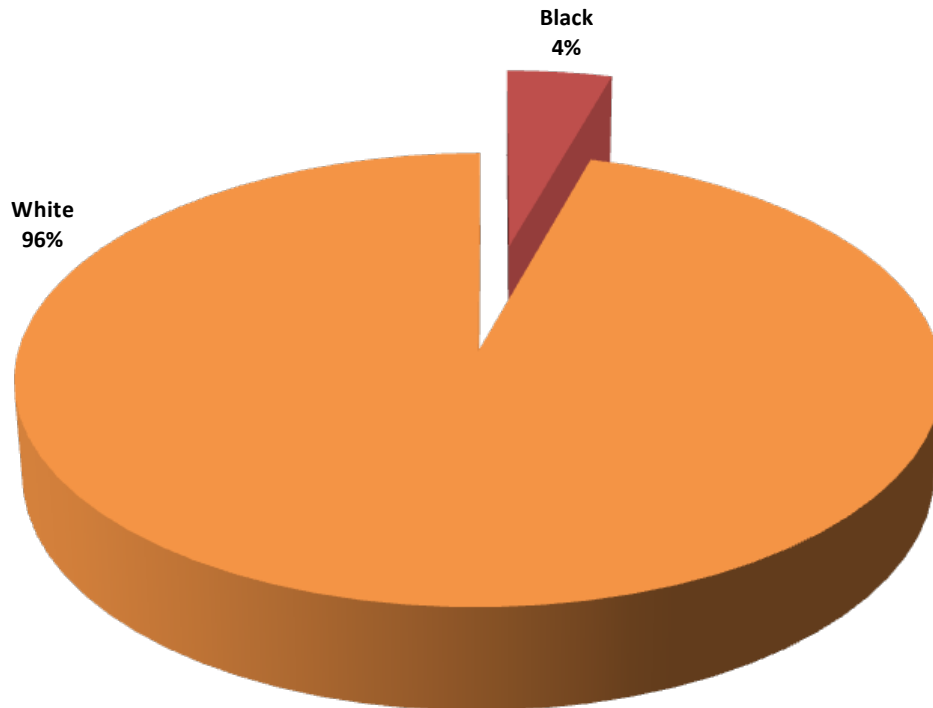
\* The 1999 population data is an estimate from VDH's Center for Health Statistics' data. The 15-17 year olds were contained within the age group for 15-19 year olds; therefore, 60 percent of the 15-19 age group was added to the 0-14 year old age group to estimate the total 1999 population of 0-17 year olds.



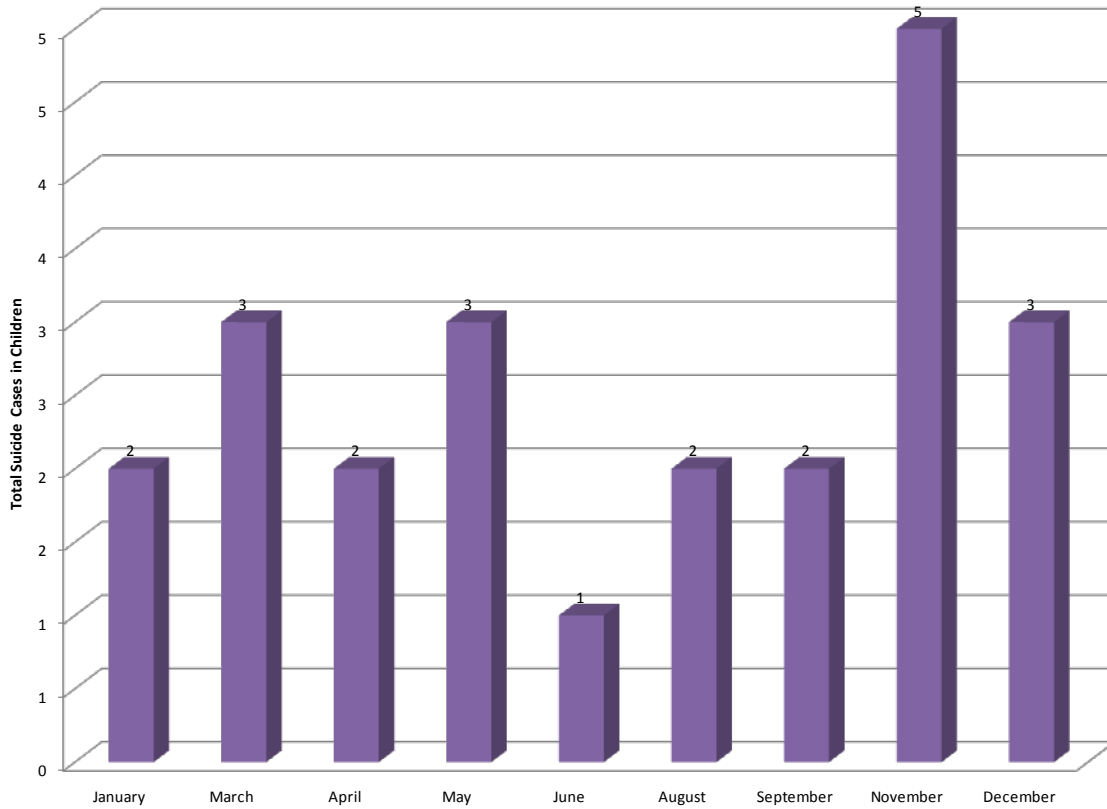
**Figure 51. Child Suicide Deaths by Age by Gender, 2009**



**Figure 52. Child Suicide Deaths by Race/Ethnicity, 2009**



**Figure 53. Child Suicide Deaths by Month of Death, 2009**



**Figure 54. Child Suicide Deaths by Day of Death, 2009**

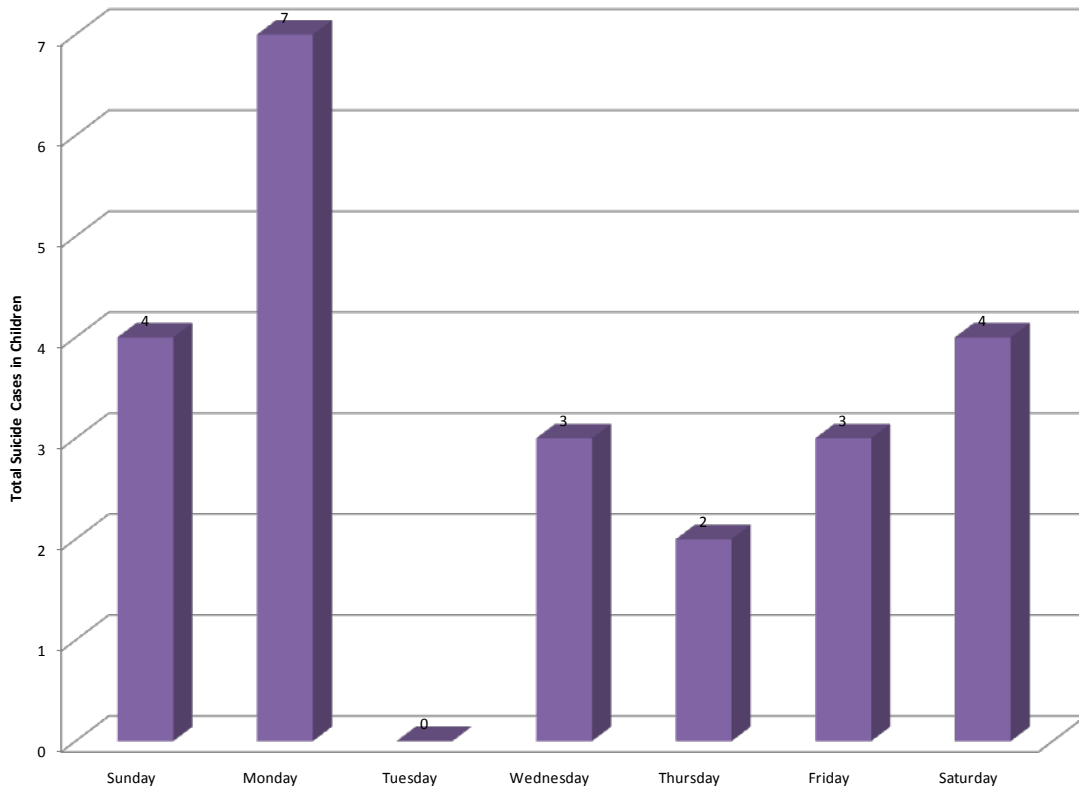


Table 27. Child Suicide Deaths by Method of Death, 2009

Method of Death	Total Cases	Autopsied
<b>Asphyxia</b>		
Hanging	7	0
<b>Drug Use</b>		
Ingested and/or injected illicit, prescription, and/or other type of drug	2	2
<b>Motor Vehicle</b>		
Train	1	0
<b>Traumatic Injury</b>		
Gunshot Wound	13	13
Handgun	(9)	(9)
Rifle	(4)	(4)
<b>Total</b>	<b>23</b>	<b>15</b>

## HOMICIDE DEATHS OF CHILDREN (N=41)

As there was an increase in overall homicides in 2009, there was also an increase in homicides of children for 2009. Homicides of children represented 10% of all homicides.

- Childhood homicides were most common in blacks (53.7%) and infants under a year old (34.1%)
- Males accounted for 61% of all childhood homicides
  - However, females accounted for 64.3% of homicides for infants under the age of one
  - In the older age group of 13-17 years old, 81% of cases were male
- Black children died from homicides at a rate of 5 per 100,000
  - Black children were murdered 2.6 times more than that of Asian children, 3.5 times that of whites, and 9.8 times that of Hispanics
- Firearms were responsible for 39% of all childhood homicides

**Figure 55. Child Homicide Deaths & Rate by Year of Death, 1999-2009**



Figure 56. Child Homicide Deaths by Age by Gender, 2009

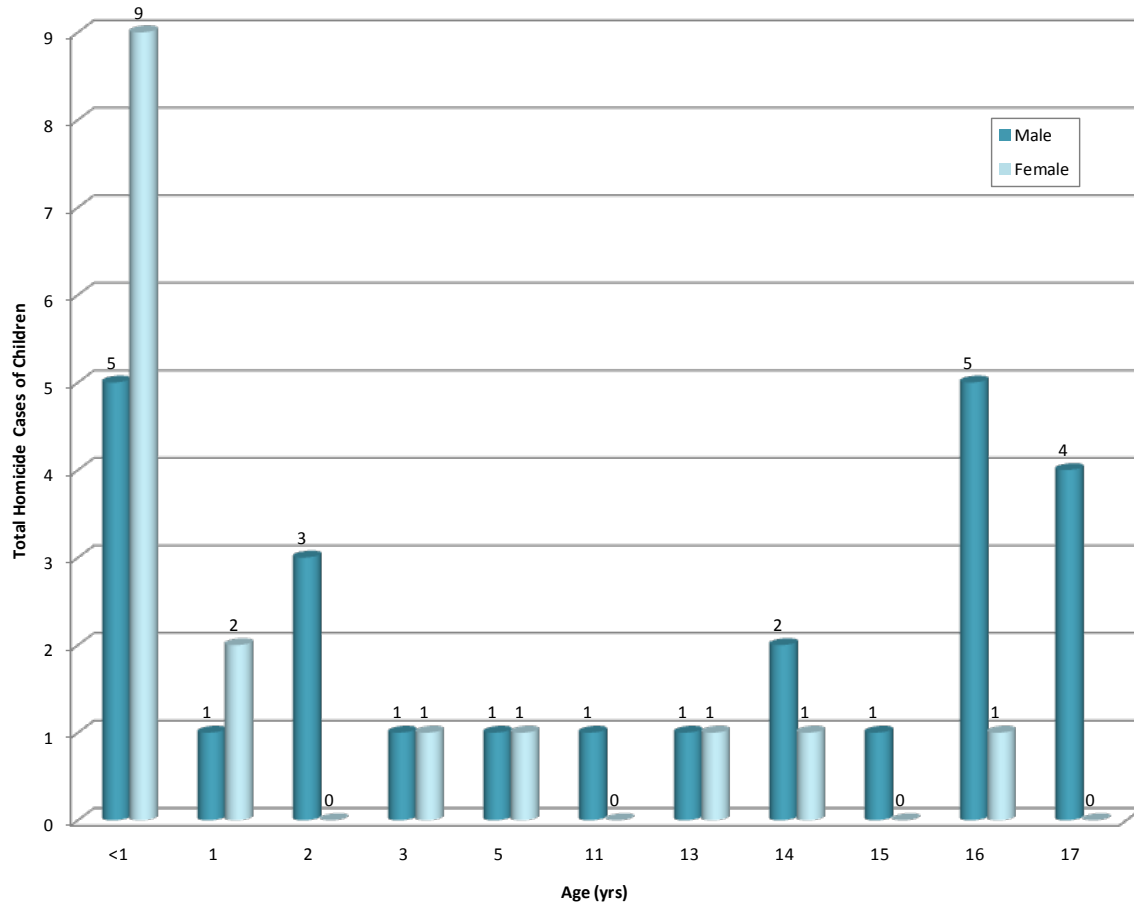


Figure 57. Child Homicides by Race/Ethnicity, 2009

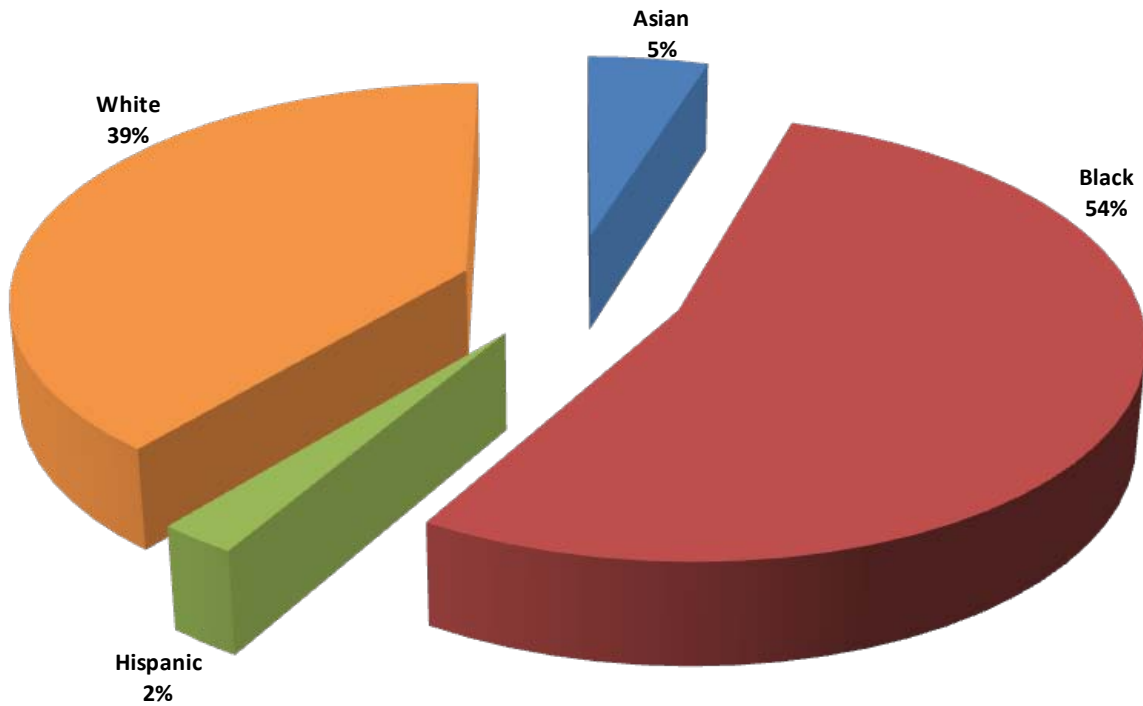


Figure 58. Child Homicide Deaths by Month of Death, 2009

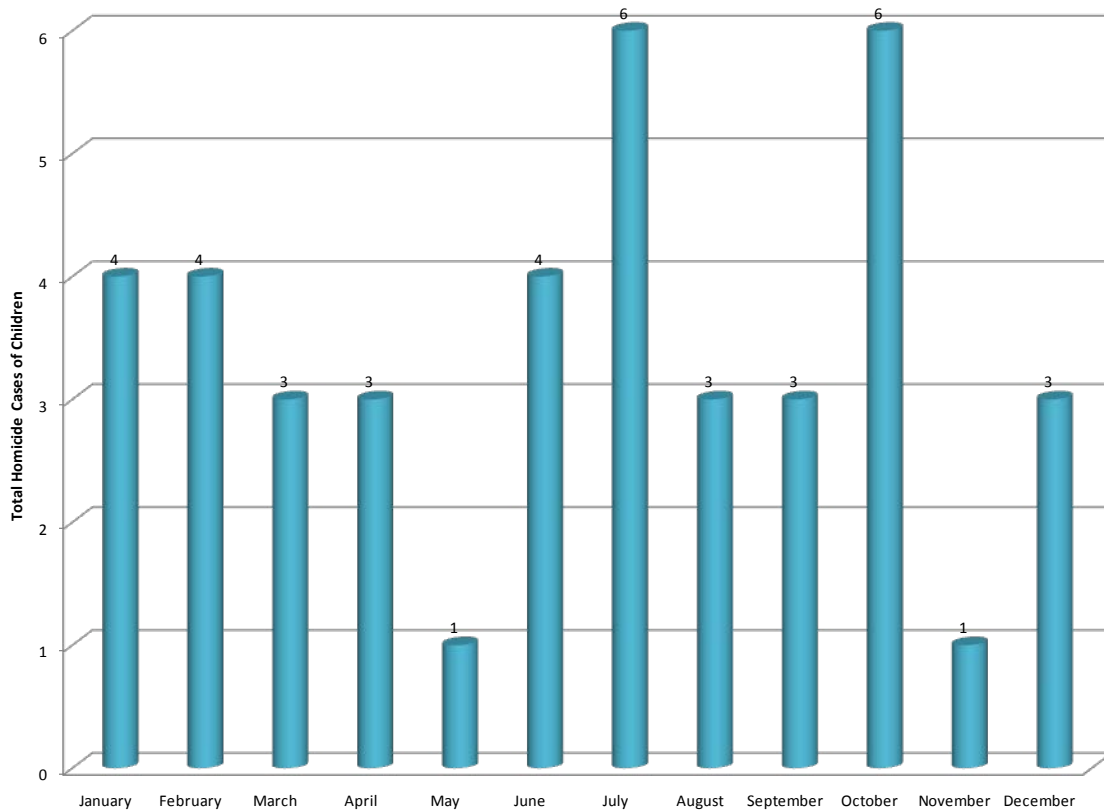


Figure 59. Child Homicide Deaths by Day of Death, 2009

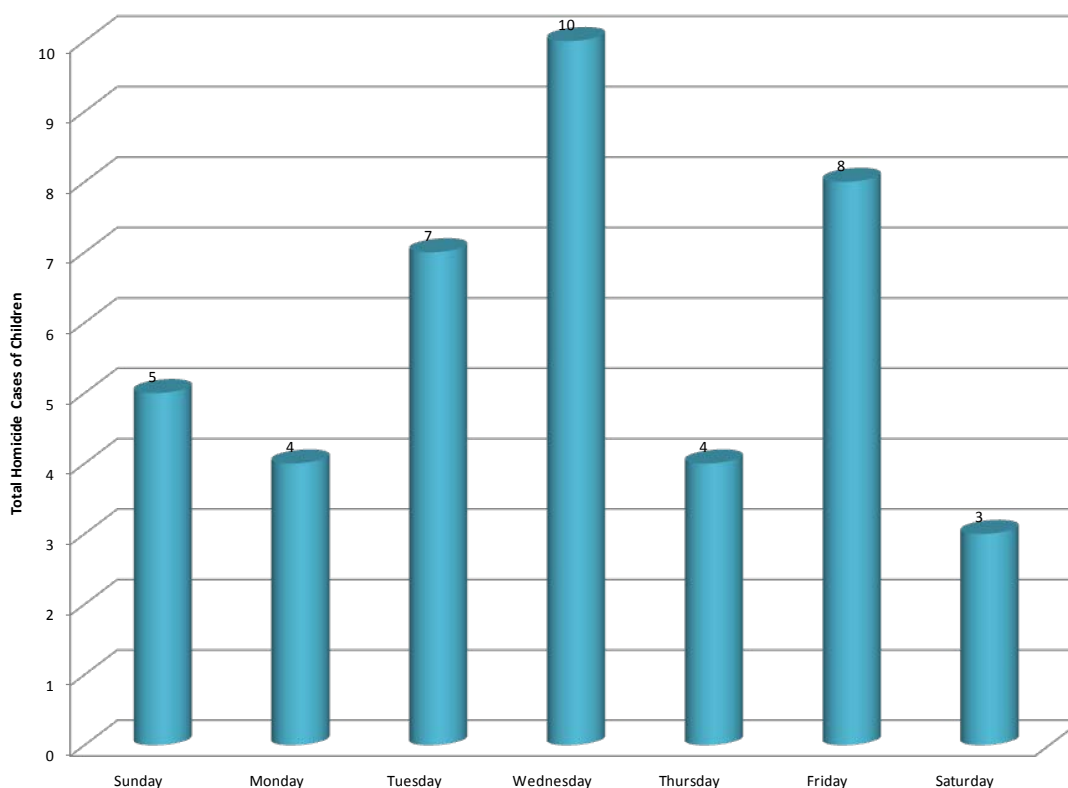


Table 28. Child Homicide Deaths by Method of Death, 2009

Method of Death	Total Cases	Autopsied
<b><i>Asphyxia</i></b>		
Drowned	1	1
Mechanical	1	1
Plastic bag	1	1
<b><i>Environmental Exposure</i></b>		
Exposed to heat	1	1
<b><i>Traumatic Injury</i></b>		
Beaten by assailant(s)	15	15
Shot by assailant(s) with firearm	16	16
Handgun	(12)	(12)
Rifle	(3)	(3)
Unspecified	(1)	(1)
Stabbed by assailant(s)	1	1
Other	4	4
<b><i>Unknown</i></b>		
Undetermined method	1	1
<b>Total</b>	<b>41</b>	<b>41</b>

## UNDETERMINED DEATHS OF CHILDREN (N=86)

A total of 86 undetermined deaths of children occurred in 2009; this represents 60.1 percent of all undetermined cases.

- 89.5% of undetermined deaths were less than 1 year of age
- 75.6% had the diagnosis of SUID

**Figure 60. Undetermined Child Deaths by Age by Gender, 2009**

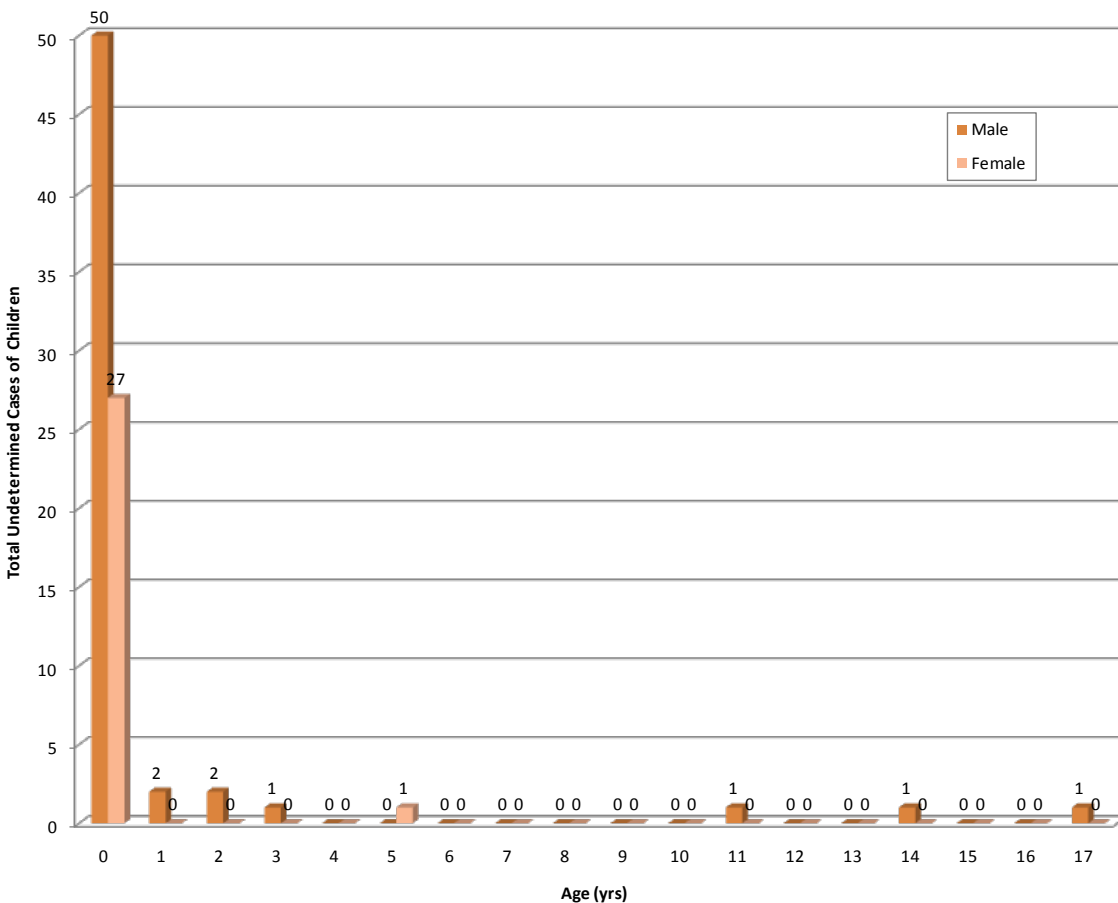




Figure 61. Undetermined Child Deaths by Race/Ethnicity, 2009

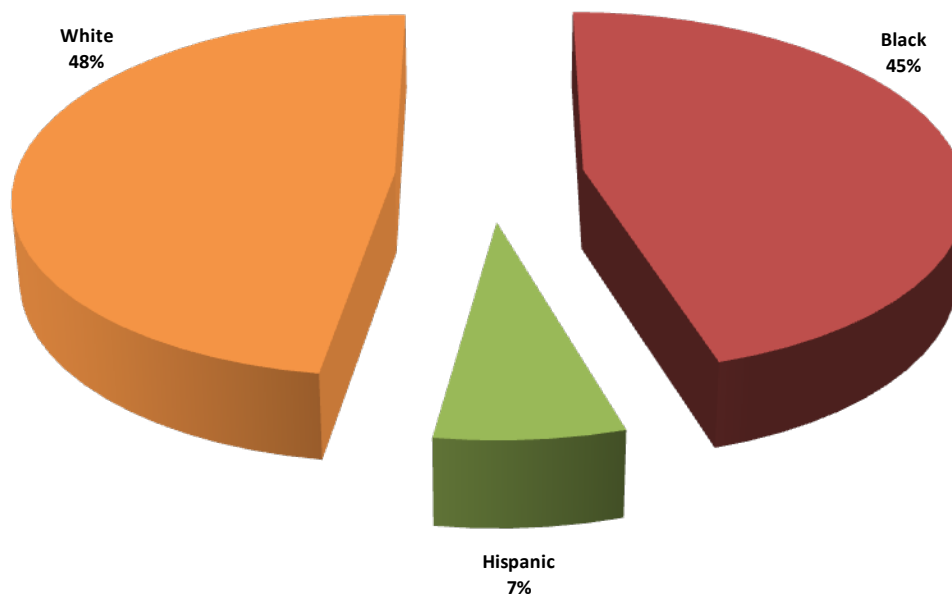


Table 29. Undetermined Child Deaths by Cause of Death and by Age, 2009

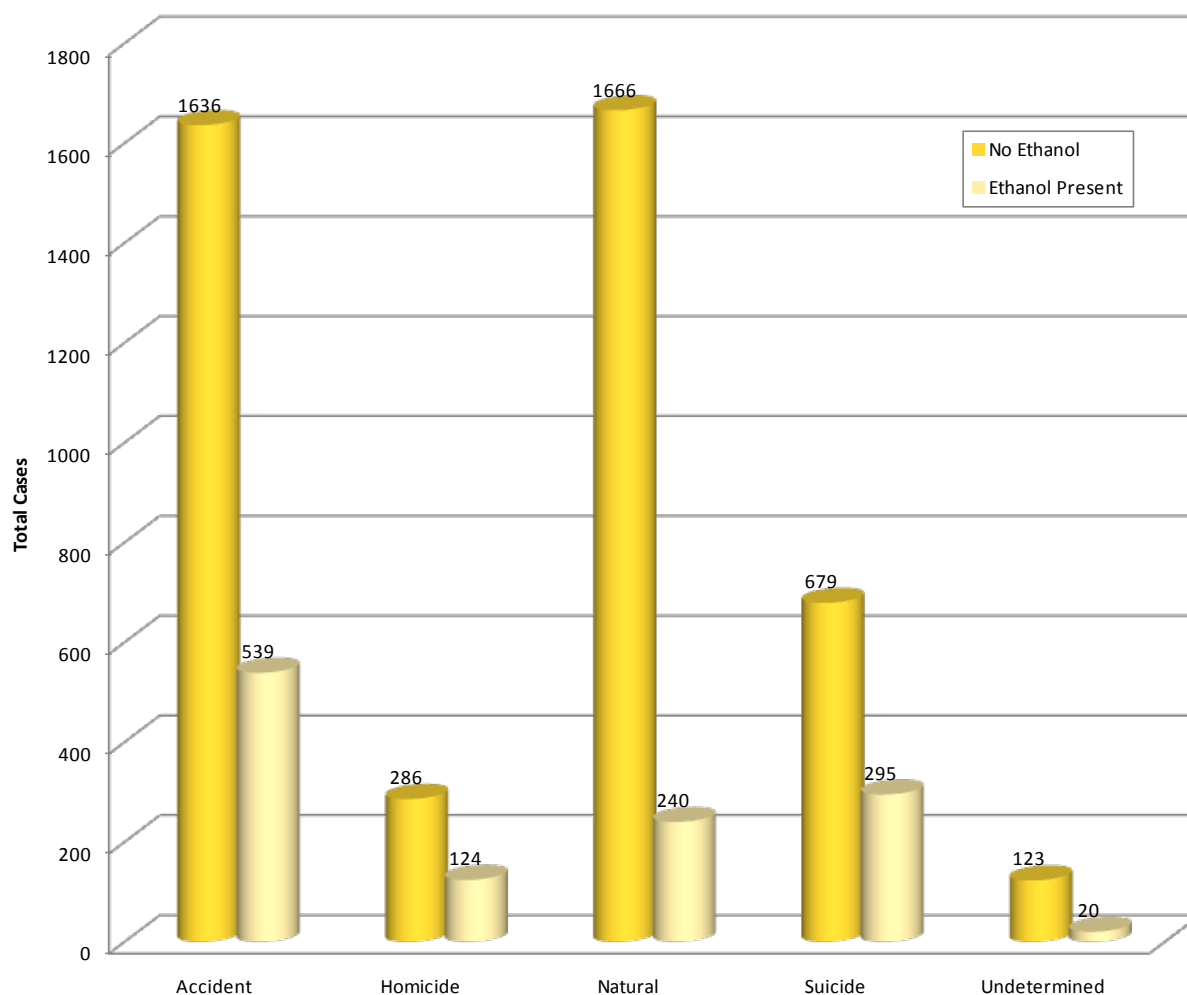
Method of Death	Total Cases	Autopsied
<b>Undetermined Manner &amp; Cause of Death</b>		
Sudden Unexpected Infant Death	65	65
Undetermined after autopsy and/or toxicology	16	15
<b>Subtotal for Undetermined Manner &amp; Cause of Death</b>	<b>81</b>	<b>80</b>
<b>Undetermined Manner but Cause of Death Determined</b>		
<b>Traumatic Injury</b>		
Drowning	1	1
Handgun	1	1
Hanging	1	1
<b>Poisoning</b>		
Inhalation of Combustion Products	1	1
Ingested and/or injected illicit, prescription, and/or other type of drug	1	1
<b>Subtotal for Undetermined Manner but Cause of Death Determined</b>	<b>5</b>	<b>5</b>
<b>Total</b>	<b>86</b>	<b>85</b>
<b>Age</b>		
0	77	76
1	2	2
2	2	2
3	1	1
5	1	1
11	1	1
14	1	1
17	1	1
<b>Total</b>	<b>86</b>	<b>85</b>

## SECTION 5: ETHANOL ASSOCIATED DEATHS (N=1218)

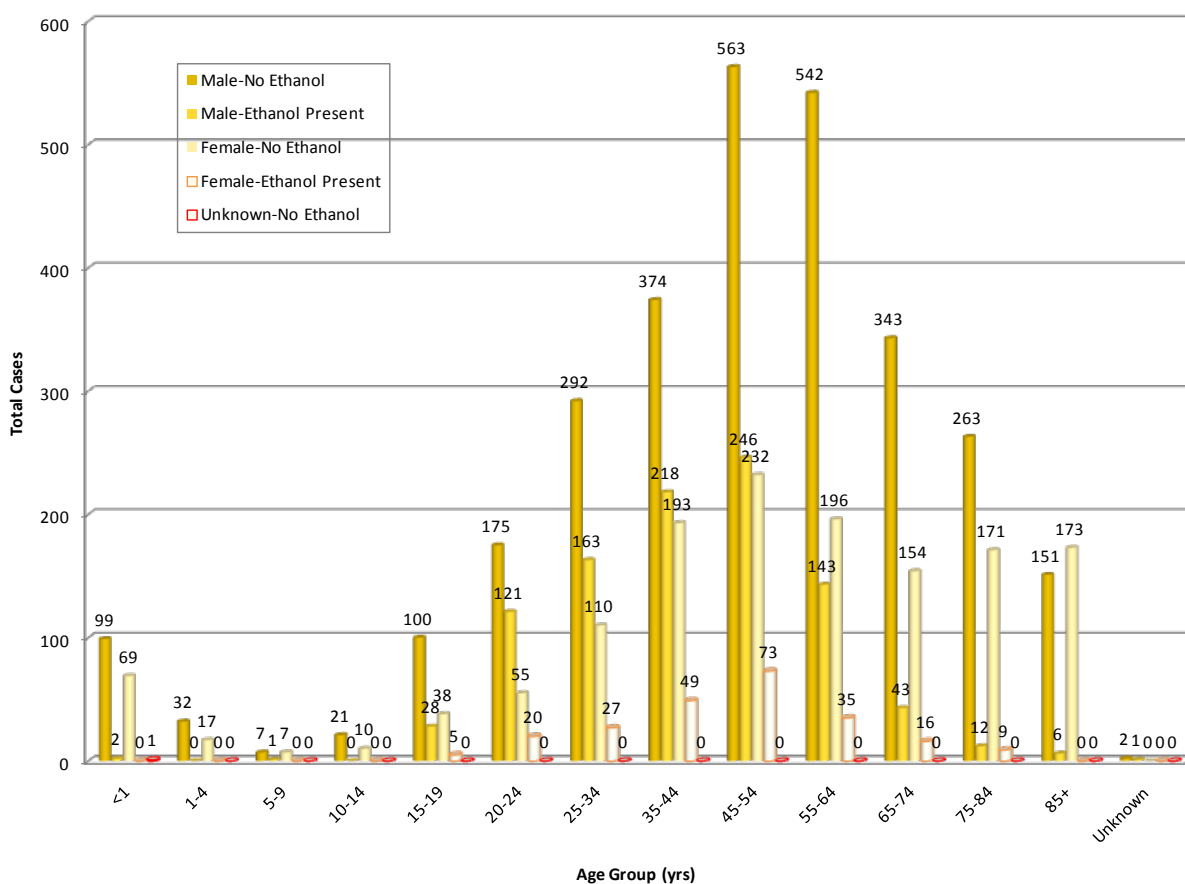
Ethanol, at the level of 0.01% by weight per volume (W/V) or greater, was detectable in 1218 or 21.7% of decedents in 2009. Of those with detectable ethanol levels, 63.8% had a measured level at or above 0.08% W/V, which is the legal limit for operating a motor vehicle in Virginia.

- Males accounted for 80.8% of all ethanol associated deaths
- Forty-three percent of penetrating injury cases were associated with ethanol as were 31.2% of all gunshot cases and 30.5% of drownings

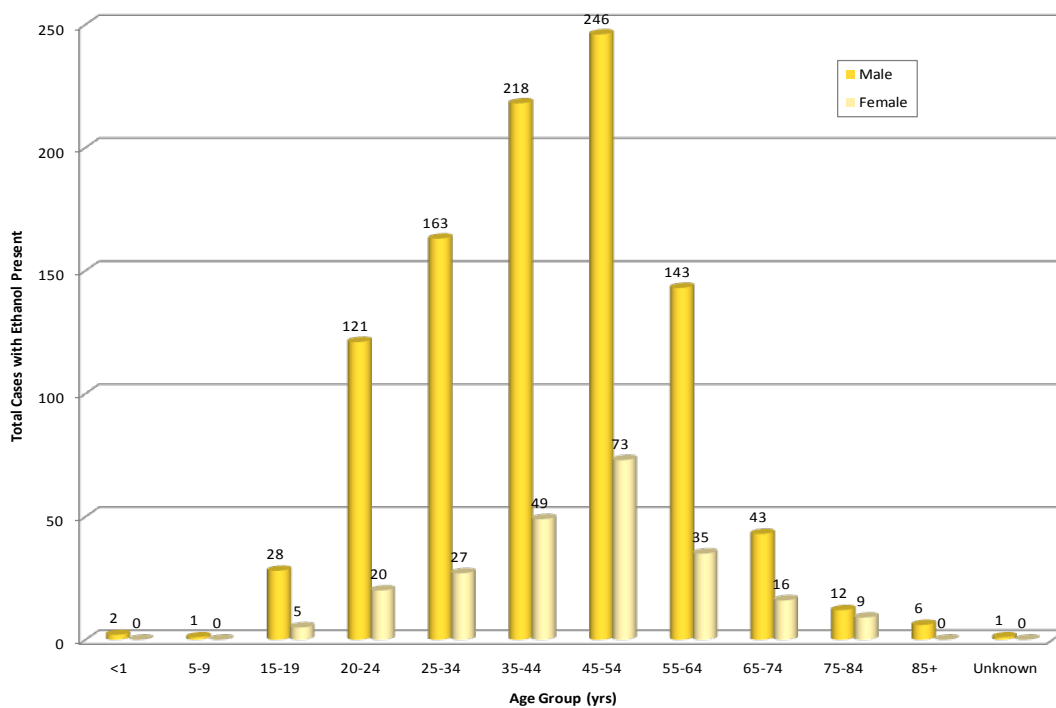
**Figure 62. Alcohol Presence by Manner of Death, 2009**  
Measured Ethanol  $\geq 0.01\%$  W/V



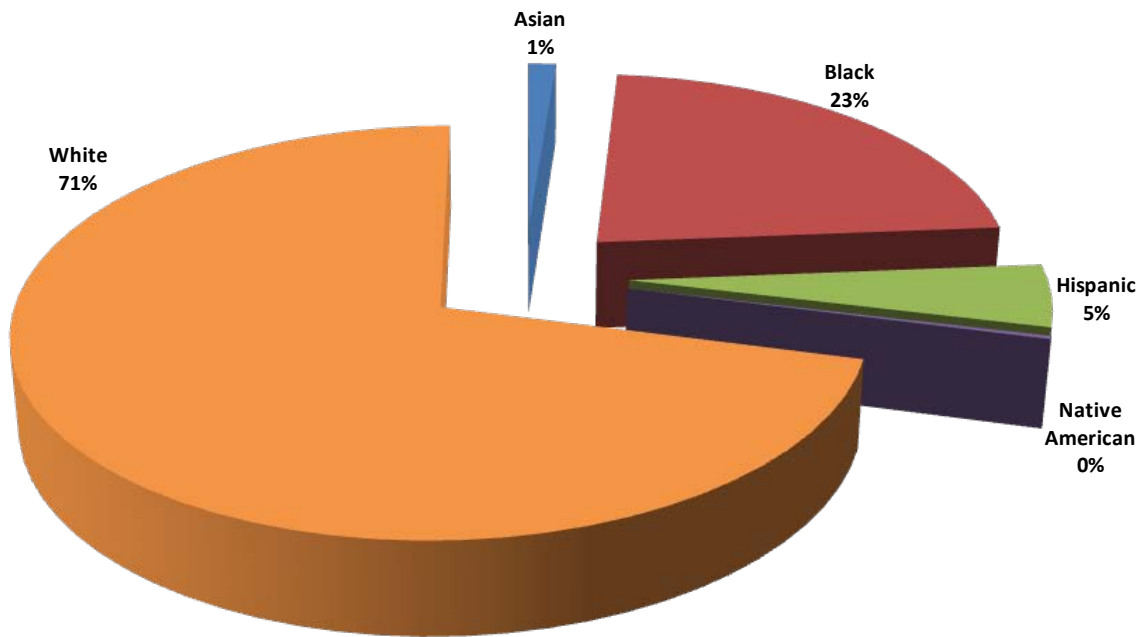
**Figure 63. Ethanol Presence by Age Group by Gender, 2009**  
**Measured Ethanol  $\geq 0.01\%$  W/V**



**Figure 64. Ethanol Associated Deaths by Age Group by Gender, 2009**  
**Measured Ethanol  $\geq 0.01\%$  W/V**



**Figure 65. Ethanol Associated Deaths by Race/Ethnicity, 2009**  
**Measured Ethanol  $\geq 0.01\%$  W/V**



**Figure 66. Ethanol Associated Deaths by Measured Ethanol Level, 2009**

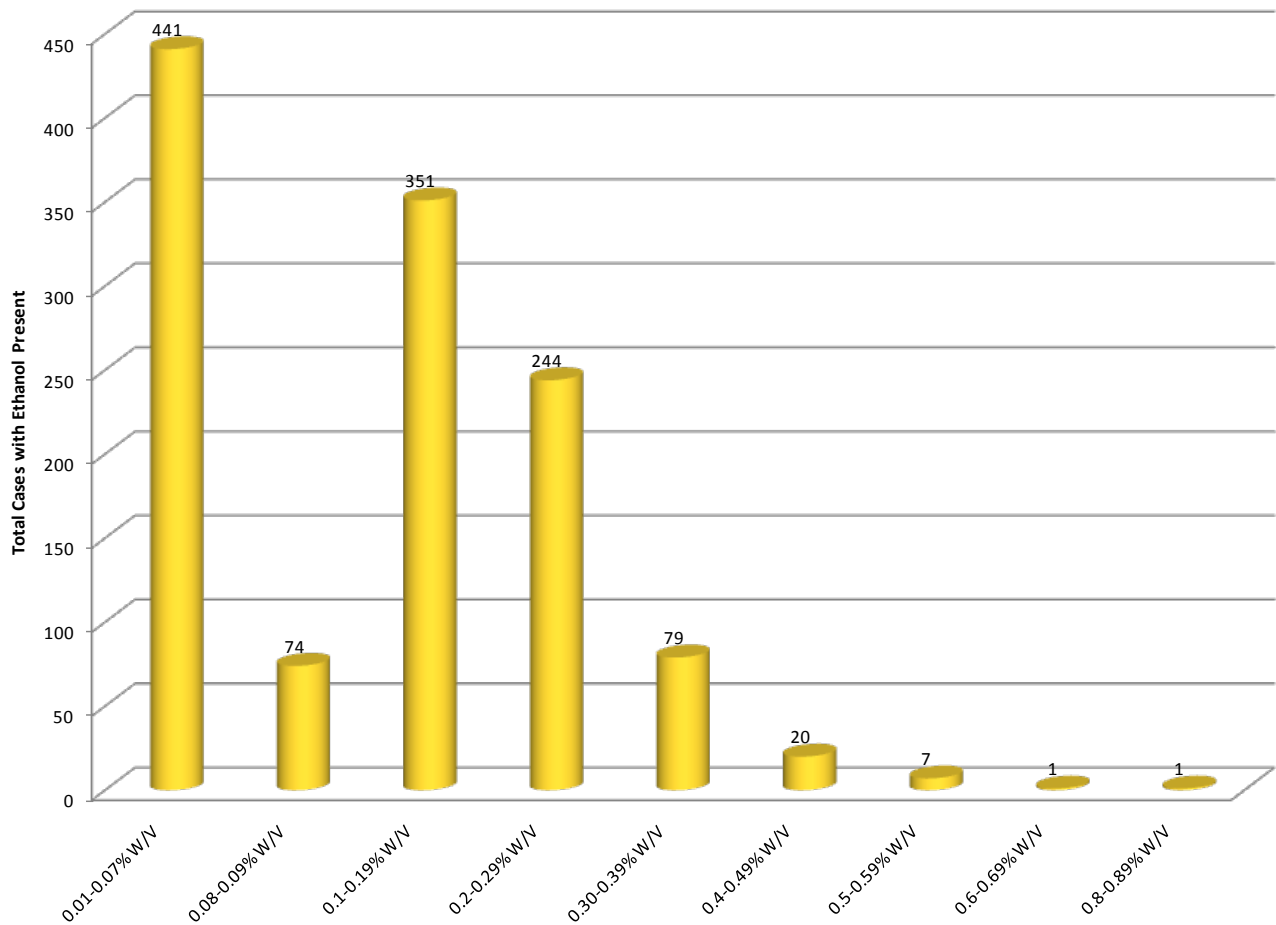


Table 30. Ethanol Presence in Natural and Unnatural Deaths by Cause of Death, 2009

Natural Deaths	Total Cases	No Ethanol	Ethanol 0.01-0.07% W/V	Ethanol ≥0.08% W/V
<b>Pulmonary Diseases/Disorders</b>	<b>167</b>	<b>160</b>	<b>6</b>	<b>1</b>
Asthma	8	8	0	0
COPD	34	33	1	0
Emboli	32	30	2	0
Pneumonia	60	58	2	0
Pulmonary Malignancy	26	25	0	1
Other Pulmonary Disease/Disorder	7	6	1	0
<b>Central Nervous System Diseases/Disorders</b>	<b>86</b>	<b>78</b>	<b>6</b>	<b>2</b>
Seizure Disorder	23	21	1	1
Vascular Disease	39	36	2	1
Degenerative Disease	8	8	0	0
Meningitis (Bacterial or Viral)	2	1	1	0
CNS Malignancy	3	3	0	0
Other CNS Disease/Disorder	11	9	2	0
<b>Cardiovascular Diseases/Disorders</b>	<b>1271</b>	<b>1109</b>	<b>105</b>	<b>57</b>
Atherosclerosis	700	625	50	25
Hypertension	212	177	20	15
Atherosclerosis & Hypertension	157	138	12	7
Congenital Defect	14	12	2	0
Vascular Dissection/Ruptures	10	8	0	2
Valvular	5	4	1	0
Acute Coronary Insufficiency	118	101	12	5
Other Cardiac Disease/Disorder	55	44	8	3
<b>Gastrointestinal Diseases/Disorders</b>	<b>59</b>	<b>58</b>	<b>1</b>	<b>0</b>
GI Hemorrhage	10	10	0	0
Cirrhosis	8	8	0	0
Hepatitis	3	3	0	0
GI Malignancy	19	19	0	0
Other GI Disease/Disorder	19	18	1	0
<b>Genitourinal Diseases/Disorders</b>	<b>14</b>	<b>13</b>	<b>1</b>	<b>0</b>
Renal Disease	4	4	0	0
Genitourinal Malignancy	8	7	1	0
Other GU Disease/Disorder	2	2	0	0
<b>Perinatal and Pediatric Diseases/Disorders</b>	<b>34</b>	<b>34</b>	<b>0</b>	<b>0</b>
Maternal Complications	1	1	0	0
Fetal Complications	5	5	0	0
Sudden Infant Death Syndrome (SIDS)	23	23	0	0
Other Perinatal or Pediatric Disorder	5	5	0	0
<b>Systemic Diseases/Disorders</b>	<b>254</b>	<b>193</b>	<b>27</b>	<b>34</b>
Blood Disorders	6	5	1	0
Diabetes	57	49	7	1

AIDS/HIV	12	11	1	0
Sepsis	15	15	0	0
Other Infectious Disease	13	13	0	0
Metastatic Malignancy Unknown Primary	6	6	0	0
Chronic Alcoholism	114	66	15	33
Chronic Drug Abuse	5	5	0	0
Other Systemic Disease/Disorder	26	23	3	0
<b>Other Natural Diseases/Disorders</b>	<b>21</b>	<b>21</b>	<b>0</b>	<b>0</b>
Other Malignancy	7	7	0	0
Other Natural Disease/Disorder	14	14	0	0
<b>Natural Subtotal</b>	<b>1906</b>	<b>1666</b>	<b>146</b>	<b>94</b>
	<b>Total</b>	<b>No</b>	<b>Ethanol</b>	<b>Ethanol</b>
<b>Unnatural Deaths</b>	<b>Cases</b>	<b>Ethanol</b>	<b>0.01-0.07%</b>	<b>≥0.08%</b>
			<b>W/V</b>	<b>W/V</b>
<b>Asphyxia</b>	<b>433</b>	<b>317</b>	<b>34</b>	<b>82</b>
Choking (Aspiration: Food or Foreign Object)	24	22	0	2
Drowning	95	66	9	20
Hanging	201	151	13	37
Mechanical	21	13	1	7
Positional	8	6	0	2
Strangulation/Neck Compression	16	9	1	6
Suffocation/Smothering	13	13	0	0
Oxygen Replacement/Displacement	6	3	2	0
Helium	11	8	2	1
Plastic Bag	12	8	1	3
CO Poisoning (MV Exhaust)	16	9	4	3
CO Poisoning (Other)	8	7	1	1
Other Asphyxia	2	2	0	0
<b>Electrocution</b>	<b>8</b>	<b>4</b>	<b>3</b>	<b>1</b>
High Voltage	6	4	2	0
Low Voltage	2	0	1	1
<b>Exposure</b>	<b>28</b>	<b>20</b>	<b>3</b>	<b>5</b>
Hyperthermia	5	5	0	0
Hypothermia	23	15	3	5
<b>Fire Injuries</b>	<b>96</b>	<b>73</b>	<b>2</b>	<b>21</b>
Thermal Burns	21	20	1	0
Inhalation of Combustion Products	20	14	0	6
Thermal Burns & Inhalation of Combustions Products	55	39	1	15
<b>Judicial Execution</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>
Lethal Injection	2	2	0	0
Electrocution	1	1	0	0
<b>Gunshot Wound</b>	<b>843</b>	<b>580</b>	<b>92</b>	<b>171</b>
GSW to Head/Neck	550	382	54	114
GSW to Chest	137	98	15	24
GSW to Abdomen	22	15	3	4

GSW to Truck	80	50	11	19
GSW to Extremities	4	3	0	1
GSW Multiple	50	32	9	9
<b>Blunt Force Injuries</b>	<b>1395</b>	<b>1092</b>	<b>46</b>	<b>257</b>
BFT to Head/Neck	724	580	21	123
BFT to Chest	70	54	1	15
BFT to Abdomen	19	13	0	6
BFT to Trunk	67	48	6	13
BFT to Extremities	118	114	2	2
BFT to Multiple	397	283	16	98
<b>Penetrating Injuries</b>	<b>69</b>	<b>39</b>	<b>11</b>	<b>19</b>
Incised	18	13	3	2
Stab	47	24	7	16
Other Penetrating Injuries	4	2	1	1
<b>Substance Abuse</b>	<b>713</b>	<b>486</b>	<b>102</b>	<b>125</b>
Ethanol Poisoning	29	1	0	28
Prescription Drug Poisoning	433	316	64	53
Illegal (Street) Drug Poisoning	130	79	24	27
Mixed Category Drug Poisoning	80	56	10	14
Inhalant Poisoning	7	5	2	0
OTC Poisoning	22	17	2	3
Ethylene Glycol Poisoning	3	3	0	0
Not Otherwise Specified Poisoning	5	5	0	0
Other Poisons (Heavy Metals, etc.)	4	4	0	0
<b>Other Unnatural Deaths</b>	<b>13</b>	<b>13</b>	<b>0</b>	<b>0</b>
Other Unnatural	13	13	0	0
<b><i>Unnatural Subtotal</i></b>	<b>3601</b>	<b>2627</b>	<b>293</b>	<b>681</b>
	<b>Total</b>	<b>No</b>	<b>Ethanol</b>	<b>Ethanol</b>
<b>Undetermined Deaths</b>	<b>Cases</b>	<b>Ethanol</b>	<b>0.01-0.07%</b>	<b>≥0.08%</b>
			<b>W/V</b>	<b>W/V</b>
<b>Undetermined After Autopsy and/or Investigation</b>	<b>101</b>	<b>97</b>	<b>2</b>	<b>2</b>
Sudden Unexpected Infant Death (SUID)	65	65	0	0
Skeletal/Mummified Remains	8	8	0	0
Other Undetermined	28	24	2	2
<b><i>Undetermined Subtotal</i></b>	<b>101</b>	<b>97</b>	<b>2</b>	<b>2</b>
<b>TOTAL</b>	<b>5608</b>	<b>4390</b>	<b>441</b>	<b>777</b>

## ETHANOL ASSOCIATED ACCIDENTAL DEATHS (N=539)

Ethanol was detected in 24.8 percent of all accidental deaths.

- Ethanol was detected in a third of all drownings
- Ethanol was detected in 32.3 percent of all motor vehicle accidents
- Ethanol was detected in only 1 of the 10 firearm deaths

**Figure 67. Accidental Deaths by Age Group by Ethanol Level, 2009**

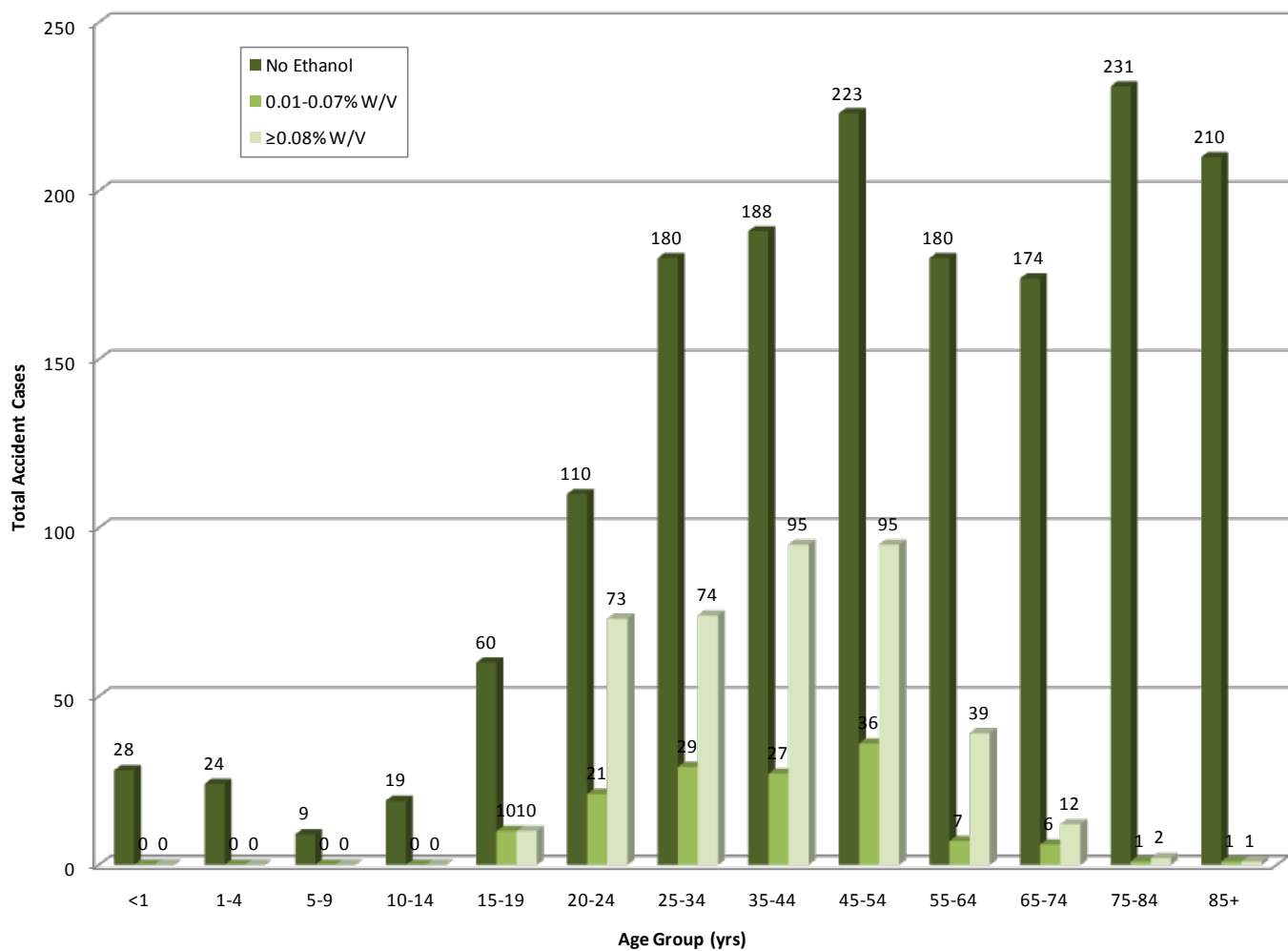




Table 31. Accidental Deaths by Method of Death by Ethanol Level, 2009

Method of Death	Total Cases	No Ethanol	Ethanol 0.01-0.07% W/V	Ethanol ≥0.08% W/V
<i>Animal/Insect</i>				
Animal/Insect related (bitten, stung, kicked)	7	6	0	1
<i>Asphyxia</i>				
Choked on food/foreign object	24	22	0	2
Drowned	81	54	7	20
Hanging	8	7	0	1
Mechanical/Positional	12	10	0	2
Other	3	2	1	0
Strangled	2	2	0	0
Suffocation/Smothering	12	12	0	0
<i>Drug Use</i>				
Ingested ethanol of other alcohol	27	1	0	26
Ingested and/or injected illicit, prescription, and/or other type of drug	527	374	78	75
<i>Electrical</i>				
Contacted electrical current	7	4	3	0
<i>Exposure</i>				
Exposed to cold	23	15	3	5
Exposed to heat	4	4	0	0
<i>Fall/Jump</i>				
Fall from any height	467	444	7	16
Jump from any height	3	2	0	1
<i>Fire</i>				
Inhalation of Combustion Products	17	12	0	5
Steam/Scald	2	2	0	0
Thermal Burns	18	17	1	0
Thermal Burns & Inhalation of Combustion Products	40	28	1	11
<i>Motor Vehicle</i>				
Aircraft	6	6	0	0
All terrain vehicle	16	8	1	7
Bicycle	14	11	0	3
Boat	1	0	0	1
Bus	4	3	0	1
Car	420	281	18	121
Construction equipment	5	4	0	1
Farm equipment	9	8	0	1
Mo-ped	7	3	0	4
Motorcycle	72	41	6	25
Multiple vehicles	3	0	1	2
Pickup truck	96	63	4	29

<b>Method of Death</b>	<b>Total Cases</b>	<b>No Ethanol</b>	<b>Ethanol 0.01-0.07% W/V</b>	<b>Ethanol ≥0.08% W/V</b>
Recreational vehicle	1	1	0	0
Scooter	2	1	0	1
Sport utility vehicle	96	69	3	24
Tractor trailer	17	16	0	1
Trailer	1	1	0	0
Train	6	2	0	4
Truck other	13	11	2	0
Van	32	25	2	5
Unknown	8	7	1	0
<i>Poisoned</i>				
Inhaled toxic agent (Carbon monoxide)	7	6	0	1
<i>Traumatic Injury</i>				
Accidental discharge of firearm	10	9	1	0
Handgun	(3)	(2)	(1)	(0)
Rifle	(3)	(3)	(0)	(0)
Shotgun	(4)	(4)	(0)	(0)
Accidental cut injury	3	3	0	0
Beatings/Blows	3	2	0	1
Falling object	26	25	0	1
<i>Unknown/Other</i>				
Accidental - Unknown/Other	13	12	0	1
<b>TOTAL</b>	<b>2175</b>	<b>1636</b>	<b>140</b>	<b>399</b>

## ETHANOL ASSOCIATED SUICIDE DEATHS (N=295)

Ethanol was detected in 30.3 percent of all suicides.

- Thirty-two percent of individuals who used a firearm to commit suicide had ethanol on board

**Figure 68. Suicide Deaths by Age Group by Ethanol Level, 2009**

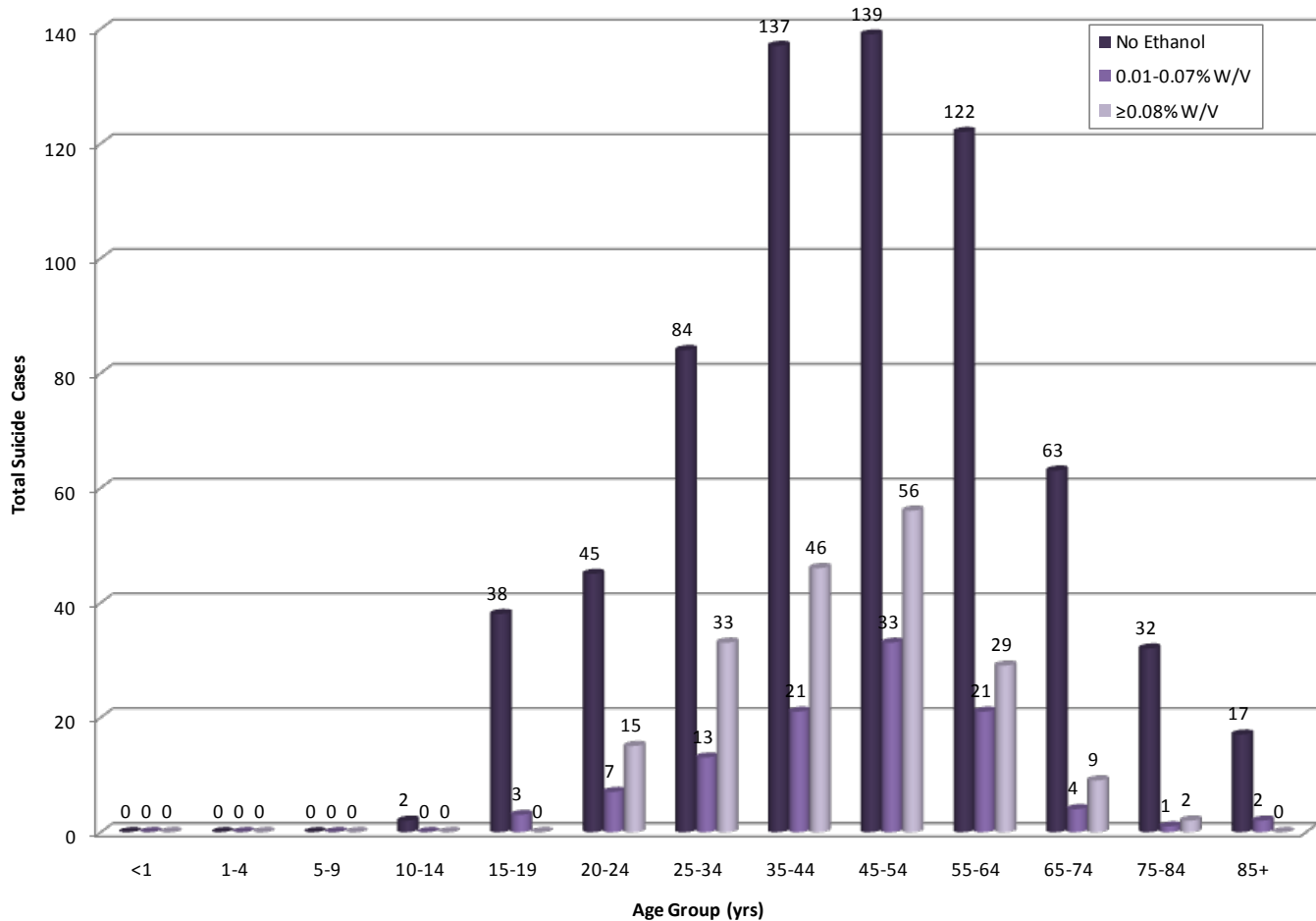


Table 32. Suicide Deaths by Method of Death by Ethanol Level, 2009

Method of Death	Total Cases	No Ethanol	Ethanol 0.01-0.07% W/V	Ethanol ≥0.08% W/V
<b>Asphyxia</b>				
Drowned	9	8	1	0
Hanging	190	143	13	34
Helium	11	8	2	1
Plastic bag	11	7	1	3
Oxygen replacement/displacement	4	3	1	0
<b>Drug Use</b>				
Ingested ethanol of other alcohol	1	0	0	1
Ingested and/or injected illicit, prescription, and/or other type of drug	142	99	23	20
<b>Electricity</b>				
Contacted electrical current	1	0	0	1
<b>Jump</b>				
Jumped from height	16	10	2	4
<b>Fire</b>				
Inhalation of Combustion Products	1	0	0	1
Thermal Burns & Inhalation of Combustion Products	2	2	0	0
<b>Poisoned</b>				
Carbon monoxide poisoning	18	10	5	3
<b>Traumatic Injury</b>				
Cut/Stabbed self	17	12	3	2
Shot self with firearm	539	366	54	119
Handgun	(403)	(276)	(36)	(91)
Rifle	(64)	(38)	(11)	(15)
Shotgun	(70)	(50)	(7)	(13)
Other	(2)	(2)	(0)	(0)
<b>Vehicular</b>				
Car	1	1	0	0
Train	7	6	0	1
Truck-Other	3	3	0	0
<b>Other</b>				
Other traumatic causes	1	1	0	0
<b>TOTAL</b>	<b>974</b>	<b>679</b>	<b>105</b>	<b>190</b>

## ETHANOL ASSOCIATED HOMICIDE DEATHS (N=124)

Ethanol was detected in 30.2 percent of all homicides.

- Ethanol was detected in 50 percent of all homicide victims who were stabbed

**Figure 69. Homicide Deaths by Age Group by Ethanol Level, 2009**

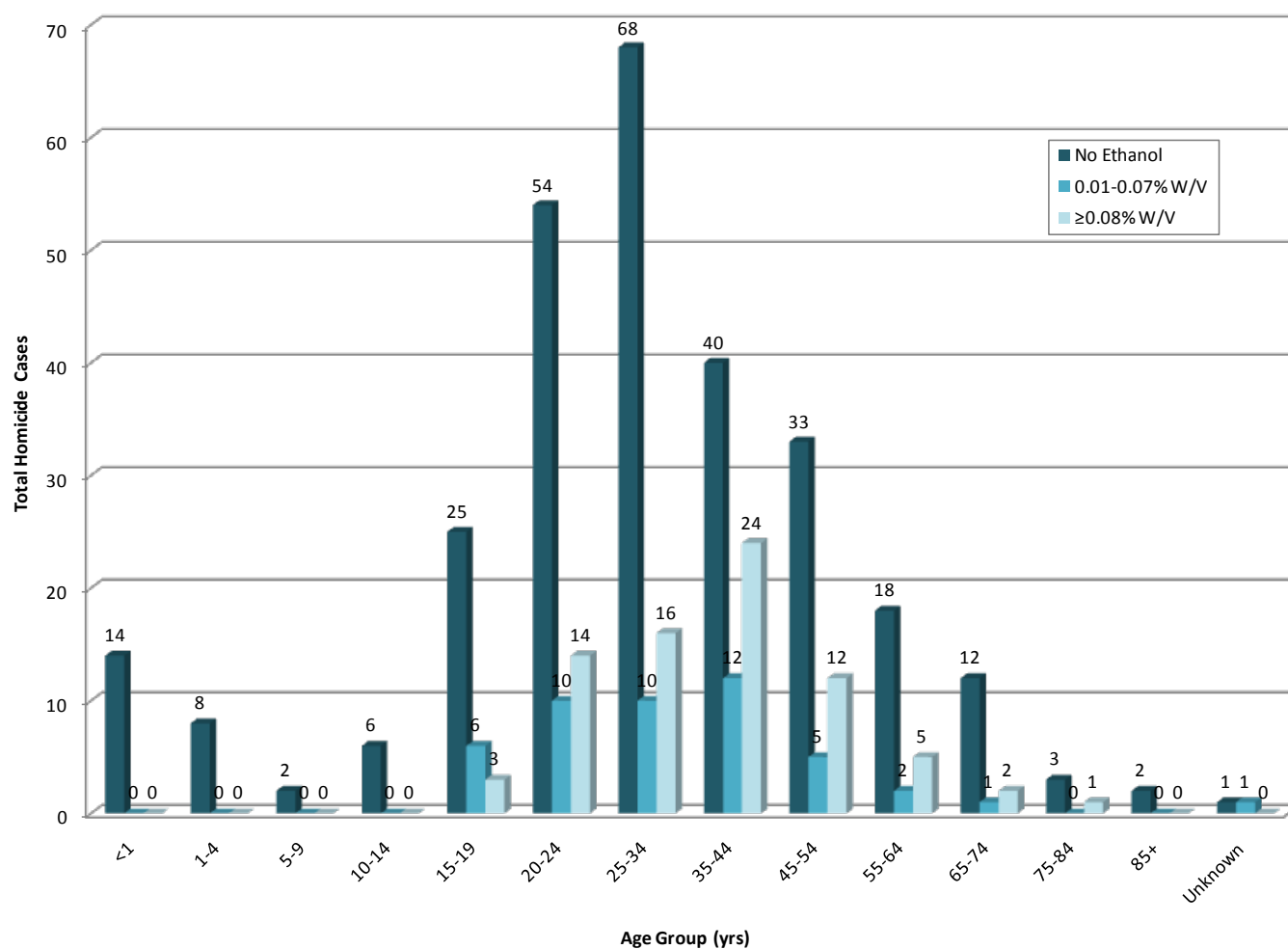


Table 33. Homicide Deaths by Method of Death by Ethanol Level, 2009

Method of Death	Total Cases	No Ethanol	Ethanol 0.01-0.07% W/V	Ethanol ≥0.08% W/V
<b><i>Asphyxia</i></b>				
Drowned	1	1	0	0
Strangled by assailant(s)	14	7	1	6
Suffocate/Smothered by assailant(s)	1	1	0	0
Other	2	2	0	0
<b><i>Environmental Exposure</i></b>				
Exposed to heat	1	1	0	0
<b><i>Legal Intervention</i></b>				
Electrocution	1	1	0	0
Lethal injection	2	2	0	0
<b><i>Poisoned</i></b>				
Poisoned by ethanol and/or drugs	1	1	0	0
<b><i>Traumatic Injury</i></b>				
Beaten by assailant(s)	46	39	1	6
Fall/Push	2	2	0	0
Other traumatic violence	4	4	0	0
Stabbed by assailant(s)	46	23	8	15
Shot by assailant(s)	287	200	37	50
Handgun	(214)	(156)	(23)	(35)
Multiple	(1)	(1)	(0)	(0)
Rifle	(20)	(12)	(2)	(6)
Shotgun	(16)	(9)	(4)	(3)
Unspecified	(36)	(22)	(8)	(6)
<b><i>Unknown</i></b>				
Undetermined method	2	2	0	0
<b>TOTAL</b>	<b>410</b>	<b>286</b>	<b>47</b>	<b>77</b>

**ETHANOL ASSOCIATED UNDETERMINED DEATHS (N=20)**

Ethanol was detected in 14 percent of all undetermined deaths.

**Figure 70. Undetermined Deaths by Age Group by Ethanol Level, 2009**

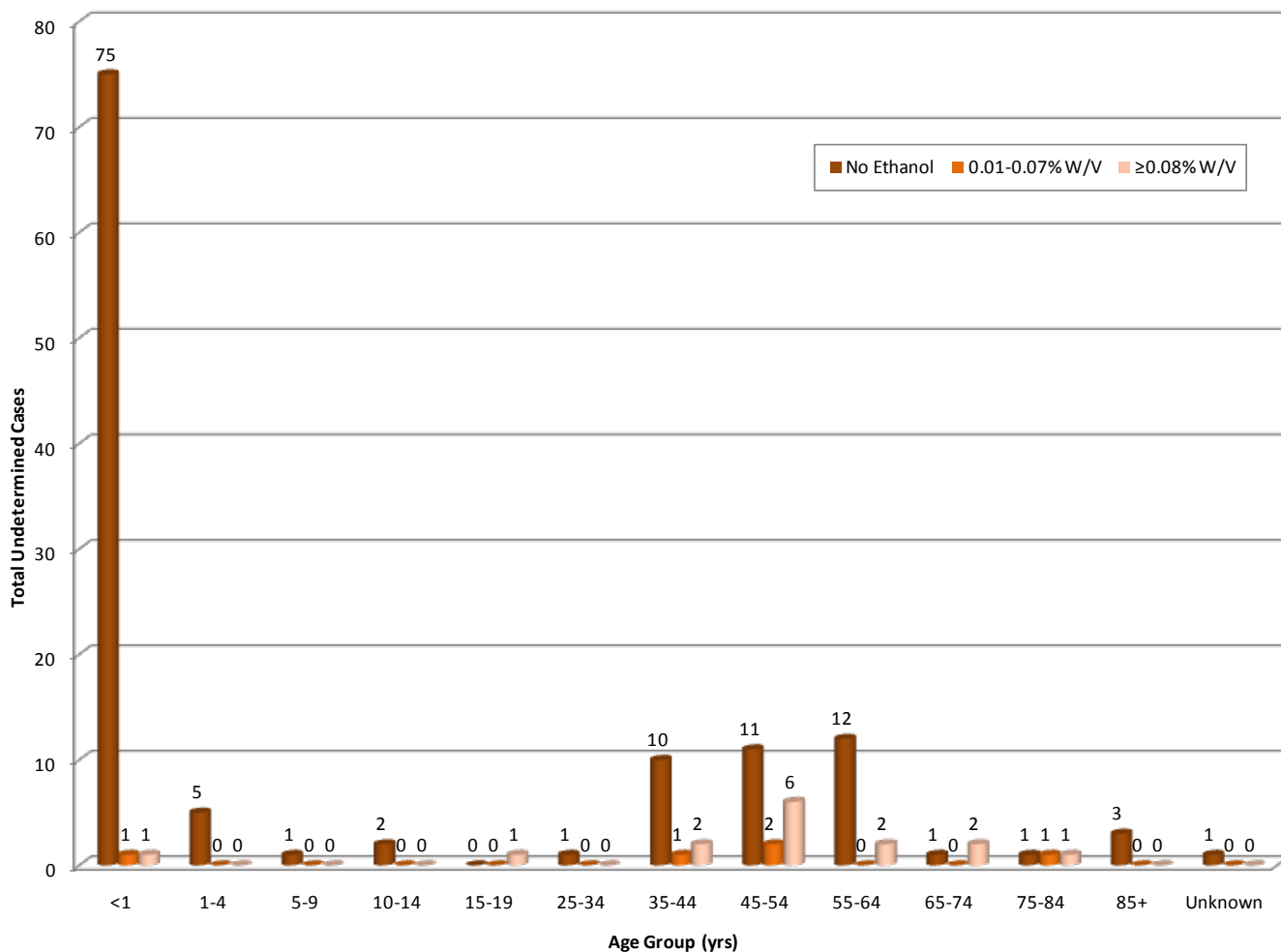


Table 34. Undetermined Deaths by Cause of Death by Ethanol Level, 2009

	Total Cases	No Ethanol	Ethanol 0.01-0.07% W/V	Ethanol ≥0.08% W/V
<b>Undetermined Manner &amp; Cause of Death</b>				
Undetermined after autopsy and/or toxicology	100	96	2	2
<b>Subtotal for Undetermined Manner &amp; Cause of Death</b>	<b>100</b>	<b>96</b>	<b>2</b>	<b>2</b>
<b>Undetermined Manner but Cause of Death Determined</b>				
<b>Asphyxia</b>				
Drowning	3	1	1	1
Hanging	3	1	0	2
<b>Drug Use</b>				
Ingested ethanol or other alcohol	1	0	0	1
Ingested and/or injected illicit, prescription, and/or OTC medication	14	11	1	2
<b>Fire</b>				
Thermal burns and/or inhalation of combustions products	5	5	0	0
<b>Motor Vehicle</b>				
Van	1	1	0	0
<b>Traumatic Injury</b>				
Fall	1	0	0	1
Gunshot Wound	7	5	0	2
Handgun	(3)	(3)	(0)	(0)
Rifle	(1)	(0)	(0)	(1)
Shotgun	(2)	(1)	(0)	(1)
Unspecified firearm	(1)	(1)	(0)	(0)
Other Traumatic Causes	8	3	1	2
<b>Subtotal for Undetermined Manner but Cause of Death Determined</b>	<b>43</b>	<b>27</b>	<b>3</b>	<b>13</b>
<b>Total</b>	<b>143</b>	<b>123</b>	<b>5</b>	<b>15</b>



## SECTION 6: MOTOR VEHICLE COLLISIONS RELATED DEATHS (N=845)

The OCME investigated 845 motor vehicle collision (MVC) related deaths in 2009. This is a 9% decrease from 2008 and the second year of a decrease from 2007's high of 1,140 MVC deaths. Not only has the overall numbers decreased, but the rate of MVC deaths decreased from a high of 13 per 100,000 in 2007 to 9.1.

- The vast majority of cases were accidents (98.1%) and males (72.7%)
- In 27.5 percent of all motor vehicle deaths, the decedent had a blood alcohol content greater than or equal to 0.08% W/V and 76.8 percent of them were drivers
- Persons aged 20-24 years old had more deaths (16.4%) in motor vehicle incidents than any other age group
- Twenty-one children under the age of 10 died in MVC-related incidents with 3 or 21.1% of them being front seat passengers and 7 or 33 percent being pedestrians

**Figure 71. Motor Vehicle Deaths & Rate by Year of Death, 2003-2009**

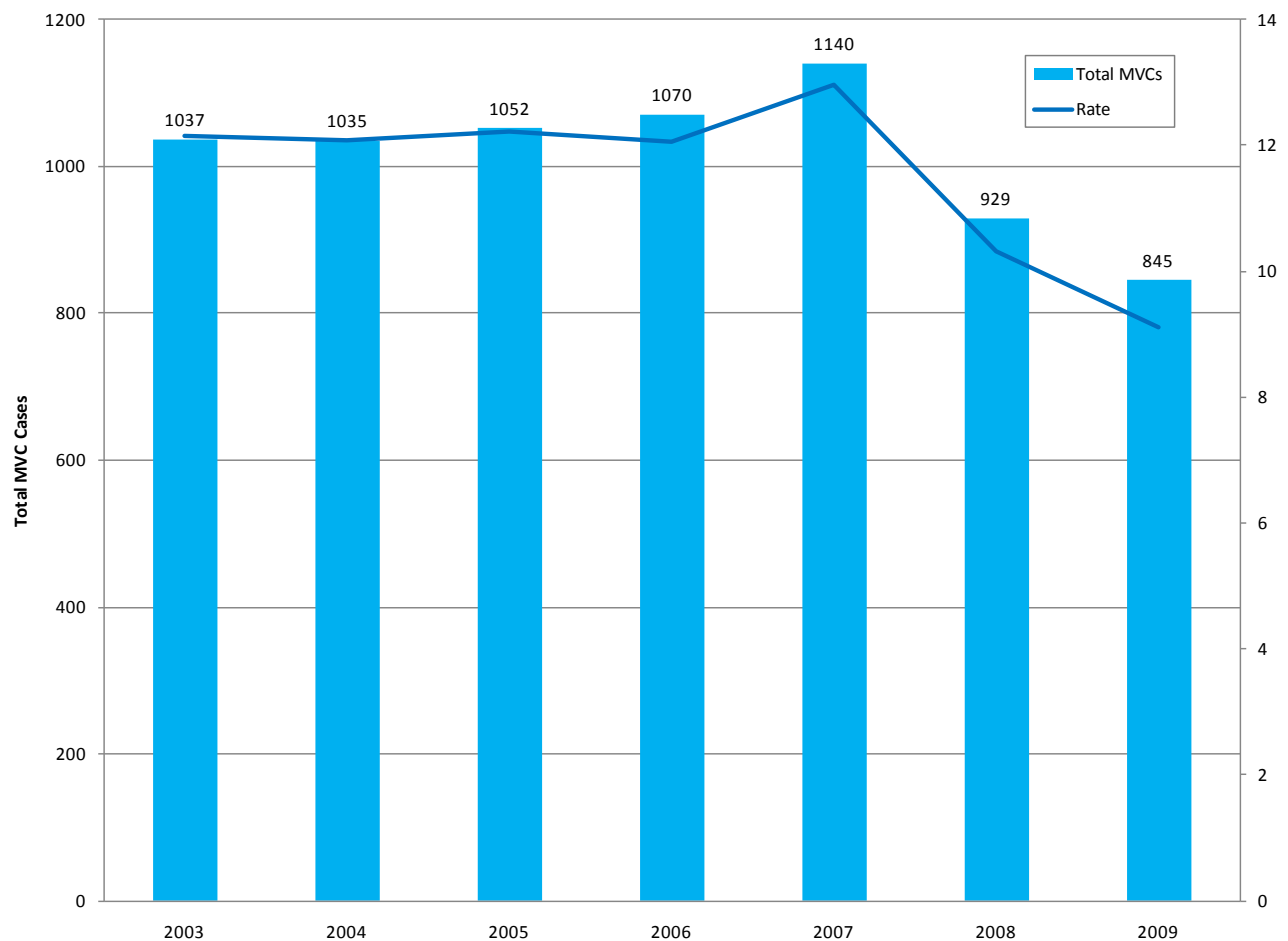


Figure 72. Motor Vehicle Deaths by Manner, 2009

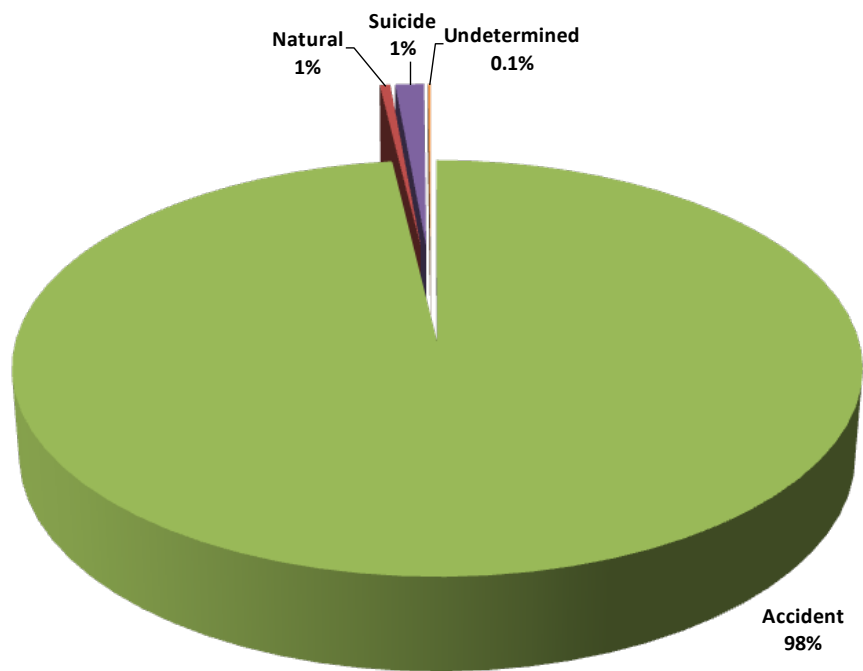
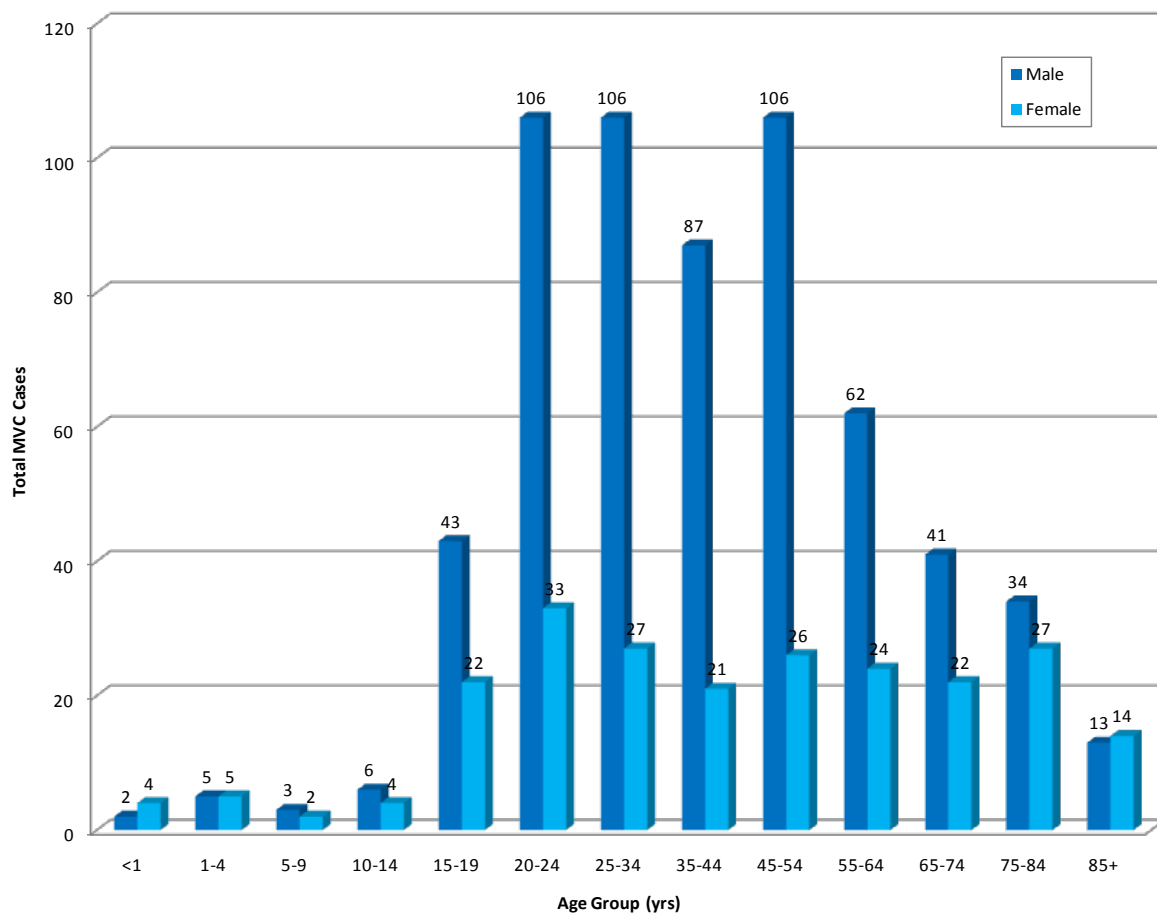
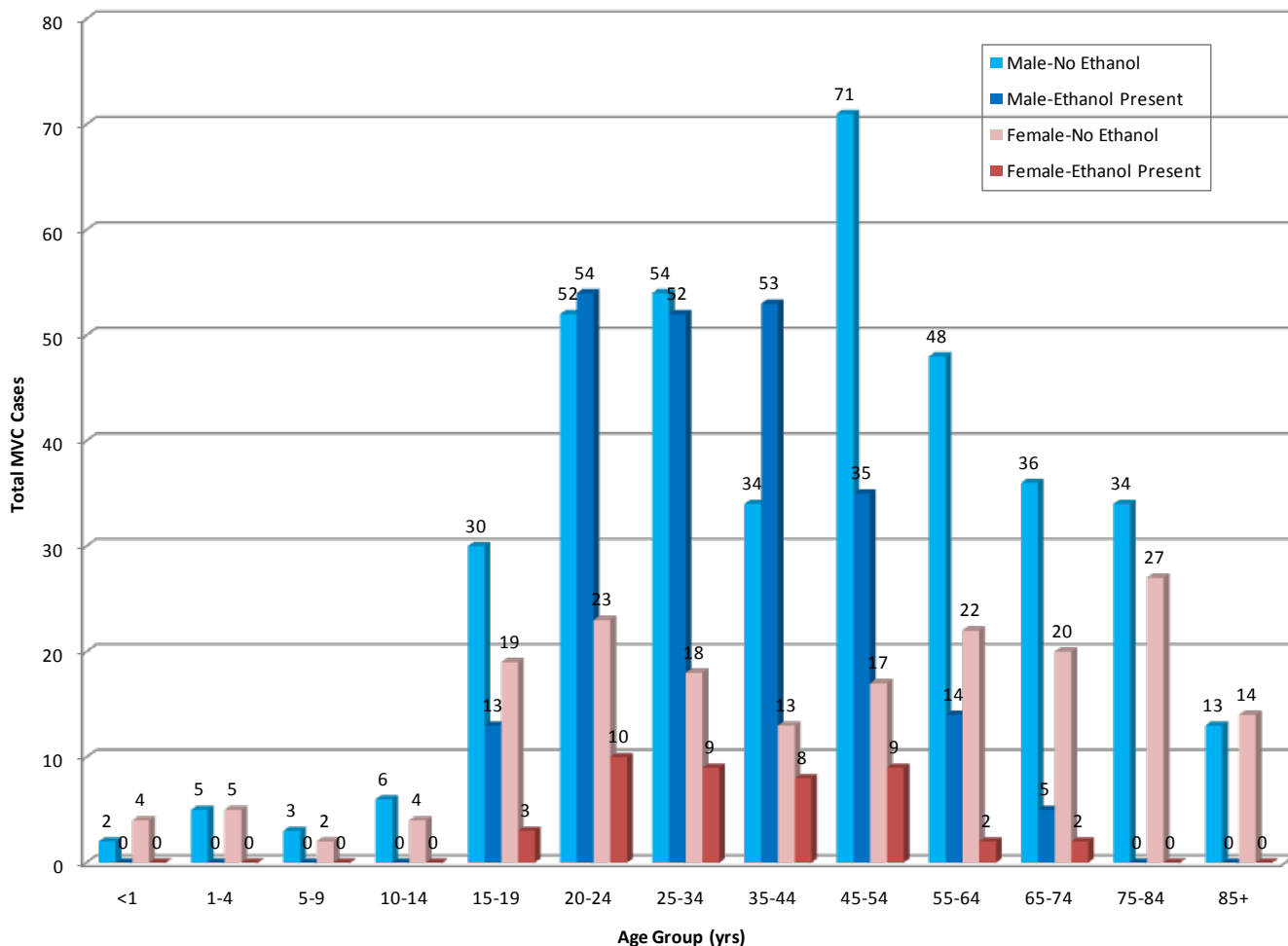


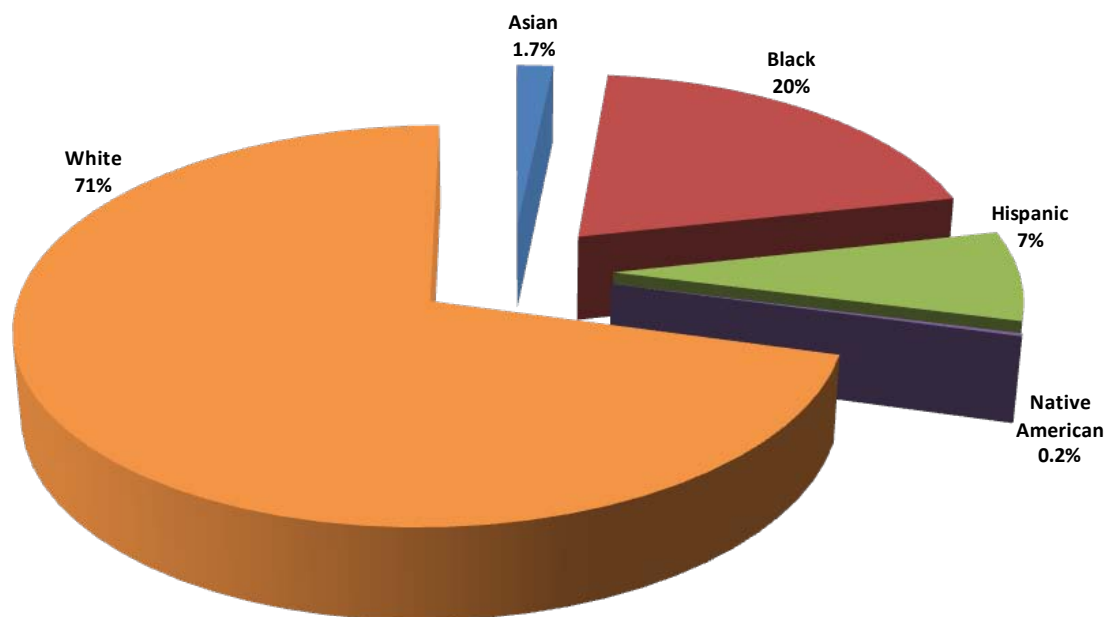
Figure 73. Motor Vehicle Deaths by Age Group by Gender, 2009

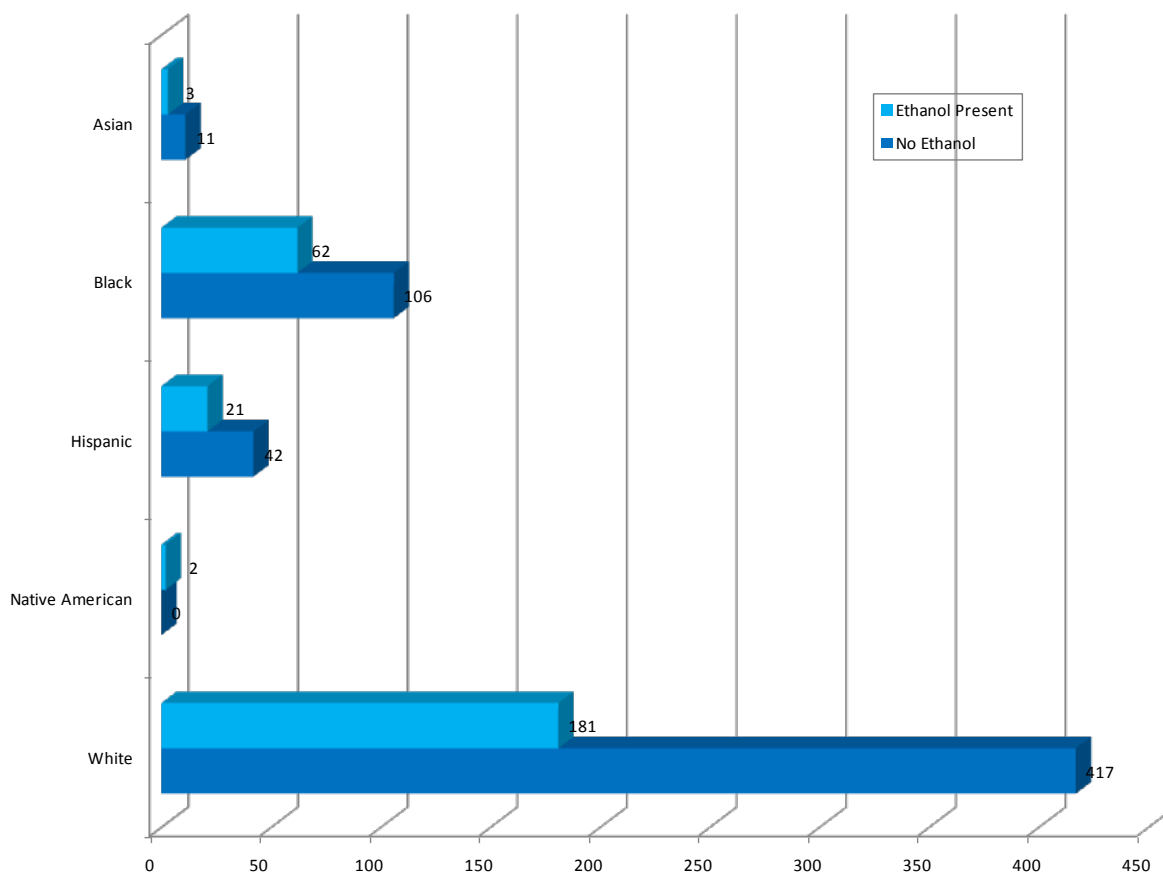


**Figure 74. Motor Vehicle Deaths by Age Group by Gender by Ethanol Presence, 2009**



**Figure 75. Motor Vehicle Deaths by Race/Ethnicity, 2009**



**Figure 76. Motor Vehicle Deaths by Race/Ethnicity by Ethanol Presence, 2009****Table 35. Motor Vehicle Deaths by Age Group by Position In or Out of Vehicle, 2009**

Age Group	Driver	Passenger-Front	Passenger-Rear	Passenger-Other	Passenger-Cargo	Pedestrian	Unknown Status	Total
<1	0	2	1	2	1	0	0	6
1-4	0	0	4	0	0	6	0	10
5-9	0	1	3	0	0	1	0	5
10-14	0	1	6	0	2	1	0	10
15-19	39	11	7	4	0	4	0	65
20-24	90	23	6	4	1	12	3	139
25-34	94	15	7	3	1	12	1	133
35-44	75	6	4	3	2	18	0	108
45-54	102	9	1	0	0	18	2	132
55-64	65	2	0	1	1	17	0	86
65-74	44	4	0	0	1	14	0	63
75-84	39	8	2	0	0	12	0	61
85+	19	5	0	0	1	2	0	27
<b>Total</b>	<b>567</b>	<b>87</b>	<b>41</b>	<b>17</b>	<b>10</b>	<b>117</b>	<b>6</b>	<b>845</b>

Table 36. Motor Vehicle Deaths by Position in or Out of Vehicle by Ethanol Level, 2009

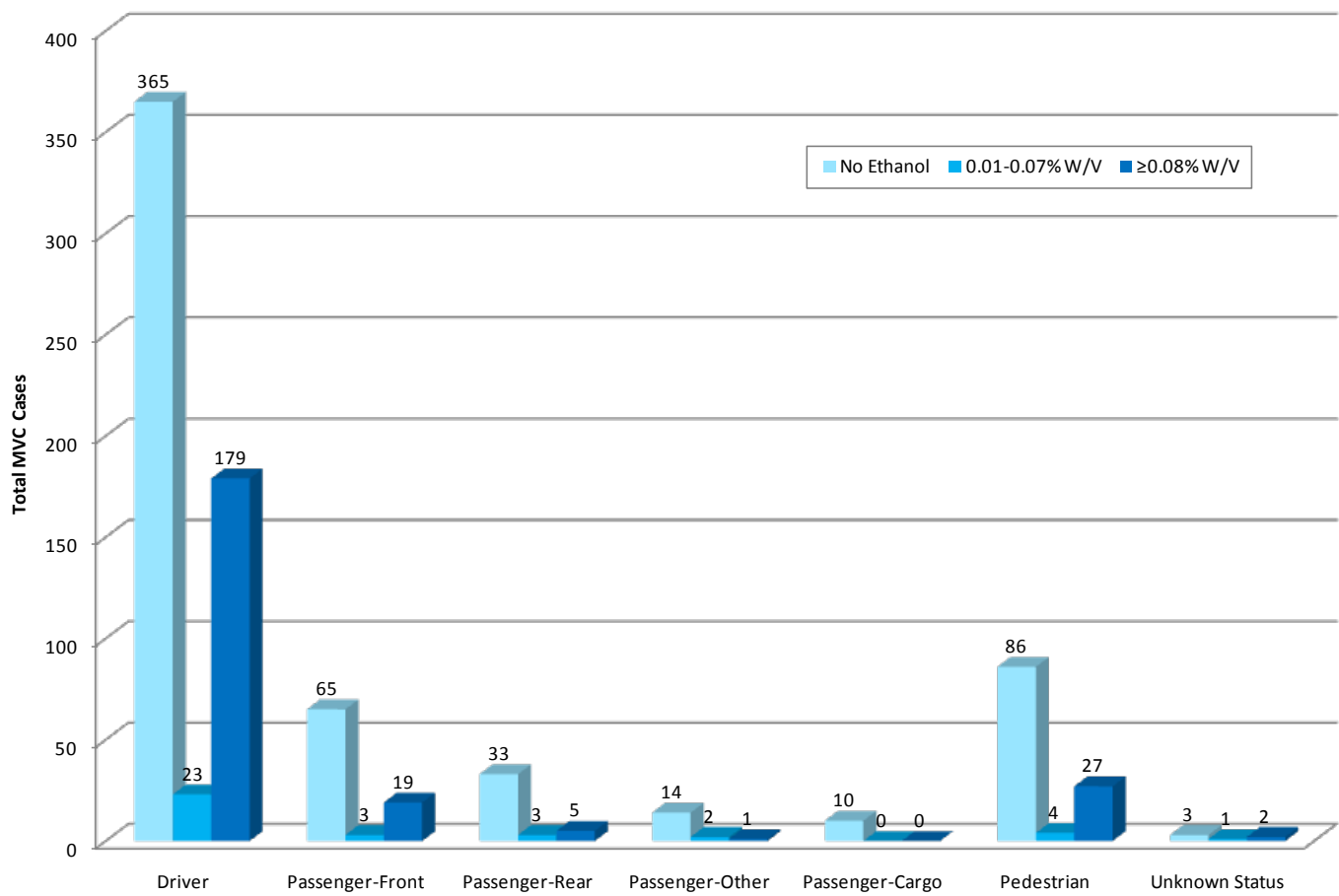


Table 37. Motor Vehicle Deaths by Decedent Status by Vehicle Type by Ethanol Level, 2009

Status of Decedent	Vehicle	Ethanol Presence			Total
		No Ethanol	0.01-0.07% W/V	≥0.08% W/V	
Driver	Aircraft	3	0	0	3
	All terrain vehicle	8	1	7	16
	Bicycle	11	0	3	14
	Boat	0	0	1	1
	Car	178	12	85	275
	Construction equipment	3	0	1	4
	Farm equipment	6	0	1	7
	Mo-ped	3	0	4	7
	Motorcycle	41	5	24	70
	Pickup truck	48	2	24	74
	Scooter	1	0	1	2
	Sport utility vehicle	32	2	22	56
	Tractor trailer	10	0	0	10
	Truck other	6	0	2	8
	Unknown	2	0	0	2
	Van	13	1	4	18
	<b>Subtotal</b>	<b>365</b>	<b>23</b>	<b>179</b>	<b>567</b>
Passenger-Front	Car	46	2	15	63
	Pickup truck	6	1	3	10
	Sport utility vehicle	5	0	1	6
	Truck other	2	0	0	2
	Unknown	1	0	0	1
	Van	5	0	0	5
	<b>Subtotal</b>	<b>65</b>	<b>3</b>	<b>19</b>	<b>87</b>
Passenger-Rear	Car	23	1	3	27
	Motorcycle	1	1	1	3
	Sport utility vehicle	8	1	0	9
	Van	1	0	1	2
	<b>Subtotal</b>	<b>33</b>	<b>3</b>	<b>5</b>	<b>41</b>
Passenger-Cargo	Car	2	0	0	2
	Pickup truck	1	0	0	1
	Sport utility vehicle	4	0	0	4
	Truck other	2	0	0	2
	Van	1	0	0	1
	<b>Subtotal</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>10</b>
Passenger-Other	Aircraft	3	0	0	3
	Bus	0	0	1	1
	Car	4	1	0	5
	Pickup truck	2	1	0	3
	Sport utility vehicle	4	0	0	4

Status of Decedent	Vehicle	Ethanol Presence			Total
		No Ethanol	0.01-0.07% W/V	≥0.08% W/V	
	Train	1	0	0	1
	<b>Subtotal</b>	<b>14</b>	<b>2</b>	<b>1</b>	<b>17</b>
<b>Pedestrian</b>	Bus	3	0	0	3
	Car	30	2	16	48
	Construction equipment	1	0	0	1
	Farm equipment	2	0	0	2
	Multiple	0	1	2	3
	Pickup truck	7	0	2	9
	Recreational vehicle	1	0	0	1
	Sport utility vehicle	16	0	1	17
	Tractor trailer	6	0	1	7
	Trailer	1	0	0	1
	Train	7	0	5	12
	Truck other	4	0	0	4
	Unknown	2	0	0	2
	Van	6	1	0	7
		<b>Subtotal</b>	<b>88</b>	<b>4</b>	<b>27</b>
<b>Unknown Status</b>	Car	1	0	2	3
	Unknown	2	1	0	3
	<b>Subtotal</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>6</b>
<b>TOTAL</b>		<b>578</b>	<b>36</b>	<b>233</b>	<b>847</b>

## SECTION 7: DRUG/POISON CAUSED DEATHS

### OVERALL DRUG/POISON DEATHS (N=713)

For the first time in 6 year, the number of drug/poisoning cases decreased 3 percent but with an overall increase of 85.7 percent since 1999.

- The overall rate of drug/poison caused deaths for Virginia residents was 9 per 100,000 people
- The majority of cases were accidents (77.7%), males (59.5%), whites (85.4%), and 35-44 year olds (27.6%)
- The Western OCME district handled almost one-third of all drug/poison deaths
- Narcotics were the most frequently identified class of compounds (38%) followed by anti-anxiety medications (15.7%)
- Twenty-nine of the 713 or 4.1% of drug/poison deaths were ethanol-only deaths
- Whites died from prescription drugs 3.9 times more than blacks while blacks died from illegal drugs 1.4 times that of whites

**Figure 77. Total Drug/Poison Deaths & Rate by Year of Death, 1999-2009**

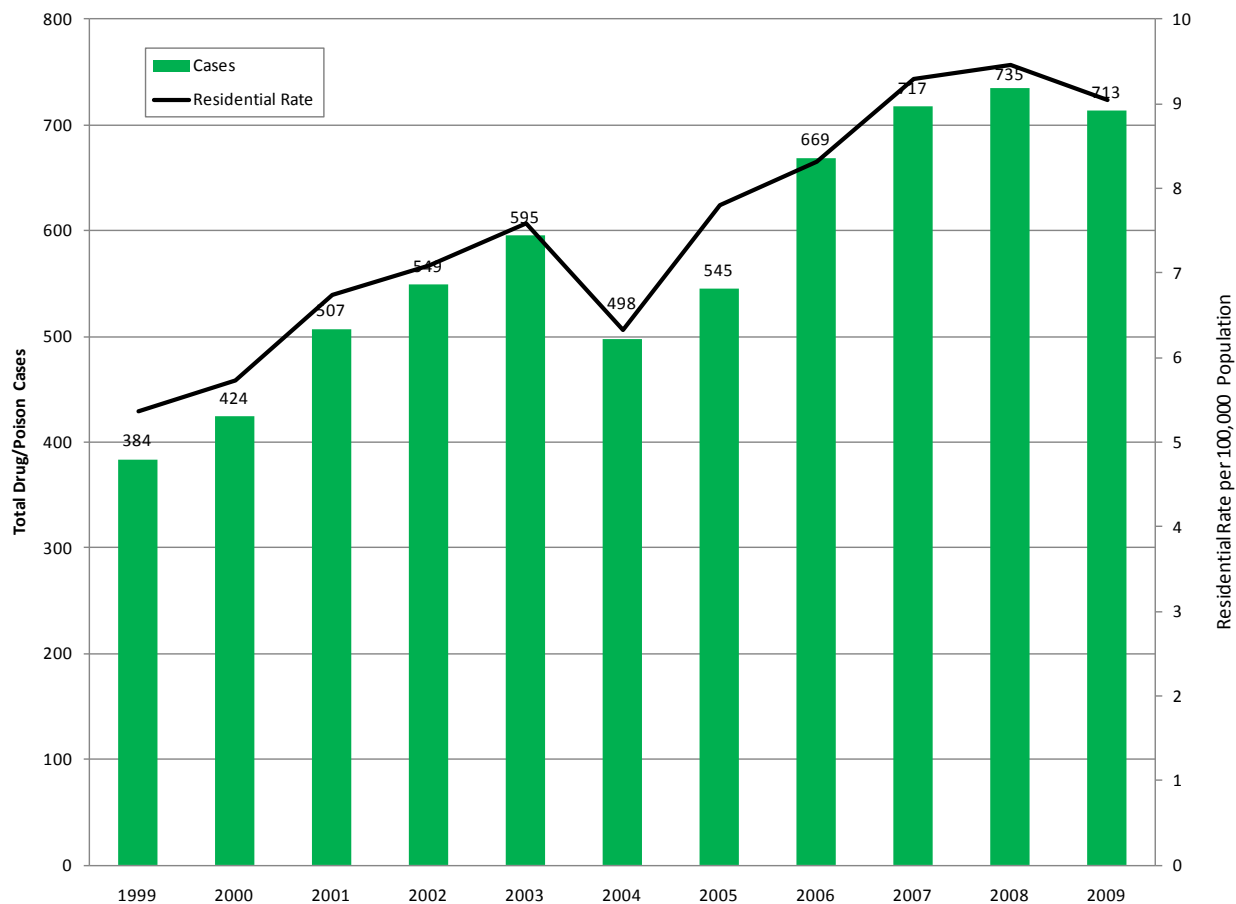




Table 38. Drug/Poison Deaths by OCME District, 2009

OCME District	Cases	Percent
Central	194	27.2%
Northern	159	22.3%
Tidewater	132	18.5%
Western	228	32.0%
<b>Total</b>	<b>713</b>	<b>100%</b>

Figure 78. Drug/Poison Deaths by Manner of Death, 2009

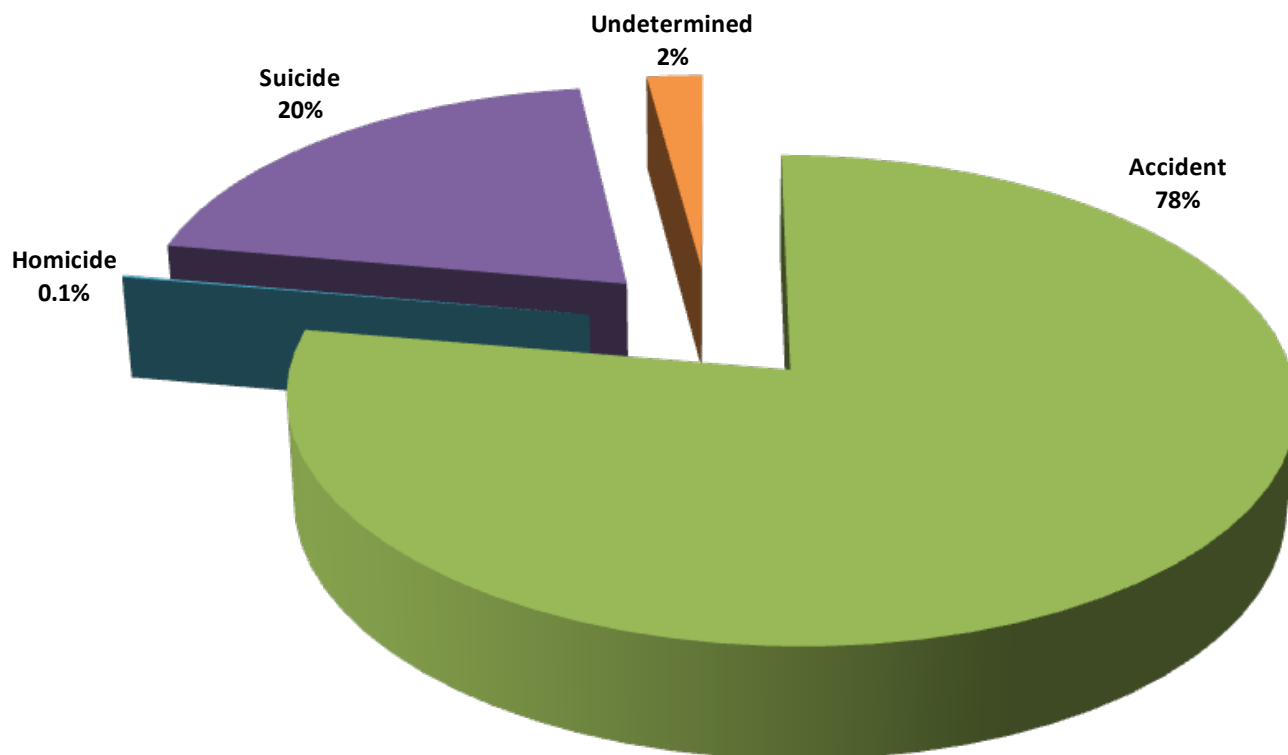


Figure . Drug/Poison Deaths by Age Group by Gender, 2009

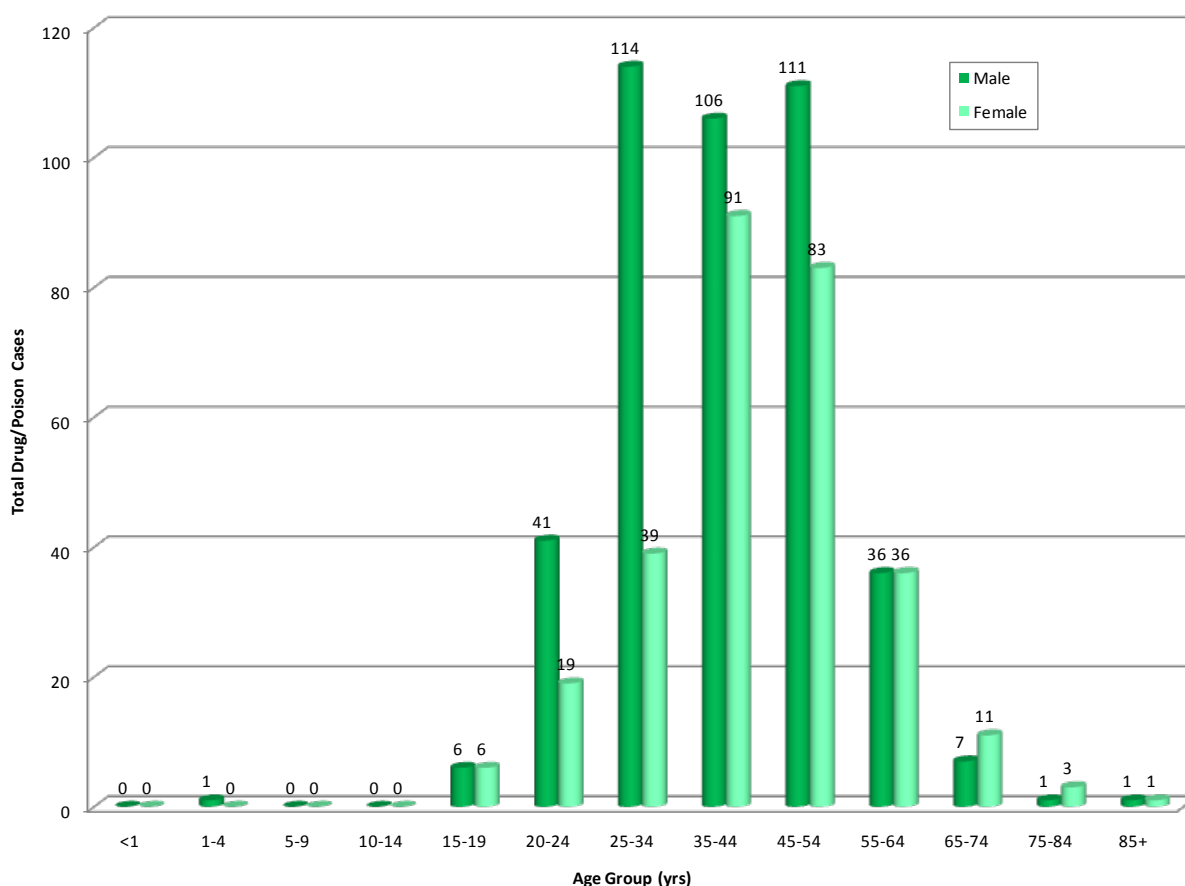


Table . Drug/Poison Deaths by Age Group by Manner of Death, 2009

Age Group	Manner of Death				Total
	Accident	Homicide	Suicide	Undetermined	
<1	0	0	0	0	0
1-4	0	0	0	1	1
5-9	0	0	0	0	0
10-14	0	0	0	0	0
15-19	8	1	3	0	12
20-24	56	0	4	0	60
25-34	133	0	20	0	153
35-44	153	0	37	7	197
45-54	152	0	37	5	194
55-64	43	0	28	1	72
65-74	6	0	11	1	18
75-84	1	0	3	0	4
85+	2	0	0	0	2
<b>Total</b>	<b>554</b>	<b>1</b>	<b>143</b>	<b>15</b>	<b>713</b>

Figure 80. Drug/Poison Deaths by Race/Ethnicity, 2009

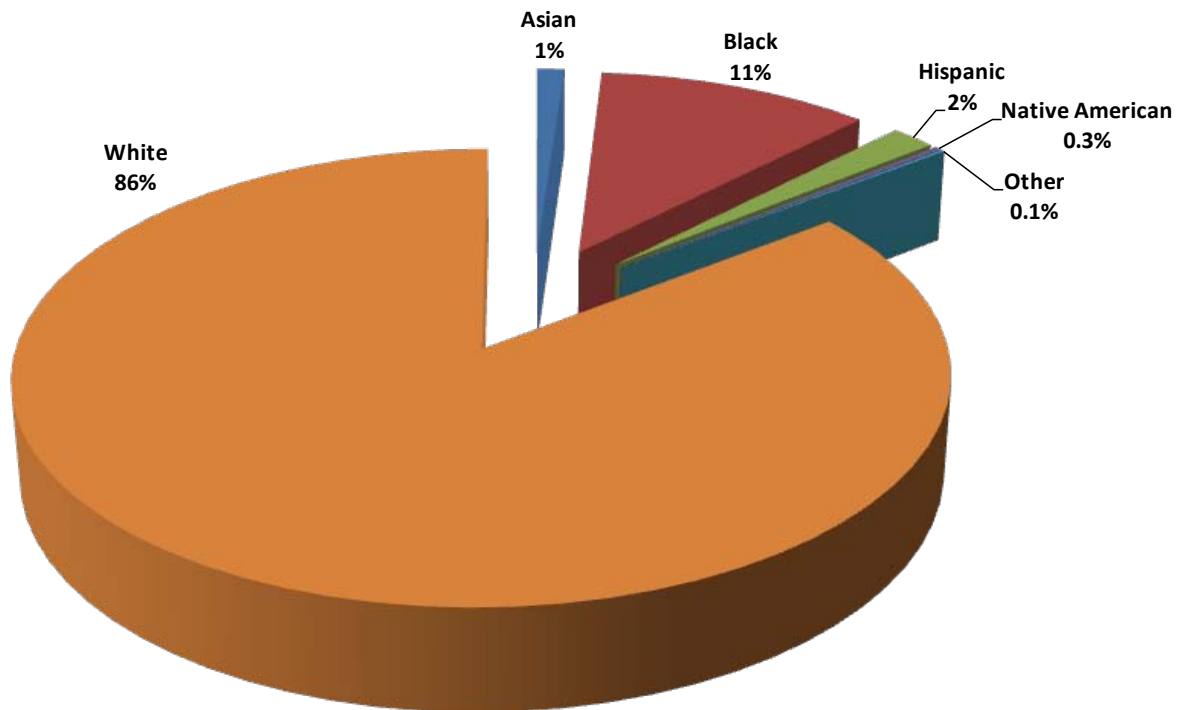


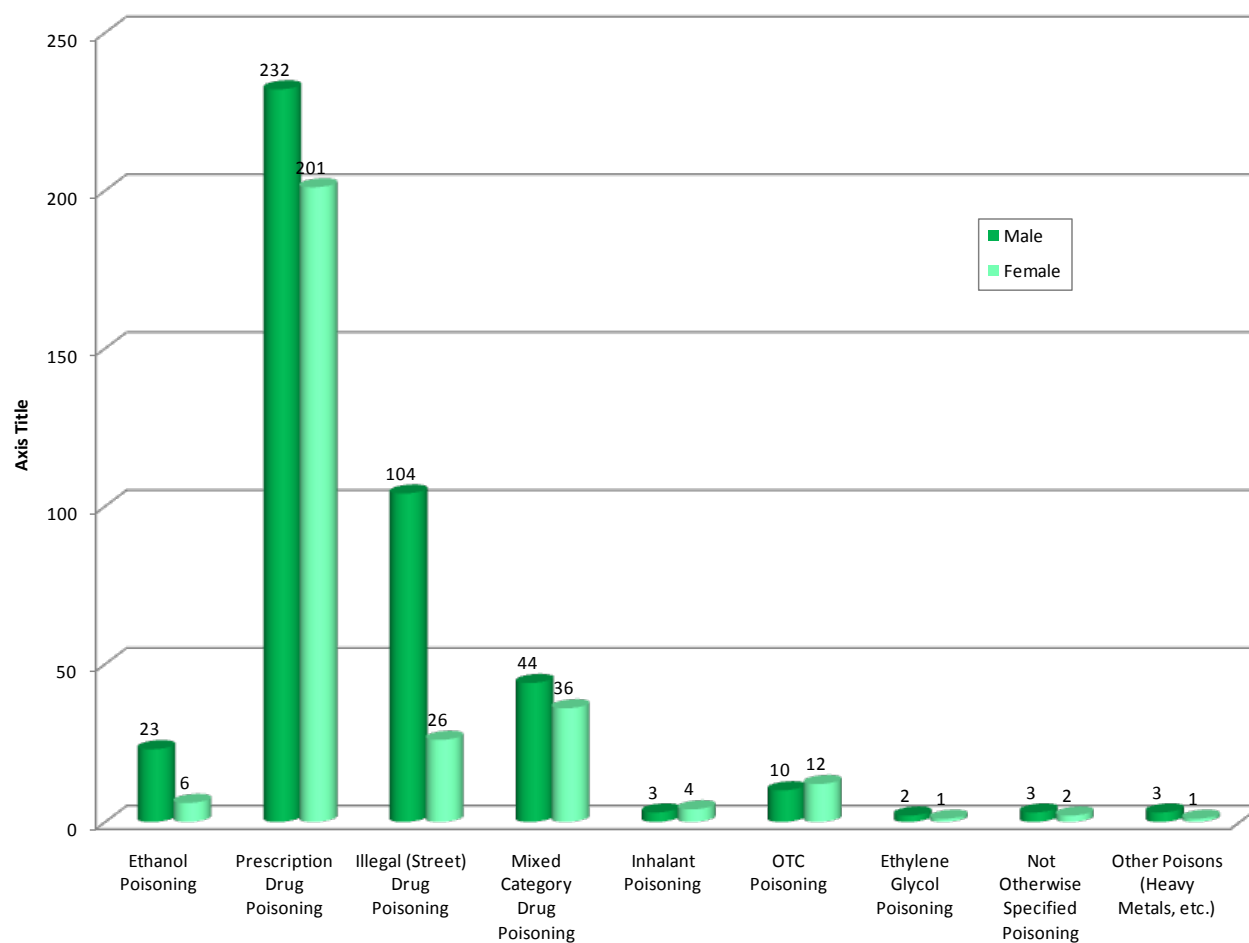
Table 40. Drug/Poison Deaths by Cause of Death by OCME District, 2009

Cause of Death	District				Total
	Central	Northern	Tidewater	Western	
Ethanol Poisoning	10	4	7	8	29
Prescription Drug Poisoning	99	85	68	181	433
Illegal (Street) Drug Poisoning	51	40	29	10	130
Mixed Category Drug Poisoning	11	23	22	24	80
Inhalant Poisoning	3	2	1	1	7
OTC Poisoning	14	3	3	2	22
Ethylene Glycol Poisoning	1	0	1	1	3
Not Otherwise Specified Poisoning	3	0	1	1	5
Other Poisons (Heavy Metals, etc.)	2	2	0	0	4
<b>Total</b>	<b>194</b>	<b>159</b>	<b>132</b>	<b>228</b>	<b>713</b>

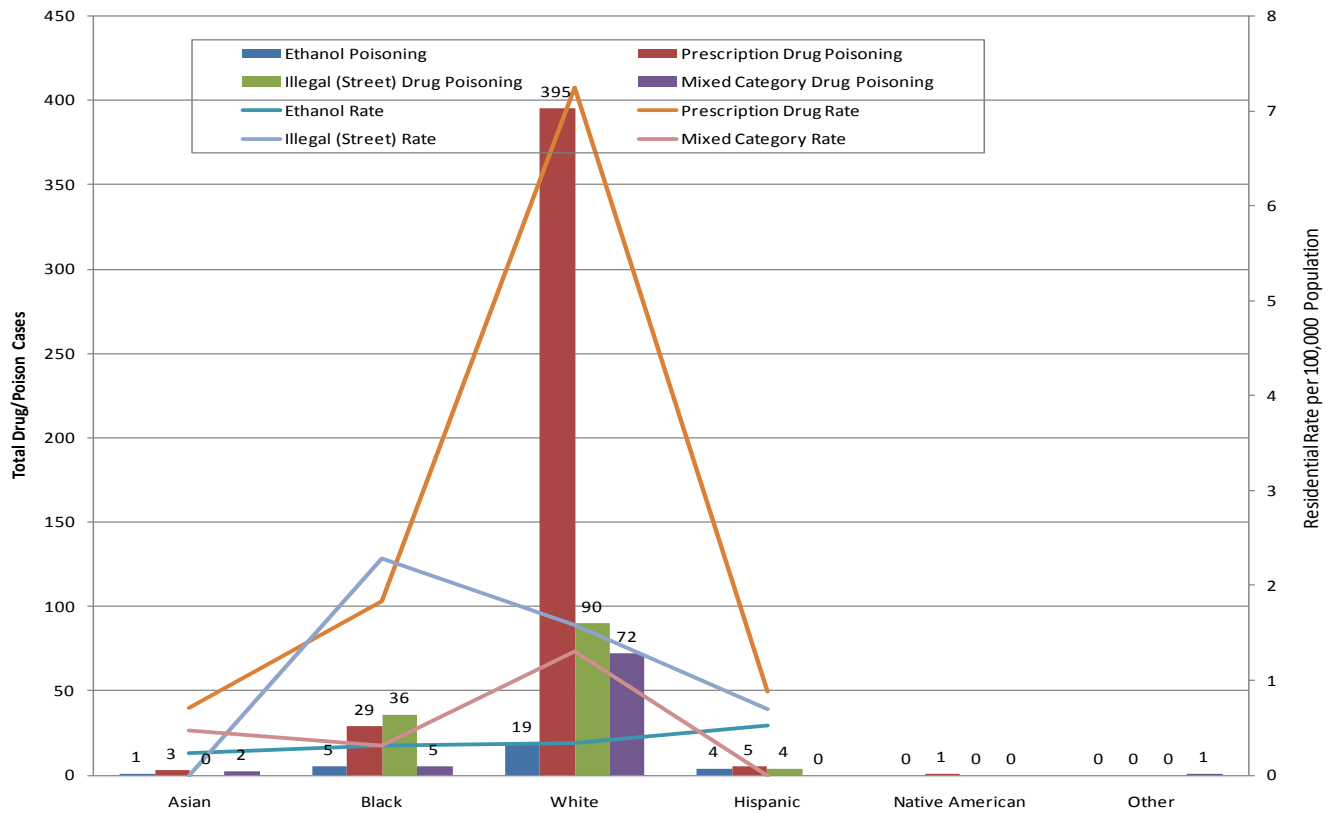
Table 41. Drug/Poison Death by Cause of Death by Manner of Death, 2009

Cause of Death	Manner of Death				Total
	Accident	Homicide	Suicide	Undetermined	
Ethanol Poisoning	27	0	1	1	29
Prescription Drug Poisoning	322	0	103	8	433
Illegal (Street) Drug Poisoning	128	0	1	1	130
Mixed Category Drug Poisoning	57	1	17	5	80
Inhalant Poisoning	7	0	0	0	7
OTC Poisoning	6	0	16	0	22
Ethylene Glycol Poisoning	0	0	3	0	3
Not Otherwise Specified Poisoning	5	0	0	0	5
Other Poisons (Heavy Metals, etc.)	2	0	2	0	4
<b>TOTAL</b>	<b>554</b>	<b>1</b>	<b>143</b>	<b>15</b>	<b>713</b>

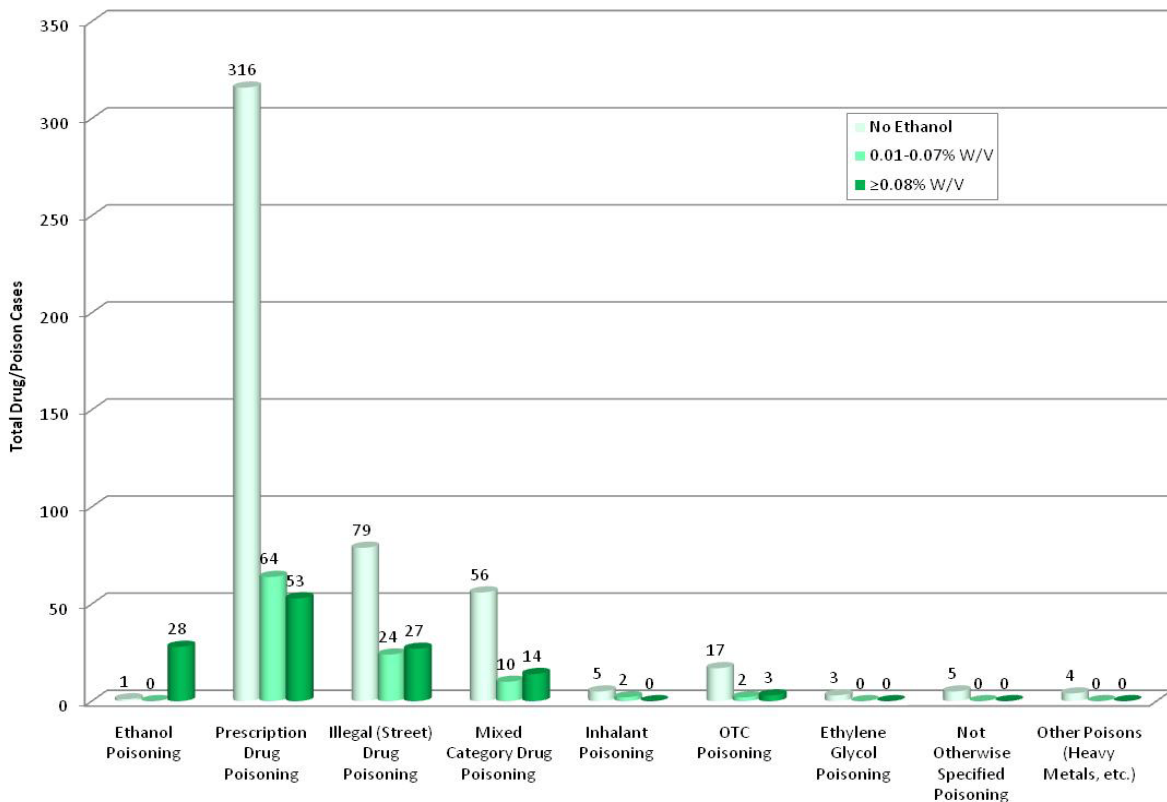
Figure 81. Drug/Poison Deaths by Drug Type by Gender, 2009



**Figure 82. Specific Type of Drug/Poison Deaths & Rates by Race/Ethnicity, 2009**



**Figure 83. Drug/Poison Caused Deaths by Drug Type by Ethanol Level, 2009**



**Table 42. All Drug Deaths by Whether or Not Alcohol Also Caused Death, 2009**

Cause of Death	Alcohol Also Caused Death				Total
	Yes	No	Contributed	Unknown	
Ethanol Poisoning	28	1*	0	0	29
Prescription Drug Poisoning	65	365	1	2	433
Illegal (Street) Drug Poisoning	24	105	1	0	130
Mixed Category Drug Poisoning	17	63	0	0	80
Inhalant Poisoning	0	7	0	0	7
OTC Poisoning	2	20	0	0	22
Ethylene Glycol Poisoning	0	3	0	0	3
Not Otherwise Specified Poisoning	0	5	0	0	5
Other Poisons (Heavy Metals, etc.)	0	4	0	0	4
<b>Total</b>	<b>136</b>	<b>573</b>	<b>2</b>	<b>2</b>	<b>713</b>

\*No toxicology was run on decedent by OCME & table is based on OCME toxicology results.

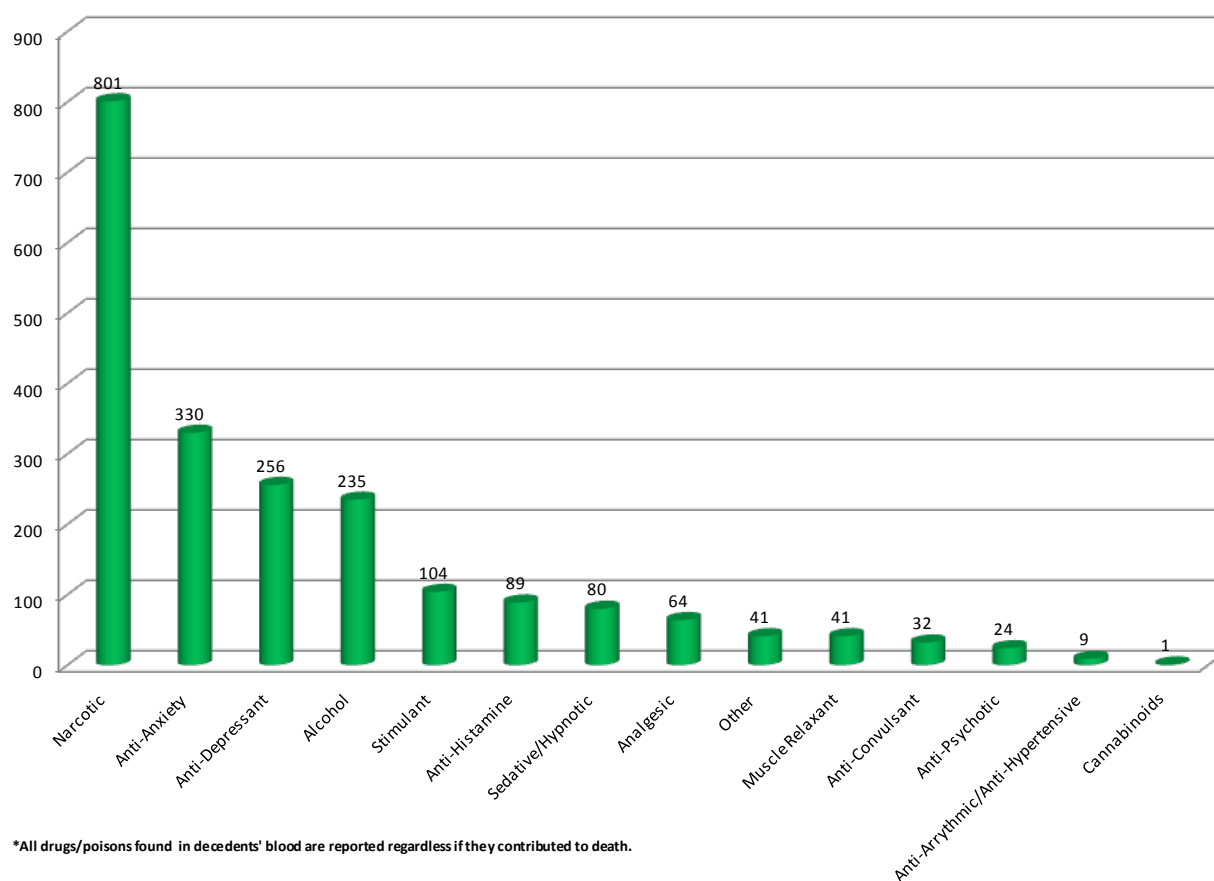
**Figure 84. Classes of All Drugs/Poisons Present\* in Drug/Poison Deaths, 2009**

Table 43. All Drugs/Poisons/Active Metabolites Present in Drug/Poison Deaths, 2009

Class	Drug/Poison/Active Metabolite	Total
<b>Alcohol</b>		
	ETHANOL	227
	ISOPROPANOL	3
	METHANOL	5
	<b>Alcohol Total</b>	<b>235</b>
<b>Analgesic</b>		
	ACETAMINOPHEN	13
	ACETYL SALICYLIC ACID	5
	BUPRENORPHINE	2
	DEXTROMETHORPHAN	11
	IBUPROFEN	1
	NAPROXEN	1
	NORBUPRENORPHINE (Buprenorphine Metabolite)	1
	TRAMADOL	30
	<b>Analgesic Total</b>	<b>64</b>
<b>Anti-Anxiety</b>		
	ALPRAZOLAM	127
	CHLORDIAZEPOXIDE	3
	DIAZEPAM	82
	LORAZEPAM	12
	MEPROBAMATE	19
	NORDIAZEPAM (Diazepam Metabolite)	83
	OXAZEPAM	4
	<b>Anti-Anxiety Total</b>	<b>330</b>
<b>Anti-Arrhythmic/Anti-Hypertensive</b>		
	DILTIAZEM	3
	METOPROLOL	1
	VERAPAMIL	5
	<b>Anti-Arrhythmic/Anti-Hypertensive Total</b>	<b>9</b>
<b>Anti-Convulsant</b>		
	CARBAMAZEPINE	6
	CLONAZEPAM	1
	GABAPENTIN	1
	LAMOTRIGINE	12
	MIDAZOLAM	1
	OXCARBAZEPINE	2
	PHENOBARBITAL	3
	PHENYTOIN	2
	PRIMIDONE	1
	TOPIRAMATE	1
	VALPROIC ACID	2
	<b>Anti-Convulsant Total</b>	<b>32</b>

Class	Drug/Poison/Active Metabolite	Total
<b>Anti-Depressant</b>		
	AMITRIPTYLINE	34
	BUPROPION (WELLBUTRIN)	16
	CITALOPRAM	54
	CLOMIPRAMINE	1
	DESIPRAMINE	1
	DOXEPIN	3
	DULOXETINE	1
	FLUOXETINE	34
	FLUVOXAMINE	3
	IMIPRAMINE	1
	MIRTAZAPINE	7
	NORFLUOXETINE (Fluoxetine Metabolite)	5
	NORTRIPTYLENE (Triptylene Metabolite)	32
	PAROXETINE	5
	SERTRALINE	18
	TRAZODONE	23
	VENLAFAXINE	18
	<b>Anti-Depressant Total</b>	<b>256</b>
<b>Anti-Histamine</b>		
	CHLORPHENIRAMINE	9
	DIPHENHYDRAMINE	66
	DOXYLAMINE	12
	HYDROXYZINE	1
	ORPHENADRINE	1
	<b>Anti-Histamine Total</b>	<b>89</b>
<b>Anti-Psychotic</b>		
	CHLORPROMAZINE	1
	CLOZAPINE	1
	LOXAPINE	1
	OLANZAPINE	2
	QUETIAPINE	18
	THIORIDAZINE	1
	<b>Anti-Psychotic Total</b>	<b>24</b>
<b>Cannabinoids</b>		
	TETRAHYDROCANNABINOL CARBOXYLIC ACID	1
	<b>Cannabinoids Total</b>	<b>1</b>
<b>Muscle Relaxant</b>		
	CARISOPRODOL	18
	CYCLOBENZAPRINE	21
	METAXALONE	2
	<b>Muscle Relaxant Total</b>	<b>41</b>
<b>Narcotic</b>		
	ACETYLMORPHINE (Heroin Metabolite)	49
	CODEINE	58



Class	Drug/Poison/Active Metabolite	Total
	FENTANYL	42
	HYDROCODONE	78
	HYDROMORPHONE	24
	METHADONE	136
	MORPHINE	185
	NORPROPOXYPHENE (Propoxyphene Metabolite)	25
	OXYCODONE	139
	OXYMORPHONE	34
	PROPOXYPHENE	31
	<b>Narcotic Total</b>	<b>801</b>
<b>Other</b>		
	ACETONE	5
	CARBOXYHEMOGLOBIN	12
	CHLOROETHANE	1
	DICYCLOMINE	4
	DIFLUOROETHANE	5
	ETHYLENE GLYCOL	3
	FLUCONAZOLE	1
	LIDOCAINE	5
	METOCLOPRAMIDE	2
	METRONIDAZOLE	1
	PHENCYCLIDINE	1
	TERBINAFINE	1
	<b>Other Total</b>	<b>41</b>
<b>Sedative/Hypnotic</b>		
	BUTALBITAL	5
	N-DESALKYFLURAZEPAM (Flurazepam Metabolite)	2
	PENTOBARBITAL	1
	PROMETHAZINE	36
	SECOBARBITAL	1
	TEMAZEPAM	12
	ZOLPIDEM	23
	<b>Sedative/Hypnotic Total</b>	<b>80</b>
<b>Stimulant</b>		
	AMPHETAMINE	3
	CAFFEINE	1
	COCAETHYLENE	27
	COCAINE	62
	METHAMPHETAMINE	5
	METHYLENEDIOXYMETHAMPHETAMINE - ECSTASY	3
	METHYLPHENIDATE	2
	PHENTERMINE	1
	<b>Stimulant Total</b>	<b>104</b>
<b>Total</b>		<b>2107</b>

\*All drugs/poisons found in drug/poison deaths are reported regardless if they contributed to death.

Table 44. Drugs/Poison/Active Metabolites Causing Death in Drug/Poison Deaths, 2009

Class	Drug/Poison/Active Metabolite	Total
<b>Alcohol</b>		
	ETHANOL	135
	ISOPROPANOL	3
	METHANOL	2
	<b>Alcohol Total</b>	<b>140</b>
<b>Analgesic</b>		
	ACETAMINOPHEN	9
	ACETYL SALICYLIC ACID	4
	BUPRENORPHINE	2
	DEXTROMETHORPHAN	4
	NORBUPRENORPHINE (Buprenorphine Metabolite)	1
	TRAMADOL	24
	<b>Analgesic Total</b>	<b>44</b>
<b>Anti-Anxiety</b>		
	ALPRAZOLAM	90
	CHLORDIAZEPOXIDE	1
	DIAZEPAM	47
	LORAZEPAM	7
	MEPROBAMATE	10
	NORDIAZEPAM (Diazepam Metabolite)	38
	OXAZEPAM	2
	<b>Anti-Anxiety Total</b>	<b>195</b>
<b>Anti-Arrhythmic/Anti-Hypertensive</b>		
	DILTIAZEM	1
	METOPROLOL	1
	VERAPAMIL	5
	<b>Anti-Arrhythmic/Anti-Hypertensive Total</b>	<b>7</b>
<b>Anti-Convulsant</b>		
	CARBAMAZEPINE	3
	CLONAZEPAM	1
	GABAPENTIN	1
	LAMOTRIGINE	2
	OXCARBAZEPINE	1
	PHENOBARBITAL	1
	TOPIRAMATE	1
	<b>Anti-Convulsant Total</b>	<b>10</b>
<b>Anti-Depressant</b>		
	AMITRIPTYLINE	25
	BUPROPION (WELLBUTRIN)	9
	CITALOPRAM	34
	DESIPRAMINE	1
	DOXEPIN	2

Class	Drug/Poison/Active Metabolite	Total
	DULOXETINE	1
	FLUOXETINE	23
	FLUVOXAMINE	1
	IMIPRAMINE	1
	MIRTAZAPINE	4
	NORFLUOXETINE (Fluoxetine Metabolite)	4
	NORTRIPTYLENE (Triptylene Metabolite)	21
	PAROXETINE	2
	SERTRALINE	12
	TRAZODONE	11
	VENLAFAXINE	10
	<b>Anti-Depressant Total</b>	<b>161</b>
<b>Anti-Histamine</b>		
	CHLORPHENIRAMINE	7
	DIPHENHYDRAMINE	39
	DOXYLAMINE	7
	ORPHENADRINE	1
	<b>Anti-Histamine Total</b>	<b>54</b>
<b>Anti-Psychotic</b>		
	CHLORPROMAZINE	1
	CLOZAPINE	1
	OLANZAPINE	2
	QUETIAPINE	11
	THIORIDAZINE	1
	<b>Anti-Psychotic Total</b>	<b>16</b>
<b>Muscle Relaxant</b>		
	CARISOPRODOL	9
	CYCLOBENZAPRINE	18
	METAXALONE	2
	<b>Muscle Relaxant Total</b>	<b>29</b>
<b>Narcotic</b>		
	ACETYLMORPHINE (Heroin Metabolite)	24
	CODEINE	24
	FENTANYL	42
	HYDROCODONE	56
	HYDROMORPHONE	17
	METHADONE	131
	MORPHINE	175
	NORPROPOXYPHENE (Propoxyphene Metabolite)	21
	OXYCODONE	121
	OXYMORPHONE	21
	PROPOXYPHENE	28
	<b>Narcotic Total</b>	<b>660</b>
<b>Other</b>		
	ACETONE	2

<b>Class</b>	<b>Drug/Poison/Active Metabolite</b>	<b>Total</b>
	CARBOXYHEMOGLOBIN	2
	CHLOROETHANE	1
	DIFLUOROETHANE	5
	ETHYLENE GLYCOL	3
	METOCLOPRAMIDE	1
	PHENCYCLIDINE	1
	<b>Other Total</b>	<b>15</b>
<hr/>		
<b>Sedative/Hypnotic</b>		
	BUTALBITAL	4
	N-DESALKYFLURAZEPAM (Flurazepam Metabolite)	1
	PROMETHAZINE	20
	TEMAZEPAM	8
	ZOLPIDEM	16
	<b>Sedative/Hypnotic Total</b>	<b>49</b>
<hr/>		
<b>Stimulant</b>		
	AMPHETAMINE	2
	COCAETHYLENE	15
	COCAINE	54
	METHAMPHETAMINE	4
	METHYLENEDIOXYMETHAMPHETAMINE - ECSTASY	2
	METHYLPHENIDATE	2
	<b>Stimulant Total</b>	<b>79</b>
<b>Total</b>		<b>1459</b>

Table 45. Drug/Poison Deaths by City/County of Residence, 2009

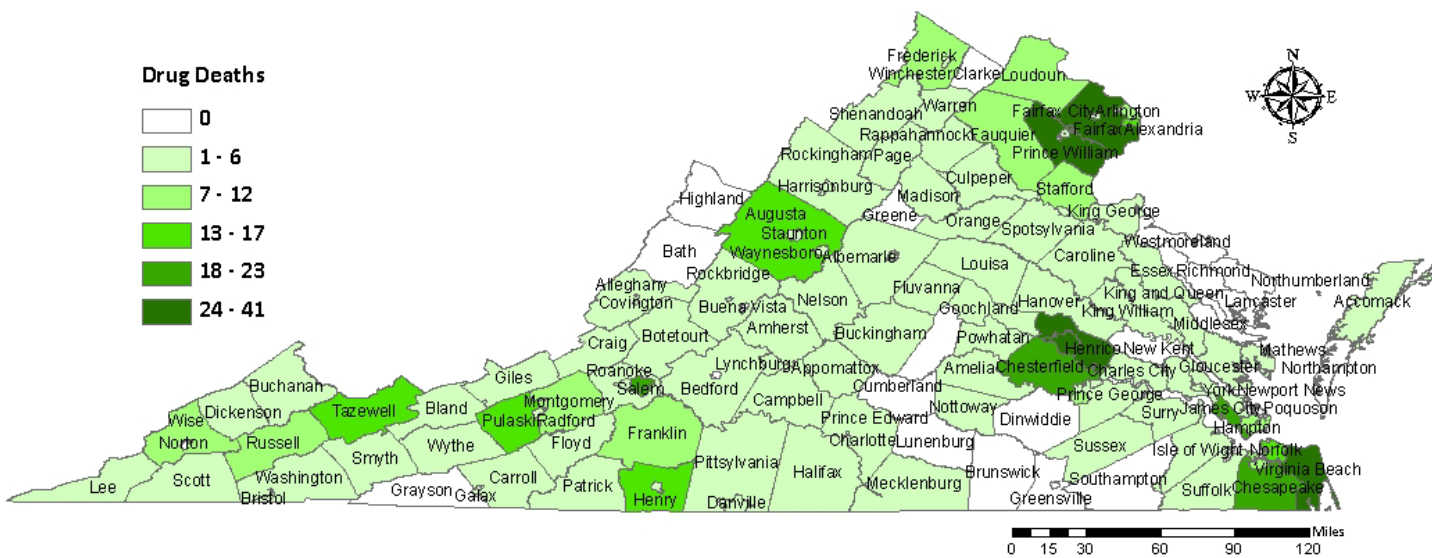
City/County of Residence	Deaths	Rate	City/County of Residence	Deaths	Rate
Accomack	2	5.2	Fauquier	8	11.8
Albemarle	6	6.3	Floyd	1	6.7
Alexandria	15	10.0	Fluvanna	1	3.9
Alleghany	1	6.2	Franklin City	1	11.3
Amelia	1	7.8	Franklin	7	13.5
Amherst	1	3.1	Frederick	9	12.0
Appomattox	1	6.9	Fredericksburg	1	4.3
Arlington	10	4.6	Galax	1	14.5
Augusta	16	22.2	Giles	2	11.5
Bath	0	0.0	Gloucester	4	10.2
Bedford City	0	0.0	Goochland	5	23.5
Bedford	4	6.0	Grayson	0	0.0
Bland	2	29.5	Greene	0	0.0
Botetourt	3	9.2	Greensville	0	0.0
Bristol	3	17.0	Halifax	3	8.5
Brunswick	0	0.0	Hampton	8	5.5
Buchanan	5	21.9	Hanover	3	3.0
Buckingham	1	6.2	Harrisonburg	2	4.4
Buena Vista	0	0.0	Henrico	29	9.8
Campbell	6	11.3	Henry	16	29.2
Caroline	2	7.2	Highland	0	0.0
Carroll	4	13.8	Hopewell	4	17.3
Charles City	1	13.9	Isle of Wight	3	8.4
Charlotte	2	16.6	James City	3	4.7
Charlottesville	4	9.5	King and Queen	2	29.4
Chesapeake	23	10.3	King George	3	12.7
Chesterfield	22	7.2	King William	4	24.7
Clarke	0	0.0	Lancaster	0	0.0
Colonial Heights	2	11.2	Lee	3	11.9
Covington	1	16.3	Lexington	1	14.5
Craig	1	20.1	Loudoun	9	3.0
Culpeper	4	8.6	Louisa	3	9.1
Cumberland	0	0.0	Lunenburg	0	0.0
Danville	5	11.3	Lynchburg	2	2.7
Dickenson	3	18.6	Madison	1	7.3
Dinwiddie	0	0.0	Manassas	3	8.2
Emporia	0	0.0	Martinsville	2	13.7
Essex	1	8.9	Mathews	1	11.1
Fairfax City	2	8.1	Mecklenburg	4	12.5
Fairfax	41	4.0	Middlesex	0	0.0
Falls Church	0	0.0	Montgomery	12	13.2

City/County of Residence	Deaths	Rate
Nelson	2	12.9
New Kent	0	0.0
Newport News	20	10.4
Norfolk	17	7.3
Northampton	0	0.0
Northumberland	0	0.0
Norton	0	0.0
Nottoway	2	12.6
Orange	1	3.0
Page	4	16.6
Patrick	6	32.2
Petersburg	7	21.2
Pittsylvania	2	3.3
Poquoson	0	0.0
Portsmouth	11	11.1
Powhatan	3	10.7
Prince Edward	0	0.0
Prince George	5	13.5
Prince William	31	8.2
Pulaski	13	37.1
Radford	5	30.9
Rappahannock	2	28.4
Richmond City	32	15.7
Richmond	0	0.0
Roanoke City	19	20.1
Roanoke	6	6.6
Rockbridge	2	9.4
Rockingham	3	4.0

City/County of Residence	Deaths	Rate
Russell	7	23.9
Salem	4	15.7
Scott	4	17.7
Shenandoah	4	9.7
Smyth	5	15.8
Southampton	0	0.0
Spotsylvania	6	5.0
Stafford	12	9.7
Staunton	3	12.6
Suffolk	3	3.6
Surry	1	14.1
Sussex	3	24.8
Tazewell	13	28.9
Virginia Beach	38	8.8
Warren	4	10.9
Washington	6	11.3
Waynesboro	3	13.5
Westmoreland	0	0.0
Williamsburg	1	7.9
Winchester	3	11.4
Wise	9	21.5
Wythe	6	20.8
York	1	1.6
<b>Total in State</b>	<b>685</b>	<b>8.7</b>
Out of State	26	ND*
Unknown	2	ND
<b>TOTAL</b>	<b>713</b>	<b>ND</b>

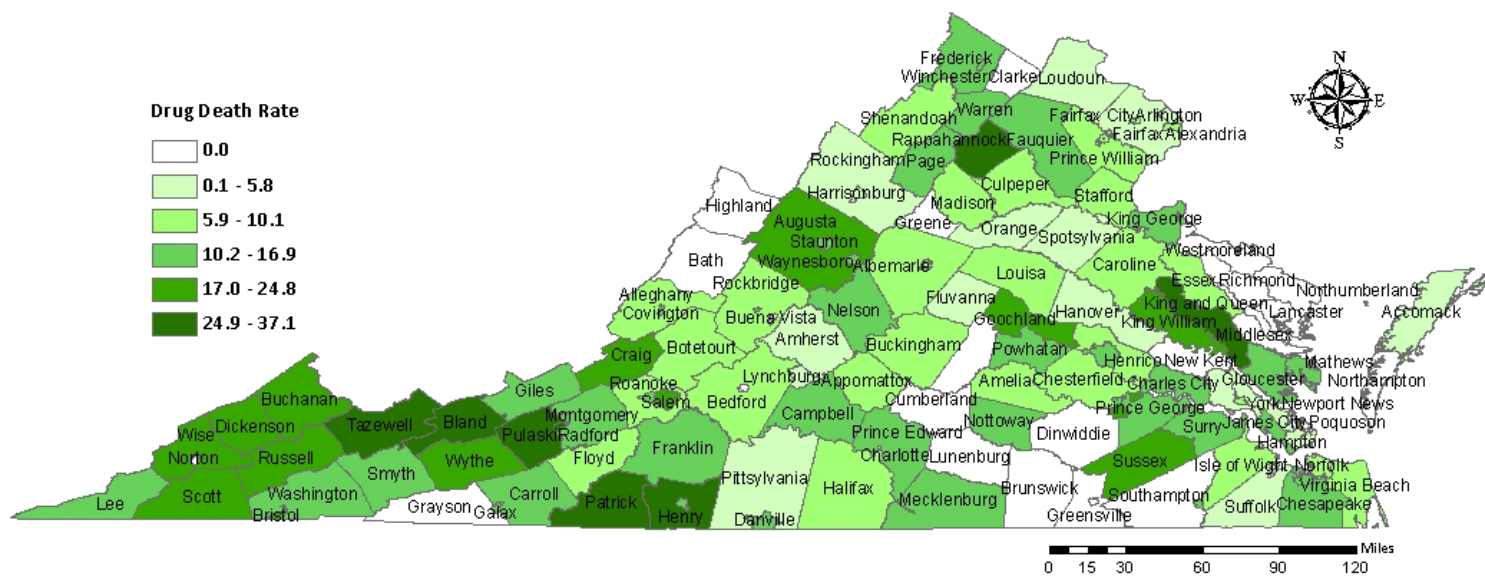
\*ND-No denominator

**Figure 85. Drug/Poison Deaths by City/County of Residence, 2009**



Map shows City/County of residency but not necessarily injury and/or where death occurred.  
 A total of 28 cases were from out of state residents or residency was unknown.

**Figure 86. Drug/Poison Death Rates by City/County of Residence, 2009**



Rate is per 100,000 population.  
 Map shows City/County of residency but not necessarily injury and/or where death occurred.  
 A total of 28 cases were from out of state residents or residency was unknown.

## FENTANYL, HYDROCODONE, METHADONE & OXYCODONE DEATHS (N=325)

Prescription drug deaths have become an increasing cause of injury and death in Virginia accounting for at least 60.7 percent of all drug/poison deaths. Fentanyl, hydrocodone, methadone, and oxycodone (FHMO) were found to be partly or wholly responsible for 45.6 percent of drug only deaths. [NOTE: The FHMO tables and figures represent deaths in which one or a combination of the FHMO drugs caused death; but other drugs/poisons may also have contributed to death.]

- Ninety-three percent of FHMO deaths were white and 60.3 percent were male
- Methadone was found in 138 or 42.5% of all FHMO deaths
- The western portion of the state had 47.4% of all the FHMO cases

**Table 46. FHMO Combinations Causing Death, 2009**

<b>FHMO Combination</b>	<b>Total</b>
Oxycodone	95
Methadone	116
Fentanyl	27
Hydrocodone	39
Oxycodone & Methadone	13
Oxycodone & Fentanyl	6
Oxycodone & Hydrocodone	12
Methadone & Fentanyl	2
Methadone & Hydrocodone	5
Fentanyl & Hydrocodone	8
Oxycodone, Methadone & Hydrocodone	2
<b>FHMO Subtotal</b>	<b>325</b>
Non-FHMO Drug/Poison Combinations	388
<b>Total</b>	<b>713</b>



Table 47. FHMO Combinations Causing Death by Race/Ethnicity, 2009

FHMO Combination	Race/Ethnicity					Total
	Asian	Black	Hispanic	Other	White	
Oxycodone	0	7	1	1	86	95
Methadone	1	7	1	0	107	116
Fentanyl	0	2	0	0	25	27
Hydrocodone	1	0	0	0	38	39
Oxycodone & Methadone	0	0	1	0	12	13
Oxycodone & Fentanyl	0	0	0	0	6	6
Oxycodone & Hydrocodone	0	0	0	0	12	12
Methadone & Fentanyl	0	0	0	0	2	2
Methadone & Hydrocodone	0	1	0	0	4	5
Fentanyl & Hydrocodone	0	0	0	0	8	8
Oxycodone, Methadone & Hydrocodone	0	0	0	0	2	2
<b>Total</b>	<b>2</b>	<b>17</b>	<b>3</b>	<b>1</b>	<b>302</b>	<b>325</b>

Table 48. FHMO Combinations Causing Death by OCME District, 2009

FHMO Combination	District				Total
	Central	Northern	Tidewater	Western	
Oxycodone	19	25	15	36	95
Methadone	31	12	15	58	116
Fentanyl	6	3	4	14	27
Hydrocodone	4	3	11	21	39
Oxycodone & Methadone	1	4	2	6	13
Oxycodone & Fentanyl	1	2	0	3	6
Oxycodone & Hydrocodone	0	3	1	8	12
Methadone & Fentanyl	0	0	0	2	2
Methadone & Hydrocodone	1	1	1	2	5
Fentanyl & Hydrocodone	2	2	1	3	8
Oxycodone, Methadone & Hydrocodone	0	1	0	1	2
<b>Total</b>	<b>65</b>	<b>56</b>	<b>50</b>	<b>154</b>	<b>325</b>

**Table 49. FHMO Combinations Causing Death by Gender, 2009**

FHMO Combination	Gender	
	Male	Female
Oxycodone	57	38
Methadone	72	44
Fentanyl	15	12
Hydrocodone	21	18
Oxycodone & Methadone	7	6
Oxycodone & Fentanyl	5	1
Oxycodone & Hydrocodone	10	2
Methadone & Fentanyl	2	0
Methadone & Hydrocodone	1	4
Fentanyl & Hydrocodone	5	3
Oxycodone, Methadone & Hydrocodone	1	1
<b>Total</b>	<b>196</b>	<b>129</b>

**Table 50. FHMO Combinations Causing Death by Whether Alcohol Caused Death, 2009**

FHMO Combination	Alcohol Caused Death			Total
	Yes	No	Contributed	
Oxycodone	21	73	1	<b>95</b>
Methadone	12	104	0	<b>116</b>
Fentanyl	2	25	0	<b>27</b>
Hydrocodone	5	34	0	<b>39</b>
Oxycodone & Methadone	1	12	0	<b>13</b>
Oxycodone & Fentanyl	0	6	0	<b>6</b>
Oxycodone & Hydrocodone	4	8	0	<b>12</b>
Methadone & Fentanyl	0	2	0	<b>2</b>
Methadone & Hydrocodone	0	5	0	<b>5</b>
Fentanyl & Hydrocone	1	7	0	<b>8</b>
Oxycodone, Methadone & Hydrocodone	0	2	0	<b>2</b>
<b>Total</b>	<b>46</b>	<b>278</b>	<b>1</b>	<b>325</b>

Table 51. FHMO Deaths &amp; Rates by City/County of Residence, 2009

City/County of Residence	Deaths	Rate
Accomack	2	5.2
Albemarle	4	4.2
Alexandria	6	4.0
Alleghany	1	6.2
Amelia	1	7.8
Amherst	1	3.1
Appomattox	0	0.0
Arlington	1	0.5
Augusta	12	16.7
Bath	0	0.0
Bedford City	0	0.0
Bedford	3	4.5
Bland	2	29.5
Botetourt	1	3.1
Bristol	3	17.0
Brunswick	0	0.0
Buchanan	3	13.1
Buckingham	0	0.0
Buena Vista	0	0.0
Campbell	3	5.7
Caroline	1	3.6
Carroll	3	10.3
Charles City	0	0.0
Charlotte	1	8.3
Charlottesville	2	4.7
Chesapeake	10	4.5
Chesterfield	7	2.3
Clarke	0	0.0
Colonial Heights	1	5.6
Covington	0	0.0
Craig	0	0.0
Culpeper	0	0.0
Cumberland	0	0.0
Danville	4	9.0
Dickenson	2	12.4
Dinwiddie	0	0.0
Emporia	0	0.0
Essex	1	8.9
Fairfax City	0	0.0
Fairfax	14	1.3

City/County of Residence	Deaths	Rate
Falls Church	0	0.0
Fauquier	3	4.4
Floyd	1	6.7
Fluvanna	0	0.0
Franklin City	0	0.0
Franklin	5	9.6
Frederick	4	5.3
Fredericksburg	0	0.0
Galax	1	14.5
Giles	2	11.5
Gloucester	2	5.1
Goochland	2	9.4
Grayson	0	0.0
Greene	0	0.0
Greensville	0	0.0
Halifax	1	2.8
Hampton	3	2.1
Hanover	1	1.0
Harrisonburg	2	4.4
Henrico	8	2.7
Henry	13	23.7
Highland	0	0.0
Hopewell	2	8.6
Isle of Wight	0	0.0
James City	0	0.0
King and Queen	2	29.4
King George	1	4.2
King William	0	0.0
Lancaster	0	0.0
Lee	3	11.9
Lexington	0	0.0
Loudoun	6	2.0
Louisa	2	6.0
Lunenburg	0	0.0
Lynchburg	1	1.4
Madison	1	7.3
Manassas	1	2.7
Martinsville	2	13.7
Mathews	1	11.1
Mecklenburg	3	9.4

City/County of Residence	Deaths	Rate
Middlesex	0	0.0
Montgomery	7	7.7
Nelson	2	12.9
New Kent	0	0.0
Newport News	12	6.2
Norfolk	5	2.1
Northampton	0	0.0
Northumberland	0	0.0
Norton	0	0.0
Nottoway	0	0.0
Orange	0	0.0
Page	2	8.3
Patrick	5	26.8
Petersburg	4	12.1
Pittsylvania	2	3.3
Poquoson	0	0.0
Portsmouth	1	1.0
Powhatan	1	3.6
Prince Edward	0	0.0
Prince George	1	2.7
Prince William	12	3.2
Pulaski	9	25.7
Radford	4	24.7
Rappahannock	2	28.4
Richmond City	2	1.0
Richmond	0	0.0
Roanoke City	6	6.4
Roanoke	5	5.5
Rockbridge	1	4.7

City/County of Residence	Deaths	Rate
Rockingham	3	4.0
Russell	5	17.1
Salem	2	7.9
Scott	1	4.4
Shenandoah	1	2.4
Smyth	3	9.5
Southampton	0	0.0
Spotsylvania	2	1.7
Stafford	5	4.0
Staunton	2	8.4
Suffolk	1	1.2
Surry	1	14.1
Sussex	3	24.8
Tazewell	10	22.3
Virginia Beach	13	3.0
Warren	3	8.2
Washington	2	3.8
Waynesboro	2	9.0
Westmoreland	0	0.0
Williamsburg	0	0.0
Winchester	0	0.0
Wise	8	19.2
Wythe	4	13.9
York	0	0.0
<b>Total in State</b>	<b>316</b>	<b>4.0</b>
Out of State	9	ND*
<b>TOTAL</b>	<b>325</b>	<b>ND</b>

\*ND-No denominator

Figure 87. FHMO Deaths by City/County of Residence, 2009

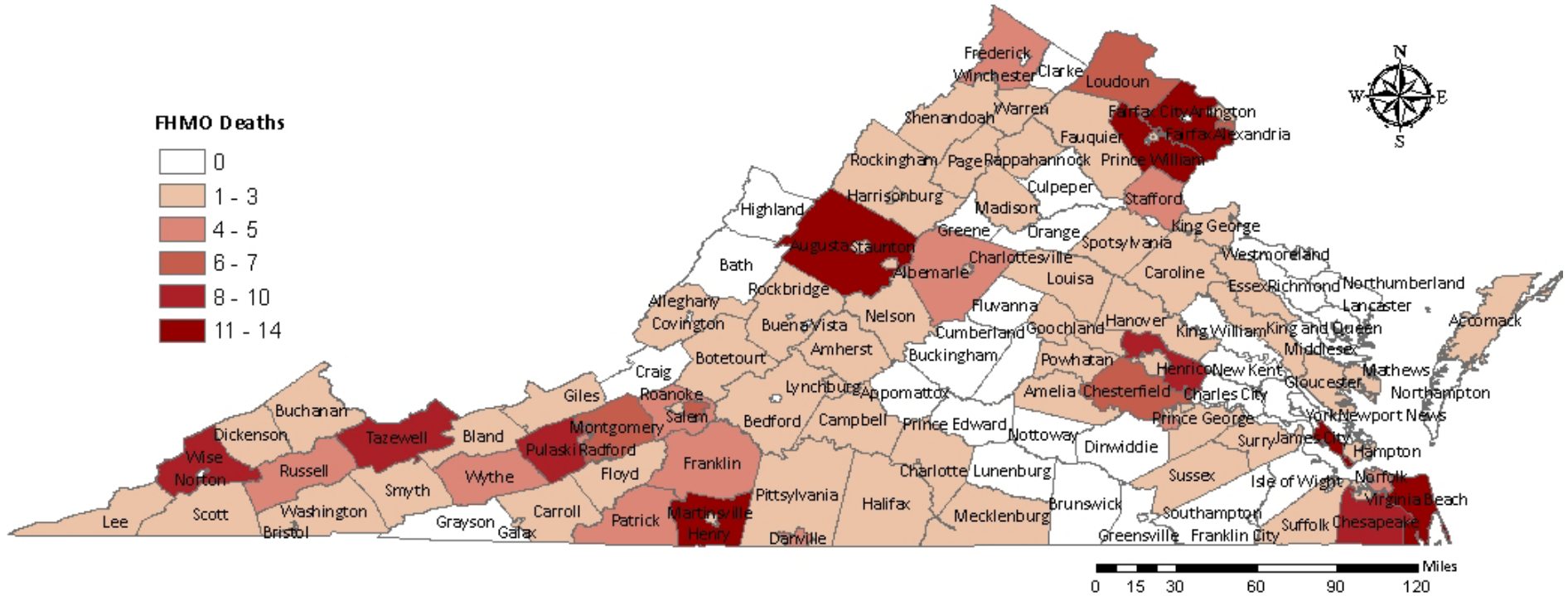
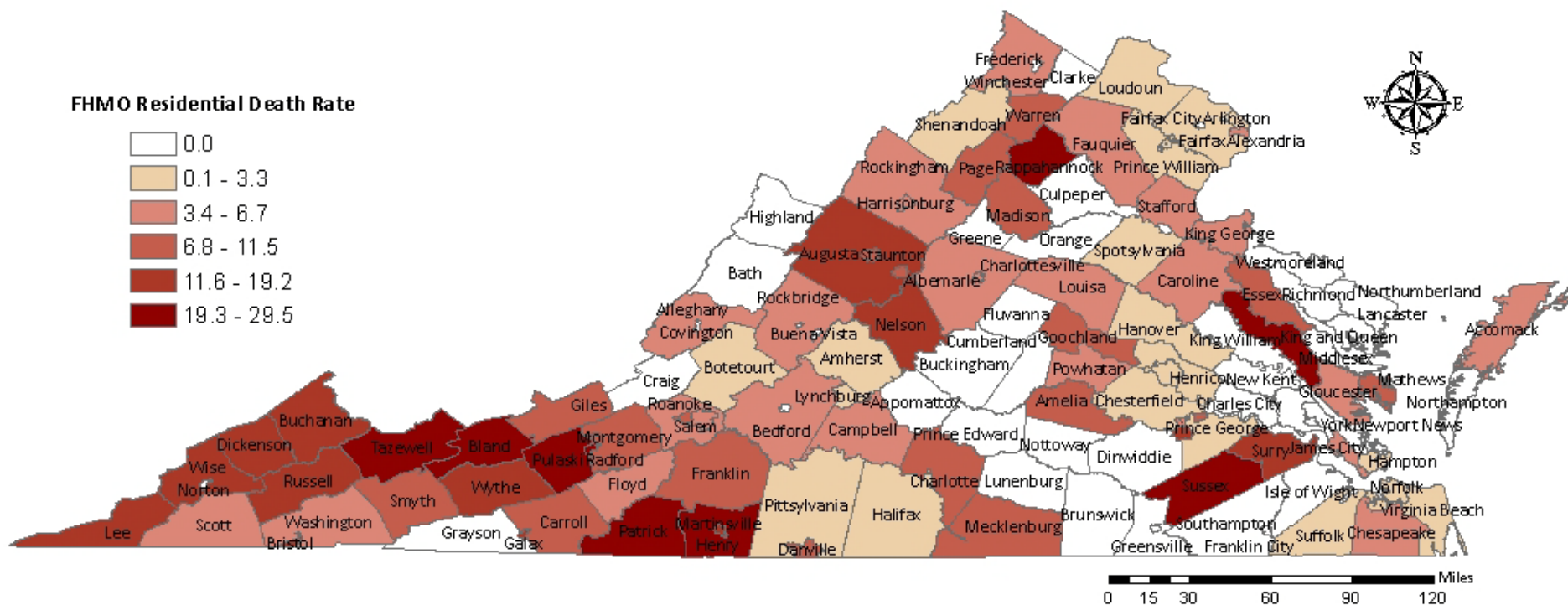


Figure 88. FHMO Death Rates by City/County of Residence, 2009



Rate is per 100,000 population.  
 Map shows City/County of residency but not necessarily injury and/or where death occurred.  
 A total of 28 cases were from out of state residents or residency was unknown.

## COCAINE & HEROIN DEATHS (N=168)

Cocaine and heroin are not the only illegal drugs used in Virginia; however, they are the main compounds found in deaths by illegal drugs. Additionally, heroin deaths are typically underestimated because heroin is very rapidly metabolized into morphine. Therefore, without known heroin history, circumstances, and/or the presence of a specific heroin metabolite; heroin cases may be missed. [NOTE: As with the FHMO deaths, cocaine & heroin tables and figures represent deaths in which one or both illegal drugs caused death; but other drugs/poisons may also have contributed to death.]

- Cocaine and/or heroin were involved in 23.6% of all drug/poison cases

**Table 52. Cocaine & Heroin Combinations Causing Death, 2009**

Cocaine & Heroin Combinations	Total
Cocaine	54
Heroin	95
Cocaine & Heroin	19
<b>Subtotal</b>	<b>168</b>
Non-Cocaine or Heroin Drugs/Poisons	545
<b>Total</b>	<b>713</b>

**Table 53. Cocaine & Heroin Combinations Causing Death by Race/Ethnicity, 2009**

Drug Combination	Race/Ethnicity				
	Asian	Black	Hispanic	Other	White
Cocaine	1	17	2	1	33
Heroin	1	18	2	0	74
Cocaine & Heroin	0	5	0	0	14
<b>Total</b>	<b>2</b>	<b>40</b>	<b>4</b>	<b>1</b>	<b>121</b>

**Table 54. Cocaine & Heroin Combinations Causing Death by Gender, 2009**

Drug Combination	Gender	
	Male	Female
Cocaine	38	16
Heroin	79	16
Cocaine & Heroin	14	5
<b>Total</b>	<b>131</b>	<b>37</b>

Table 55. Cocaine &amp; Heroin Combinations Causing Death by OCME District, 2009

Drug Combination	District			
	Central	Northern	Tidewater	Western
Cocaine	16	18	12	8
Heroin	33	29	24	9
Cocaine & Heroin	5	9	4	1
<b>Total</b>	<b>54</b>	<b>56</b>	<b>40</b>	<b>18</b>

Table 56. Cocaine &amp; Heroin Deaths by City/County of Residence, 2009

City/County of Residence	Deaths	Rate
Accomack	0	0.0
Albemarle	1	1.1
Alexandria	4	2.7
Alleghany	0	0.0
Amelia	0	0.0
Amherst	0	0.0
Appomattox	0	0.0
Arlington	3	1.4
Augusta	1	1.4
Bath	0	0.0
Bedford City	0	0.0
Bedford	0	0.0
Bland	0	0.0
Botetourt	0	0.0
Bristol	0	0.0
Brunswick	0	0.0
Buchanan	2	8.7
Buckingham	0	0.0
Buena Vista	0	0.0
Campbell	1	1.9
Caroline	1	3.6
Carroll	0	0.0
Charles City	0	0.0
Charlotte	0	0.0
Charlottesville	1	2.4
Chesapeake	7	3.1
Chesterfield	11	3.6
Clarke	0	0.0

City/County of Residence	Deaths	Rate
Colonial Heights	2	11.2
Covington	0	0.0
Craig	0	0.0
Culpeper	4	8.6
Cumberland	0	0.0
Danville	0	0.0
Dickenson	0	0.0
Dinwiddie	0	0.0
Emporia	0	0.0
Essex	0	0.0
Fairfax City	0	0.0
Fairfax	11	1.1
Falls Church	0	0.0
Fauquier	6	8.8
Floyd	0	0.0
Fluvanna	1	3.9
Franklin City	0	0.0
Franklin	1	1.9
Frederick	6	8.0
Fredericksburg	1	4.3
Galax	0	0.0
Giles	0	0.0
Gloucester	0	0.0
Goochland	0	0.0
Grayson	0	0.0
Greene	0	0.0
Greensville	0	0.0
Halifax	0	0.0

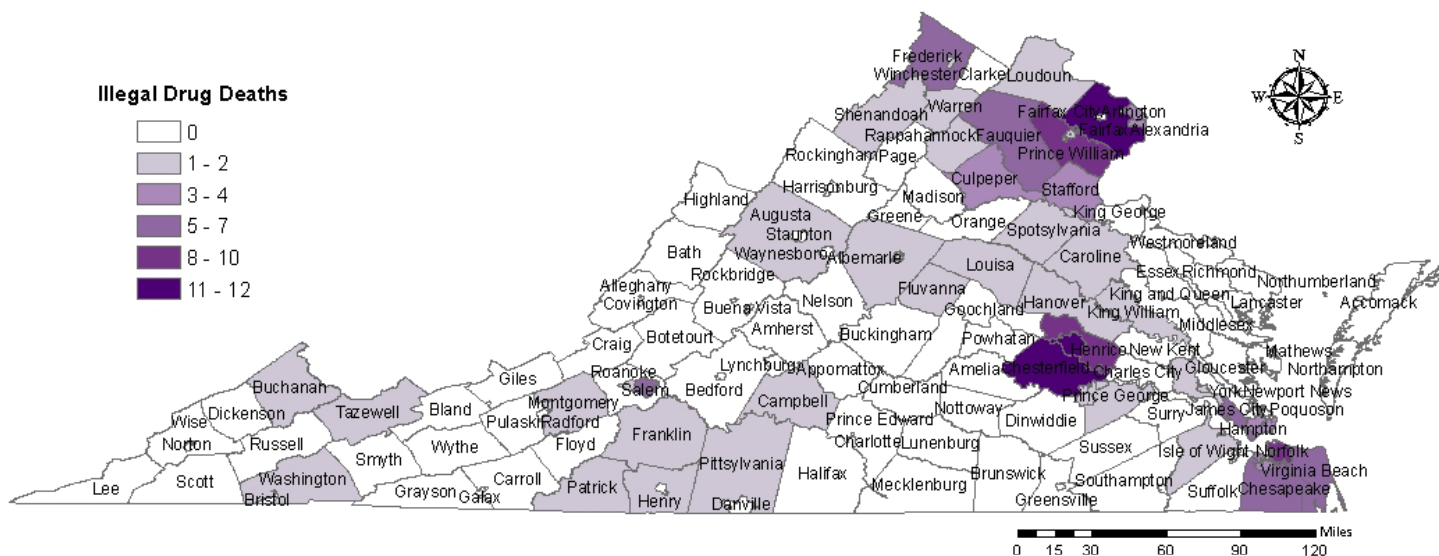


City/County of Residence	Deaths	Rate
Hampton	3	2.1
Hanover	1	1.0
Harrisonburg	0	0.0
Henrico	10	3.4
Henry	1	1.8
Highland	0	0.0
Hopewell	1	4.3
Isle of Wight	2	5.6
James City	1	1.6
King and Queen	0	0.0
King George	0	0.0
King William	1	6.2
Lancaster	0	0.0
Lee	0	0.0
Lexington	0	0.0
Loudoun	1	0.3
Louisa	1	3.0
Lunenburg	0	0.0
Lynchburg	0	0.0
Madison	0	0.0
Manassas	2	5.5
Martinsville	0	0.0
Mathews	0	0.0
Mecklenburg	0	0.0
Middlesex	0	0.0
Montgomery	1	1.1
Nelson	0	0.0
New Kent	0	0.0
Newport News	6	3.1
Norfolk	9	3.9
Northampton	0	0.0
Northumberland	0	0.0
Norton	0	0.0
Nottoway	0	0.0
Orange	0	0.0
Page	0	0.0
Patrick	1	5.4
Petersburg	1	3.0
Pittsylvania	1	1.6
Poquoson	0	0.0
Portsmouth	4	4.0

City/County of Residence	Deaths	Rate
Powhatan	0	0.0
Prince Edward	0	0.0
Prince George	2	5.4
Prince William	10	2.6
Pulaski	0	0.0
Radford	0	0.0
Rappahannock	1	14.2
Richmond City	12	5.9
Richmond	0	0.0
Roanoke City	5	5.3
Roanoke	0	0.0
Rockbridge	0	0.0
Rockingham	0	0.0
Russell	0	0.0
Salem	1	3.9
Scott	0	0.0
Shenandoah	1	2.4
Smyth	0	0.0
Southampton	0	0.0
Spotsylvania	1	0.8
Stafford	3	2.4
Staunton	0	0.0
Suffolk	0	0.0
Surry	0	0.0
Sussex	0	0.0
Tazewell	1	2.2
Virginia Beach	6	1.4
Warren	1	2.7
Washington	1	1.9
Waynesboro	0	0.0
Westmoreland	0	0.0
Williamsburg	1	7.9
Winchester	2	7.6
Wise	0	0.0
Wythe	0	0.0
York	0	0.0
<b>Total in State</b>	<b>159</b>	<b>2.0</b>
Out of State	8	ND*
Unknown	1	ND
<b>TOTAL</b>	<b>168</b>	<b>ND</b>

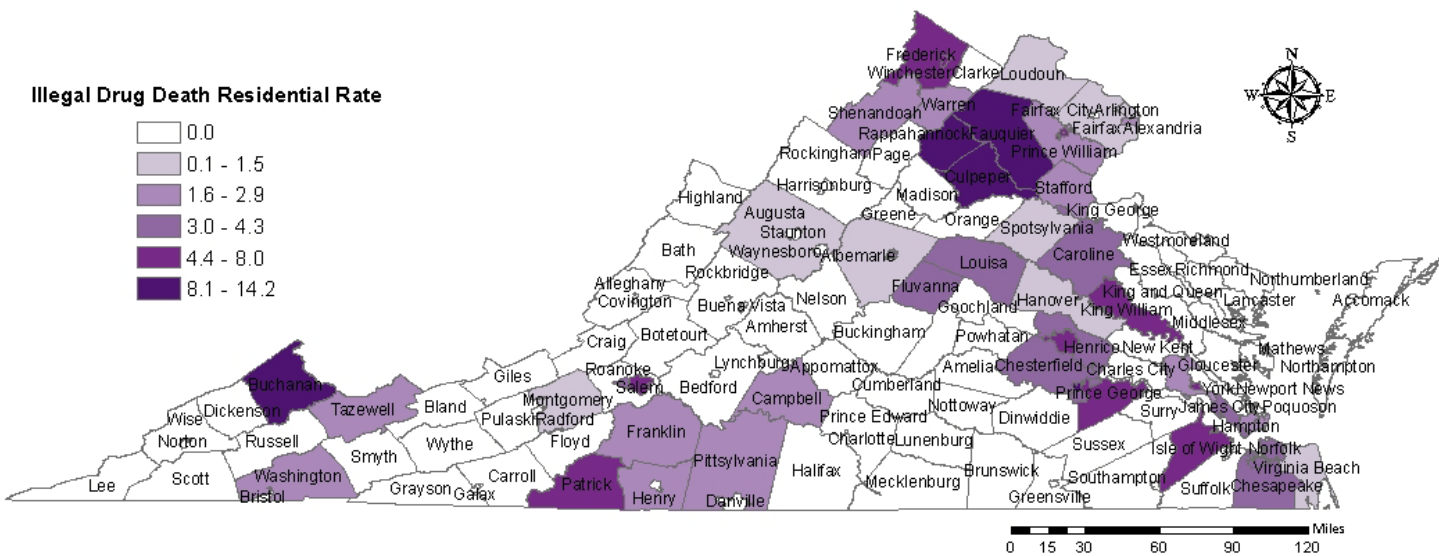
\*ND-No denominator

**Figure 89. Cocaine & Heroin Deaths by City/County of Residence, 2009**



Map shows City/County of residency but not necessarily injury and/or where death occurred.  
 A total of 9 cases were from out of state residents or residency was unknown.

**Figure 90. Cocaine & Heroin Death Rates by City/County of Residence, 2009**



Rate is per 100,000 population.  
 Map shows City/County of residency but not necessarily injury and/or where death occurred.  
 A total of 28 cases were from out of state residents or residency was unknown.

**SECTION 8: IN CUSTODY (PRISONER) POPULATION (N=137)**

Pursuant to § 32.1-283 of the Code of Virginia, the OCME investigates deaths of persons in jail, prison, or other correctional institution, or in police custody. The OCME took jurisdiction of 137 prisoners in 2009.

- The majority (81.8%) of prisoner cases were natural
- The vast majority of cases were males (95.6%) and blacks had a slight majority of cases over whites (48.9% versus 47.4%, respectively)

**Figure 91. Prisoner Deaths by Manner of Death, 2009**

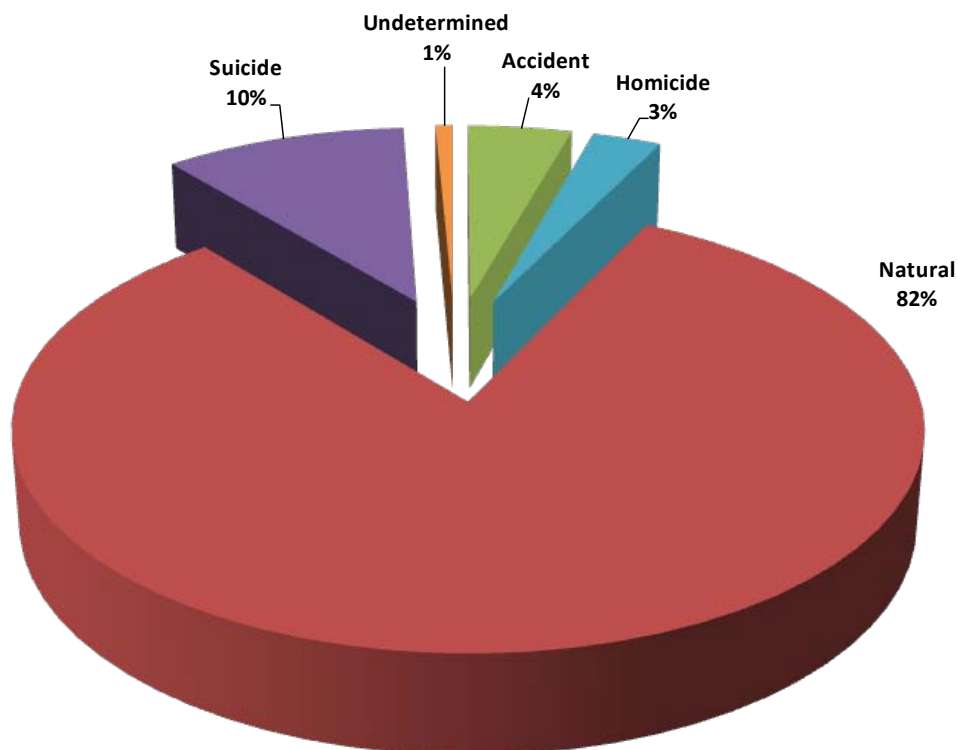


Figure 92. Prisoner Deaths by Race/Ethnicity, 2009

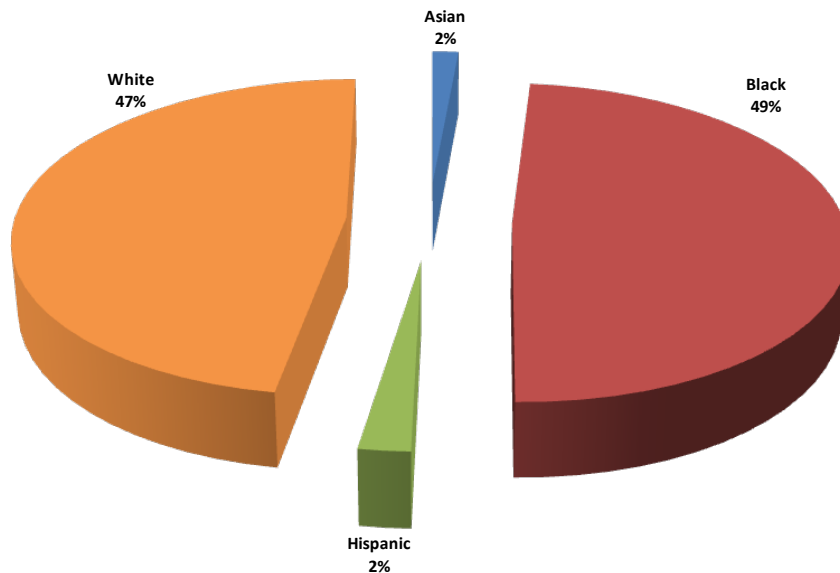
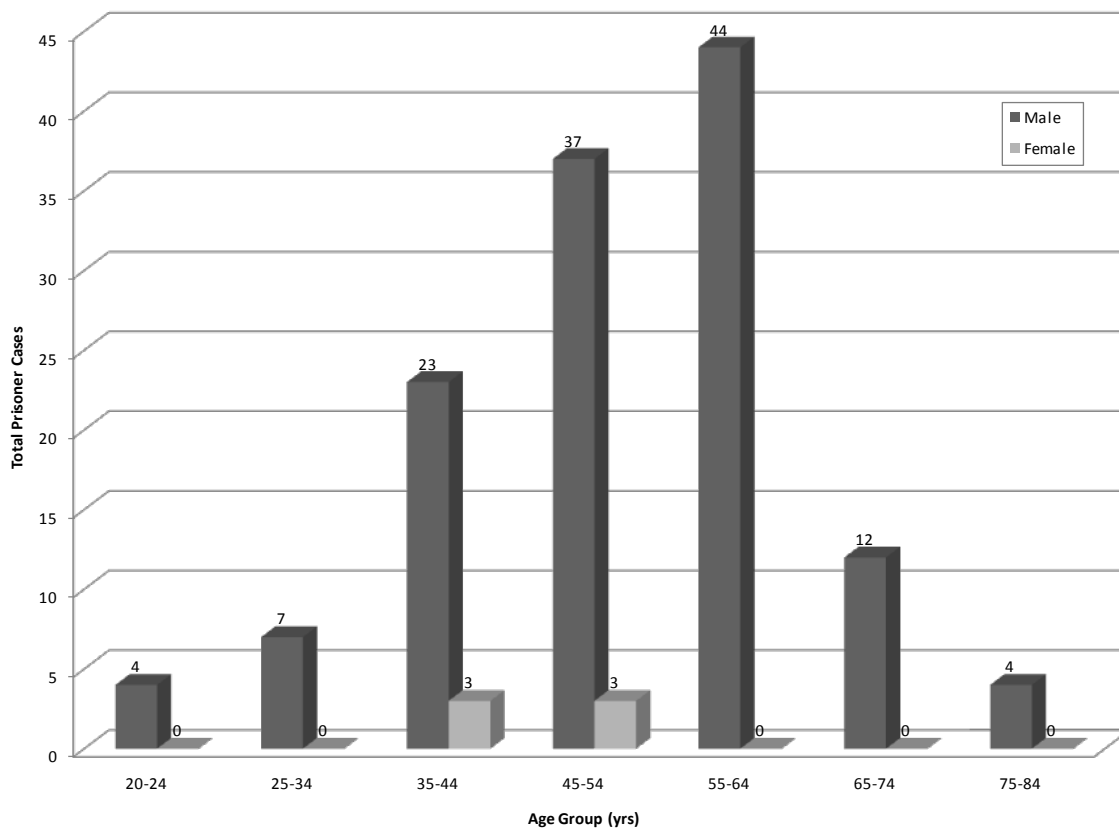
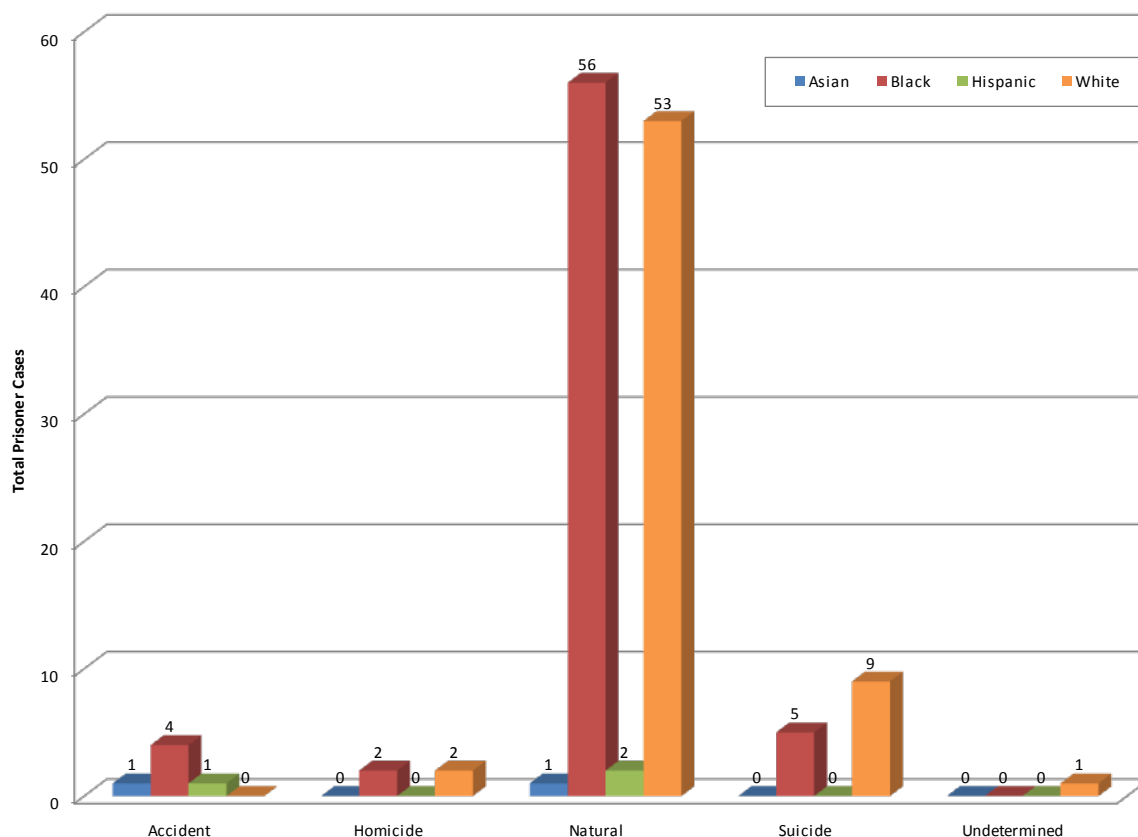


Figure 93. Prisoner Deaths by Age Group by Gender, 2009



**Figure 94. Prisoner Deaths by Manner of Death by Race/Ethnicity, 2009****Table 57. Prisoner Deaths by Cause of Death, 2009**

	Natural Deaths	Total Cases	Autopsied
<b>Pulmonary Diseases/Disorders</b>		<b>27</b>	<b>12</b>
Asthma		1	1
COPD		2	1
Emboli		2	2
Pneumonia		4	1
Pulmonary Malignancy		18	7
<b>Central Nervous System Diseases/Disorders</b>		<b>8</b>	<b>1</b>
Vascular Disease		8	1
<b>Cardiovascular Diseases/Disorders</b>		<b>28</b>	<b>20</b>
Atherosclerosis		15	9
Hypertension		5	3
Atherosclerosis & Hypertension		8	8
<b>Gastrointestinal Diseases/Disorders</b>		<b>18</b>	<b>7</b>
GI Hemorrhage		1	0
Cirrhosis		4	1
GI Malignancy		11	6
Other GI Disease/Disorder		2	0

<b>Genitourinal Diseases/Disorders</b>	<b>5</b>	<b>1</b>
Renal Disease	1	0
Genitourinal Malignancy	4	1
<b>Systemic Diseases/Disorders</b>	<b>23</b>	<b>7</b>
Blood Disorders	1	0
Diabetes	2	2
AIDS/HIV	6	1
Sepsis	5	1
Other Infectious Disease	1	0
Metastatic Malignancy Unknown Primary	4	1
Chronic Alcoholism	3	1
Other Systemic Disease/Disorder	1	1
<b>Other Natural Diseases/Disorders</b>	<b>3</b>	<b>1</b>
Other Malignancy	3	1
<b><i>Natural Subtotal</i></b>	<b>112</b>	<b>49</b>
<b>Unnatural Deaths</b>	<b>Total Cases</b>	<b>Autopsied</b>
<b>Asphyxia</b>	<b>15</b>	<b>14</b>
Hanging	14	13
Strangulation/Neck Compression	1	1
<b>Judicial Execution</b>	<b>3</b>	<b>2</b>
Electrocution	1	0
Lethal Injection	2	2
<b>Blunt Force Injuries</b>	<b>4</b>	<b>3</b>
Head/Neck	4	3
<b>Substance Abuse</b>	<b>2</b>	<b>1</b>
Ethanol Poisoning	1	1
Over-the-Counter Drug Poisoning	1	0
<b>Other Unnatural Deaths</b>	<b>1</b>	<b>1</b>
Other Unnatural	1	1
<b><i>Unnatural Subtotal</i></b>	<b>25</b>	<b>21</b>
<b>TOTAL</b>	<b>137</b>	<b>70</b>

**SECTION 9: STATE MENTAL HEALTH FACILITIES (N=76)**

Pursuant to § 32.1-283 of the Code of Virginia, the OCME investigates the death of any patient or resident of a state mental health facility. The OCME took jurisdiction of 76 state mental health residents.

- The majority of state mental health cases were natural (96.1%), white (76.3%) and male (61.8%)

**Figure 95. State Mental Health Deaths by Manner of Death, 2009**

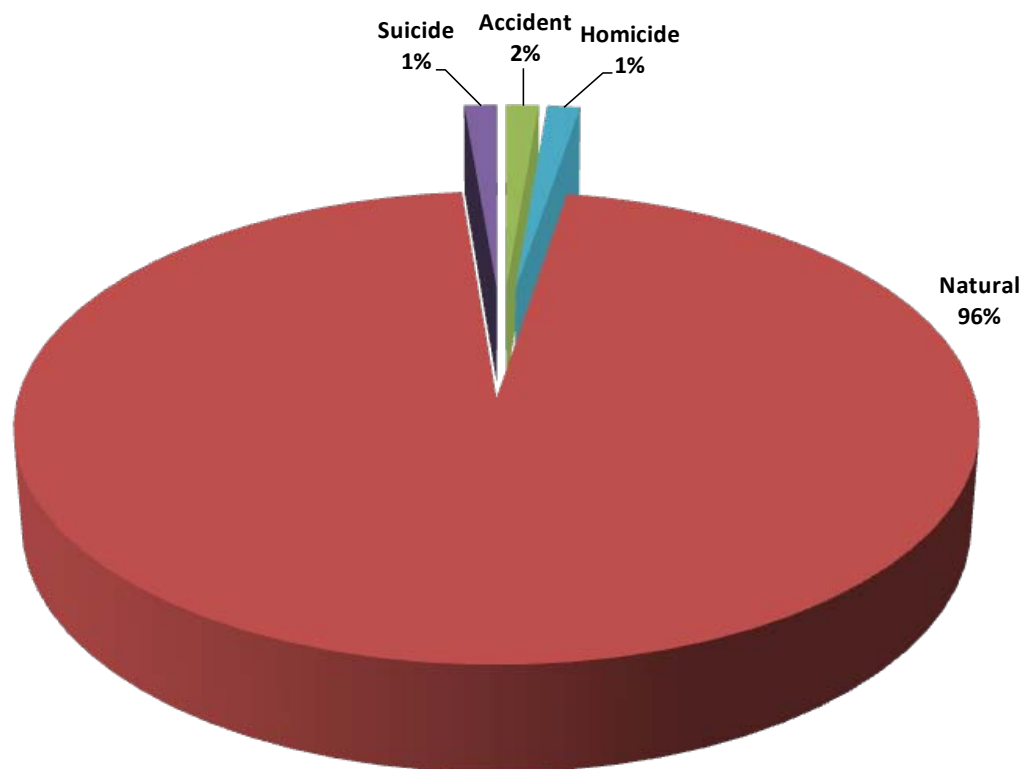


Figure 96. State Mental Health Deaths by Race/Ethnicity, 2009

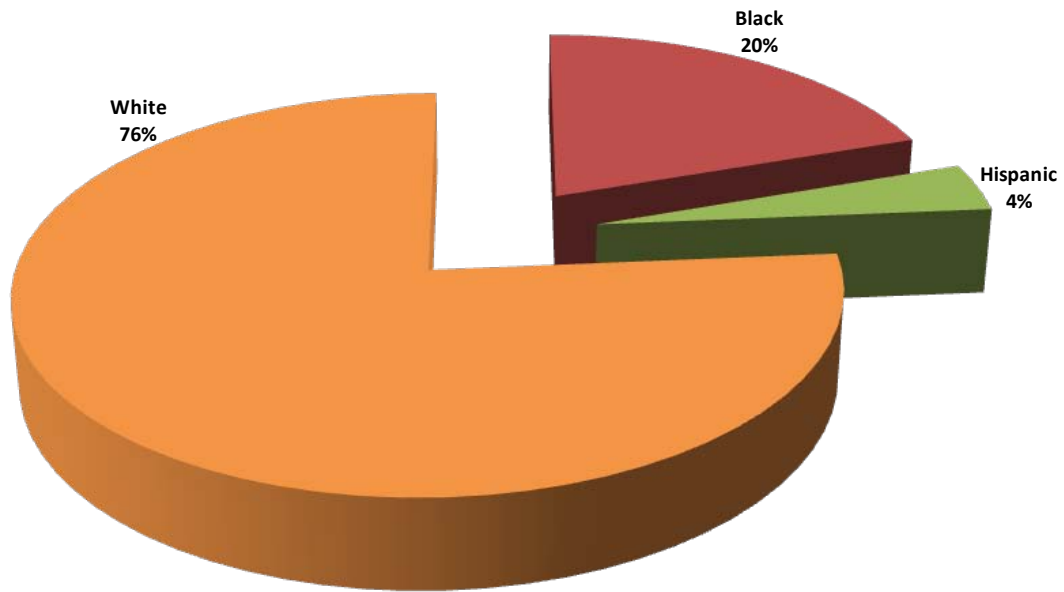


Figure 97. State Mental Health Deaths by Age Group by Gender, 2009

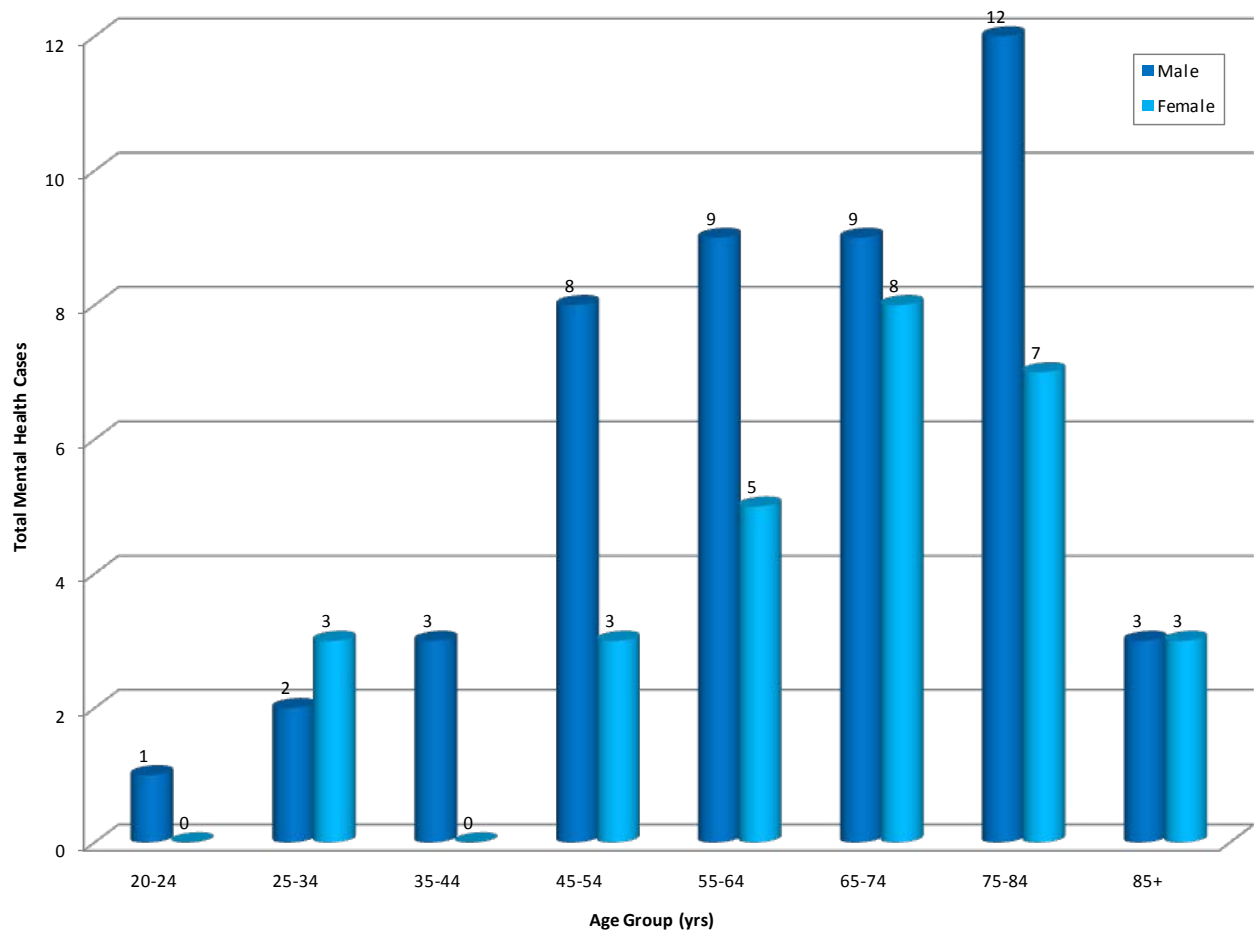




Table 58. State Mental Health Deaths by Cause of Death, 2009

<b>Natural Deaths</b>	<b>Total Cases</b>	<b>Autopsied</b>
<b>Pulmonary Diseases/Disorders</b>	<b>24</b>	<b>6</b>
COPD	2	0
Emboli	1	0
Pneumonia	19	6
Pulmonary Malignancy	2	0
<b>Central Nervous System Diseases/Disorders</b>	<b>9</b>	<b>3</b>
Seizure Disorder	2	1
Vascular Disease	1	0
Degenerative Disease	3	0
Other CNS Disease/Disorder	3	2
<b>Cardiovascular Diseases/Disorders</b>	<b>13</b>	<b>7</b>
Atherosclerosis	5	4
Hypertension	6	2
Atherosclerosis & Hypertension	1	1
Valvular	1	0
<b>Gastrointestinal Diseases/Disorders</b>	<b>14</b>	<b>6</b>
Hepatitis	1	1
GI Malignancy	7	3
Other GI Disease/Disorder	6	2
<b>Genitourinal Diseases/Disorders</b>	<b>2</b>	<b>0</b>
Renal Disease	1	0
Other GU Disease/Disorder	1	0
<b>Systemic Diseases/Disorders</b>	<b>7</b>	<b>2</b>
Diabetes	2	1
Sepsis	2	0
Other Infectious Disease	2	1
Metastatic Malignancy Unknown Primary	1	0
<b>Other Natural Diseases/Disorders</b>	<b>4</b>	<b>2</b>
Other Malignancy	1	0
Other Natural Disease/Disorder	3	2
<b>Natural Subtotal</b>	<b>73</b>	<b>26</b>
<b>Unnatural Deaths</b>	<b>Total Cases</b>	<b>Autopsied</b>
<b>Asphyxia</b>	<b>1</b>	<b>1</b>
Hanging	1	1
<b>Blunt Force Injuries</b>	<b>2</b>	<b>0</b>
Extremities	1	0
Multiple	1	0
<b>Unnatural Subtotal</b>	<b>3</b>	<b>1</b>
<b>TOTAL</b>	<b>76</b>	<b>27</b>

## SECTION 10: RECOVERED UNREPORTED CASES (N=165)

Recovered unreported cases are those cases that the OCME investigates retrospectively. At times, medical care providers or death reporters misunderstand what type of case falls under the jurisdiction of the OCME and do not refer a case to the OCME. The OCME typically learns about these cases from VDH's Division of Vital Records, funeral homes, or local medical examiners.

While these 165 cases are in the annual report reflective of calendar year 2009, retrospective cases may have been deaths from other years but the OCME investigation of the case began in 2009.

- The majority of the OCME's retrospective cases are accidents (77%)
- Most common unreported type of death is due to a jump/fall (37.6%) followed by motor vehicle collisions (26.1%)

**Figure 98. Retrospective Cases by Manner of Death, 2009**

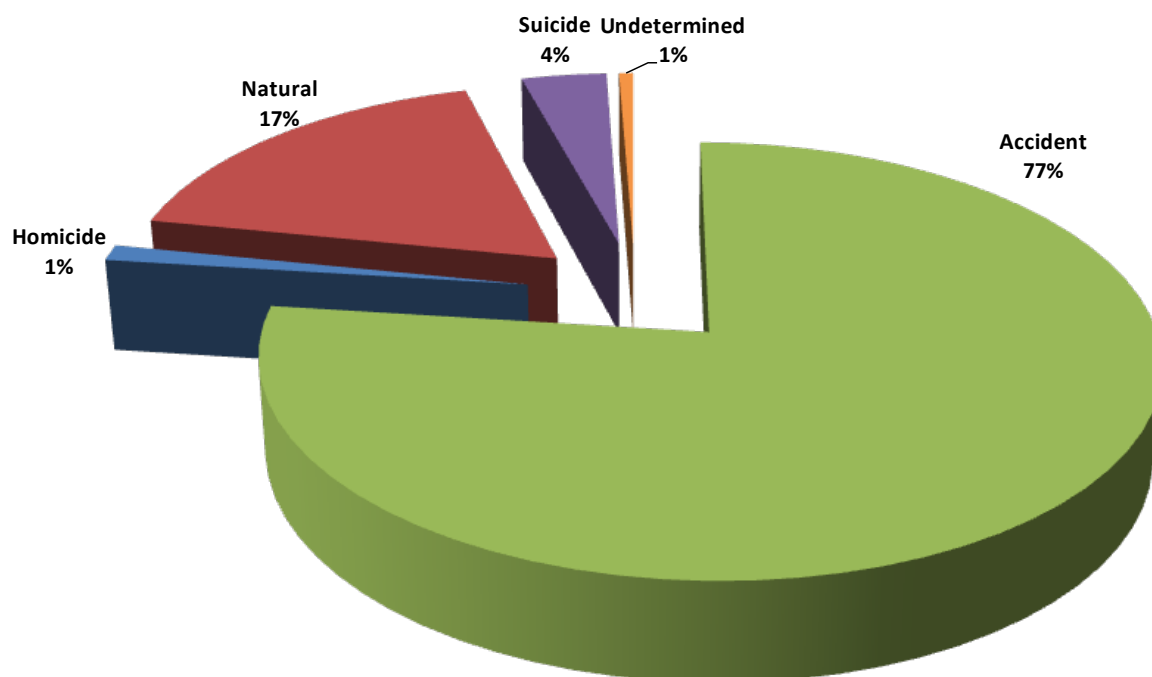


Figure 99. Retrospective Cases by Race/Ethnicity, 2009

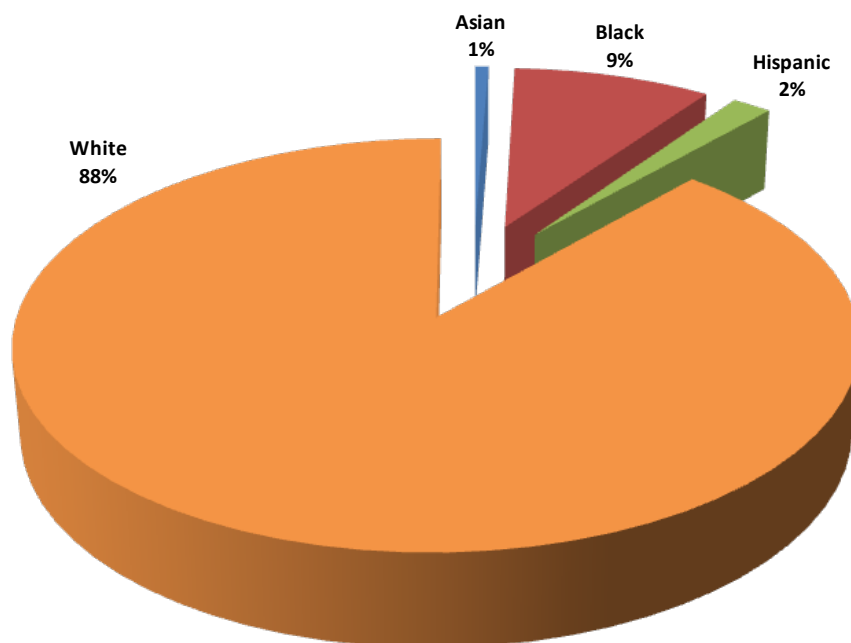


Figure 100. Retrospective Cases by Age Group by Gender, 2009

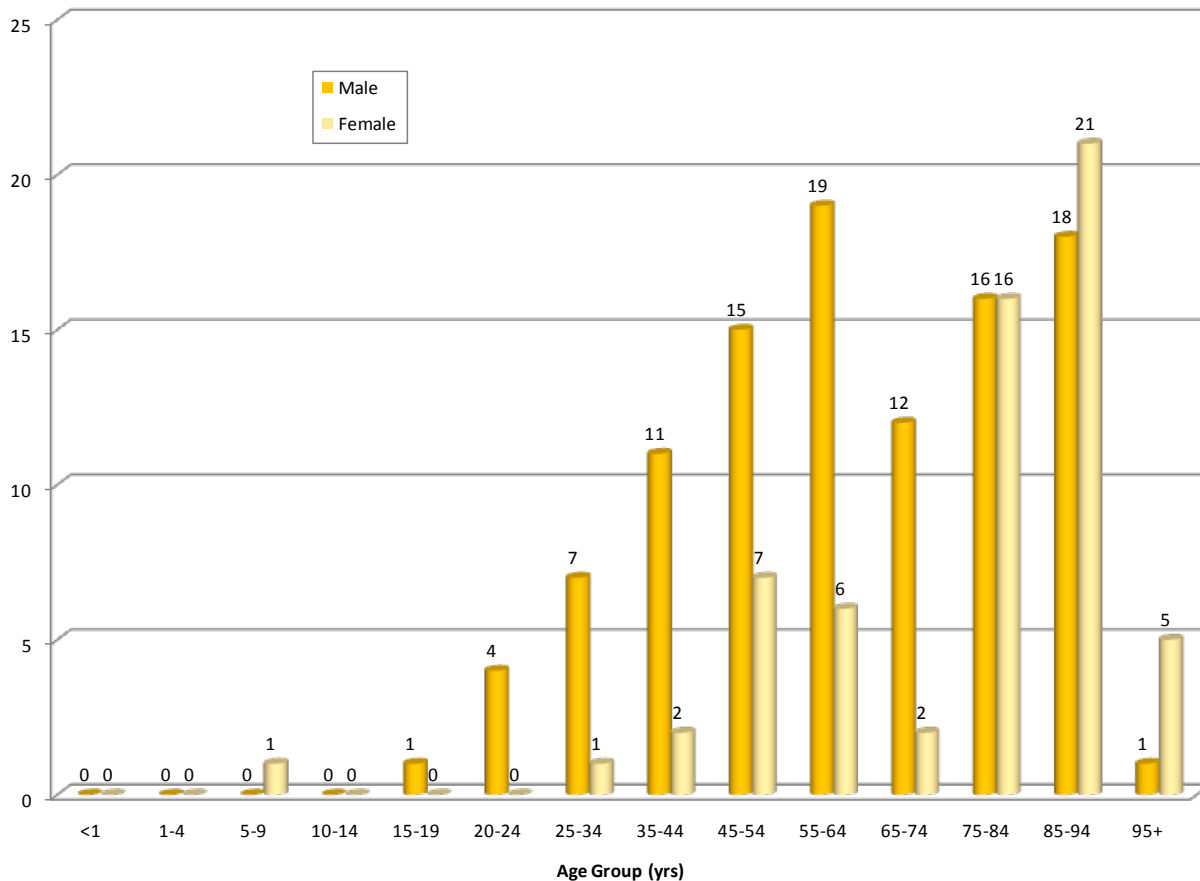


Table 59. Retrospective Cases by Method of Death and by Classification of Death, 2009

<b>Method of Death</b>	<b>Total Cases</b>
<b><i>Asphyxia</i></b>	
Choked on food/foreign object	6
Drowned	2
<b><i>Drug Use</i></b>	
Carbon monoxide- Generator or motor vehicle exhaust	1
Ingested and/or injected illicit, prescription, and/or OTC medication	13
Ingested and/or injected other type of poison (Ethylene glycol, etc.)	3
<b><i>Electricity</i></b>	
Contacted electrical current	1
<b><i>Fall/Jump</i></b>	
Jumped or fell from height	62
<b><i>Fire</i></b>	
Inhalation of Combustion Products	1
<b><i>Motor Vehicle</i></b>	
Bicycle	1
Car	18
Farm equipment	1
Golf car	1
Mo-ped	1
Motorcycle	4
Pickup Truck	9
Sport Utility Vehicle	3
Truck Other	1
Unknown	3
Van	1
<b><i>Traumatic Injury</i></b>	
Cut/Stabbed self	1
Shot with firearm	2
Shotgun	(1)
Unspecified	(1)
<b><i>Unknown/Other</i></b>	
Other traumatic cases	1
<b>Subtotal</b>	<b>136</b>
<b>Death Classification</b>	
Natural Deaths	29
Unnatural Deaths	136
<b>TOTAL DEATHS</b>	<b>165</b>

## GLOSSARY

**Accident** – The *manner of death* used when, in other than *natural deaths*, there is no evidence of intent; an undesigned, sudden, and unexpected death.

**Assistant Chief Medical Examiner** – A forensic pathologist who has the duty of performing autopsies and investigating deaths that fall under the *jurisdiction* of the *Office of the Chief Medical Examiner*, and determining *cause* and *manner of death*.

**Autopsy** – A detailed postmortem external and internal examination of a body to determine cause of death, collect evidence, determine the presence or absence of injury.

**Cause of Death** – The disease, injury, or poison that results in a physiological derangement or biochemical disturbance that is incompatible with life. The result of post-mortem examination, including autopsy and toxicological findings, combined with information about the medical history of the decedent serves to establish the *cause of death*.

**Chief Medical Examiner** – The head of the *Office of the Chief Medical Examiner*. The Chief Medical Examiner must be a forensic pathologist licensed to practice medicine in Virginia and may appoint *Assistant Medical Examiners* who are forensic pathologists, and *Local Medical Examiners*.

**Children** – Individuals 17 years of age and younger.

**County/City of Death** – The county/city where the death occurred. The county/city where the decedent legally resided, the county/city where the decedent was fatally injured, and the county/city where the decedent died may be the same or different.

**County/City of Residence** – The county/city where a person legally resides. If not a resident of Virginia, the decedent is listed as “out of state”.

**Drug Caused Death** – A death caused by a drug or combination of drugs.

**Ethanol** – An alcohol, which is the principal intoxicant in beer, liquor, and wine. A person with an alcohol concentration in blood of 0.08 percent by weight by volume (0.08%) is legally intoxicated in Virginia.

**Ethanol Present** – Deaths in which toxicological tests reveal a reportable level of *ethanol* (0.01% W/V or greater) at the time of death.

**Homicide** – The *manner of death* in which death results from the intentional harm of one person by another.

**Jurisdiction** – The extent of the Office of the Chief Medical Examiner’s authority over deaths. The OCME authority covers every death which is due or which might reasonably have been due to a violent or traumatic injury or accident, or is of public health interest which will be investigated by the Medical Examiner.

**Local Medical Examiner** – A physician appointed by the *Chief Medical Examiner* for a city or county to assist in the investigation of deaths and determine *jurisdiction* of the Office of the Chief Medical Examiner. There is a local medical examiner in most counties in Virginia.

**Manner of Death** – The general category of the circumstances of the event which causes the death. The categories are *accident, homicide, natural, suicide, and undetermined*.

**Method of Death** – The means, fatal agency or item causing death present at the time of injury or death.

**Motor Vehicle Collision Related Death** – A death involving a motor vehicle. Motor vehicles include automobiles, vans, motorcycles, trucks, aircraft, and trains. The decedent is usually a driver of, a passenger in, or a pedestrian who is struck by a motor vehicle. The death of a bicyclist that is struck by a motor vehicle is considered to be a motor vehicle related death.

**Natural** – The *manner of death* used when solely a disease causes death. If death is hastened by an injury, the *manner of death* is not considered natural.

**Office of the Chief Medical Examiner** – The office in the Virginia Department of Health that is responsible for the investigation of sudden, violent, or unexpected death.

**Opiate** – A class of drugs, including morphine, codeine, and heroin, derived from the opium poppy plant (*Papaver somniferum*).

**Stimulant** – A class of drugs, including cocaine and oral amphetamines, whose principal action is the stimulation of the central nervous system.

**Sudden and Unexpected Infant Death** – A diagnosis designated for infants under the age of 1 year. Sudden and Unexpected Infant Death (SUID) is a diagnosis made in cases in which autopsy does not reveal a definitive medical or traumatic cause of death and the circumstances surrounding the death suggest that there is an associated risk factor for dying, such as unsafe bedding or co-sleep, or some other external factor, but the contribution of this factor cannot be determined with certainty. The diagnosis may also be used in the situation where a medical disease is identified, but it is uncertain that this disease caused death. The cause of death in suspected but not proven homicides would be undetermined.

**Sudden Infant Death Syndrome** – Sudden Infant Death Syndrome (SIDS) is defined as the sudden death of an infant less than one year of age that cannot be explained after a thorough investigation is conducted, including a complete autopsy, examination of the death scene which includes no external risk factors, and review of the clinical history.

**Suicide** – The *manner of death* in which death results from the purposeful attempt to end one's life.

**Undetermined** – The *manner of death* for deaths in which there is insufficient information to assign another manner. An undetermined death may have an undetermined cause of death & an unknown manner, an undetermined cause of death and a known manner, or a determined cause of death and an unknown manner.

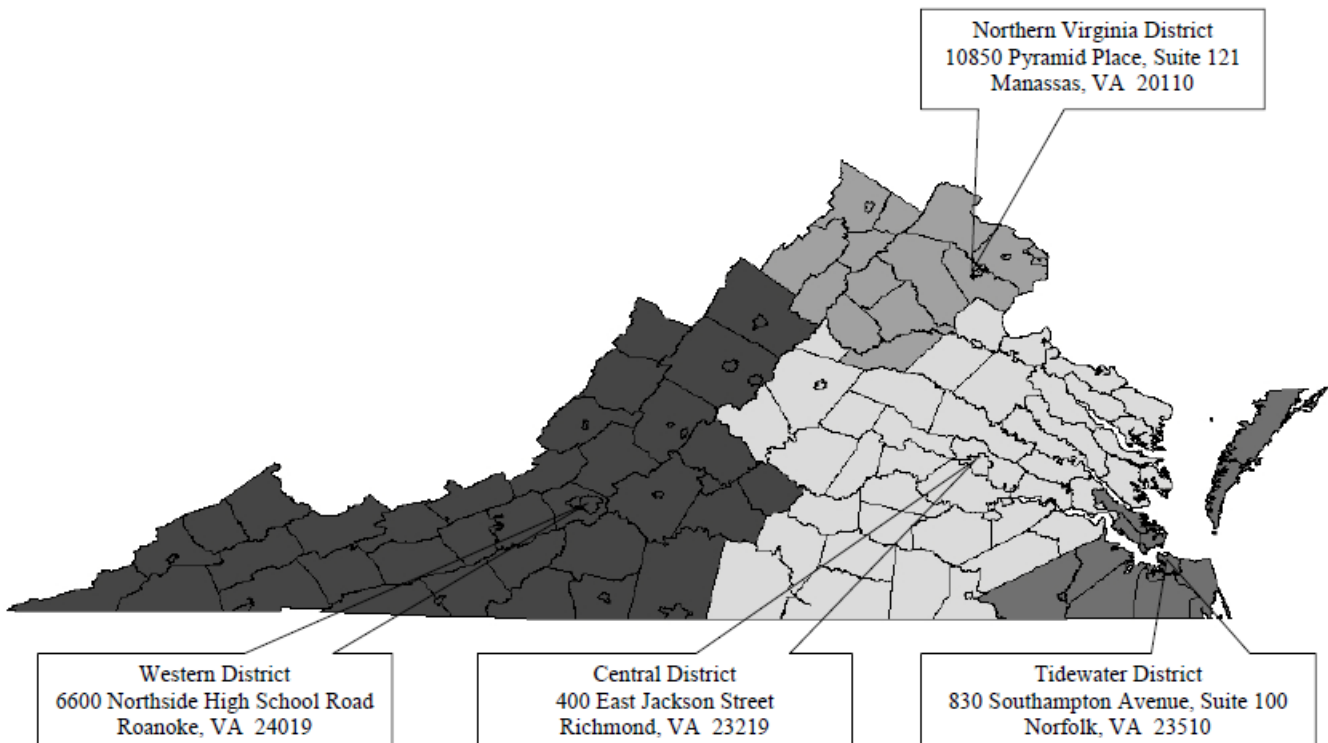
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**NORTHERN** *Counties* of Arlington, Clarke, Culpeper, Fairfax, Fauquier, Frederick, Loudoun, Madison, Orange, Page, Prince William, Rappahannock, Shenandoah, and Warren. *Cities* of Alexandria, Fairfax, Falls Church, Manassas, Manassas Park, and Winchester.

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Commonwealth of Virginia  
Virginia Department of Health  
Office of the Chief Medical Examiner  
400 E. Jackson Street  
Richmond, VA 23219  
(804)786-3174

