VDH VIRGINIA DEPARTMENT OF HEALTH
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2004 ANNUAL REPORT

Office of the Chief Medical Examiner
Commonwealth of Virginia

Commonwealth of Virginia
Virginia Department of Health
Office of the Chief Medical Examiner
October 2004

2004 Annual Report
Office of the Chief Medical Examiner

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Annual Report 2004
Office of the Chief Medical Examiner
Department of Health
Commonwealth of Virginia

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** 18 years of age and younger*

Letter from the Chief Medical Examiner

The staff of the Office of the Chief Medical Examiner (OCME) presents this report on deaths under the jurisdiction of the medical examiner to the citizens of Virginia. How and under what circumstances deaths occur is not only a measure of OCME workload but demonstrates the large numbers of deaths due to violence that are worthy of special study. Information developed by the OCME is useful for the civil and criminal justice system but is equally revealing in that unnatural deaths beg for prevention.

The OCME hopes that other agencies and groups will utilize OCME data to identify classes of deaths that lend themselves to study for preventative strategies that will reduce violent deaths of Virginians. Since death is such a clearly definable end point, the success of prevention strategies should be easily measurable.

Special thanks go to Mr. Tim Powell, OCME Epidemiologist, who compiled this report from the mounds of disparate data the OCME diligently collects on the deaths it investigates.

Marcella F. Fierro, MD, CME

October 26, 2004

Introduction

This report, which presents the deaths investigated by the Virginia Department of Health, Office of the Chief Medial Examiner in 2003, represents the first report of its kind in over 10 years, and the most detailed analysis of medical examiner cases ever produced.

Preparation for the Annual Report

The OCME data from which this report was compiled are maintained on a Solaris SunFire 280R enterprise server, running Solaris 8 and Oracle 8i, and is located at the Central district office of the OCME in Richmond. Timothy A. Powell, MPH using SPSS v11.0 and Microsoft Office 2000 Professional prepared this report. Mary Neathawk performed the layout and design of this report.

SECTION 1: OVERVIEW – OFFICE OF THE CHIEF MEDICAL EXAMINER

In 1946, Virginia became one of the first states to institute a statewide medical examiner system. In that year, the General Assembly of Virginia abolished the Office of Coroner's Physician and appointed a Chief Medical Examiner. Four years later, in 1950, the OCME became a division within the Virginia Department of Health.

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 to persons in apparent good health or deaths unattended by a physician;
- deaths of persons in jail, prison, or another correctional institution, or in police custody (this includes deaths from legal intervention);
- deaths of patients/residents of state mental health or mental retardation facilities;
- the 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, medical examiners conduct a medicolegal death investigation, serving as the principal case investigator in their locality for deaths falling within their jurisdiction and statutory authority. The OCME currently supports more than 253 local medical examiners, who receive the initial notification of death and determine if the death should come under the jurisdiction of the medical examiner. Local medical examiners may examine the body 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 in one of four district offices: Northern, Tidewater, Central or Western. Each district is staffed by board certified forensic pathologists, death investigators, clerical and morgue personnel. The Chief Medical Examiner, Dr. Marcella F. Fierro, resides in the Richmond office and is responsible for the overall operation of the state's medical examiner system.

The overall vision of the OCME is to be the best medical examiner system in the world. The following missions form the core of OCME staff members' efforts in accomplishing this goal:

- Conduct medicolegal death investigations.
- Perform autopsies to certify cause and manner of death.
- Provide public service to citizens and professional colleagues throughout the Commonwealth.
- Educate peers and professionals on subjects related to death investigation.
- Reduce violent death by conducting surveillance and fatality review.
- Provide support and technical assistance to local fatality review teams.
- Administer the State Anatomical Program.

Virginia's medical examiners and forensic pathologists are committed to public safety and to public health. To promote public safety, they testify to their findings in civil and criminal 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.

In addition to its central mission – conducting medico-legal death investigation to identify the cause and manner of death – the OCME has another mission related to injury and violence prevention. The OCME houses four fatality review and surveillance projects, which are designed to:

- understand the circumstances of death.
- provide information to legislators, policy makers, and other advocates for injury prevention.
- make direct recommendations for prevention and intervention.
- measure the impact of prevention programs and practices.
- make something good come from the violence and destruction of human life.

The Child Fatality Review Team was established by the Virginia General Assembly and the Governor of Virginia. Working in the spirit of public health, this Team reviews violent and unexpected child deaths and develops consensus recommendations to prevent similar deaths in the future. It is a multidisciplinary Team with representatives from pediatrics, child psychiatry, law enforcement, social services, forensic pathology, commonwealth's attorneys, local fire and emergency medical services providers, the Virginia SIDS alliance, and state agencies. Published reports are available at www.vdh.state.va.us/medexam/Fatalreview.asp.

The OCME's **Family and Intimate Partner Violence Surveillance Project** uses OCME records and news reports to identify the circumstances and the dynamics of fatal family violence. Staff members publish annual information on every homicide in the Commonwealth with a focus on family and intimate partner violence. Published reports are available at www.vdh.state.va.us/medexam/violence.asp.

In partnership with the Office of Family Health Services, the OCME coordinates the work of the **Maternal Mortality Review Team.** This effort involves review of the circumstances surrounding all maternal deaths in the Commonwealth by an interdisciplinary team of professionals, including representatives from local health departments, obstetrician-gynecologists, medical social workers, nurse-midwives, nurse practitioners, and state planning agencies. Maternal deaths include all deaths to women during or within one year of the termination of pregnancy, regardless of outcome of the pregnancy or cause and manner of death. This Team's preliminary report will be published in early 2005, and will be available at the following website: http://vdhweb/medexam/Fatalreview.asp.

The OCME was the first medical examiner system to be selected as a demonstration site for the Center for Disease Control and Prevention's **National Violent Death Reporting System.** Known more commonly as NVDRS, the National Violent Death Reporting System is a relatively new venture for the OCME. NVDRS collects information from a variety of sources – forensic pathology, forensic science, law enforcement, vital records, health statistics, and child fatality review – in order to comprehend the circumstances of violent death. Information will be used to frame violence and injury prevention programs at the national, state and local levels. Published reports will be available at http://vdhweb/medexam/NVDRS.asp.

Training and Education

Forensic Pathology Fellowship Programs

Website — http://www.vdh.state.va.us/medexam/Forensic.asp

The Virginia Commonwealth University, School of Medicine (VCU) and the Eastern Virginia Medical School (EVMS) in conjunction with the OCME offer residency/fellowship training in the subspecialty of forensic pathology. The four board-certified forensic pathologists of the Central District office are the core faculty of the Department of Legal Medicine at VCU, and faculty in the Division of Forensic Pathology of the Department of Pathology at VCU. Medical Examiner's office staff have full access to facilities at VCU and its medical, dental, pharmacy, hospital administration, nursing, and other health science schools. The three board-certified forensic pathologists including a

pediatric pathologist of the Tidewater District office are faculty in the Department of Pathology at EVMS and the Department of Legal Medicine at VCU. The Tidewater District office staff has full access to EVMS. The forensic pathology training program is designed to provide flexibility in training and experience depending upon the individual physician's career objectives.

- A 1 or 2-month experience for the trainee who desires a brief exposure to forensic pathology as part of a general anatomic pathology program.
- A 3 to 6-month experience for trainees desiring more intensive exposure as part of a general anatomic pathology program.
- A 12-month experience for a trainee desiring eligibility to take the American Board of Pathology examination in forensic pathology.

The Central District office provides forensic pathology and medical examiner administrative services to the county and city medical examiners in the central region of Virginia including the Richmond Metropolitan area. The Tidewater District office provides forensic pathology and medical examiner administrative services to the county and city medical examiners in the eastern region of Virginia including the Norfolk, Virginia Beach, Hampton, Portsmouth, and Newport News metropolitan areas.

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 should be equipped to step into a position as an able assistant in an established Medical Examiner's or Coroner's Office of a county, city, or state.

Virginia Institute of Forensic Science and Medicine

Website — http://www.vifsm.org/

The Virginia Institute for Forensic Science and Medicine, a 501(c) (3) organization founded in 1999, is a premier provider of hands on training in a working forensic environment for aspiring forensic scientists and pathologists. To the nation, VIFSM promotes a Virginia brand of justice forged from the cooperative efficiencies and innovations of its medical examiner system and forensic science laboratories. Over 200 world-renowned faculty, many of which are staff members of the Division of Forensic Science and Office of the Chief Medical Examiner, lend their expertise as foremost practitioners of all disciplines of forensic science and medicine. VIFSM offers state-of-the-art post-graduate fellowships as preparation for careers in these forensic disciplines. Through its training

seminars, VIFSM enhances the knowledge and performance of those engaged in violent crime and death investigation.

Virginia 2003

In 2003, the estimated population of the Commonwealth was 7,386,330, ranking 12th among the states. Virginia has a land area of 39,594 square mile and a population density of 178.8 persons per square mile; although an estimated 73 percent of the population lives in urban areas. Racially, whites constituted 72.3 percent of the population, blacks 19.65 percent, Native Americans 0.3 percent, Asians 3.7 percent, Native Hawaiian and other Pacific Islanders 0.1 percent, and those of mixed heritage or not reporting race 4.0 percent. Hispanics, who may be of any race, were 4.7 percent of Virginia's people. The median household income in 2003 was $46,677.

SECTION 2: TOTAL CASES

Since 1999 the number of deaths investigated by the OCME annually has increased by 12.3 percent, while during the same time frame the population of Virginia increased by 7.5 percent. In 2003 the OCME investigated 5,821 deaths, representing 10.1 percent of the estimated total deaths in Virginia in 2003. Of the deaths investigated by the OCME in 2003:

- The total number of deaths investigated represents a 2.8 percent increase from the 2002 total, and a 12.3 percent increase since 1999.
- The highest total number of deaths occurred in December, and the fewest in February. More deaths occurred on Saturdays than any other day of the week, and the least on Tuesdays.
- The ratio of male to female deaths was 2.5:1. Decedents classified as white represented 70.1 percent of the total.
- The City of Richmond had greater than twice as many homicide deaths of its residents than the locality with the second greatest number in 2003. Fairfax County experienced the greatest number of accidental, natural, and suicide deaths in its residents.
- Autopsies were conducted in 36.6 percent of cases due to natural causes, 36.3 percent of accidental deaths, 79.2 percent of suicide deaths, 97.6 percent of homicides, 94.4 percent of undetermined deaths, and 47.9 percent of all cases in 2003.
- Gunshot wounds were the cause of death in 795 deaths in 2003, 13.7 percent of total cases.
- Whites represented the greatest proportion of cases by all manners of death except homicide where blacks represented greater than 60 percent of cases.
- The number of accidental deaths has increased annually since 1999, while the number of deaths by all other manners has remained stable.

Figure 1. Total Cases by Year of Death, 1999-2003

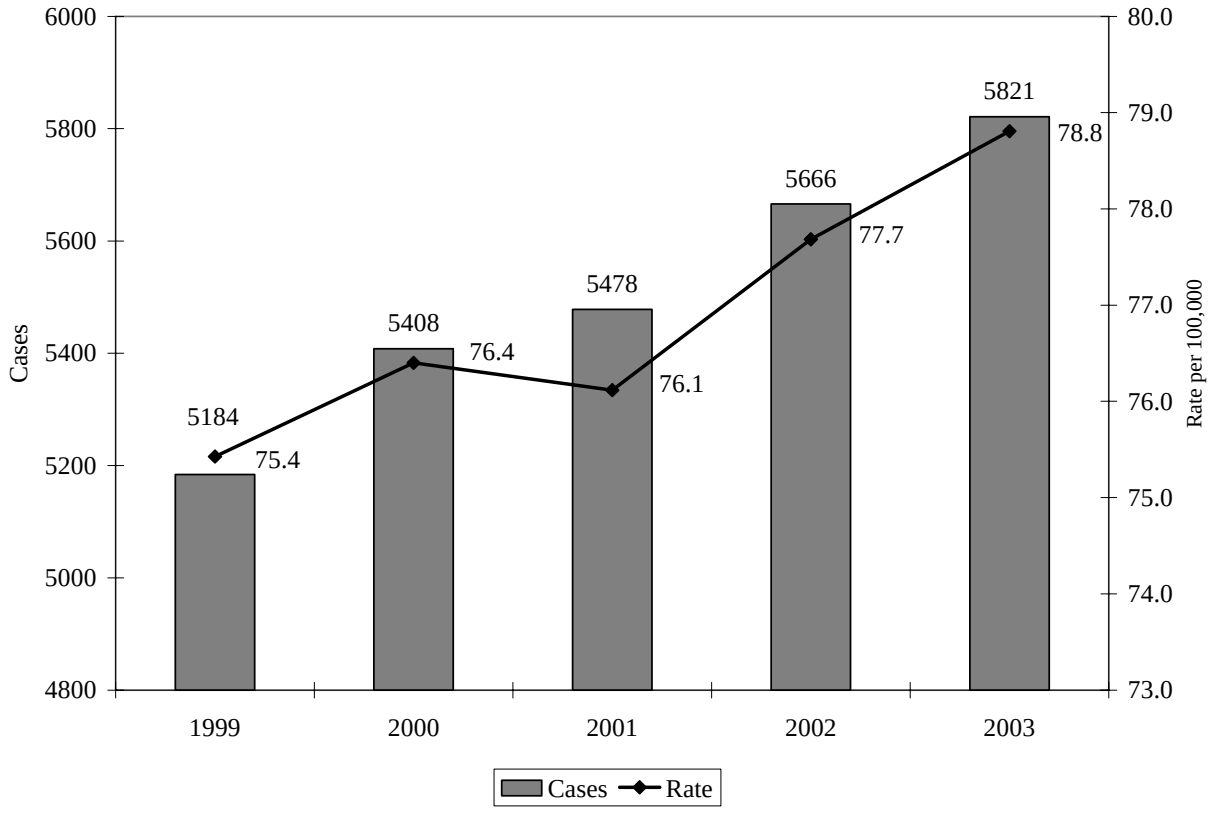


Table 1. Total Cases by Manner of Death by OCME District, 2003

	OCME District				
Manner	**Central**	**Northern**	**Tidewater**	**Western**	**Total**
Accident	789	481	402	633	2305
Homicide	199	47	144	69	459
Natural	716	443	566	456	2181
Suicide	237	190	154	223	804
Undetermined	18	13	24	17	72
Total	**1959**	**1174**	**1290**	**1398**	**5821**

Figure 2. Total Cases by Month of Death, 2003

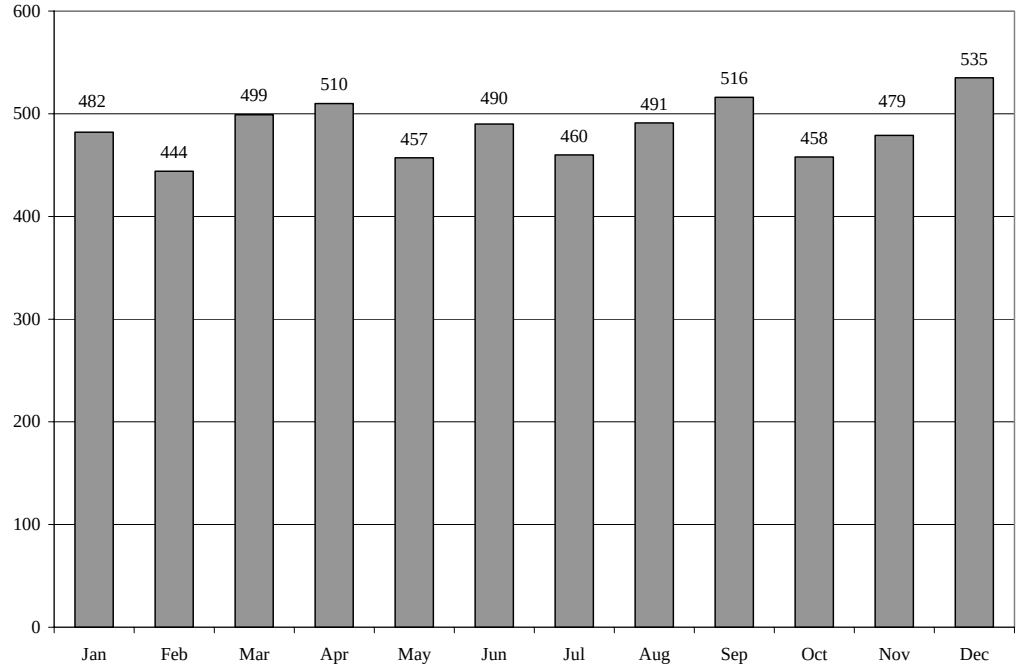


Figure 3. Total Cases by Day of Death, 2003

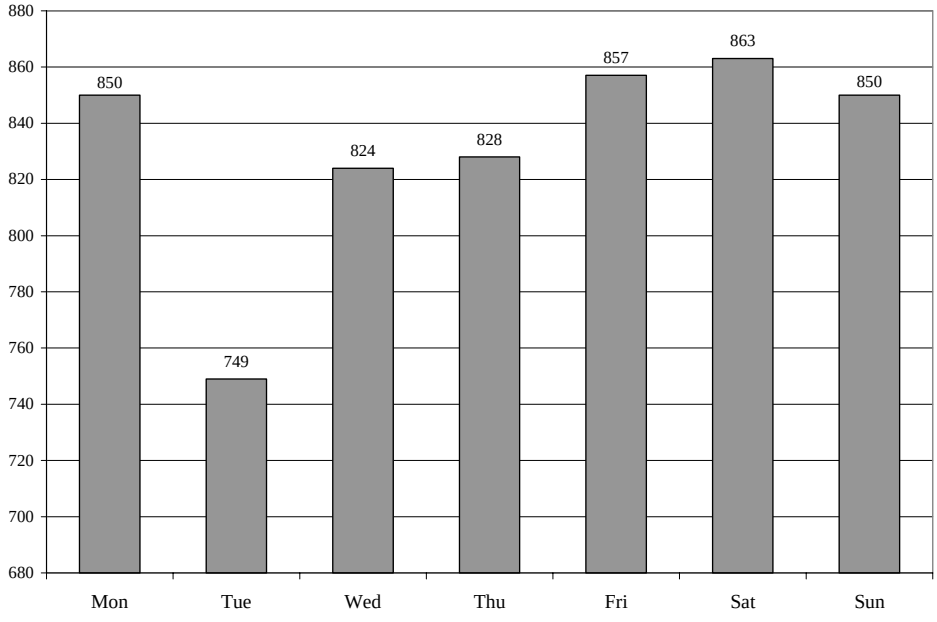


Table 2. Total Cases by Gender, 2003

Female	Male	Total
1678	4143	5821

Table 3. Total Cases by Race/Ethnicity, 2003

White	Black	Asian	Hawaiian/Pacific Islander	Native American	Other	Unknown	TOTAL
4082	1449	60	11	2	174	43	5821

Figure 4. Total Cases by Age Group, 2003

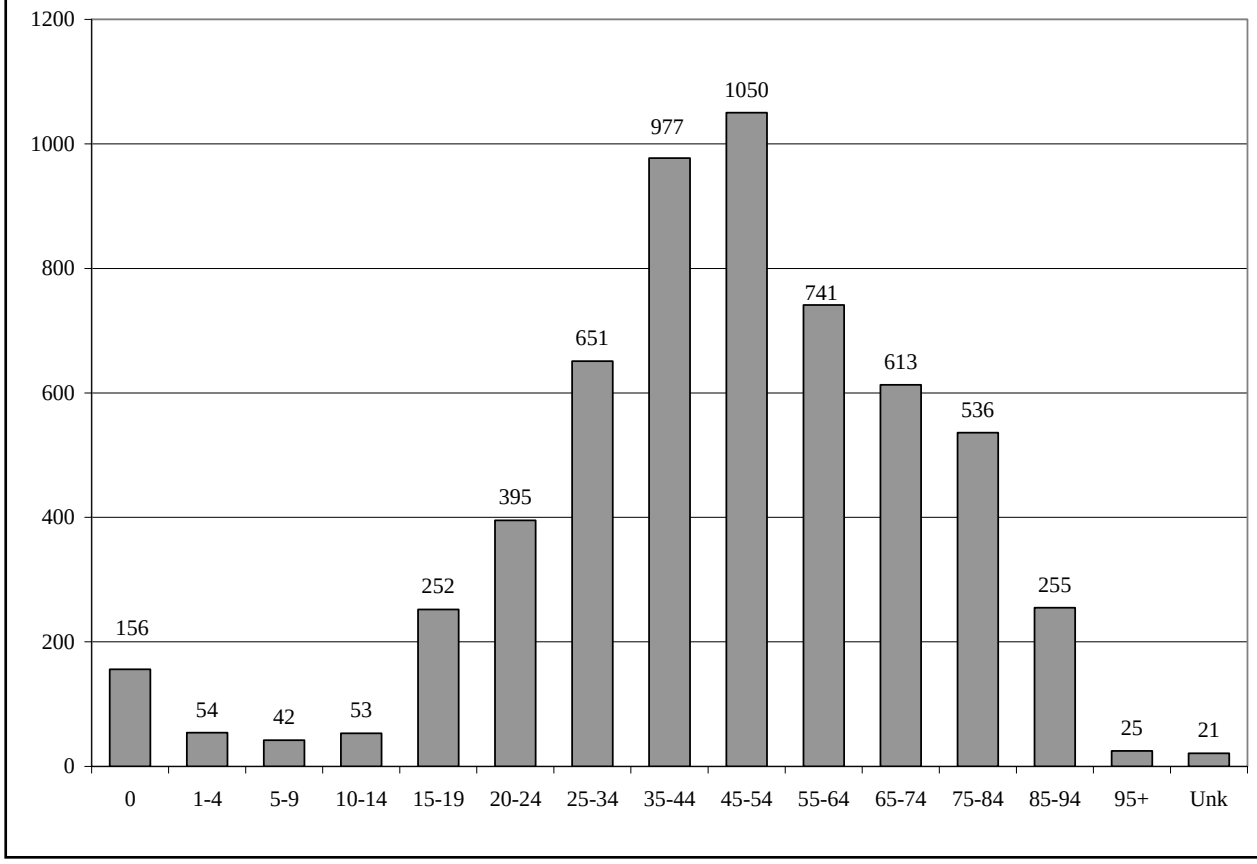


Table 4. Total Cases by Autopsy Status, 2003

	Manner of Death					
Autopsy	**Natural**	**Accident**	**Suicide**	**Homicide**	**Undetermined**	**TOTAL**
Yes	798	836	637	448	68	2787
No	1383	1469	167	11	4	3034
%	36.6	36.3	79.2	97.6	94.4	47.9
TOTAL	2181	2305	804	459	72	5821

Figure 5: Proportion of Cases by Manner of Death, 2003

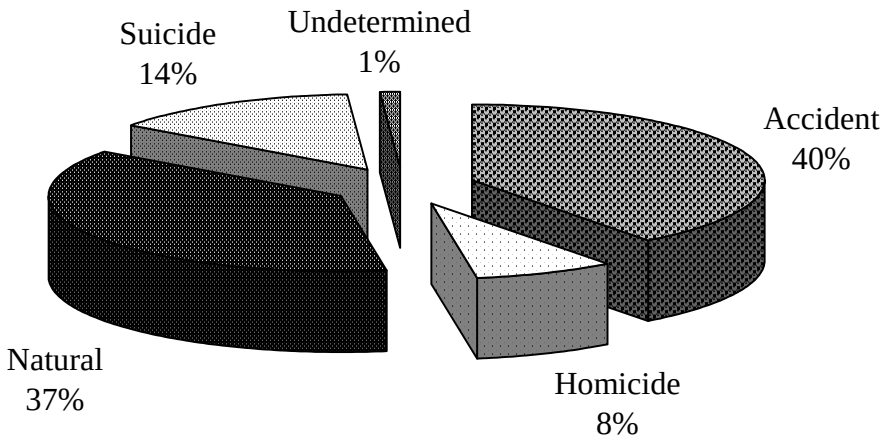


Figure 6. Total Cases by Manner of Death by Month of Death, 2003

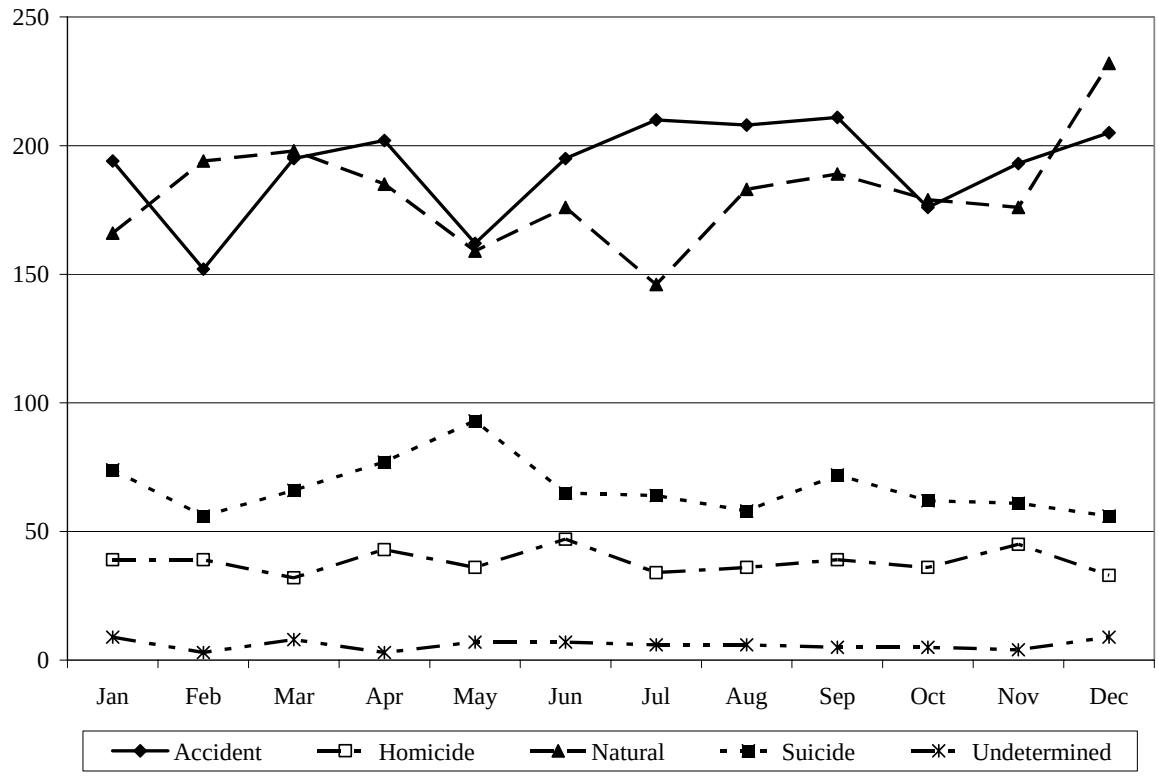


Figure 7. Total Cases by Manner of Death by Day of Death, 2003

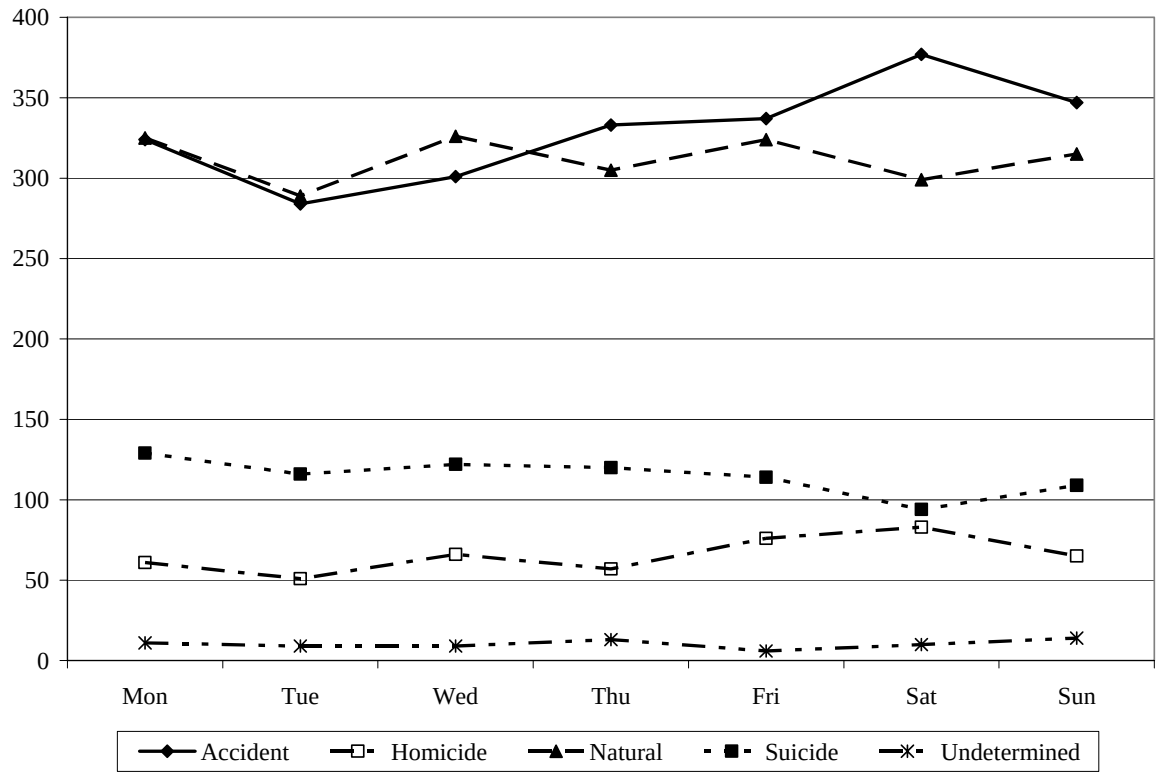


Table 5. Total Cases by Manner of Death by Gender, 2003

	Manner of Death					
Gender	**Natural**	**Accident**	**Suicide**	**Homicide**	**Undetermined**	**Total**
Female	681	685	184	94	34	1,678
Male	1,500	1,620	620	365	38	4,143
Total	2,181	2,305	804	459	72	5,821

Figure 8. Total Cases by Manner of Death by Gender, 2003

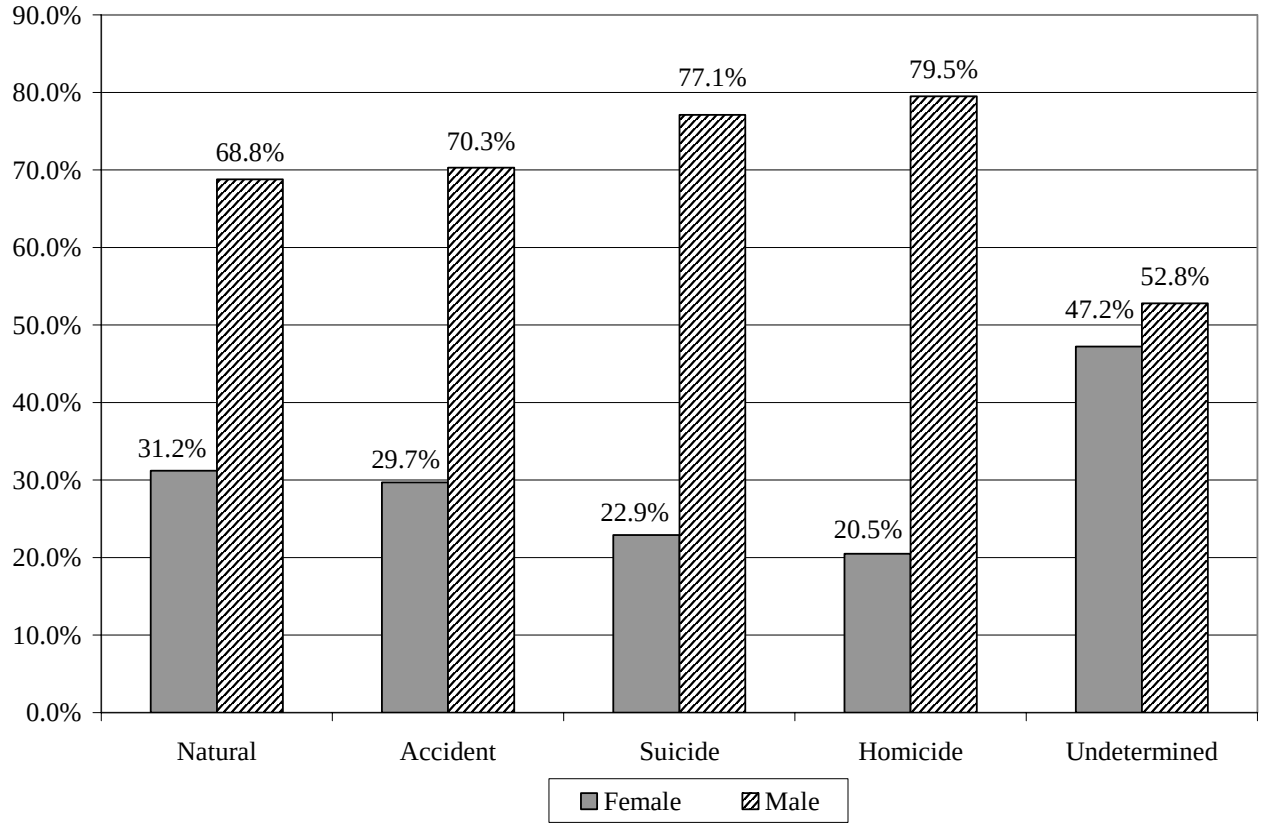


Table 6. Total Cases by Manner of Death by Age Group by Gender, 2003

		Manner of Death					
Gender	**Age**	**Natural**	**Accident**	**Suicide**	**Homicide**	**Undetermined**	**Total**
Female	<1	56	11	0	3	3	73
	1-4	4	7	0	2	5	18
	5-9	7	9	0	2	0	18
	10-14	4	7	1	2	0	14
	15-19	6	47	2	6	1	62
	20-24	16	40	8	15	2	81
	25-34	28	61	30	14	4	137
	35-44	70	113	48	24	3	258
	45-54	122	94	37	10	7	270
	55-64	98	55	31	7	5	196
	65-74	111	53	13	4	1	182
	75-84	96	97	11	2	0	206
	85-94	56	79	2	2	0	139
	95+	6	11	1	0	0	18
	Unk	1	1	0	1	3	6
	Subtotal	**681**	**685**	**184**	**94**	**34**	**1,678**
Male	<1	65	8	0	6	4	83
	1-4	6	23	0	5	2	36
	5-9	4	13	0	7	0	24
	10-14	3	25	7	4	0	39
	15-19	8	97	35	48	2	190
	20-24	28	141	50	93	2	314
	25-34	68	249	110	85	2	514
	35-44	219	311	117	62	10	719
	45-54	364	257	119	32	8	780
	55-64	317	151	60	12	5	545
	65-74	232	127	65	7	0	431
	75-84	143	146	39	2	0	330
	85-94	36	65	15	0	0	11
	95+	3	4	0	0	0	7
	Unk	4	3	3	2	3	15
	Subtotal	**1,500**	**1,620**	**620**	**365**	**38**	**4,143**
TOTAL		**2,181**	**2,305**	**804**	**459**	**72**	**5,821**

Figure 9. Total Cases by Manner of Death by Race/Ethnicity, 2003

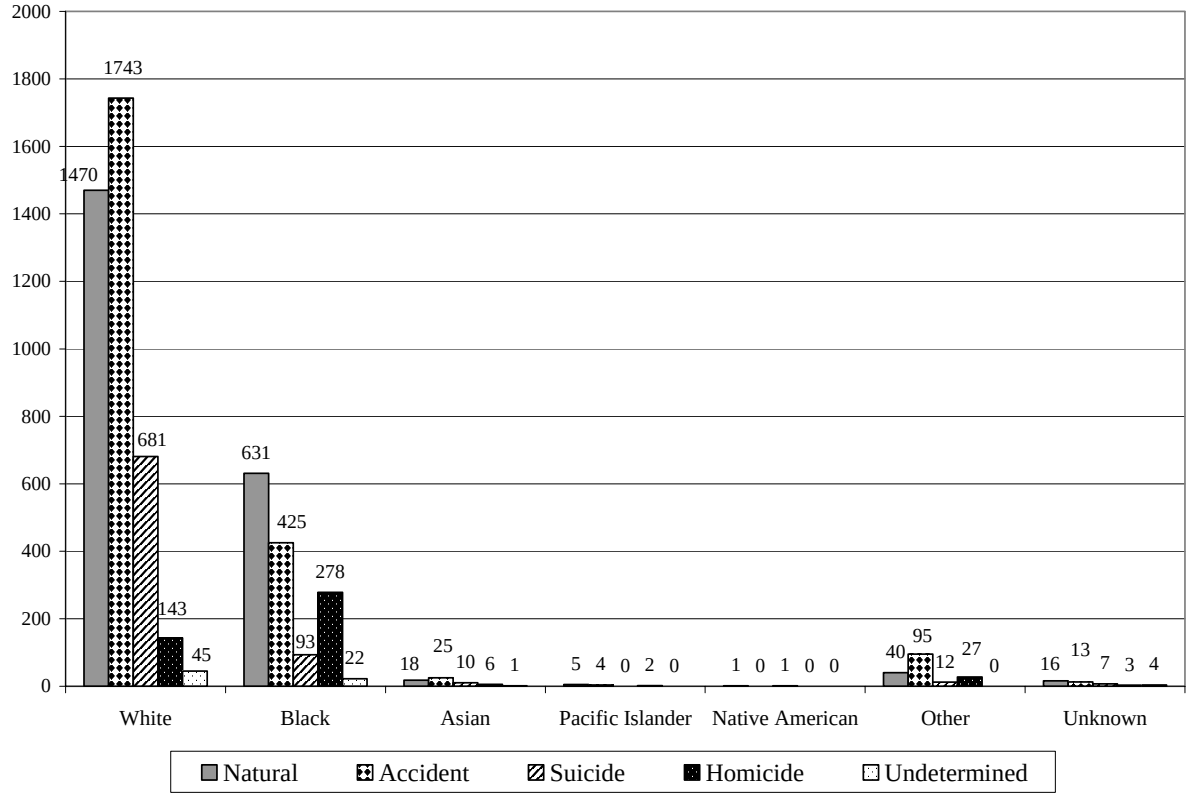


Figure 10. Total Cases by Manner of Death by Year of Death, 1999-2003

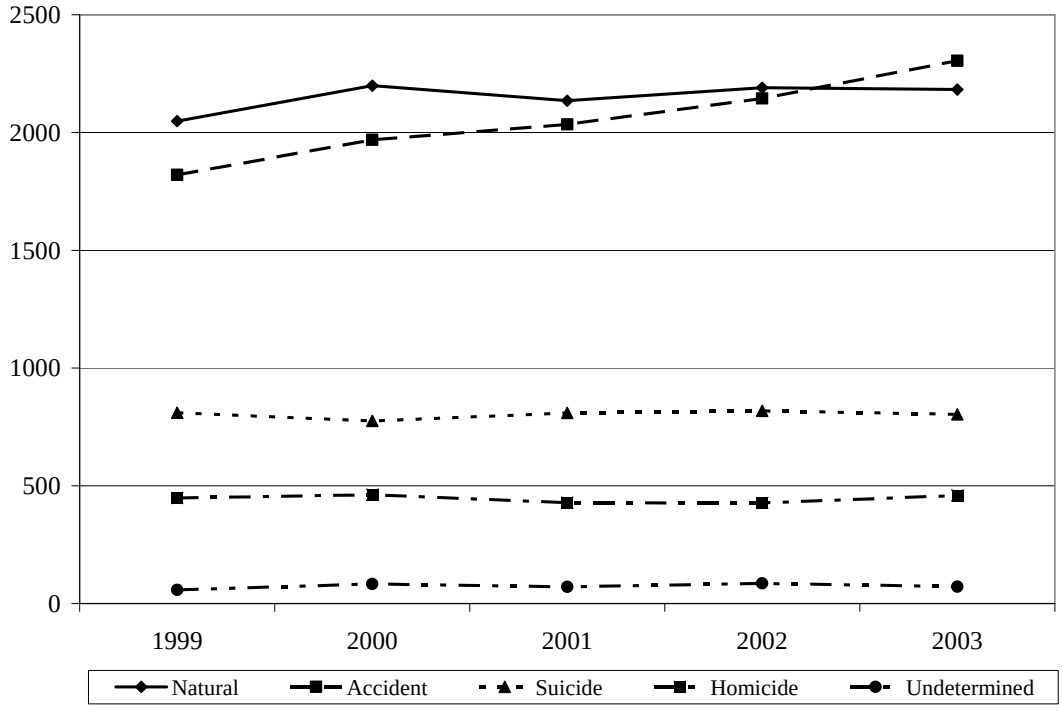


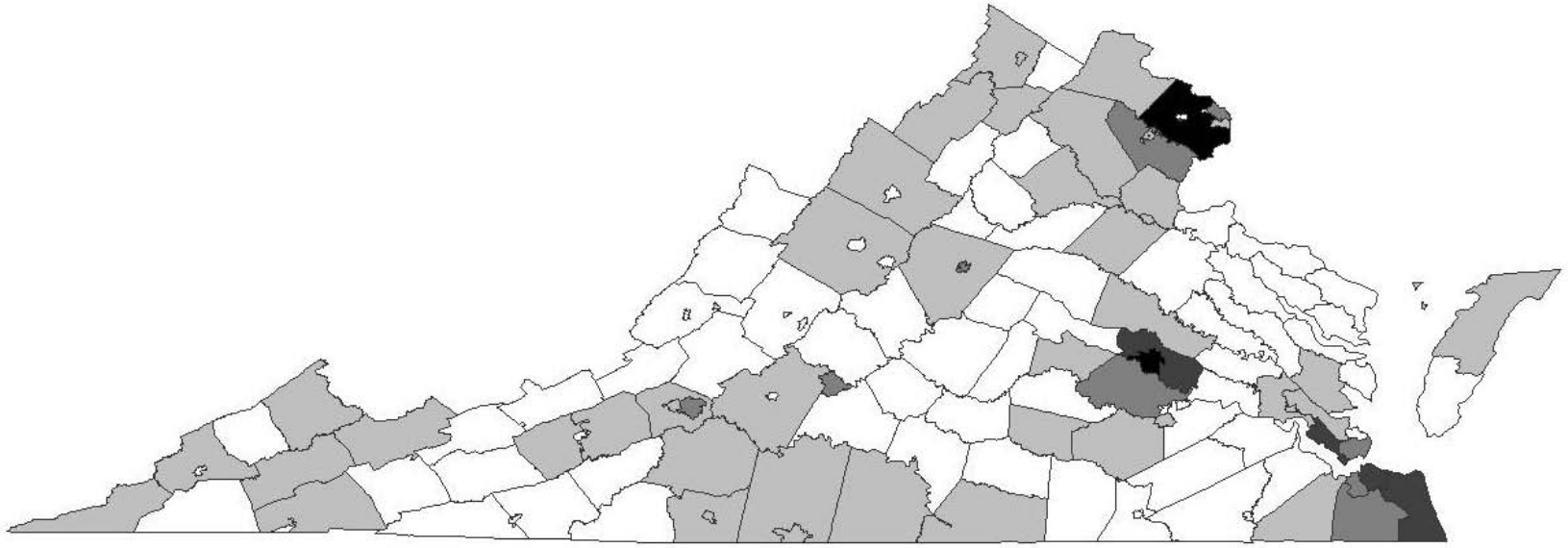
Table 7. Total Cases by Locality of Death, 2003

	Manner of Death					
Locality of Death	**Accident**	**Homicide**	**Natural**	**Suicide**	**Undetermined**	**Total**
Accomack	16	1	8	4	0	29
Albemarle	26	3	14	10	0	53
Alexandria	14	5	40	18	0	77
Alleghany	3	0	8	4	0	15
Amelia	2	1	3	2	0	8
Amherst	5	1	17	1	1	25
Appomattox	2	0	3	2	0	7
Arlington	31	3	60	15	1	110
Augusta	26	4	16	12	1	59
Bath	6	0	1	0	0	7
Bedford City	2	0	2	0	0	4
Bedford	14	0	18	7	1	40
Bland	2	0	1	3	0	6
Botetourt	6	1	4	2	0	13
Bristol	6	0	5	3	0	14
Brunswick	5	2	6	4	0	17
Buchanan	20	2	24	5	0	51
Buckingham	8	2	7	0	0	17
Buena Vista	0	0	0	0	0	0
Campbell	15	0	4	5	0	24
Caroline	6	0	10	5	0	21
Carroll	8	1	13	2	0	24
Charles City	4	0	1	1	0	6
Charlotte	4	1	0	0	0	5
Charlottesville	83	4	30	8	2	127
Chesapeake	38	4	40	16	1	99
Chesterfield	50	7	52	29	0	138
Clarke	6	1	1	2	0	10
Colonial Heights	1	0	2	1	0	4
Covington	2	0	1	0	0	3
Craig	1	0	1	3	0	5
Culpeper	11	2	16	8	0	37
Cumberland	2	0	3	0	0	5
Danville	21	5	18	10	1	55
Dickenson	7	0	2	4	1	14
Dinwiddie	8	2	13	6	1	30
Emporia	8	0	8	1	0	17
Essex	8	0	4	3	0	15
Fairfax City	3	0	4	0	0	7
Fairfax	232	15	160	64	6	477
Falls Church	0	0	2	0	0	2
Fauquier	21	2	16	8	0	47
Floyd	11	0	6	0	0	17
Fluvanna	11	0	5	3	0	19
Franklin City	1	0	1	0	0	2
Franklin	16	3	14	8	1	42
Frederick	15	1	6	7	0	29
Fredericksburg	39	0	23	11	3	76
Galax	3	0	6	1	1	11
Giles	12	0	3	3	0	18
Gloucester	11	2	11	6	0	30
Goochland	8	2	3	2	0	15
Grayson	4	0	1	5	1	11
Greene	3	4	1	2	0	10
Greensville	3	2	15	2	0	22
Halifax	16	4	19	3	1	43
Hampton	33	12	88	11	2	146
Hanover	25	2	23	7	0	57
Harrisonburg	10	0	9	3	0	22
Henrico	65	19	71	35	3	193
Henry	17	2	8	4	1	32
Highland	0	1	0	0	0	1
Hopewell	3	2	4	2	0	11
Isle of Wight	13	0	4	4	0	21
James City	11	0	30	3	0	44
King & Queen	3	2	0	1	0	6
King George	5	0	3	1	0	9
King William	3	1	0	1	0	5
Lancaster	4	0	2	1	0	7

Table 7. Total Cases by Locality of Death, 2003 ~ *continued*

	Manner of Death					
Locality of Death	**Accident**	**Homicide**	**Natural**	**Suicide**	**Undetermined**	**Total**
Lee	23	2	11	5	1	42
Lexington	1	0	2	0	0	3
Loudoun	26	1	26	17	1	71
Louisa	7	1	7	5	1	21
Lunenburg	2	0	3	2	0	7
Lynchburg	45	7	30	10	0	92
Madison	5	0	7	1	1	14
Manassas	14	5	7	3	1	30
Martinsville	17	1	11	9	1	39
Mathews	4	0	1	0	0	5
Mecklenburg	13	1	14	6	0	34
Middlesex	4	0	2	1	0	7
Montgomery	22	1	19	4	2	48
Nelson	7	0	2	5	0	14
New Kent	8	0	1	1	0	10
Newport News	56	29	80	16	1	182
Norfolk	105	59	117	31	8	320
Northampton	10	1	10	1	1	23
Northumberland	3	0	2	1	1	7
Norton	5	0	5	2	0	12
Nottoway	10	0	20	1	0	31
Orange	6	0	9	3	0	18
Page	7	0	6	5	1	19
Patrick	6	0	3	4	0	13
Petersburg	13	7	38	3	0	61
Pittsylvania	7	2	17	8	0	34
Poquoson	0	0	1	1	0	2
Portsmouth	27	11	61	10	4	113
Powhatan	8	0	17	1	1	27
Prince Edward	8	0	12	1	1	22
Prince George	5	1	2	3	1	12
Prince William	42	8	41	20	1	112
Pulaski	14	0	9	7	1	31
Radford	0	0	1	0	0	1
Rappahannock	3	1	2	1	0	7
Richmond City	225	115	158	27	1	526
Richmond	1	0	5	3	0	9
Roanoke City	89	22	37	19	1	168
Roanoke	15	1	7	10	0	33
Rockbridge	12	3	9	2	0	26
Rockingham	19	0	16	4	0	39
Russell	29	1	9	2	0	41
Salem	10	0	13	8	0	31
Scott	9	1	1	3	0	14
Shenandoah	11	3	13	8	0	35
Smyth	11	0	5	2	0	18
South Boston	0	0	0	0	0	0
Southampton	7	2	9	2	0	20
Spotsylvania	13	4	20	9	0	46
Stafford	12	4	10	7	0	33
Staunton	6	1	11	3	0	21
Suffolk	14	2	28	8	1	53
Surry	1	0	5	1	0	7
Sussex	6	0	7	3	1	17
Tazewell	20	2	16	9	0	47
Virginia Beach	72	23	111	43	5	254
Warren	16	0	14	1	0	31
Washington	25	2	20	7	0	54
Waynesboro	0	0	4	1	1	6
Westmoreland	5	0	3	2	0	10
Williamsburg	6	2	22	5	1	36
Winchester	18	2	15	9	1	45
Wise	21	1	8	7	0	37
Wythe	6	0	6	5	0	17
York	11	0	9	7	0	27
Unknown	0	0	0	0	1	1
Out of State	2	2	2	5	1	12
Total	**2305**	**459**	**2181**	**804**	**72**	**5821**

Figure 11. Total Cases by Locality of Injury, 2003



Number of Deaths

- 0 - 26
- 27 - 77
- 78 - 168
- 169 - 320

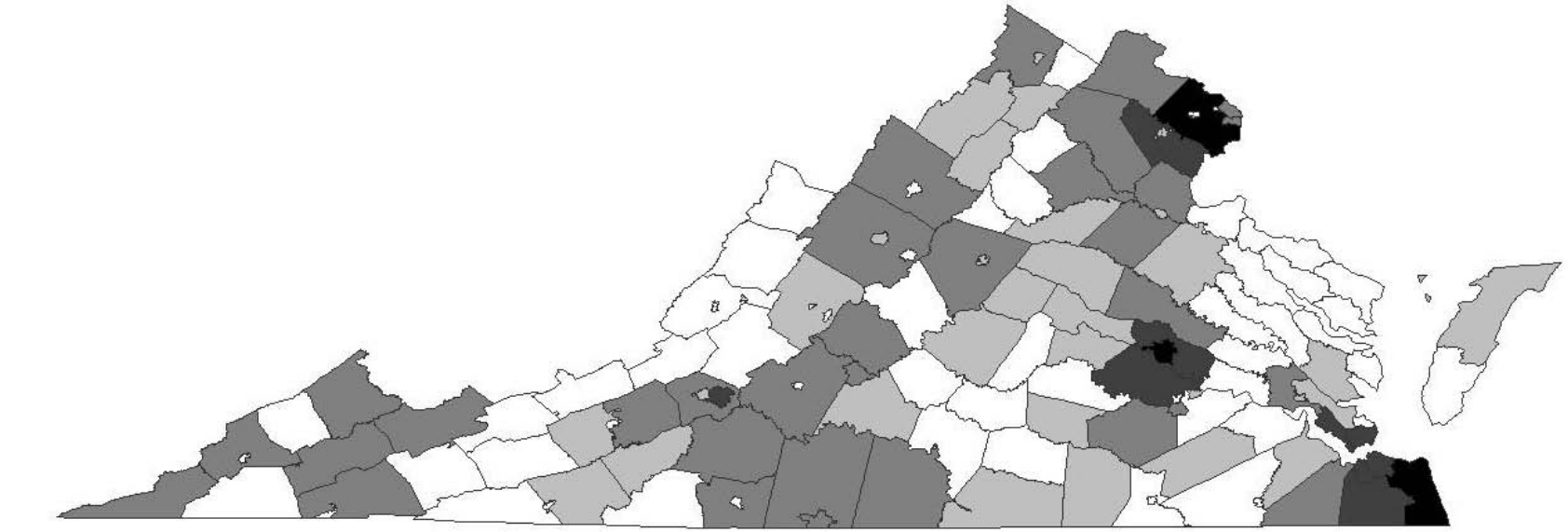
Table 8. Total Cases by Locality of Residence, 2003

	Manner of Death					
Locality of Residence	**Accident**	**Homicide**	**Natural**	**Suicide**	**Undetermined**	**Total**
Accomack	19	2	12	4	0	37
Albemarle	21	3	13	10	0	47
Alexandria	14	3	23	16	1	57
Alleghany	2	0	6	4	0	12
Amelia	7	1	3	2	0	13
Amherst	10	2	27	2	1	42
Appomattox	9	0	4	3	0	16
Arlington	29	2	40	12	1	84
Augusta	27	4	15	11	1	58
Bath	7	0	2	0	0	9
Bedford City	3	0	1	0	0	4
Bedford	22	0	20	9	1	52
Bland	2	0	2	2	0	6
Botetourt	6	1	5	2	0	14
Bristol	4	0	7	5	0	16
Brunswick	9	3	8	2	0	22
Buchanan	17	2	22	4	0	45
Buckingham	15	3	5	0	0	23
Buena Vista	1	0	1	0	0	2
Campbell	17	1	6	4	0	28
Caroline	10	1	7	4	0	22
Carroll	9	2	18	2	0	31
Charles City	5	1	1	0	0	7
Charlotte	8	0	1	0	0	9
Charlottesville	13	0	21	4	0	38
Chesapeake	42	8	45	19	1	115
Chesterfield	67	22	58	31	0	178
Clarke	3	1	2	2	0	8
Colonial Heights	5	1	4	1	0	11
Covington	2	0	1	0	0	3
Craig	1	0	1	3	0	5
Culpeper	17	0	15	8	0	40
Cumberland	3	0	7	1	0	11
Danville	9	4	17	10	0	40
Dickenson	9	0	5	3	1	18
Dinwiddie	13	2	17	7	0	39
Emporia	3	0	2	1	0	6
Essex	2	0	1	2	0	5
Fairfax City	7	0	4	0	1	12
Fairfax	148	11	140	62	2	363
Falls Church	1	0	3	0	0	4
Fauquier	20	4	15	7	0	46
Floyd	12	1	14	0	0	27
Fluvanna	17	0	7	3	0	27
Franklin City	1	0	0	0	0	1
Franklin	21	3	13	9	1	47
Frederick	22	1	10	8	0	41
Fredericksburg	15	0	9	3	0	27
Galax	1	0	0	1	0	2
Giles	10	0	2	2	0	14
Gloucester	9	1	14	6	0	30
Goochland	8	2	7	2	0	19
Grayson	5	0	4	4	1	14
Greene	3	4	1	1	1	10
Greensville	6	0	12	0	0	18
Halifax	17	4	18	3	1	43
Hampton	36	15	86	11	2	150
Hanover	24	3	23	10	0	60
Harrisonburg	7	0	6	2	0	15
Henrico	79	22	63	34	4	202
Henry	22	3	15	12	2	54
Highland	1	0	0	0	0	1
Hopewell	8	2	7	3	0	20
Isle of Wight	15	2	10	2	0	29
James City	10	1	24	5	1	41
King & Queen	4	1	0	1	0	6
King George	9	0	3	1	0	13
King William	6	2	0	1	0	9
Lancaster	2	0	2	0	0	4

Table 8. Total Cases by Locality of Residence, 2003 ~ *continued*

	Manner of Death					
Locality of Residence	**Accident**	**Homicide**	**Natural**	**Suicide**	**Undetermined**	**Total**
Lee	20	2	12	5	1	40
Lexington	2	0	0	0	0	2
Loudoun	36	1	21	18	0	76
Louisa	7	1	7	4	1	20
Lunenburg	5	0	4	2	0	11
Lynchburg	24	4	12	5	0	45
Madison	4	2	6	1	0	13
Manassas	11	2	3	2	1	19
Martinsville	6	2	5	2	0	15
Mathews	6	0	2	0	0	8
Mecklenburg	14	1	14	4	0	33
Middlesex	8	1	3	2	0	14
Montgomery	21	2	15	6	2	46
Nelson	6	0	3	5	0	14
New Kent	10	1	0	1	0	12
Newport News	37	26	67	22	1	153
Norfolk	46	37	104	23	3	213
Northampton	8	0	4	1	0	13
Northumberland	6	0	3	2	1	12
Norton	2	0	1	1	0	4
Nottoway	14	0	18	1	0	33
Orange	9	2	11	5	0	27
Page	11	0	6	5	1	23
Patrick	7	0	2	3	0	12
Petersburg	15	5	25	2	1	48
Pittsylvania	22	3	18	8	1	52
Poquoson	3	0	2	1	0	6
Portsmouth	30	14	56	13	5	118
Powhatan	8	0	13	2	1	24
Prince Edward	7	0	4	1	1	13
Prince George	7	1	4	4	0	16
Prince William	70	11	40	23	2	146
Pulaski	16	0	8	6	1	31
Radford	5	0	2	1	0	8
Rappahannock	5	1	1	0	0	7
Richmond City	105	87	115	17	1	325
Richmond	3	0	4	2	0	9
Roanoke City	43	12	38	19	1	113
Roanoke	24	2	12	10	0	48
Rockbridge	9	2	8	2	0	21
Rockingham	24	0	20	4	0	48
Russell	25	1	9	5	0	40
Salem	6	3	7	5	0	21
Scott	8	1	1	3	0	13
Shenandoah	10	1	12	9	0	32
Smyth	10	0	2	3	0	15
South Boston	1	0	3	0	0	4
Southampton	6	1	5	2	0	14
Spotsylvania	25	1	19	15	1	61
Stafford	25	5	16	6	2	54
Staunton	7	2	10	4	0	23
Suffolk	20	3	23	8	1	55
Surry	3	0	4	0	0	7
Sussex	6	2	11	3	0	22
Tazewell	21	2	14	9	0	46
Virginia Beach	75	31	116	43	6	271
Warren	16	0	12	1	0	29
Washington	20	2	21	7	0	50
Waynesboro	2	0	5	2	1	10
Westmoreland	5	0	5	3	0	13
Williamsburg	5	1	10	4	0	21
Winchester	9	0	5	6	1	21
Wise	25	1	12	7	1	46
Wythe	5	0	2	7	1	15
York	11	0	12	7	0	30
Unknown	15	6	15	4	4	44
Out of Country	1	1	0	0	0	2
Out of State	217	22	182	23	6	450
Total	**2305**	**459**	**2181**	**804**	**72**	**5821**

Figure 12. Total Cases by County of Residence, 2003



Number of Deaths

- 1 - 18
- 19 - 38
- 39 - 84
- 85 - 213
- 214 - 363

Table 9. Total Cases by Cause of Death, 2003

Natural Deaths	Total Cases	Autopsied
Acquired Immune Deficiency Syndrome	12	1
Alzheimer's Disease	3	1
Aneurysm	28	18
Arthritis	1	0
Aspiration	9	2
Asthma	15	9
Blood disorders	3	1
Carcinoma	71	21
Cerebrovascular	26	11
Chronic Obstructive Pulmonary Disease	30	6
Congenital Defect	11	10
Dehydration	4	3
Diabetes	36	16
Emboli	58	37
Epilepsy	25	15
Ethanolism	60	12
Gastrointestinal Hemorrhage	50	14
Heart Disease	1,424	405
Hepatic failure	41	14
Intrauterine Fetal Death	8	8
Leukemia	3	2
Maternal and Fetal Complications of Birth	13	12
Medical Treatment	9	6
Meningitis	1	0
Obesity	7	3
Obstruction (blockage)	4	2
Pancreas	4	4
Pneumonia	84	43
Pulmonary Edema	1	1
Renal Failure	7	1
Respiratory Distress Syndrome	9	1
Sepsis	36	15
Spontaneous Hemorrhage	1	1
Sudden Infant Death Syndrome	82	81
Natural - Other	73	38
Subtotal	**2,249**	**814**
Unnatural Deaths		
Asphyxia	93	58
Carbon Monoxide Poisoning	124	75
Child Abuse	4	4
Drowning	143	94
Electrocution	12	10
Ethanol Poisoning	33	21
Exposure	31	19
Gunshot Wound	795	785
Hanging	140	59
Head and Neck Injuries	573	90
Judicial Execution	2	2
Multiple Injuries	763	125
Stab Wound	53	50
Subdural Hematoma	137	12
Substance Poisoning	586	512
Thermal Injuries (burns)	32	16
Unnatural - Other	21	12
Subtotal	**3,542**	**1,944**
Undetermined Deaths		
Undetermined After Autopsy and/or Investigation	30	29
Subtotal	**30**	**29**
TOTAL	**5821**	**2787**

SECTION 3: MANNER OF DEATH

NATURAL DEATHS

Figure 13. Natural Deaths by Gender by Age Group, 2003

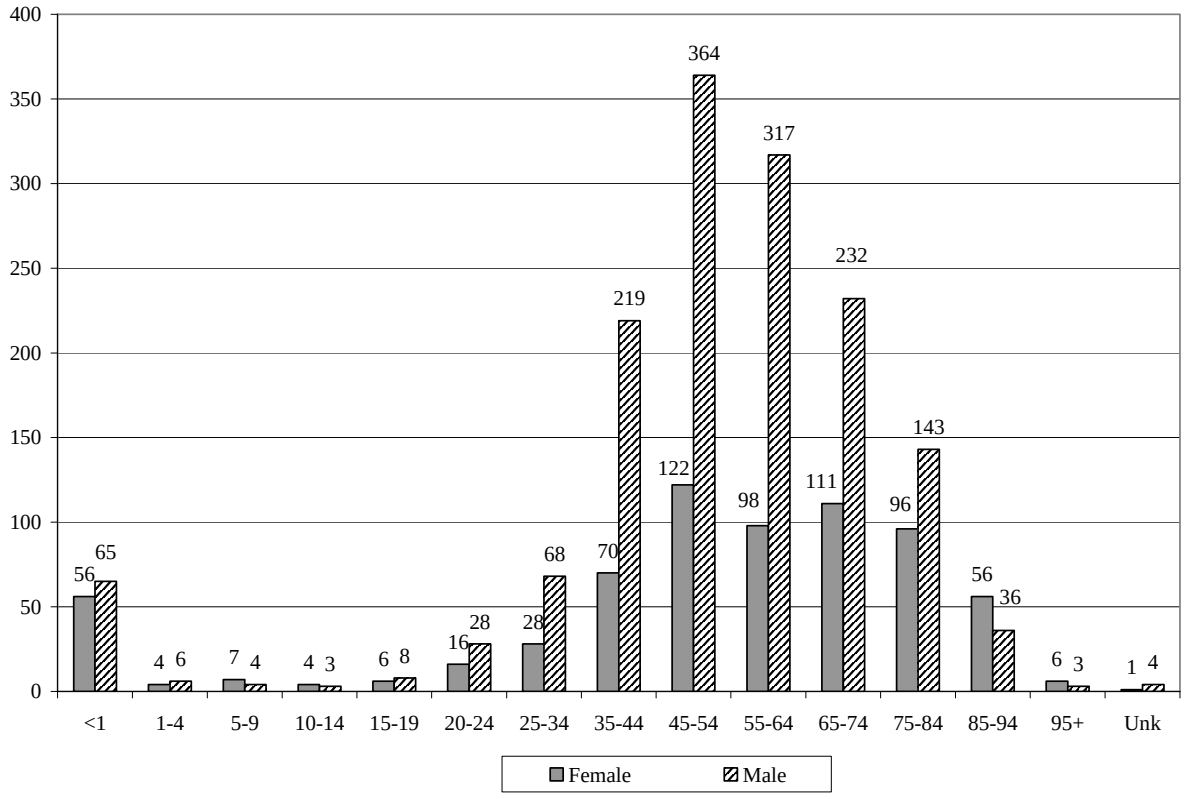


Figure 14. Natural Deaths by Race/Ethnicity, 2003

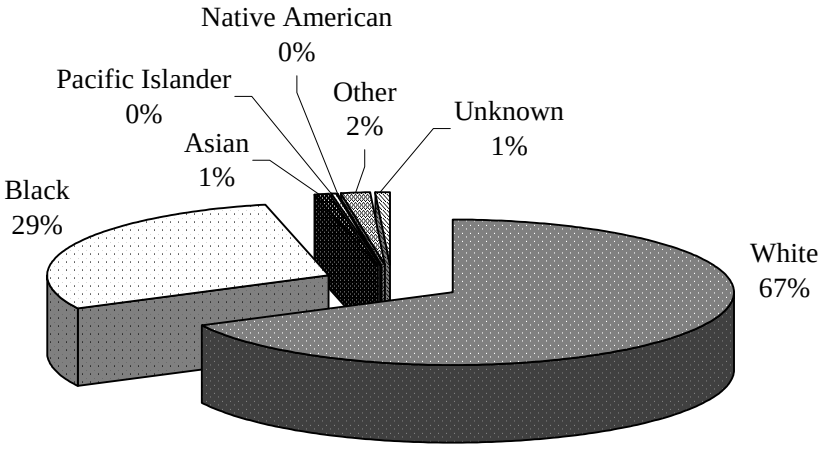
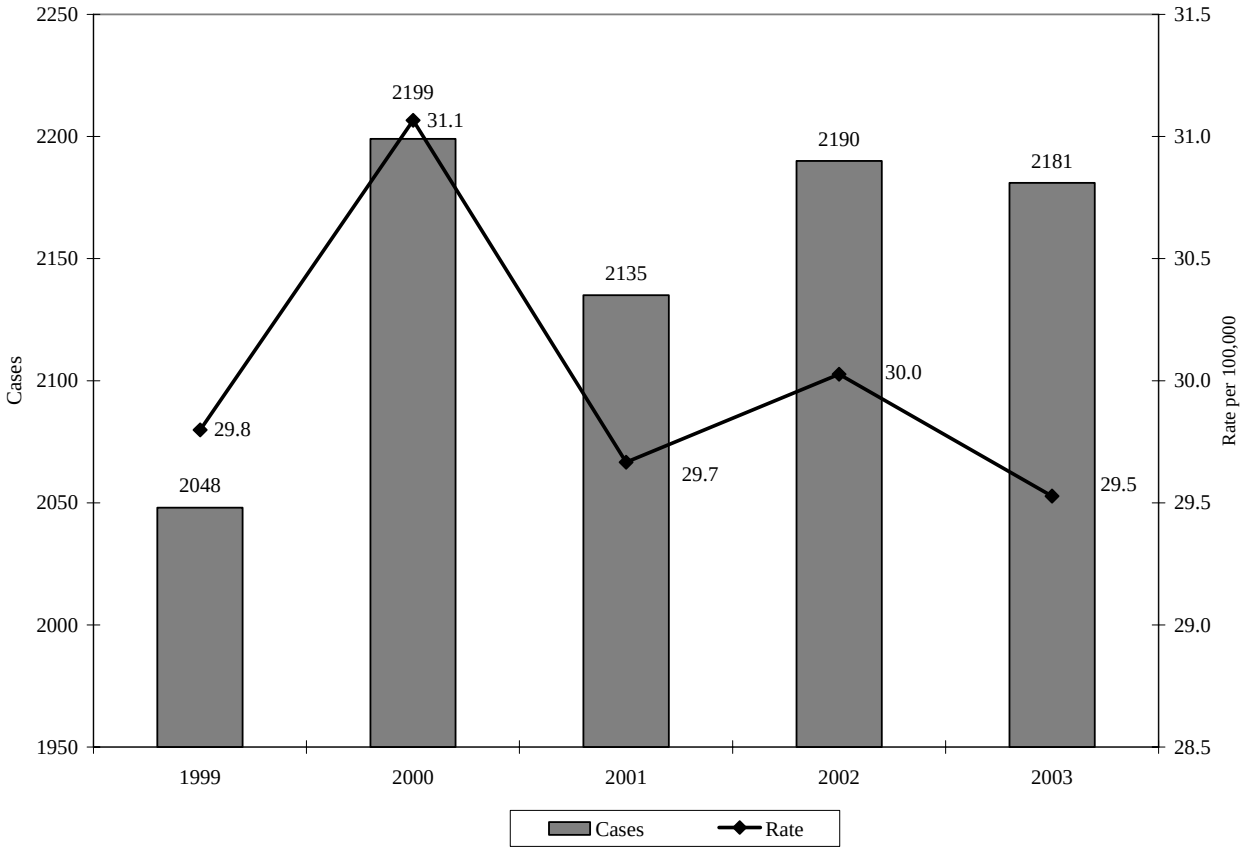


Figure 15. Natural Deaths by Year of Death, 1999-2003



ACCIDENTAL DEATHS

Accidental deaths accounted for 40 percent of the deaths investigated by the OCME in 2003; this represents the greatest proportion of deaths by manner. Accidents involving a vehicle were the most common cause of accidental deaths, with a vehicle involved in 43.7 percent of all accidental deaths. The number of accidental deaths investigated annually by the OCME has increased by 26.6 percent since 1999.

Figure 16. Accidental Deaths by Gender by Age Group, 2003

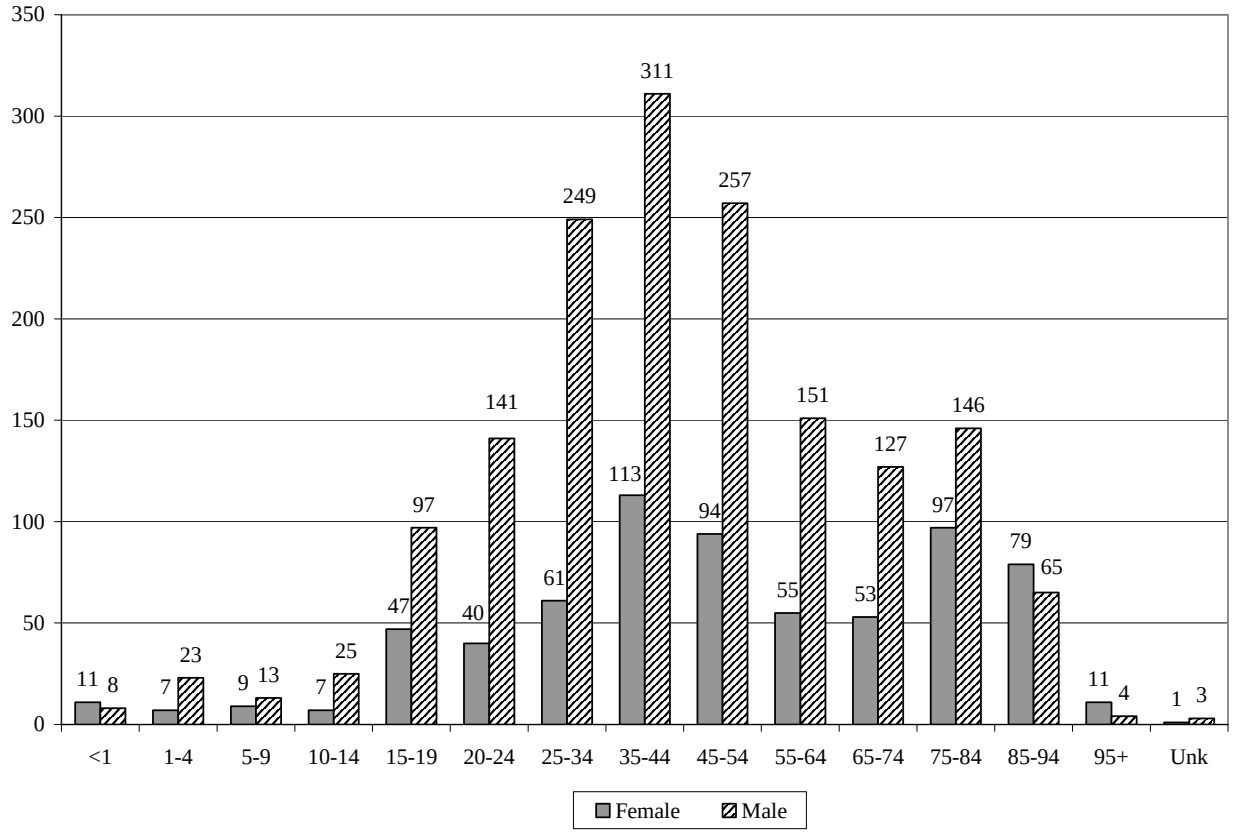


Figure 17. Proportion of Accidental Deaths by Race/Ethnicity, 2003

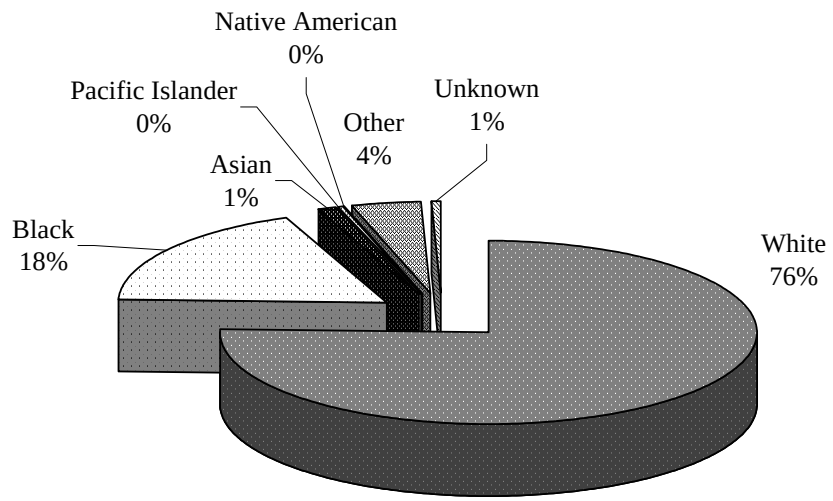


Figure 18. Accidental Deaths by Year of Death, 1999-2003

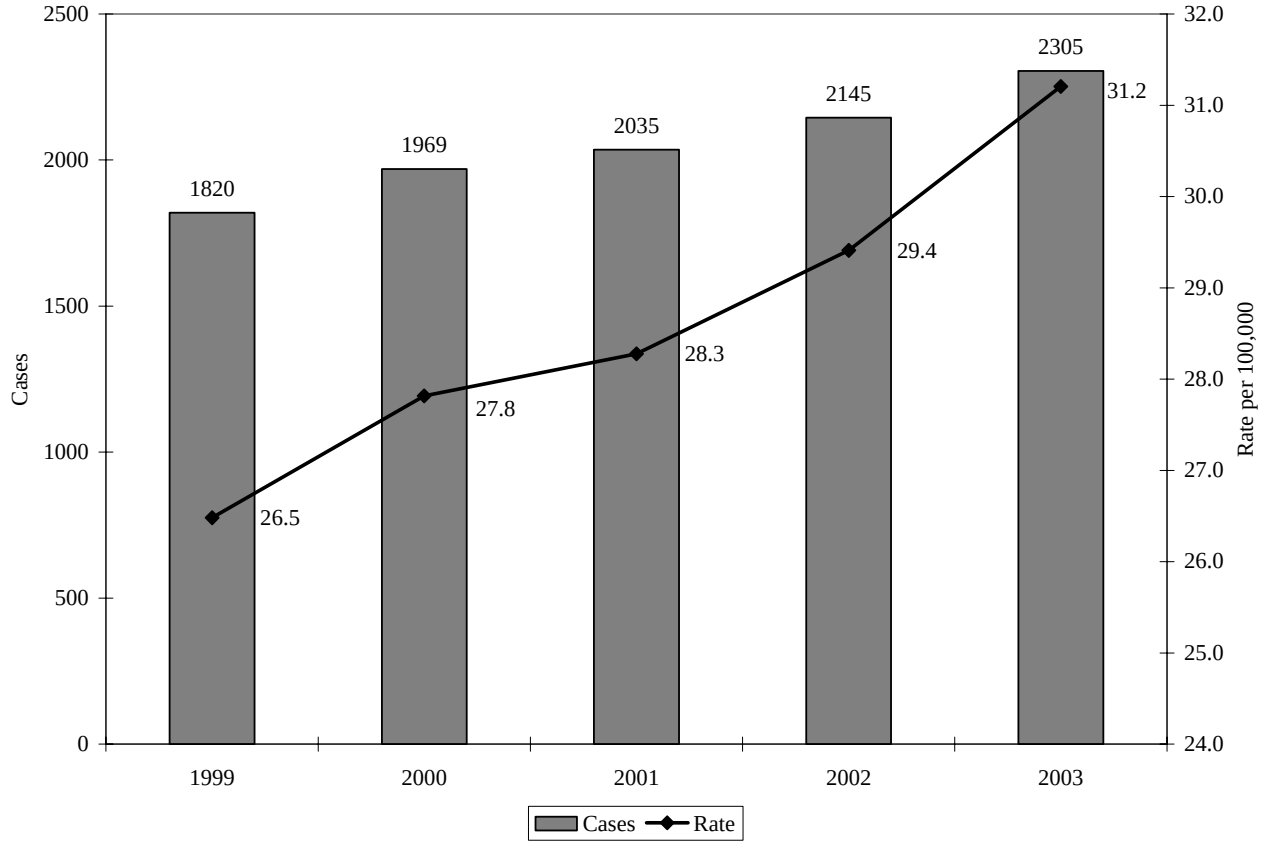


Table 10. Accidental Deaths by Method of Death, 2003

Method of Death	Total Cases	Autopsied
Aircraft		
Passenger/Pilot in aircraft crash	13	11
Animal Related		
Animal related (bitten, kicked, trampled)	3	0
Asphyxia		
Accidental ligature strangulation	7	4
Choked on foreign object	20	6
Crushed/suffocated	30	23
Drowned	121	75
Drug Use		
Ingested alcohol (ethanol)	33	21
Ingested and/or injected illicit drug and/or prescription medications	461	420
Electrical		
Contacted electrical current	13	11
Struck by lightning	1	0
Exposure		
Exposed to cold, heat	30	18
Fall		
Fall from all heights	382	48
Fire		
Scalded by hot water, hot oil, other agent	1	0
Smoke: Inhalation (Carbon Monoxide)	60	37
Victim of explosion	3	2
Victim of Fire	26	14
Machinery		
Farm or industrial machinery accident	8	6
Motor Vehicle		
Vehicular: ATV	8	0
Vehicular: auto/truck (driver)	574	49
Vehicular: auto/truck (passenger)	217	23
Vehicular: auto/truck (pedestrian)	101	19
Vehicular: auto/truck (unknown)	14	2
Vehicular: bicycle	11	0
Vehicular: boat	2	1
Vehicular: mo-ped	2	0
Vehicular: motorcycle	49	3
Vehicular: tractor/heavy construction equipment	19	2
Vehicular: train	6	1
Vehicular: other	4	1
Poisoned		
Inhaled toxic agent (Carbon Monoxide)	20	14
Traumatic Injury		
Accidental discharge of firearm	9	9
Accidental cut injury	2	2
Cave-in	2	0
Received blow/collided with object	25	4
Sports related	2	2
Other traumatic injury	7	5
Unknown		
Accident - Unknown	19	5
Total	**2305**	**836**

Table 11. Accidental Deaths by Locality of Death by Year of Death, 1999-2003

	Year of Death					
Locality of Death	**1999**	**2000**	**2001**	**2002**	**2003**	**Total**
Accomack	13	17	17	14	16	77
Albemarle	15	6	7	22	26	76
Alexandria	19	16	17	20	14	86
Alleghany	4	3	3	4	3	17
Amelia	4	5	3	5	2	19
Amherst	9	4	5	3	5	26
Appomattox	2	1	3	6	2	14
Arlington	28	35	34	44	31	172
Augusta	16	18	24	24	26	108
Bath	3	1	2	3	6	15
Bedford City	1	1	5	2	2	11
Bedford	15	9	16	16	14	70
Bland	2	1	8	4	2	17
Botetourt	9	7	9	8	6	39
Bristol	1	1	0	2	6	10
Brunswick	8	8	7	9	5	37
Buchanan	11	10	16	19	20	76
Buckingham	8	7	8	5	8	36
Buena Vista	0	0	0	1	0	1
Campbell	11	12	7	12	15	57
Caroline	9	12	8	16	6	51
Carroll	7	9	5	5	8	34
Charles City	2	2	2	6	4	16
Charlotte	10	4	5	3	4	26
Charlottesville	74	60	70	71	83	358
Chesapeake	26	24	30	44	38	162
Chesterfield	43	43	28	46	50	210
Clarke	1	2	3	2	6	14
Colonial Heights	0	3	1	0	1	5
Covington	3	0	0	0	2	5
Craig	0	0	0	3	1	4
Culpepper	5	8	12	8	12	45
Cumberland	6	4	1	0	2	13
Danville	17	23	22	16	21	99
Dickenson	4	2	7	9	7	29
Dinwiddie	7	10	5	6	8	36
Emporia	8	4	4	7	8	31
Essex	6	5	10	6	8	35
Fairfax City	3	0	2	2	3	10
Fairfax	171	201	196	235	232	1035
Falls Church	0	1	1	0	0	2
Fauquier	24	11	17	11	20	83
Floyd	5	8	7	6	11	37
Fluvanna	2	4	2	2	11	21
Franklin City	0	0	1	0	1	2
Franklin	17	9	19	14	16	75
Frederick	0	2	2	6	15	25
Fredericksburg	20	27	18	26	39	130
Galax	5	5	8	6	3	27
Giles	6	5	6	4	12	33
Gloucester	8	7	12	4	11	42
Goochland	3	4	3	2	8	20
Grayson	6	7	2	3	4	22
Greene	6	3	2	5	3	19
Greensville	3	4	1	2	3	13
Halifax	22	16	16	18	16	88
Hampton	25	17	19	21	33	115
Hanover	20	27	13	16	25	101
Harrisonburg	14	19	6	11	10	60
Henrico	40	51	50	59	65	265
Henry	7	6	8	8	17	46
Highland	3	2	2	0	0	7
Hopewell	7	6	14	5	3	35
Isle of Wight	8	7	10	4	13	42
James City	4	7	4	7	11	33
King & Queen	2	2	0	3	3	10
King George	4	1	2	8	5	20
King William	2	4	5	14	3	28

Table 11. Accidental Deaths by Locality of Death by Year of Death , 1999-2003 ~ *continued*

Locality of Death	Year of Death					Total
	1999	2000	2001	2002	2003	
Lancaster	11	8	5	9	4	37
Lee	8	14	13	6	23	64
Lexington	10	4	1	5	1	21
Loudoun	15	16	25	15	26	97
Louisa	7	11	8	12	7	45
Lunenburg	7	4	2	8	2	23
Lynchburg	39	42	39	40	45	205
Madison	2	2	2	4	5	15
Manassas	15	10	12	12	14	63
Martinsville	17	13	24	15	17	86
Mathews	2	1	3	2	4	12
Mecklenburg	13	14	12	13	13	65
Middlesex	5	2	4	6	4	21
Montgomery	29	21	29	22	22	123
Nelson	5	5	5	9	7	31
New Kent	2	6	7	2	8	25
Newport News	56	56	52	52	55	271
Norfolk	114	127	144	138	105	628
Northampton	9	7	13	10	10	49
Northumberland	0	3	2	1	3	9
Norton	6	5	6	5	5	27
Nottoway	7	3	6	2	10	28
Orange	7	4	6	10	6	33
Page	3	10	10	7	7	37
Patrick	4	6	8	7	6	31
Petersburg	19	18	10	18	13	78
Pittsylvania	8	12	21	21	7	69
Poquoson	3	0	2	0	0	5
Portsmouth	24	23	24	24	27	122
Powhatan	0	2	5	3	8	18
Prince Edward	2	7	11	4	8	32
Prince George	3	9	7	8	5	32
Prince William	20	38	36	36	42	172
Pulaski	11	8	18	20	14	71
Radford	2	3	1	3	0	9
Rappahannock	1	0	1	1	3	6
Richmond City	166	200	188	179	225	958
Richmond	3	1	1	2	1	8
Roanoke City	74	76	80	98	89	417
Roanoke	8	10	10	8	15	51
Rockbridge	6	11	2	9	12	40
Rockingham	10	9	11	13	19	62
Russell	9	11	29	12	29	90
Salem	3	10	6	8	10	37
Scott	3	10	9	12	9	43
Shenandoah	6	8	7	12	11	44
Smyth	9	10	9	10	11	49
Southampton	9	17	12	6	7	51
Spotsylvania	13	21	15	8	13	70
Stafford	7	7	12	4	12	42
Staunton	1	1	3	1	6	12
Suffolk	20	21	17	31	14	103
Surry	1	5	3	4	1	14
Sussex	9	3	7	9	6	34
Tazewell	8	9	15	19	20	71
Virginia Beach	57	70	73	67	72	339
Warren	7	11	5	9	16	48
Washington	19	21	9	17	25	91
Waynesboro	2	1	3	3	0	9
Westmoreland	5	1	9	6	5	26
Williamsburg	2	10	16	13	7	48
Winchester	16	21	25	29	18	109
Wise	7	16	7	11	21	62
Wythe	6	15	12	20	6	59
York	2	8	12	2	11	35
Unknown	1	0	0	0	0	1
Out of State	1	1	2	0	2	6
TOTAL	**1820**	**1969**	**2035**	**2145**	**2305**	**10274**

SUICIDE DEATHS

In 2003 suicide deaths occurred most frequently in whites (84.7%), males (76.4%), and those aged 35-44 years (20.5%). A firearm was utilized in 55.7 percent of all suicide deaths. Fairfax County has had the greatest number of suicide deaths annually since 1999. Among blacks and whites, black females are significantly less likely to commit suicide than males or white females.

Figure 19. Suicide Deaths by Gender by Age Group, 2003

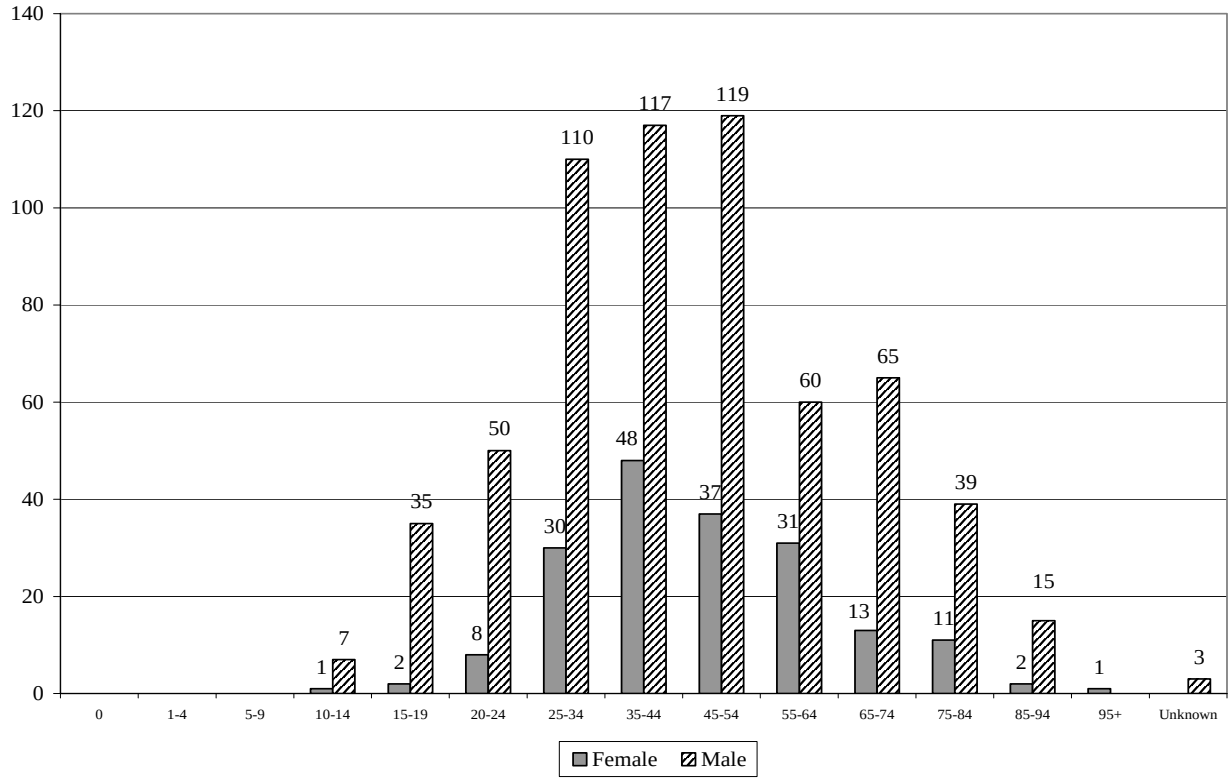


Figure 20. Suicide Deaths by Race/Ethnicity, 2003

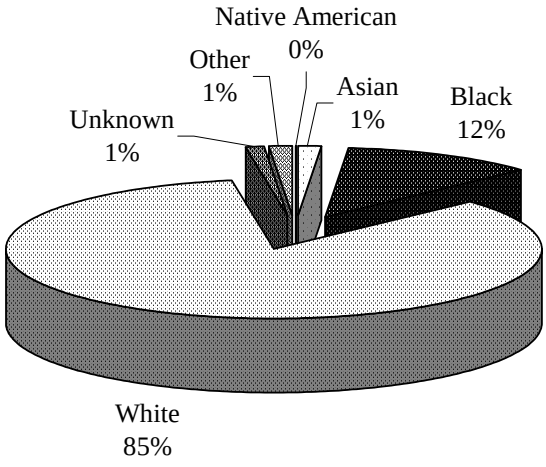


Figure 21. Suicide Deaths by Gender by Race/Ethnicity, 2003

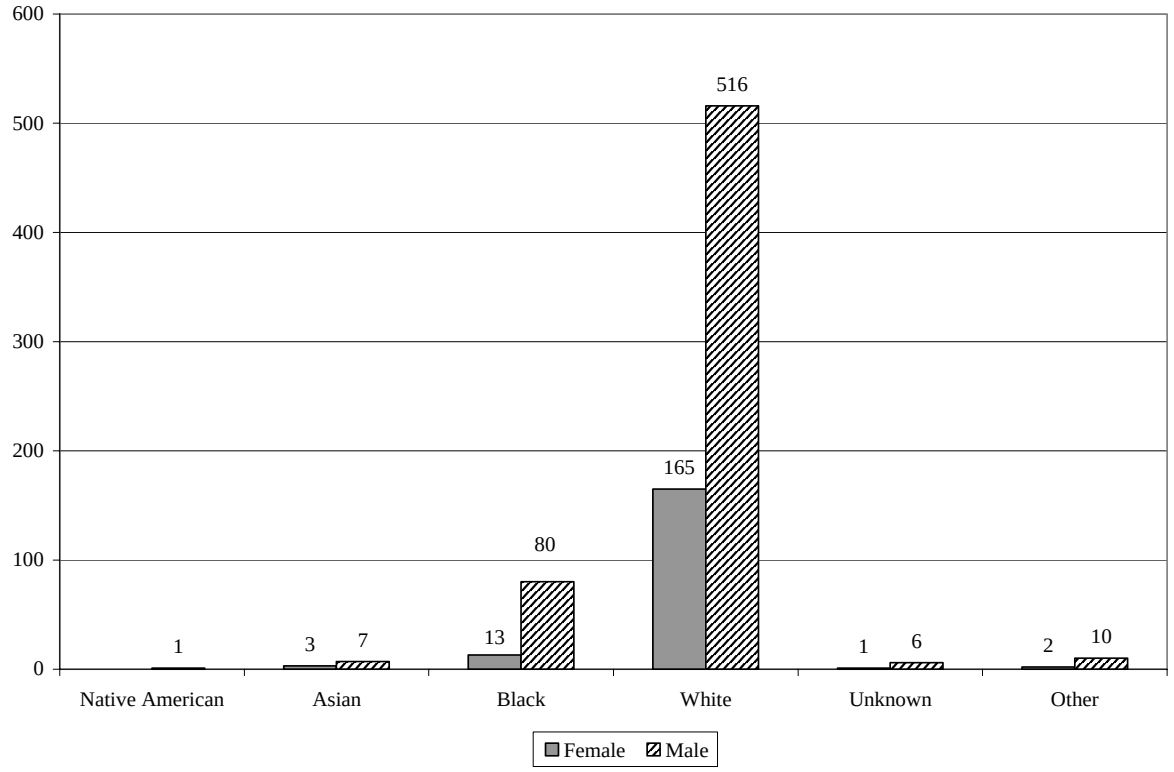


Figure 22. Suicide Deaths by Year of Death, 1999- 2003

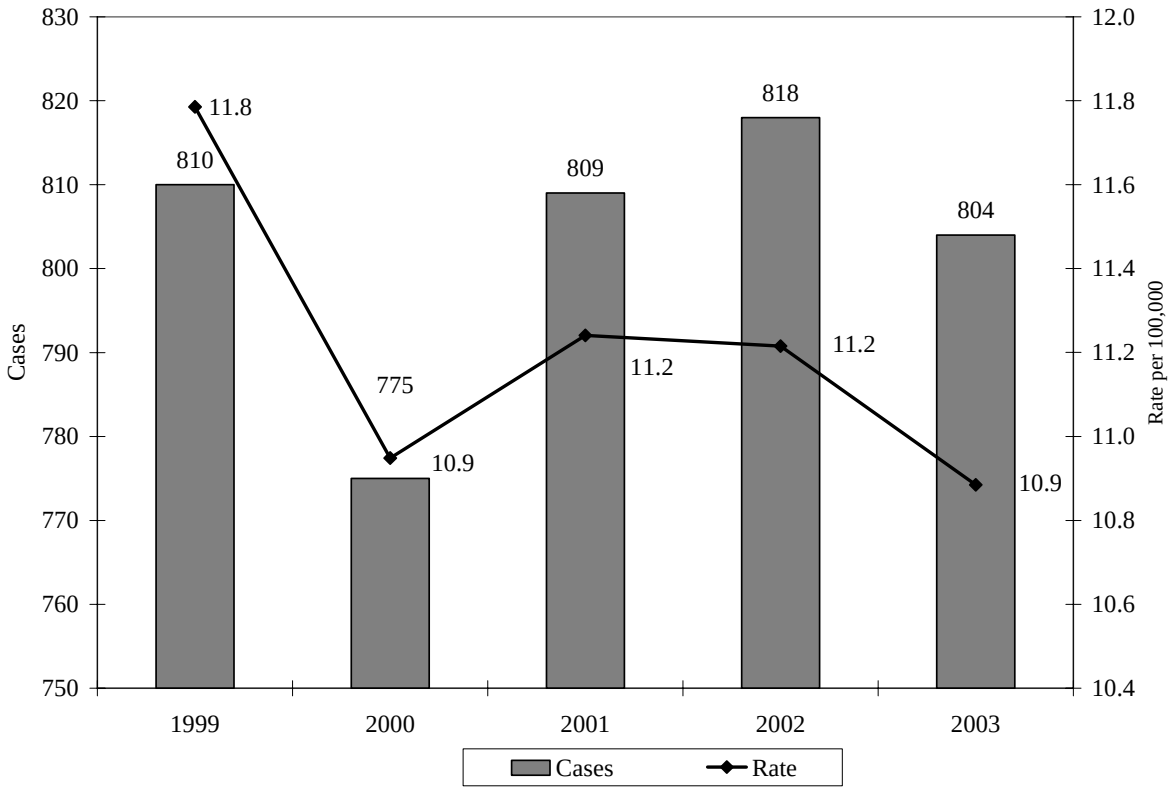


Table 12. Suicide Deaths by Method of Death, 2003

Method of Death	Total Case	Autopsied
Asphyxia		
Drowned self	19	16
Hanged self	137	57
Suffocated self	14	6
Drug Use		
Ingested, injected or inhaled medication	120	88
Fall		
Jumped from height	14	9
Fire		
Burned self	3	1
Smoke: Inhalation (Carbon Monoxide)	3	3
Poisoned		
Inhaled toxic agent (Carbon Monoxide)	27	7
Traumatic Injury		
Cut/Stabbed self	6	4
Shot self with firearm	448	442
- Handgun	(313)	(310)
- Rifle	(46)	(44)
- Shotgun	(69)	(68)
- Unspecified	(20)	(20)
Traumatic - Other	2	1
Vehicular		
Driver of motor vehicle	1	0
Vehicular - Other	7	1
Unknown		
Suicide - Other	3	2
Total	**804**	**637**

Figure 23. Suicide Deaths by Method of Death, 2003

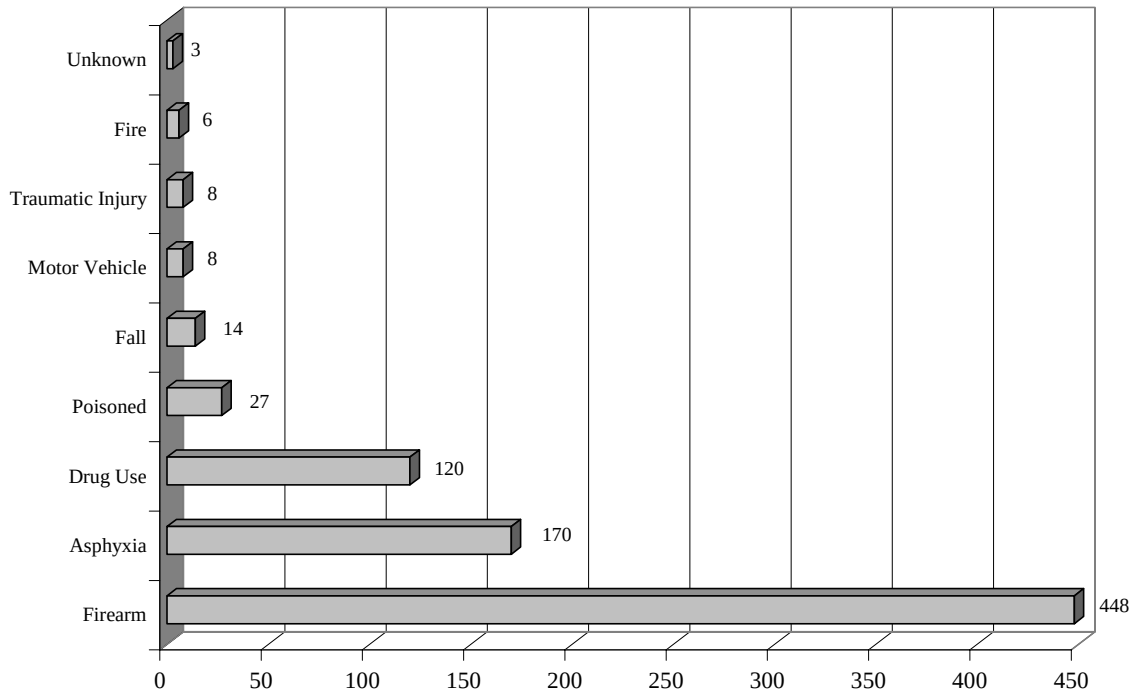


Table 13. Suicide Deaths by Locality of Death by Year of Death, 1999-2003

	Year of Death					
Locality of Death	**1999**	**2000**	**2001**	**2002**	**2003**	**Total**
Accomack	6	4	2	2	4	18
Albemarle	7	8	7	5	10	37
Alexandria	8	9	11	13	18	59
Alleghany	0	2	3	1	4	10
Amelia	0	0	1	2	2	5
Amherst	4	1	3	10	1	19
Appomattox	0	0	1	4	2	7
Arlington	9	14	10	22	15	70
Augusta	11	6	3	10	12	42
Bath	0	0	1	0	0	1
Bedford City	1	2	2	0	0	5
Bedford	9	11	10	4	7	41
Bland	3	0	1	0	3	7
Botetourt	5	4	4	4	2	19
Bristol	0	2	1	1	3	7
Brunswick	0	1	0	2	4	7
Buchanan	6	4	9	8	5	32
Buckingham	4	4	2	2	0	12
Buena Vista	0	2	0	1	0	3
Campbell	4	5	9	2	5	25
Caroline	5	3	1	2	5	16
Carroll	6	10	3	3	2	24
Charles City	1	1	0	1	1	4
Charlotte	3	0	3	1	0	7
Charlottesville	10	13	16	7	8	54
Chesapeake	18	8	17	12	16	71
Chesterfield	28	22	25	26	29	130
Clarke	3	1	0	2	2	8
Colonial Heights	3	1	1	3	1	9
Covington	0	2	0	2	0	4
Craig	1	0	0	2	3	6
Culpepper	10	2	5	5	8	30
Cumberland	2	1	0	1	0	4
Danville	11	12	11	7	10	51
Dickenson	3	3	4	6	4	20
Dinwiddie	8	5	2	6	6	27
Emporia	2	0	0	1	1	4
Essex	1	1	1	4	3	10
Fairfax City	2	1	0	2	0	5
Fairfax	62	75	64	87	64	352
Falls Church	0	1	0	0	0	1
Fauquier	5	3	7	6	8	29
Floyd	1	0	1	2	0	4
Fluvanna	1	0	3	1	3	8
Franklin	5	6	9	9	8	37
Frederick	1	2	0	6	7	16
Fredericksburg	5	6	5	8	11	35
Galax	3	1	2	3	1	10
Giles	0	5	2	1	3	11
Gloucester	3	2	3	6	6	20
Goochland	2	1	2	2	2	9
Grayson	1	0	0	0	5	6
Greene	2	3	1	0	2	8
Greensville	2	6	2	2	2	14
Halifax	5	6	4	8	3	26
Hampton	12	10	12	10	11	55
Hanover	4	10	13	6	7	40
Harrisonburg	7	2	3	2	3	17
Henrico	32	26	37	19	35	149
Henry	6	8	5	5	4	28
Highland	1	0	0	1	0	2
Hopewell	4	3	5	3	2	17
Isle of Wight	2	7	3	4	4	20
James City	1	3	3	4	3	14
King & Queen	3	1	1	0	1	6
King George	4	3	2	2	1	12
King William	2	1	2	0	1	6

Table 13. Suicide Deaths by Locality of Death by Year of Death, 1999–2003 *continued*

Locality of Death	Year of Death					
	1999	2000	2001	2002	2003	Total
Lancaster	0	2	0	1	1	4
Lee	5	4	3	6	5	23
Lexington	1	1	0	0	0	2
Loudoun	13	6	17	10	17	63
Louisa	4	3	6	3	5	21
Lunenburg	2	0	0	3	2	7
Lynchburg	8	10	5	12	10	45
Madison	1	4	2	1	1	9
Manassas	7	4	3	3	3	20
Martinsville	4	5	9	6	9	33
Mathews	1	3	0	2	0	6
Mecklenburg	4	3	6	4	6	23
Middlesex	1	0	2	2	1	6
Montgomery	13	3	10	8	4	38
Nelson	7	3	2	2	5	19
New Kent	3	4	2	4	1	14
Newport News	15	24	23	16	16	94
Norfolk	28	28	43	32	31	162
Northampton	1	4	0	4	1	10
Northumberland	1	0	1	2	1	5
Norton	2	5	5	0	2	14
Nottoway	2	1	0	4	1	8
Orange	4	3	1	3	3	14
Page	1	2	3	3	5	14
Patrick	5	3	1	6	4	19
Petersburg	4	4	4	3	3	18
Pittsylvania	9	9	9	15	8	50
Poquoson	2	0	1	1	1	5
Portsmouth	13	6	14	10	10	53
Powhatan	1	2	5	6	1	15
Prince Edward	4	2	1	1	1	9
Prince George	4	3	0	6	3	16
Prince William	26	25	21	15	20	107
Pulaski	4	4	7	11	7	33
Radford	3	3	1	2	0	9
Rappahannock	0	1	0	2	1	4
Richmond City	42	21	45	44	27	179
Richmond	1	1	4	0	3	9
Roanoke City	22	28	18	21	19	108
Roanoke	6	12	10	15	10	53
Rockbridge	4	3	2	2	2	13
Rockingham	2	5	12	5	4	28
Russell	6	9	9	6	2	32
Salem	3	4	1	2	8	18
Scott	7	9	4	3	3	26
Shenandoah	5	8	5	5	8	31
Smyth	6	4	3	3	2	18
Southampton	3	4	3	3	2	15
Spotsylvania	5	5	9	11	9	39
Stafford	12	5	5	8	7	37
Staunton	2	3	3	4	3	15
Suffolk	0	9	7	4	8	28
Surry	1	1	1	1	1	5
Sussex	3	1	4	2	3	13
Tazewell	15	9	7	5	9	45
Virginia Beach	44	42	37	35	43	201
Warren	5	6	6	4	1	22
Washington	8	16	12	6	7	49
Waynesboro	3	3	2	4	1	13
Westmoreland	1	4	2	2	2	11
Williamsburg	3	2	2	2	5	14
Winchester	12	8	5	10	9	44
Wise	7	3	8	9	7	34
Wythe	4	3	8	7	5	27
York	5	4	3	1	7	20
Out of State	0	3	5	2	5	15
TOTAL	810	775	809	818	804	4016

HOMICIDE DEATHS

The number of homicides in Virginia increased by 7.5 percent from 2002 to 2003. Homicide deaths were greatest in blacks (60.6%), males (79.1%), and persons aged 20-24 years (23.5%). A firearm was utilized in 73.6 percent of all homicide deaths.

Figure 24. Homicide Deaths by Gender by Age Group, 2003

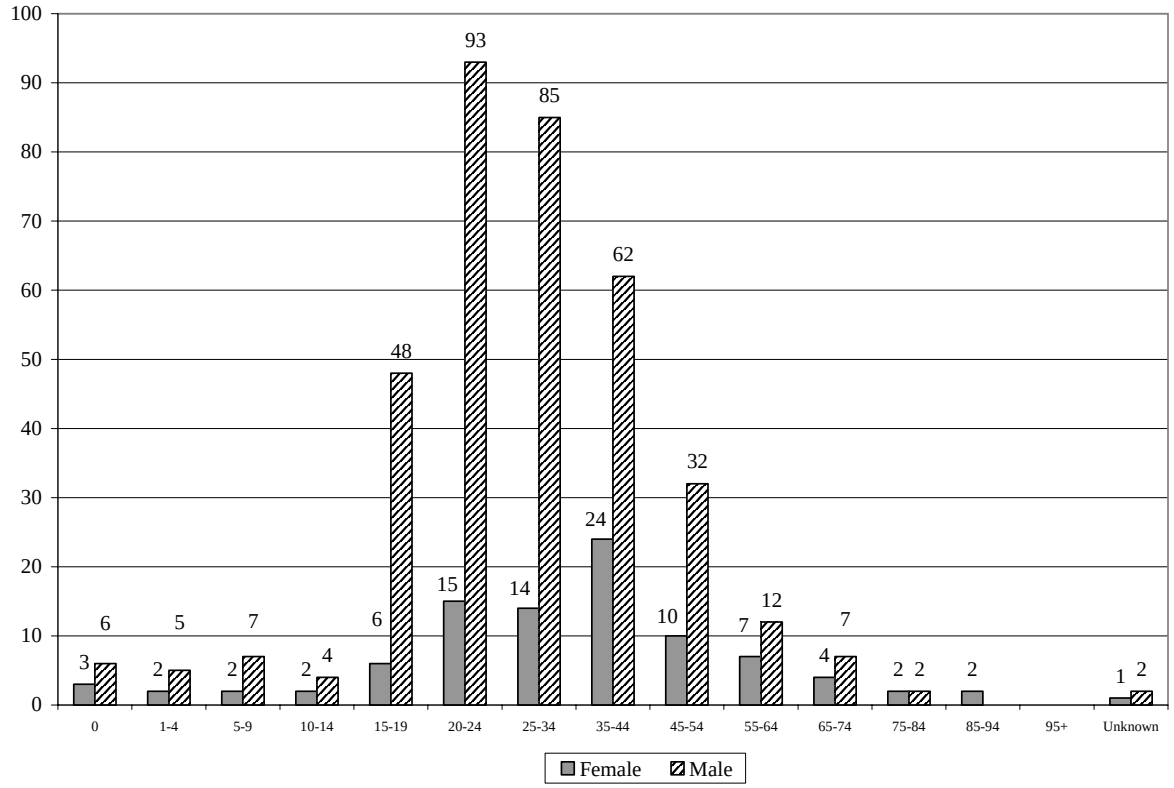


Figure 25. Homicide Deaths by Race/Ethnicity, 2003

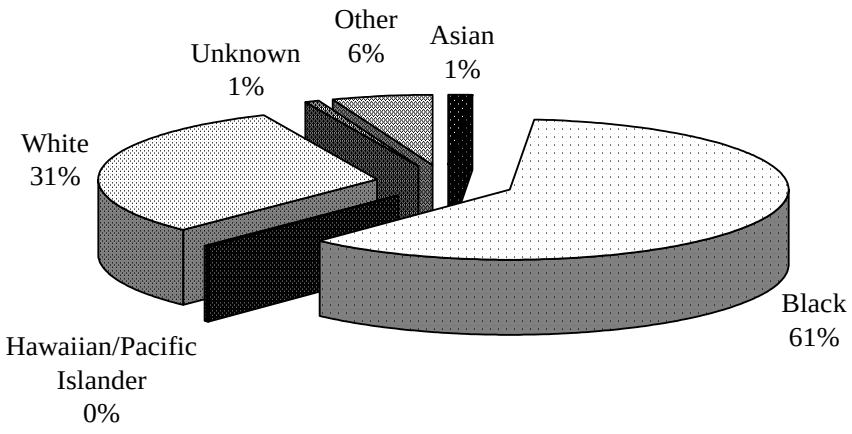


Figure 26. Homicide Deaths by Year of Death, 1999-2003

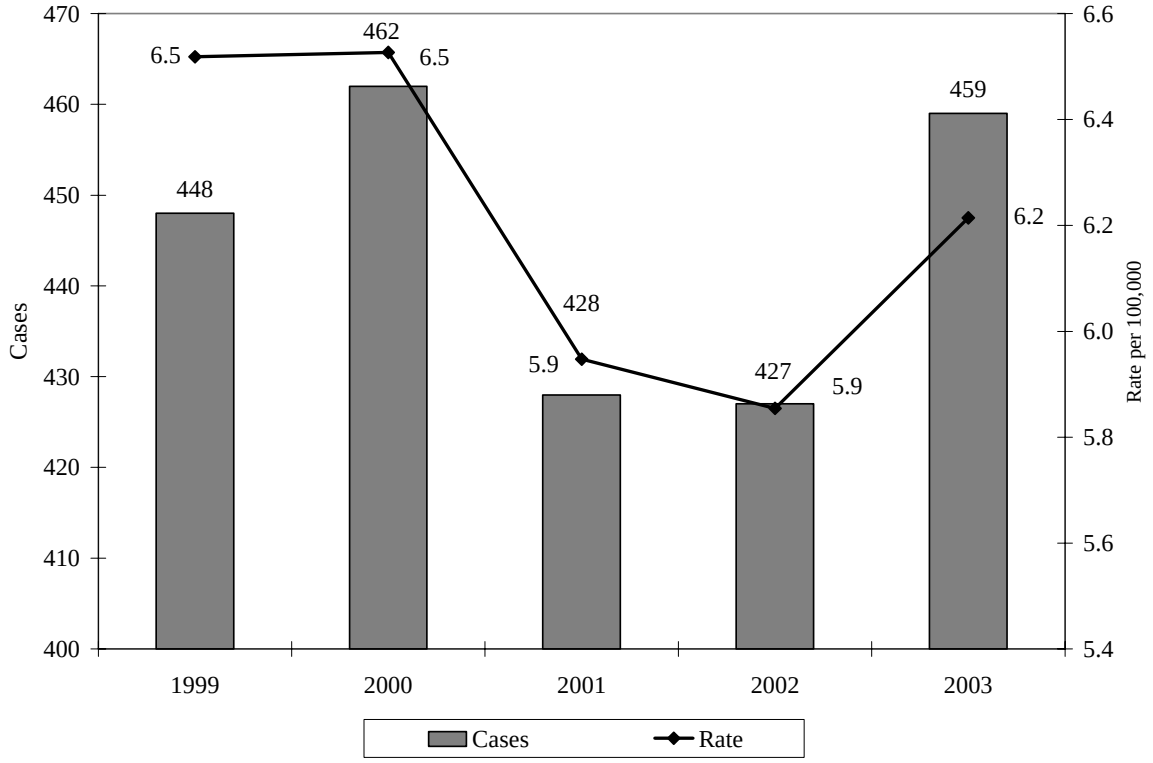


Figure 27. Homicide Deaths by Method of Death, 2003

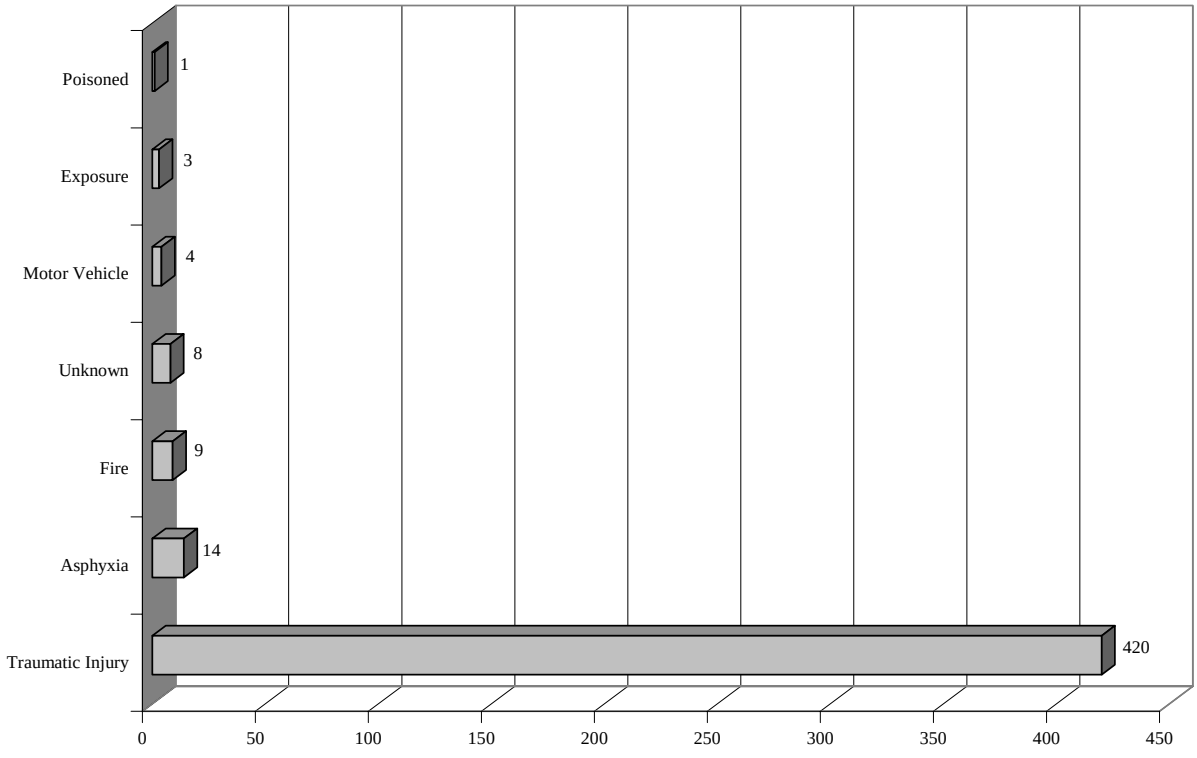


Table 14. Homicide Deaths by Method of Death, 2003

Method of Death	Total Cases	Autopsies
Asphyxia		
Strangled by assailant(s)	14	12
Exposure		
Exposure to cold	1	1
Neglect/Starvation	2	2
Fire		
Victim of intentionally set fire	9	9
Poisoned		
Judicial Execution	1	1
Traumatic Injury		
Beaten by assailant(s)	31	28
Electrocution - Judicial Execution	1	1
Shot by assailant(s) with firearm	338	333
- Handgun	(187)	(184)
- Rifle	(10)	(10)
- Shotgun	(27)	(27)
- Unspecified	(114)	(112)
Stabbed by assailant(s)	48	48
Traumatic - Other	2	2
Vehicular		
Struck with auto by assailant(s)	3	3
Vehicular - Other	1	1
Unknown		
Homicide - Other	8	7
Total	**459**	**448**

Figure 28. Homicide Deaths by Leading Methods of Death, 2003

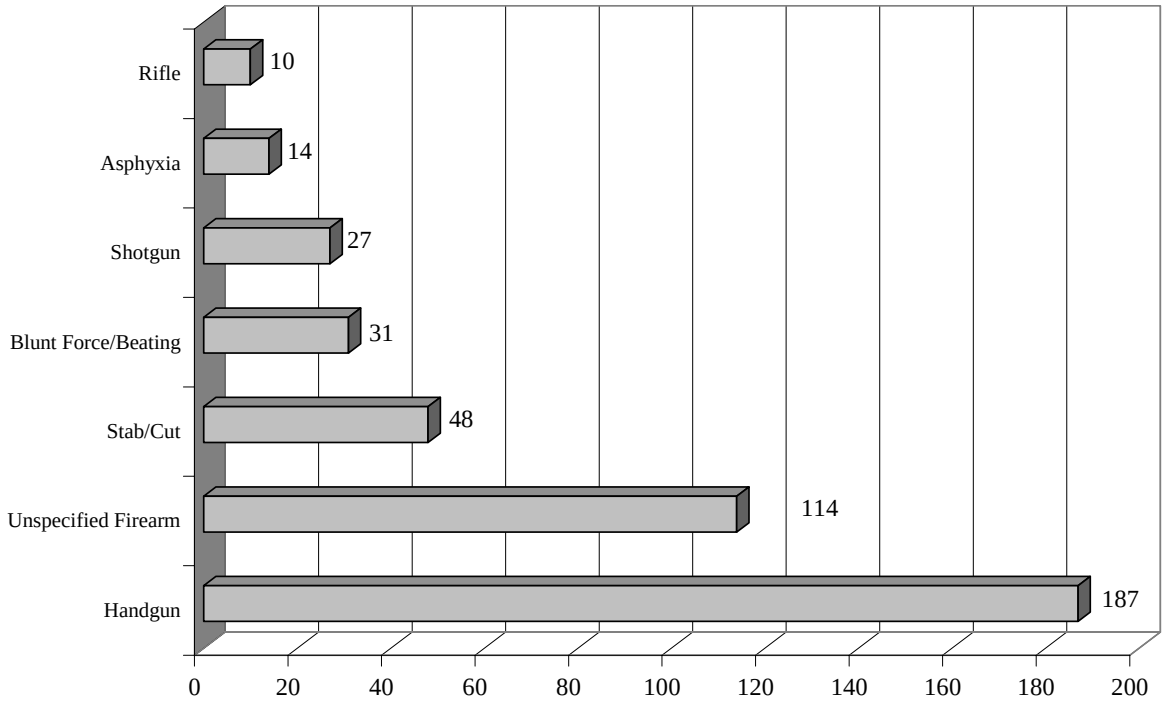


Table 15. Homicide Deaths by Locality of Death by Year of Death, 1999-2003

	Year of Death					
Locality of Death	**1999**	**2000**	**2001**	**2002**	**2003**	**Total**
Accomack	2	1	1	0	1	5
Albemarle	5	1	3	2	3	14
Alexandria	2	2	5	0	5	14
Alleghany	0	0	0	2	0	2
Amelia	0	1	0	0	1	2
Amherst	1	3	0	1	1	6
Appomattox	1	0	0	1	0	2
Arlington	3	10	2	5	3	23
Augusta	1	3	1	3	4	12
Bedford	2	1	1	2	0	6
Bland	0	1	0	0	0	1
Botetourt	0	2	0	0	1	3
Bristol	1	1	2	0	0	4
Brunswick	1	1	0	2	2	6
Buchanan	1	2	1	4	2	10
Buckingham	0	0	0	0	2	2
Campbell	2	1	0	0	0	3
Caroline	0	0	1	0	0	1
Carroll	1	2	0	1	1	5
Charles City	0	1	0	0	0	1
Charlotte	2	0	0	2	1	5
Charlottesville	6	7	7	5	4	29
Chesapeake	6	9	8	5	4	32
Chesterfield	8	6	6	5	7	32
Clarke	2	0	0	1	1	4
Colonial Heights	1	0	0	0	0	1
Covington	0	0	0	1	0	1
Craig	0	0	0	1	0	1
Culpepper	0	1	3	1	2	7
Cumberland	0	2	0	0	0	2
Danville	9	10	6	8	5	38
Dickenson	0	1	0	2	0	3
Dinwiddie	1	1	2	2	2	8
Emporia	0	2	2	0	0	4
Essex	0	1	3	1	0	5
Fairfax City	0	0	0	1	0	1
Fairfax	26	21	23	19	15	104
Falls Church	1	0	0	0	0	1
Fauquier	3	0	3	1	2	9
Floyd	0	1	2	0	0	3
Fluvanna	0	1	0	0	0	1
Franklin	2	2	2	2	3	11
Frederick	0	0	0	2	1	3
Fredericksburg	4	4	3	1	0	12
Galax	4	1	2	0	0	7
Giles	0	0	0	1	0	1
Gloucester	1	2	1	3	2	9
Goochland	0	0	2	0	2	4
Grayson	0	0	2	1	0	3
Greene	0	0	0	0	4	4
Greensville	15	9	3	6	2	35
Halifax	2	4	3	8	4	21
Hampton	14	8	10	7	12	51
Hanover	2	3	1	4	2	12
Harrisonburg	1	4	1	0	0	6
Henrico	12	8	8	7	19	54
Henry	3	2	1	6	2	14
Highland	0	0	0	0	1	1
Hopewell	5	1	1	3	2	12
Isle of Wight	1	1	1	0	0	3
James City	0	1	3	0	0	4
King & Queen	0	0	3	0	2	5
King George	1	1	1	0	0	3
King William	1	0	0	1	1	3
Lancaster	0	0	3	0	0	3
Lee	1	2	2	1	2	8

Table 15. Homicide Deaths by Locality of Death by Year of Death, 1999-2003 ~ *continued*

	Year of Death					
Locality of Death	**1999**	**2000**	**2001**	**2002**	**2003**	**Total**
Loudoun	1	1	6	3	1	12
Louisa	0	3	1	1	1	6
Lunenburg	0	0	0	1	0	1
Lynchburg	6	6	5	12	7	36
Madison	0	0	0	1	0	1
Manassas	2	2	0	1	5	10
Martinsville	6	11	8	3	1	29
Mecklenburg	3	2	2	3	1	11
Montgomery	0	1	0	1	1	3
Nelson	0	1	2	0	0	3
New Kent	2	1	0	2	0	5
Newport News	20	23	34	23	29	129
Norfolk	61	61	51	54	59	286
Northampton	1	3	1	0	1	6
Northumberland	0	0	1	0	0	1
Norton	1	1	0	0	0	2
Nottoway	1	1	1	1	0	4
Orange	0	1	1	1	0	3
Page	1	0	0	0	0	1
Patrick	0	1	1	0	0	2
Petersburg	8	9	5	7	7	36
Pittsylvania	0	3	5	7	2	17
Portsmouth	12	16	11	8	11	58
Powhatan	0	1	1	1	0	3
Prince Edward	0	1	3	1	0	5
Prince George	1	1	1	1	1	5
Prince William	11	5	8	4	8	36
Pulaski	2	2	2	1	0	7
Radford	0	1	0	0	0	1
Rappahannock	1	0	0	0	1	2
Richmond City	92	95	83	102	115	487
Richmond	1	0	0	0	0	1
Roanoke City	13	14	18	20	22	87
Roanoke	0	1	0	2	1	4
Rockbridge	0	0	0	0	3	3
Rockingham	1	0	1	1	0	3
Russell	0	4	0	2	1	7
Salem	0	0	1	0	0	1
Scott	0	0	0	1	1	2
Shenandoah	0	1	0	0	3	4
Smyth	0	0	0	3	0	3
Southampton	4	1	1	0	2	8
Spotsylvania	1	1	0	3	4	9
Stafford	0	2	1	1	4	8
Staunton	0	0	1	0	1	2
Suffolk	5	3	6	4	2	20
Surry	1	1	0	1	0	3
Sussex	2	2	3	0	0	7
Tazewell	0	3	1	2	2	8
Virginia Beach	12	7	11	5	23	58
Warren	0	1	0	1	0	2
Washington	2	3	3	2	2	12
Waynesboro	1	2	0	0	0	3
Westmoreland	3	2	0	0	0	5
Williamsburg	0	0	1	2	2	5
Winchester	6	3	2	5	2	18
Wise	1	1	2	2	1	7
Wythe	2	2	2	0	0	6
York	1	2	1	0	0	4
Out of State	3	4	5	0	2	14
Total	**448**	**462**	**428**	**427**	**459**	**2224**

UNDETERMINED DEATHS

Cause of death was not able to be determined in 58.3 percent of deaths with an undetermined manner. For undetermined deaths where cause of death was determined, drug use was the most frequently associated cause (40.0%).

Figure 29. Undetermined Deaths by Gender by Age Group, 2003

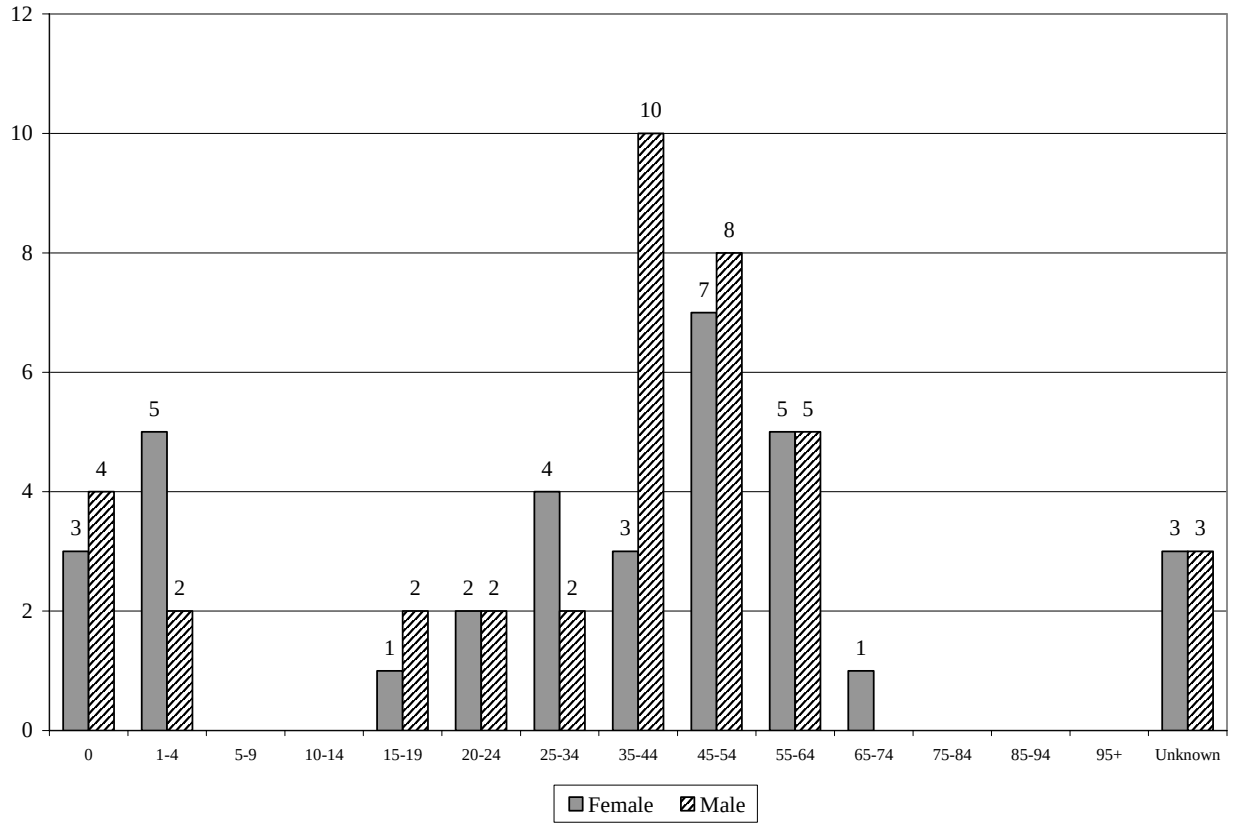


Figure 30. Undetermined Deaths by Race/Ethnicity, 2003

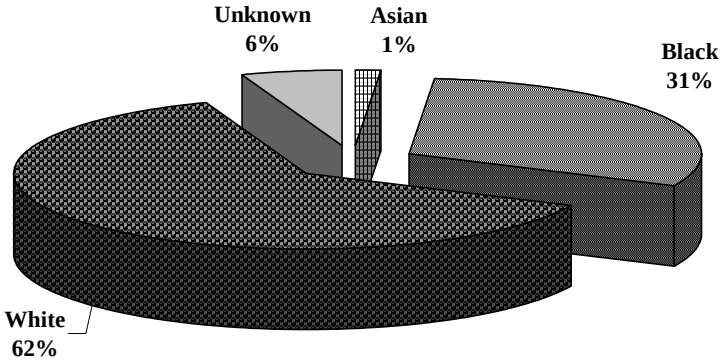


Figure 31. Undetermined Deaths by Year of Death, 1999-2003

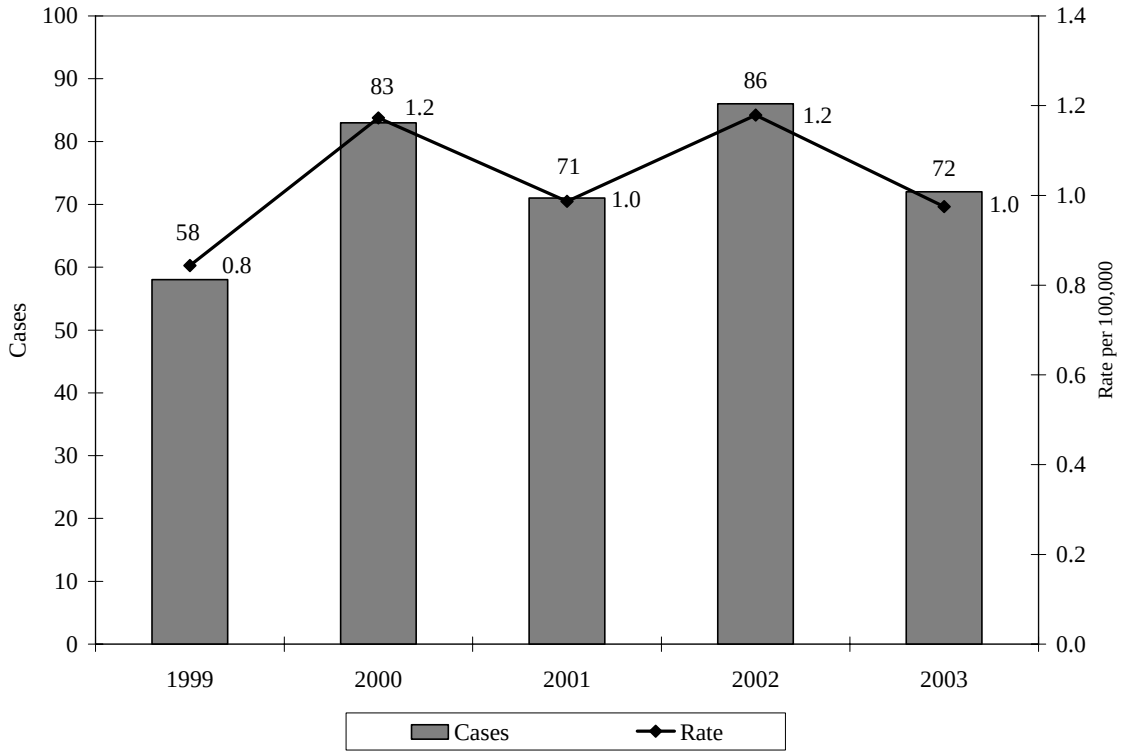


Figure 32. Undetermined Deaths by Method of Death, 2003

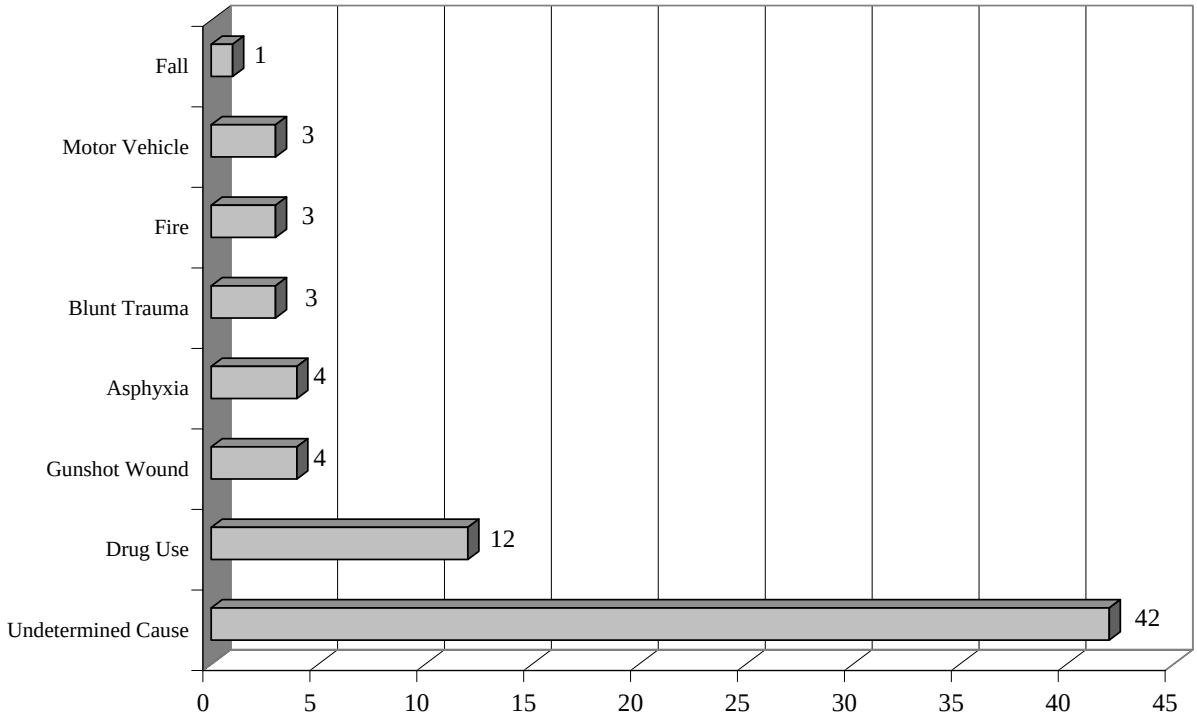


Table 16. Undetermined Deaths by Method of Death, 2003

Undetermined Method of Death	Total Cases	Autopsied
Undetermined after autopsy and/or toxicology	42	40
Undetermined but Method Determined		
Asphyxia		
Mechanical/Positional	1	1
Drowning	3	3
Drug Use		
Ingested/Injected medication	11	9
Ingested alcohol (ethanol)	1	1
Fall		
Fall from height/same height	1	1
Fire		
Explosion/Victim of fire	3	3
Traumatic Injury		
Blunt trauma	3	3
Gunshot wound	4	4
Vehicular		
Driver/Passenger/Pedestrian	3	3
Total	**72**	**68**

SECTION 4: DEATHS OF CHILDREN (18 Years of Age and Younger)

The 473 deaths of people 18 years of age and younger represented 8.1 percent of all deaths investigated by the OCME in 2003, and an increase of 9.6 percent from the number of childhood deaths in 2002. Male decedents comprised 64.1 percent of the total deaths in children. The most common manner of death in children was accident, contributing 43.4 percent of the total. Accidents involving vehicles were the most common cause of accidental deaths in children (60.7% of the total). Natural deaths comprised 34.7 percent of deaths of children and unnatural deaths 62.6 percent. Of those natural deaths, Sudden Infant Death Syndrome (SIDS) represented the most frequently identified cause (50.0%). Firearms played a role in fifty-two unnatural deaths (accounting for 17.6% of all unnatural deaths), 1 accident (1.9%), 15 suicides (28.8%) and 37 homicides (71.1%) among children.

During 2003, Virginia experienced the lowest number of suicides among children in the previous five years. In 2003, there was an 18.9 percent decrease in suicides among children from the previous year. Suicide deaths were more common among males (93.3%) than females, and whites represented the majority of suicides (70.0%). Males aged 17 and 18 together accounted for greater than half of all child suicide deaths.

Of the 62 homicide deaths of children, blacks represented greater than half of those deaths (57%). Homicide deaths occurred most frequently in the months of January and April (9 each), and on the day of Saturday (14); Mondays had the least number of deaths (3).

The State Child Fatality Review Team is an additional resource for comprehensive information on child death in Virginia. The Team's purpose is to systematically analyze deaths among Virginia's children to make recommendations for the prevention of these deaths. Chaired by the Chief Medical Examiner, the Team is a multi-disciplinary group including representatives from law enforcement, fire, social services departments, state medical associations, and other local and state agencies. Reviewed deaths may include violent and unnatural child deaths, sudden child deaths in the first 18 months of life, and deaths where the cause and manner was not determined with reasonable medical certainty. The Team's reviews are governed by the principles and practices of public health. Published reports are available at the following website: www.vdh.state.va.us/medexam/Fatalreview.asp.

Figure 33. Deaths of Children, 18 Years and Younger, by Manner of Death, 2003

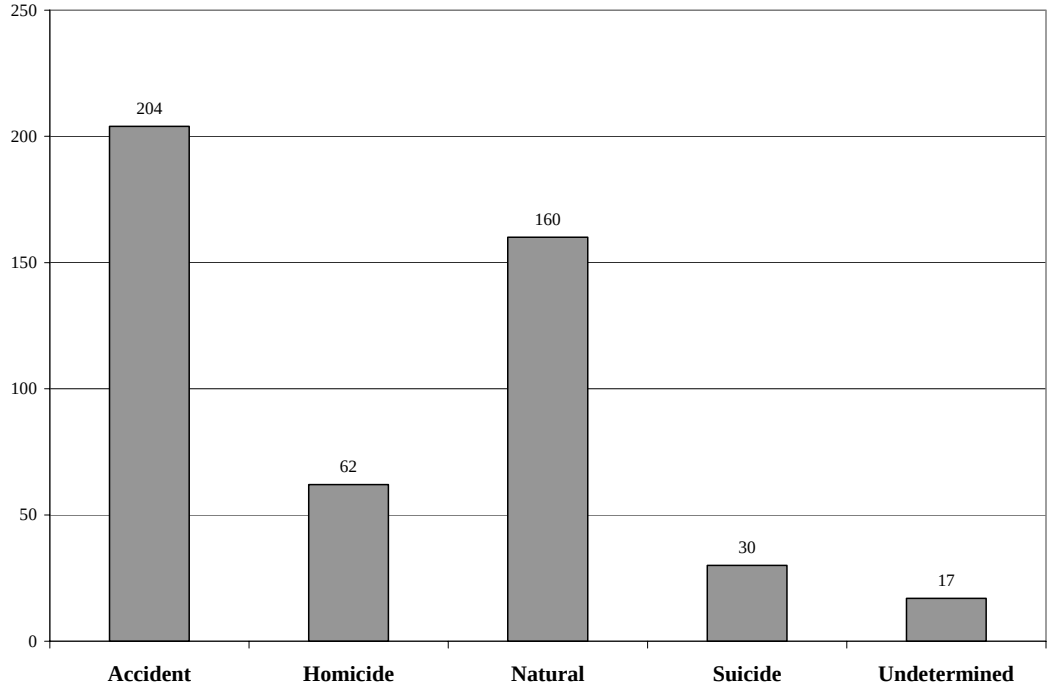


Figure 34. Deaths of Children, 18 Years and Younger, by Gender by Age, 2003

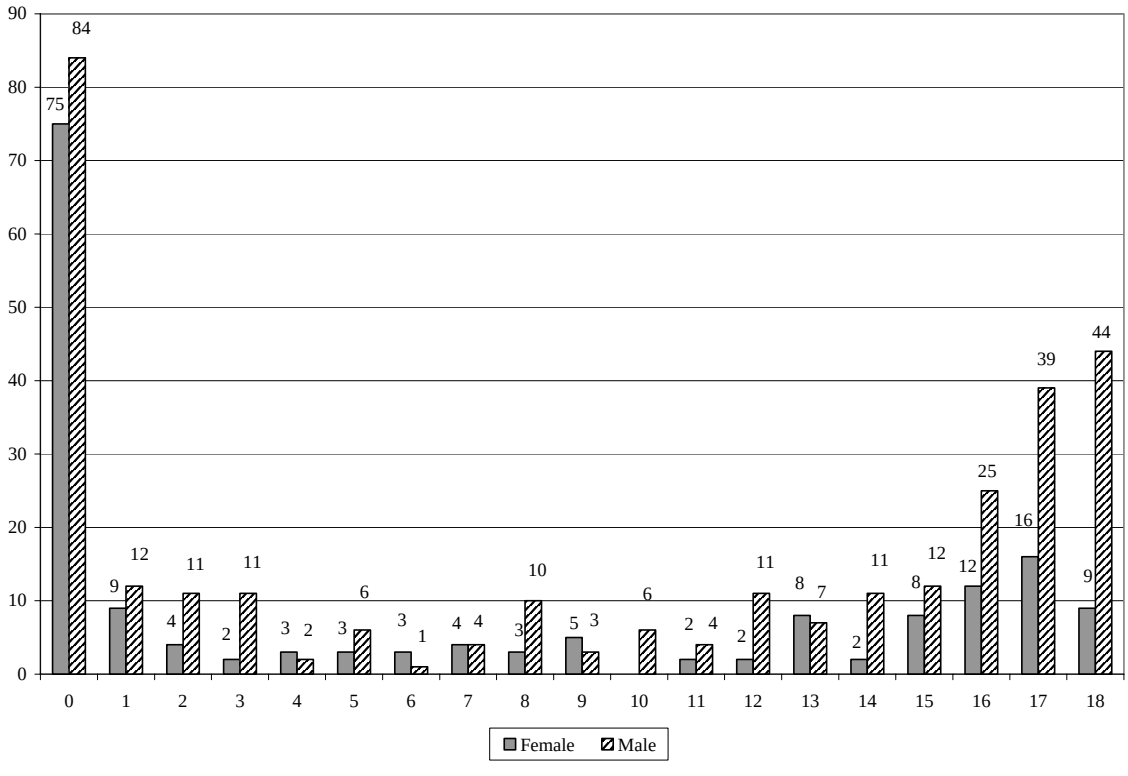


Figure 35. Deaths of Children, 18 Years and Younger, by Manner by Race/Ethnicity, 2003

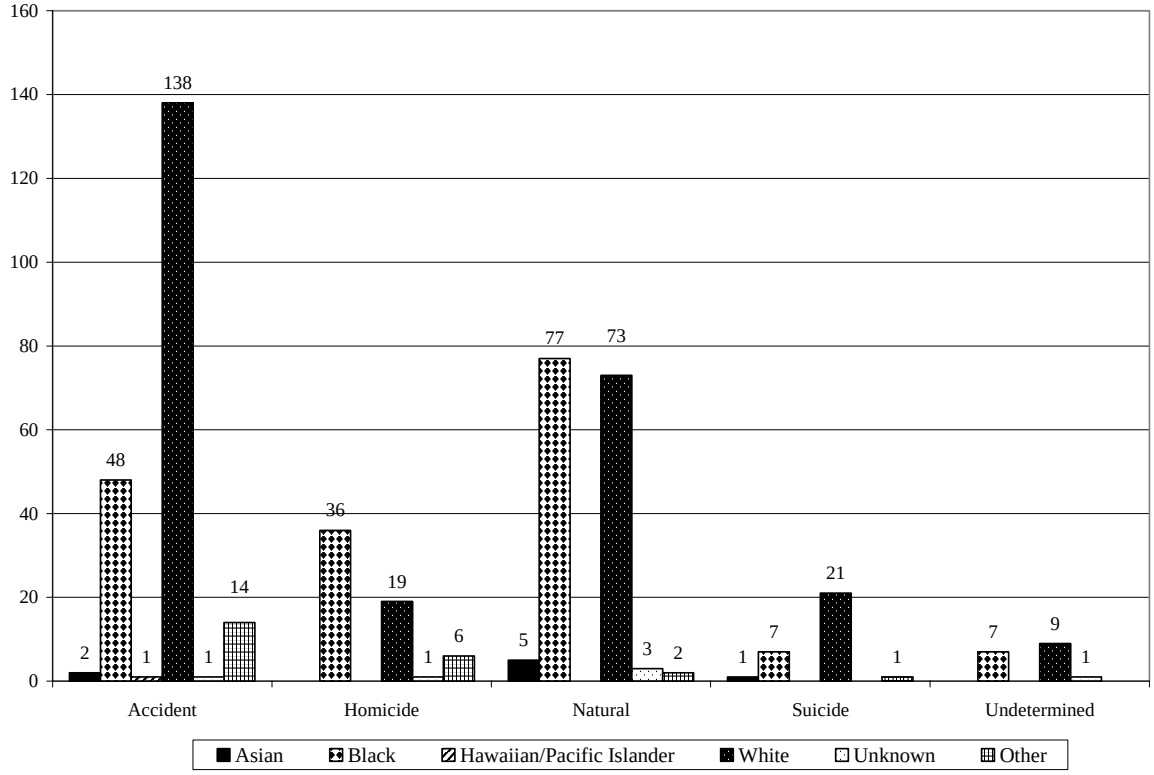


Figure 36. Proportion of Deaths of Children, 18 Years and Younger, by Race/Ethnicity, 2003

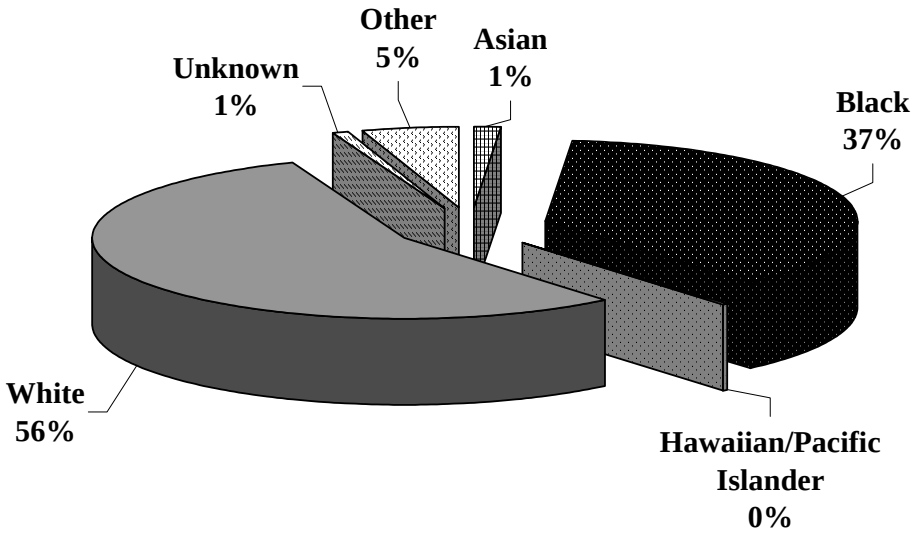


Table 17. Deaths of Children, 18 Years and Younger, by Cause of Death, 2003

Natural Deaths	Total Cases	Autopsied
Asthma	3	3
Congenital Defect	6	5
Dehydration	2	2
Diabetes	1	1
Emboli	1	1
Epilepsy	1	1
Heart Disease	12	11
Intrauterine Fetal Death	7	7
Leukemia	1	1
Maternal and Fetal Complications of Birth	10	10
Medical Treatment	2	1
Natural - Other	20	20
Obesity	1	1
Obstruction (blockage)	1	1
Pneumonia	7	6
Pulmonary Edema	1	1
Renal Failure	1	1
Sepsis	5	5
SIDS	82	81
Subtotal	**164**	**159**
Unnatural Deaths		
Asphyxia	20	17
Carbon Monoxide Poisoning	20	10
Child Abuse	4	4
Drowning	28	13
Ethanol Intoxication	2	2
Exposure	3	3
Gunshot Wound	52	51
Hanging	11	6
Head and Neck Injuries	79	13
Multiple Injuries	60	7
Stab Wound	3	3
Subdural Hematoma	2	0
Substance Poisoning	8	8
Unnatural - Other	4	3
Subtotal	**296**	**140**
Undetermined After Autopsy and/or Investigation	13	13
Total	**473**	**312**

Figure 37. Natural Deaths of Children, 18 Years and Younger, by Gender by Age Group, 2003

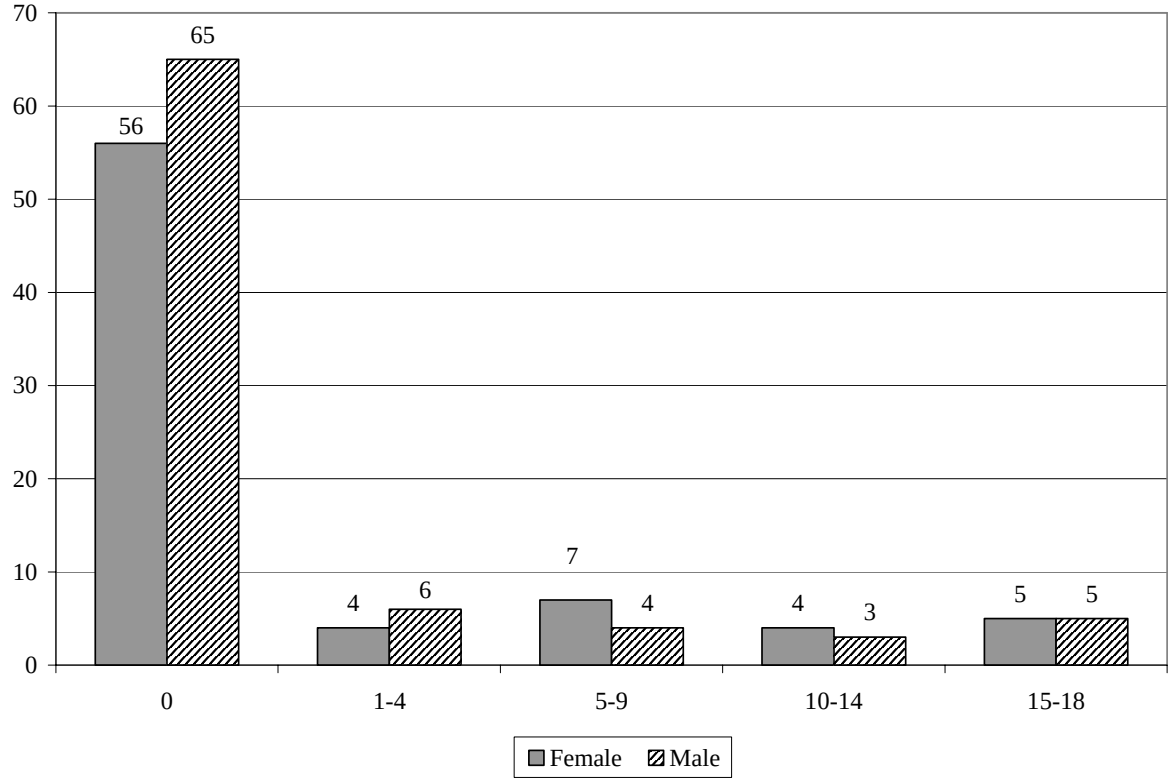


Figure 38. Proportion of Natural Deaths of Children, 18 Years and Younger, by Race/Ethnicity, 2003

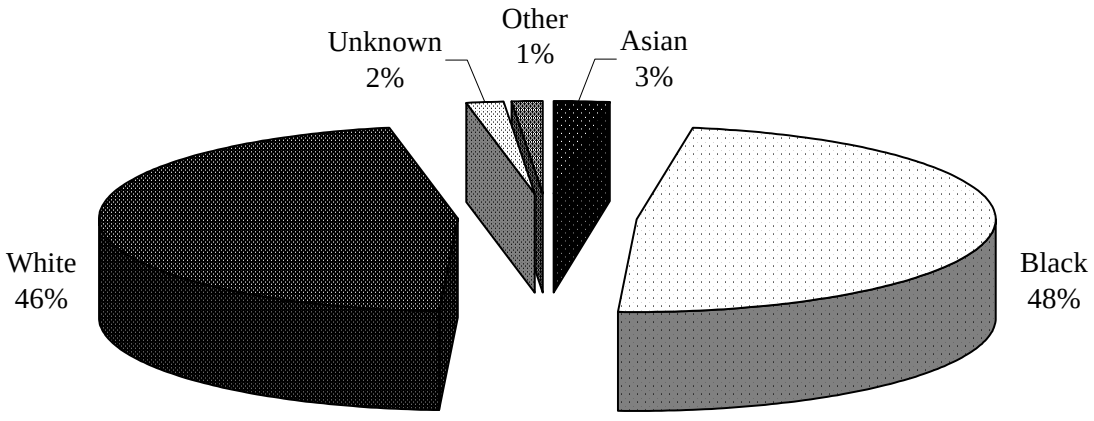


Figure 39. Accidental Deaths of Children, 18 Years and Younger, by Gender by Age Group, 2003

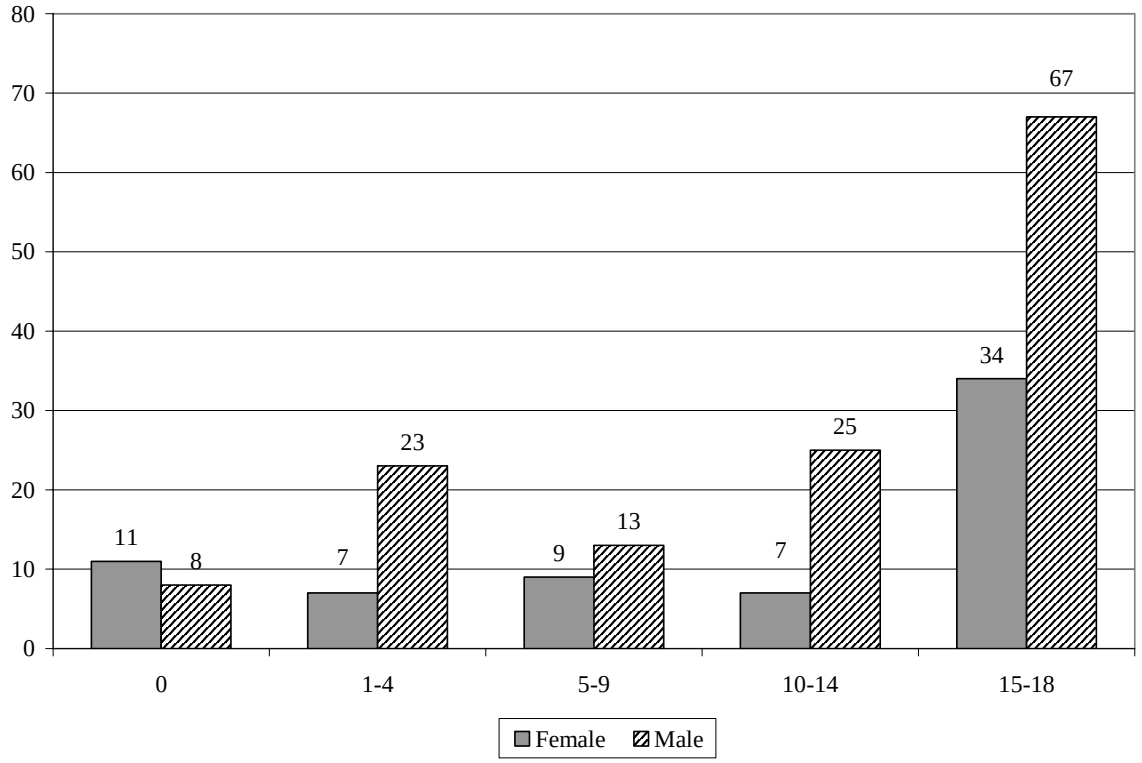


Figure 40. Proportion of Accidental Deaths of Children, 18 Years and Younger, by Race/Ethnicity, 2003

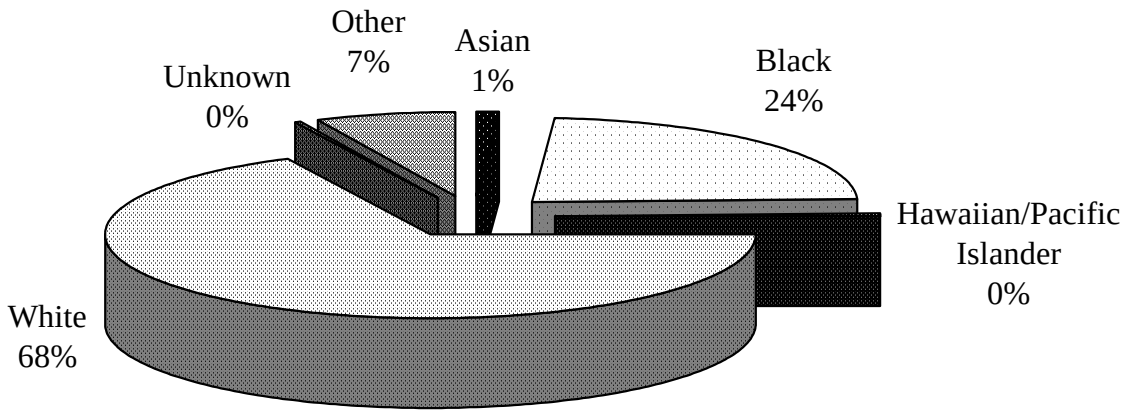


Figure 41. Accidental Deaths of Children, 18 Years and Younger, by Month of Death, 2003

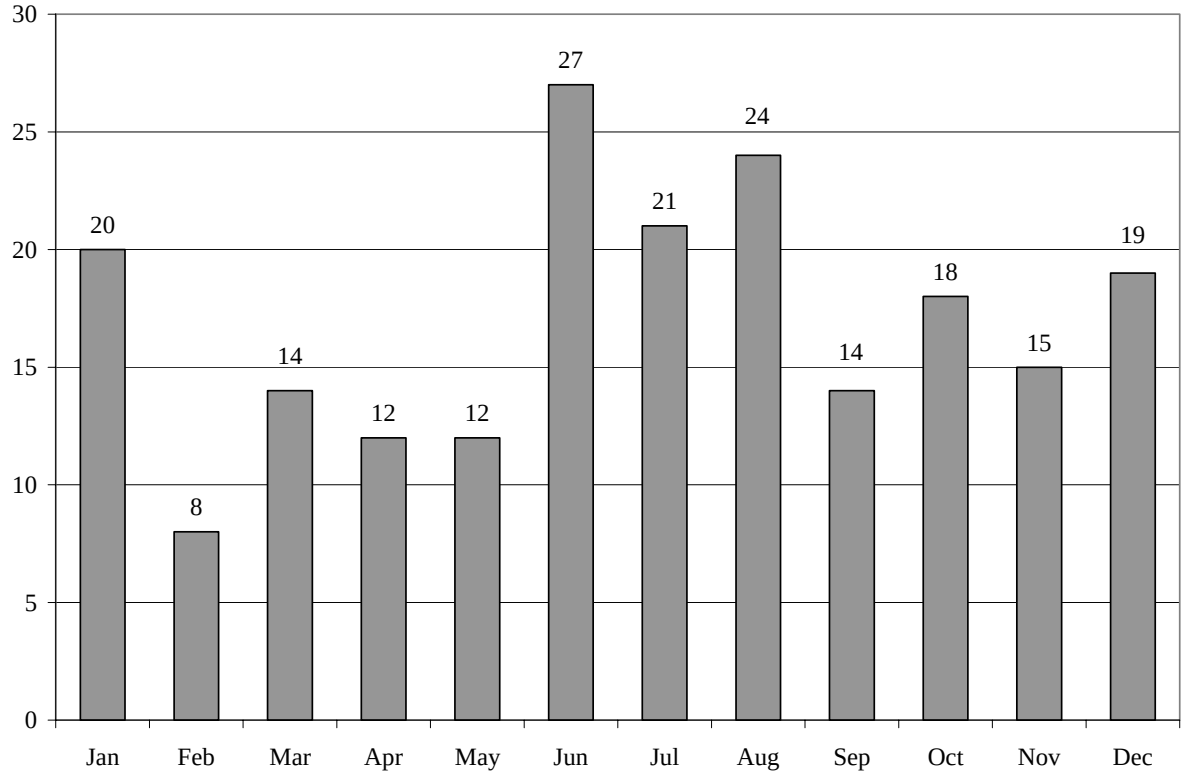


Figure 42. Accidental Deaths of Children, 18 Years and Younger, by Day of Death, 2003

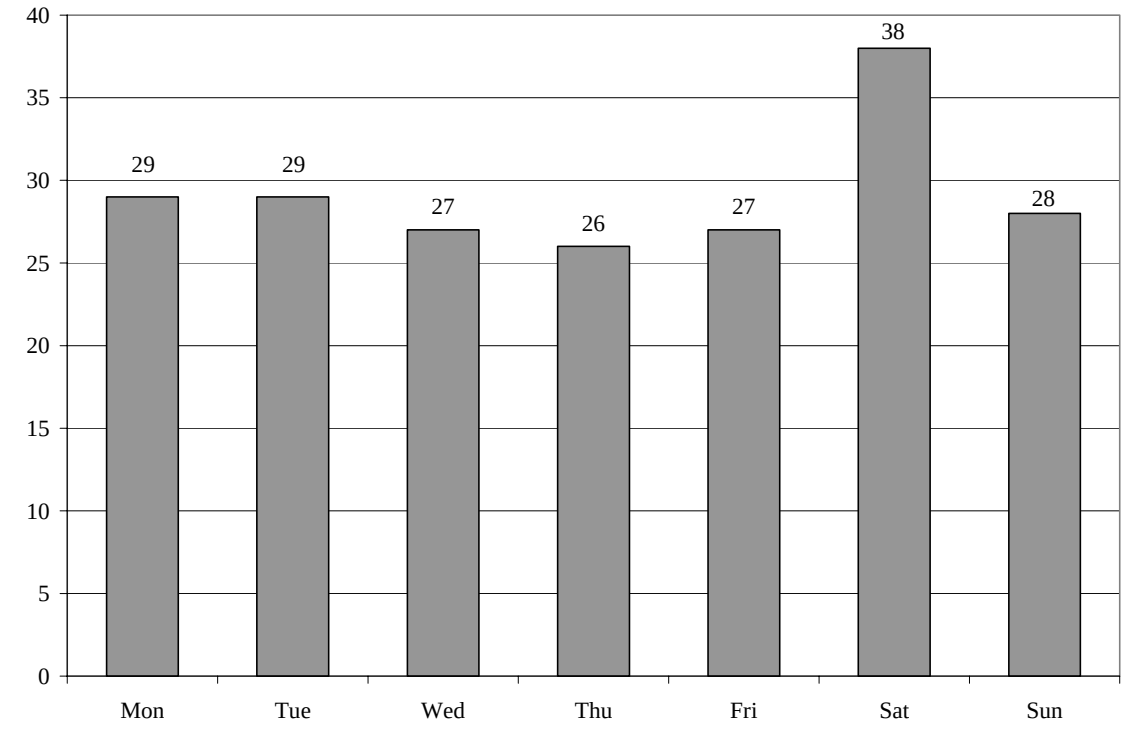


Table 18. Accidental Deaths of Children, 18 Years and Younger, by Method of Death, 2003

Method of Death	Total Cases	Autopsied
Asphyxia		
Accidental ligature strangulation	3	1
Choked on foreign object	2	2
Crushed/Suffocated	6	6
Drowned	28	13
Mechanical/Positional	7	6
Drug Use		
Ingested alcohol (ethanol)	2	2
Ingested and/or injected medication	7	7
Electrical		
Electrocuted	1	1
Exposure		
Exposed to cold, heat	3	3
Fall		
Fall from height	3	2
Fire		
Victim of fire	16	6
Traumatic Injury		
Accidental gunshot wound	1	1
Machinery related	1	0
Vehicular		
Driver of automobile	40	2
Passenger in automobile	65	3
Pedestrian struck by automobile	14	1
Vehicular - Other	5	0
Total	**204**	**56**

Figure 43. Suicide Deaths of Children, 18 Years and Younger, by Gender by Age, 2003

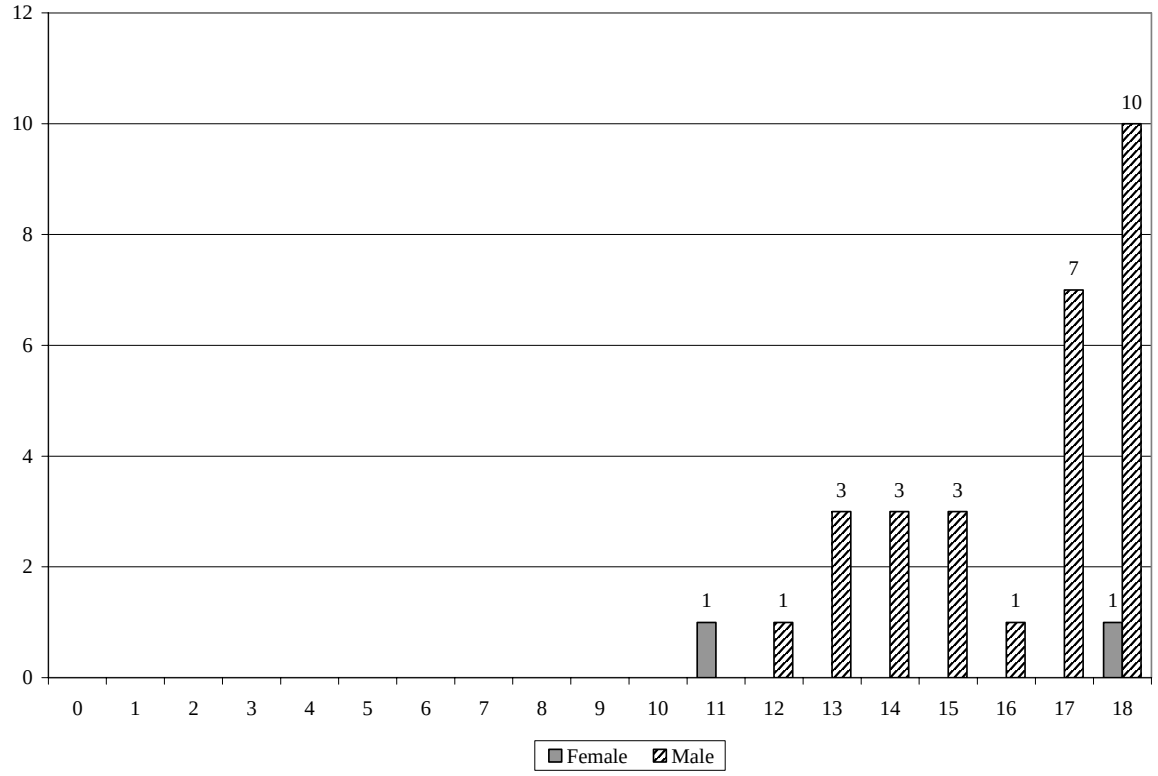


Figure 44. Proportion of Suicide Deaths of Children, 18 Years and Younger, by Race/Ethnicity, 2003

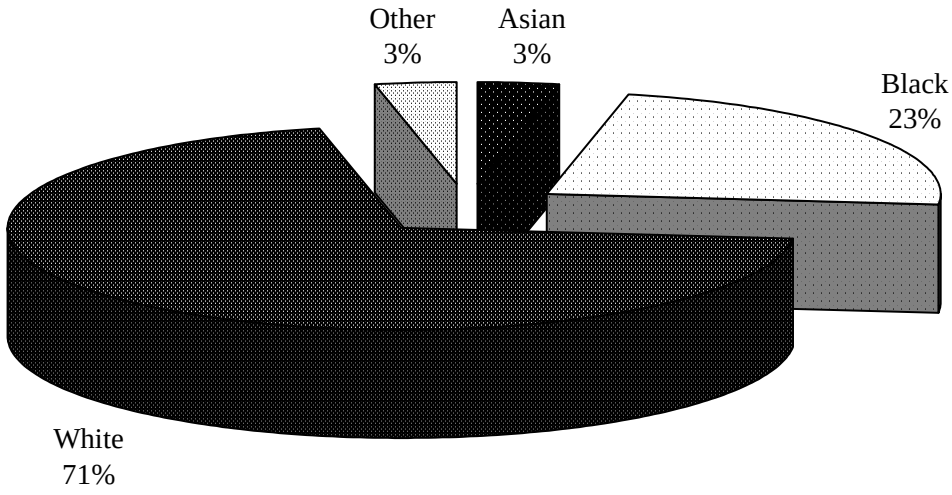


Figure 45. Suicide Deaths of Children, 18 Years and Younger, by Month of Death, 2003

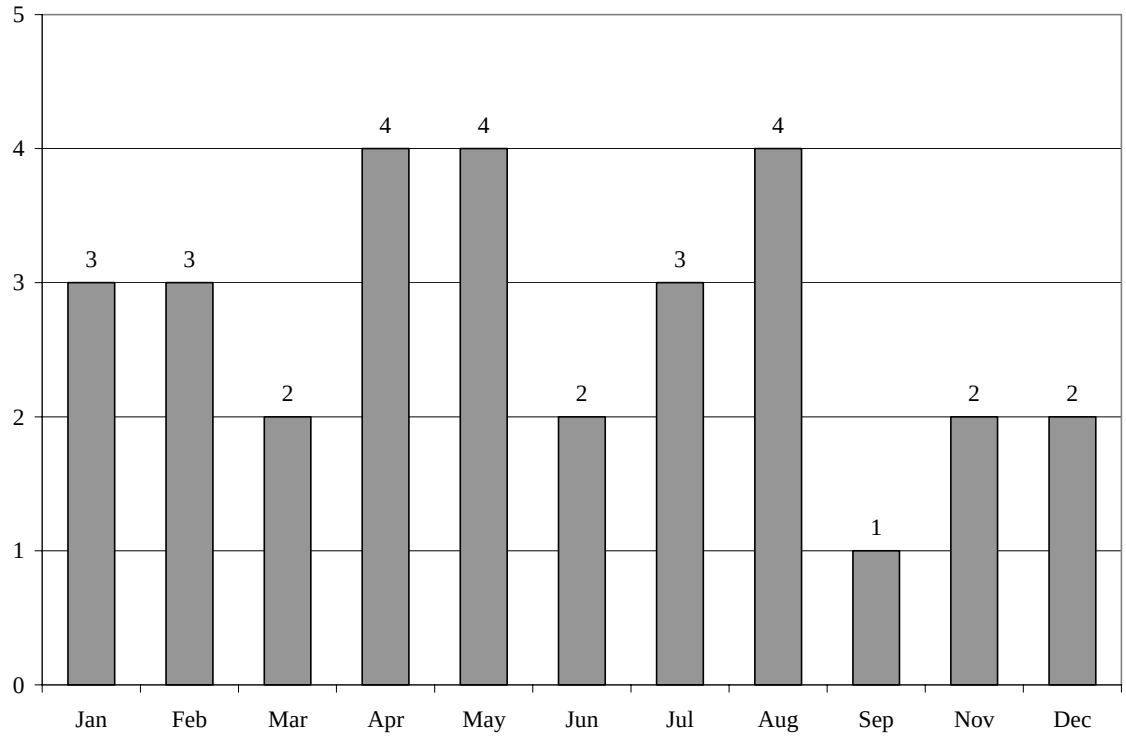


Figure 46. Suicide Deaths of Children, 18 Years and Younger, by Day of Death, 2003

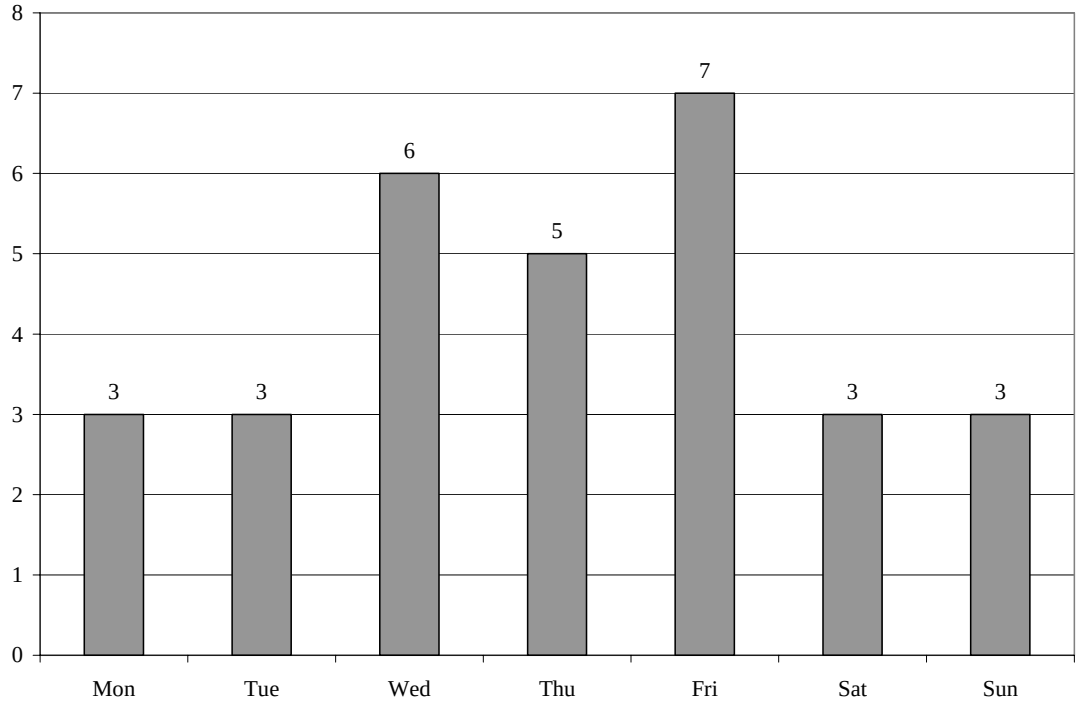


Table 19. Suicide Deaths of Children, 18 Years and Younger, by Method of Death, 2003

Method of Death	Total Cases	Autopsied
Shot self with firearm	15	15
- Handgun	(8)	(8)
- Shotgun	(4)	(4)
- Rifle	(2)	(2)
- Unspecified Firearm	(1)	(1)
Hanged self	8	5
Jumped from height	2	2
Poisoned self with drugs	2	2
Asphyxia	1	1
Burned self	1	1
Carbon Monoxide Poisoning	1	0
Total	**30**	**26**

Figure 47. Suicide Deaths of Children, 18 Years and Younger, by Method of Death, 2003

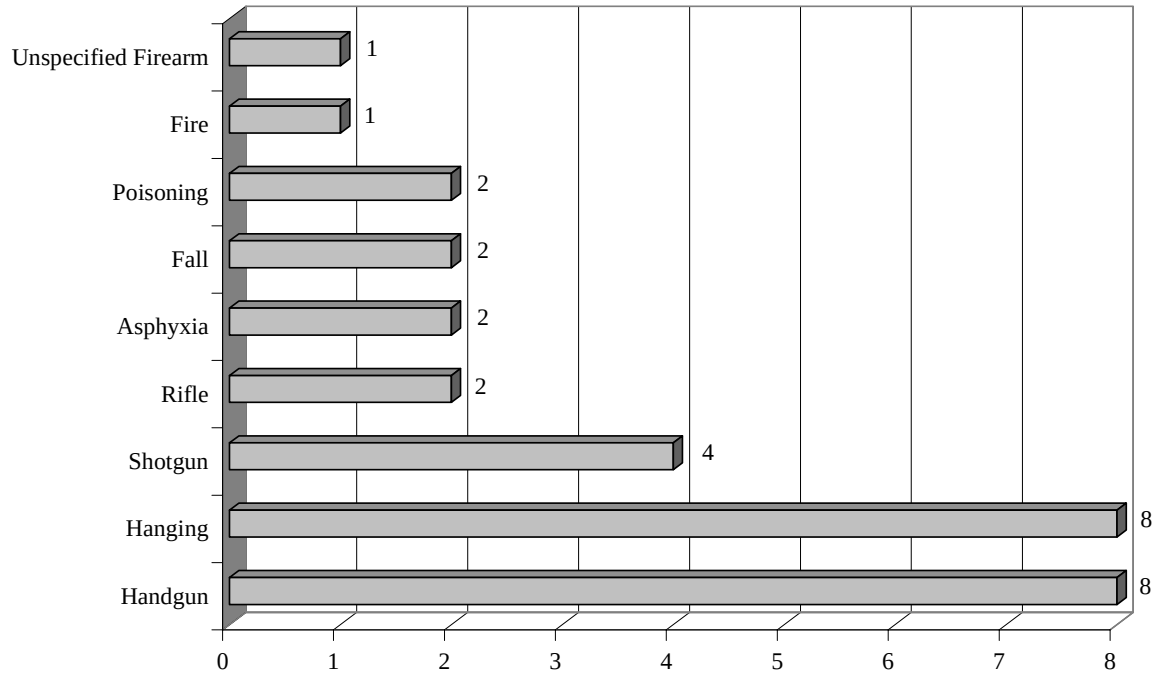


Figure 48. Suicide Deaths of Children, 18 Years and Younger, by Year of Death, 1999-2003

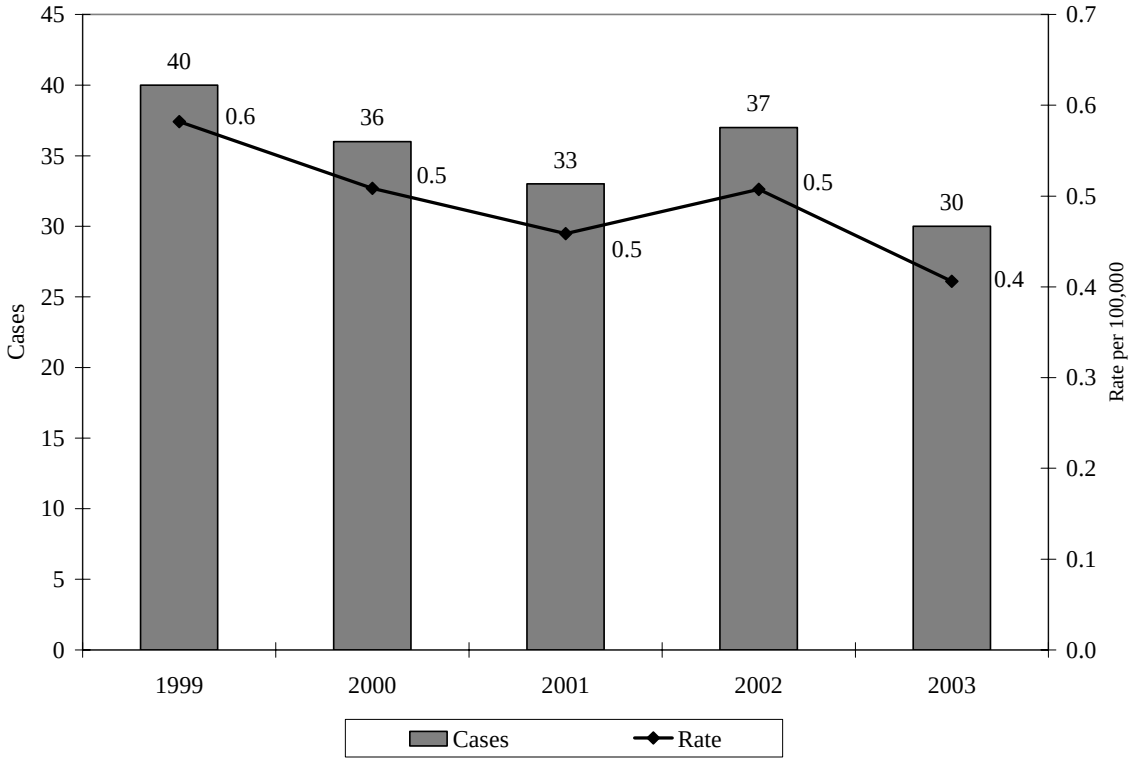


Figure 49. Homicide Deaths of Children, 18 Years and Younger, by Gender by Age, 2003

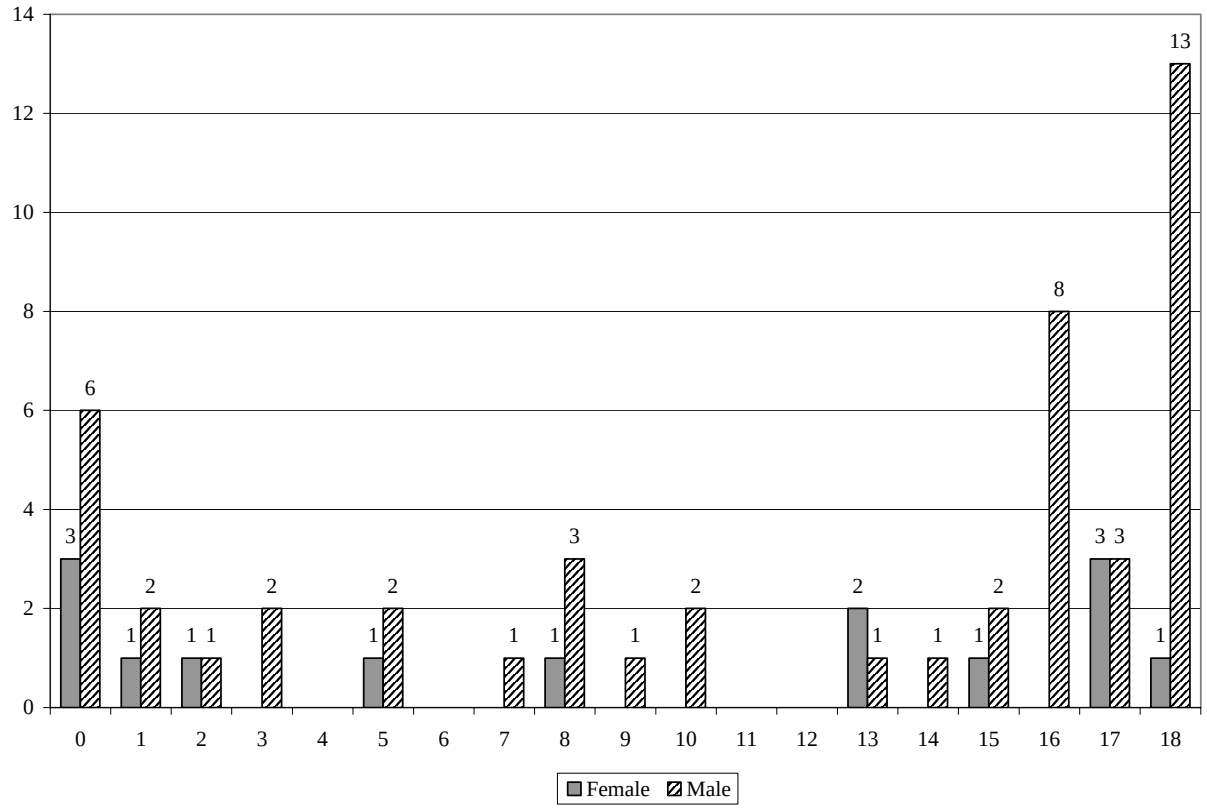


Figure 50. Proportion of Homicide Deaths of Children, 18 Years and Younger, by Race/Ethnicity, 2003

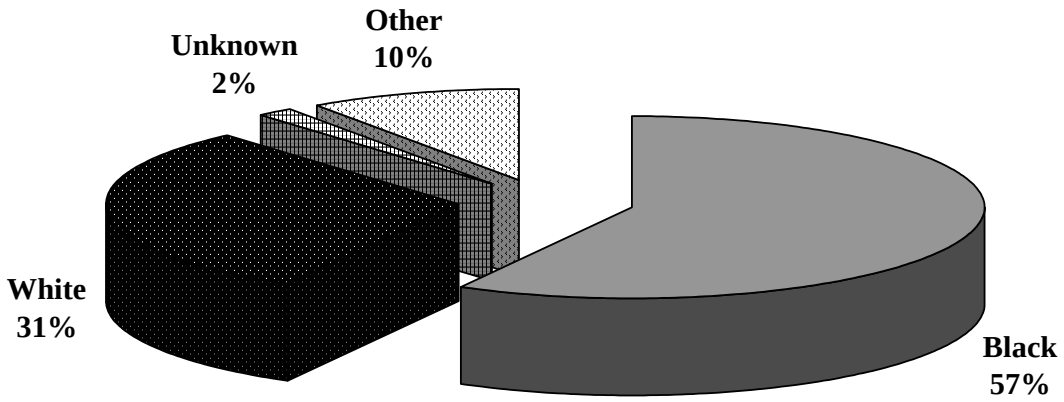


Figure 51. Homicide Deaths of Children, 18 Years and Younger, by Month of Death, 2003

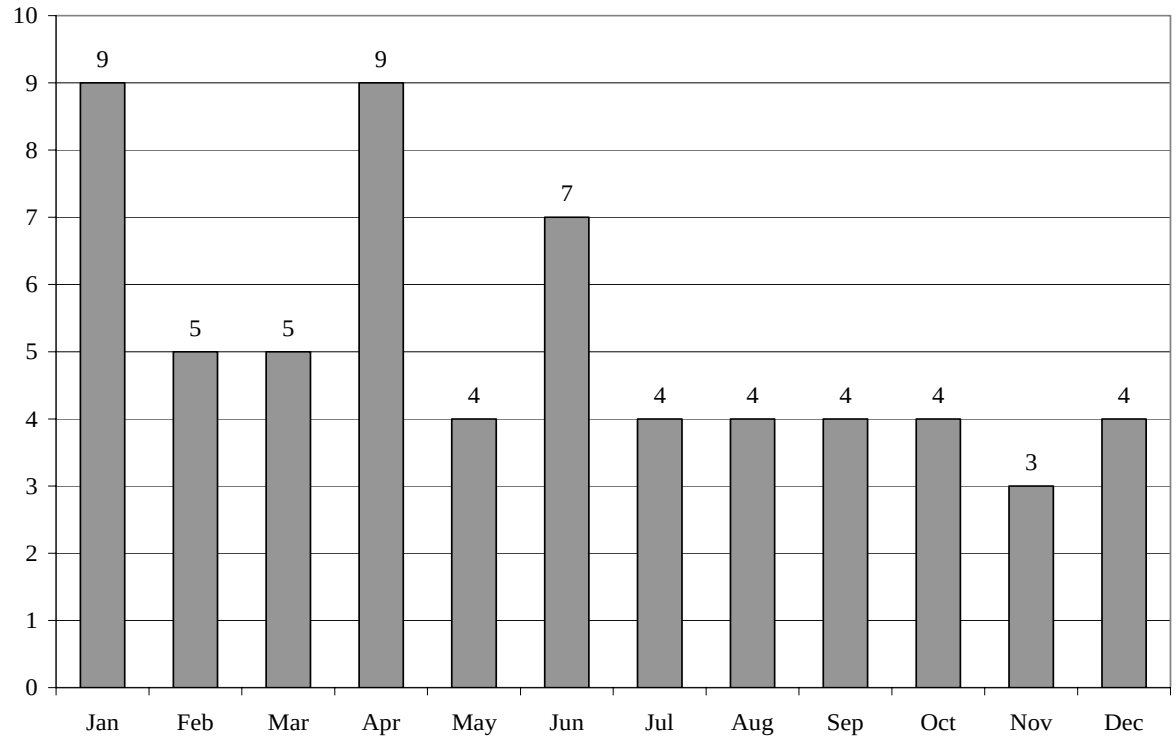


Figure 52. Homicide Deaths of Children, 18 Years and Younger, by Day of Death, 2003

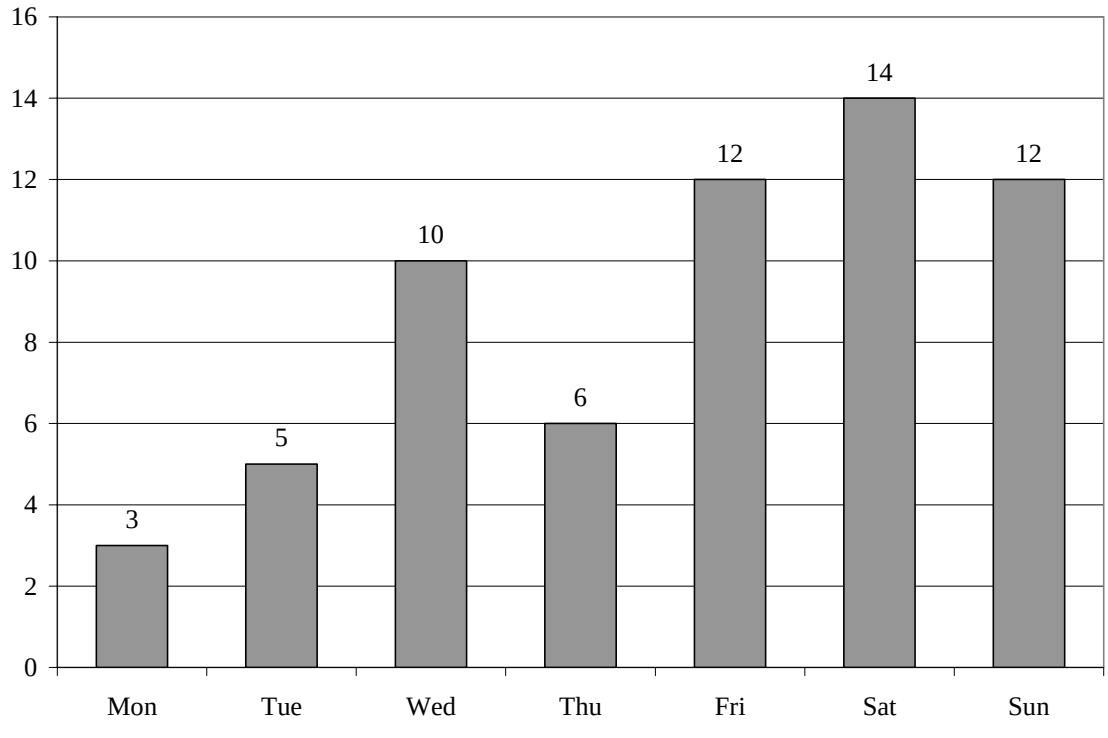


Figure 53. Homicide Deaths of Children, 18 Years and Younger, by Method of Death, 2003

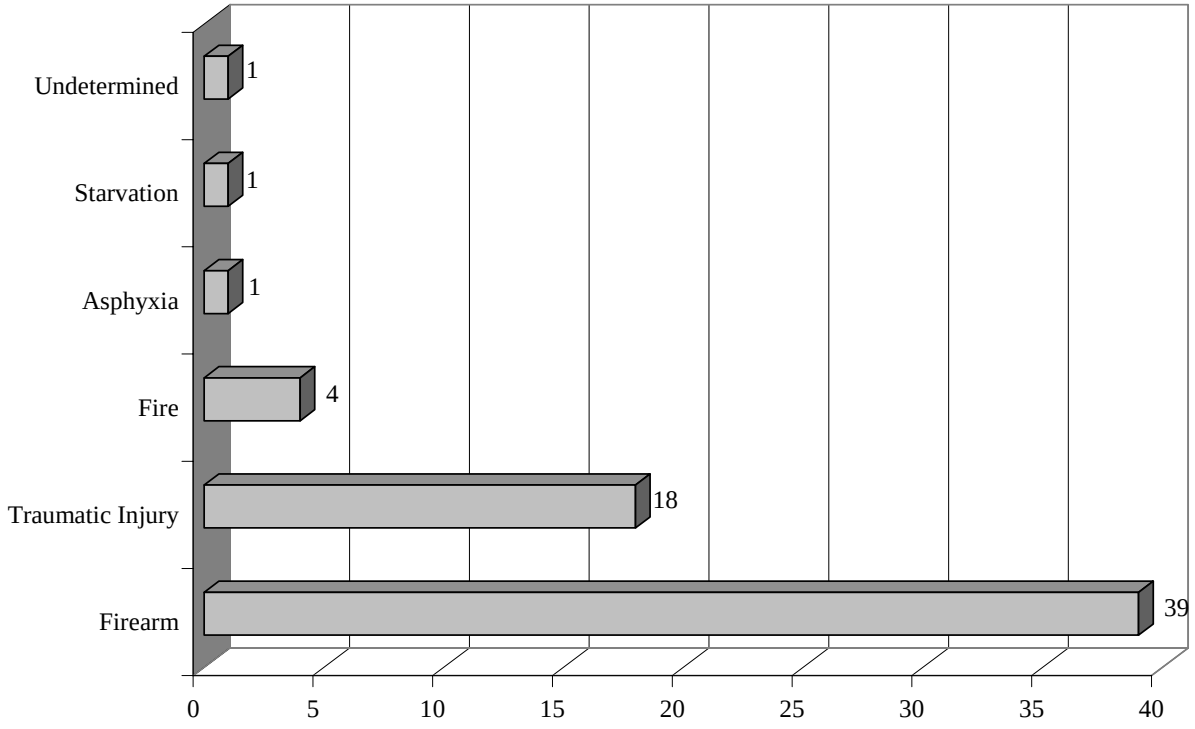
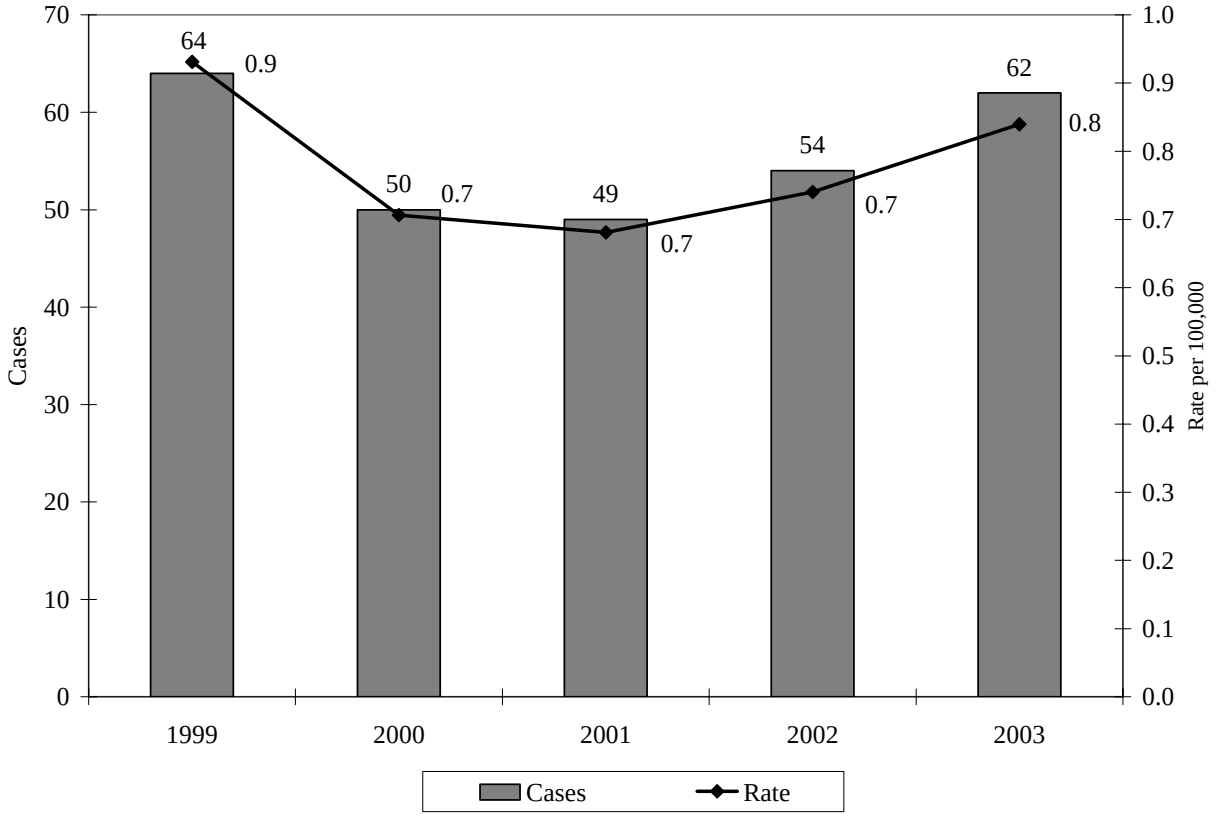


Table 20. Homicide Deaths of Children, 18 Years and Younger, by Method of Death, 2003

Method of Death	Total Cases	Autopsied
Shot by assailant(s) with firearm	39	38
- Handgun	(18)	(18)
- Rifle	(2)	(2)
- Shotgun	(4)	(4)
- Unspecified Firearm	(15)	(14)
Abused/Beaten by assailant(s)	15	12
Strangled/Smothered by assailant(s)	1	0
Stabbed by assailant(s)	3	3
Victim of fire/burning	4	4
Starved	1	1
Undetermined	1	1
Total	**64**	**59**

Figure 54. Homicide Deaths of Children, 18 Years and Younger, by Year of Death, 1999-2003



UNDETERMINED DEATHS OF CHILDREN

Table 20. Undetermined Deaths of Children, 18 Years of Age and Younger, by Method of Death and Age, 2003

Method	Total Cases	Autopsied
Pedestrian struck by vehicle	1	1
Undetermined after autopsy and/or toxicology	16	16
Age		
0	9	8
1	6	6
2	1	1
16	1	1
Total	**17**	**16**

SECTION 5: ETHANOL RELATED DEATHS

Ethanol was detected in the blood of decedents, at a level of 0.01 percent by weight by volume or greater, in 1204 cases (20.7%) in 2003. Of those cases with a detectable ethanol level, 61.0 percent had a measured level at or above 0.08 percent.

Figure 55. Ethanol Related Deaths by Manner of Death, 2003
Measured Ethanol > 0.01%

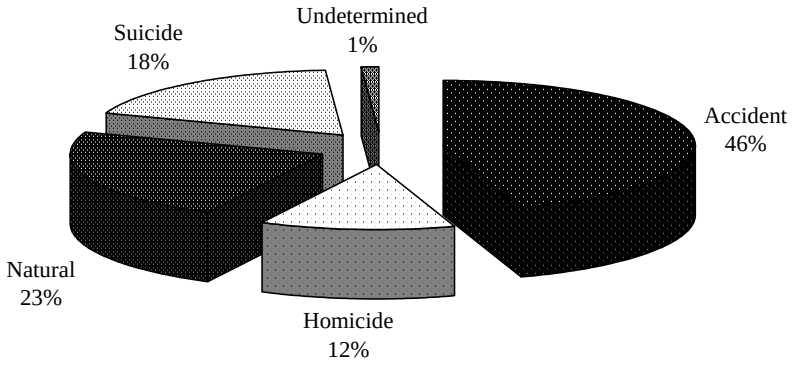


Figure 56. Ethanol Related Deaths by Gender by Age Group, 2003
Measured Ethanol > 0.01%

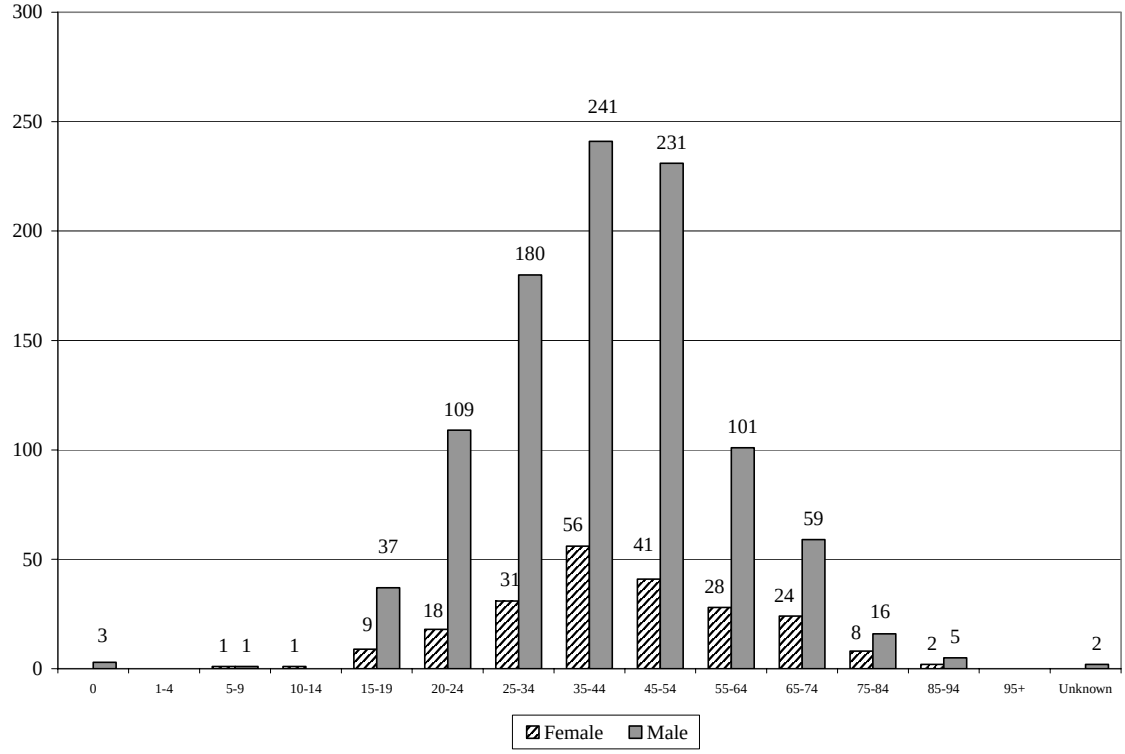


Figure 57. Ethanol Related Deaths by Race/Ethnicity, 2003
Measured Ethanol > 0.01%

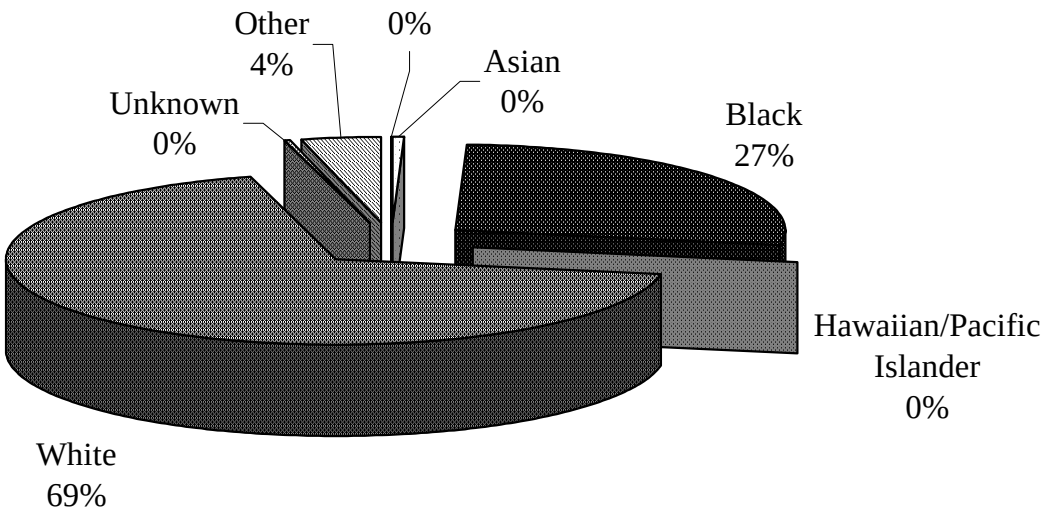
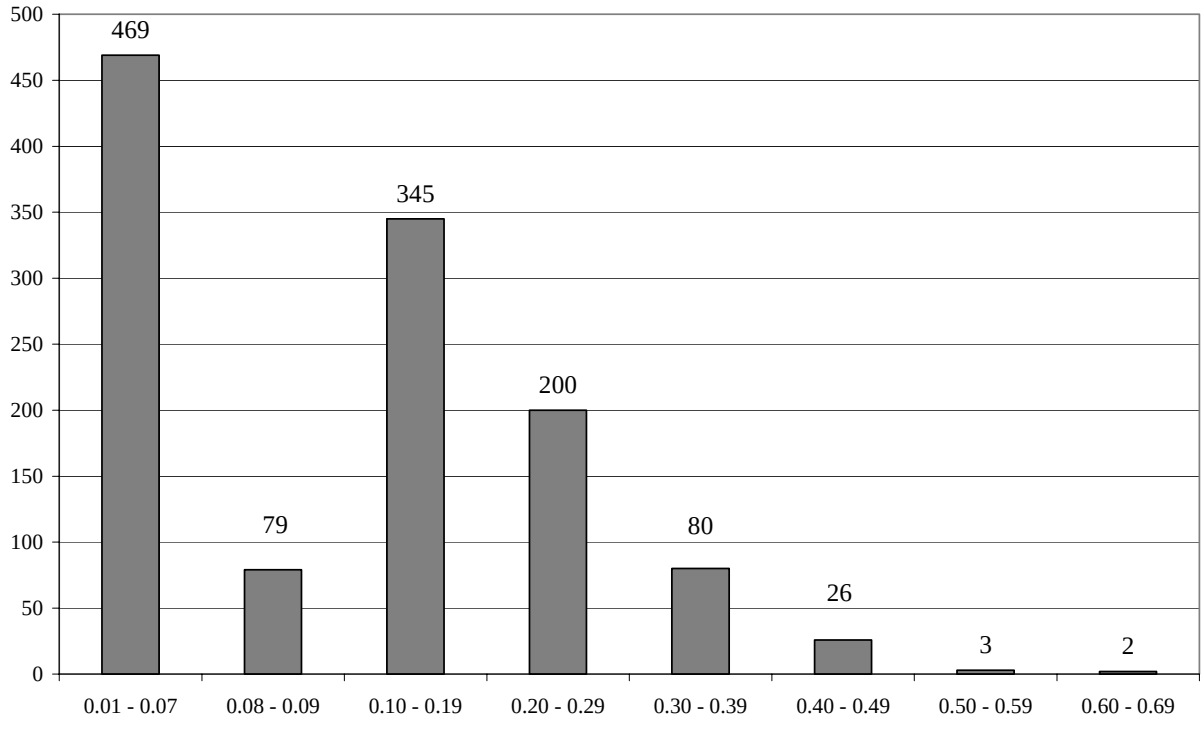


Figure 58. Ethanol Related Deaths by Measured Ethanol Level, 2003



ETHANOL RELATED ACCIDENTAL DEATHS

Ethanol was detected in 23.6 percent of all accidental deaths in 2003. Vehicular related accidental deaths had detectable levels of ethanol in 26.8 percent of those deaths.

Figure 59. Accidental Deaths by Presence of Ethanol by Method of Death, 2003

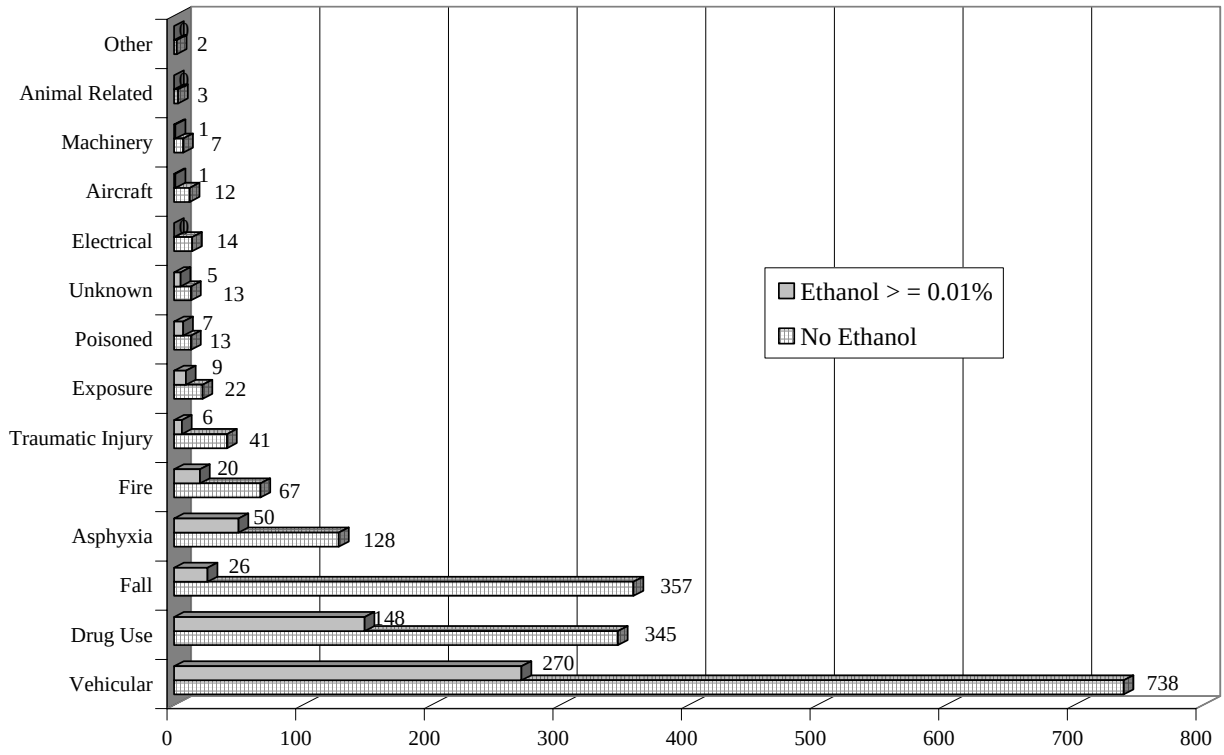


Table 22. Ethanol Related Accidental Deaths by Method of Death, 2003

		Ethanol >=0.01%	
Method of Deaths	**Total**	**Yes**	**No**
Aircraft			
Passenger/Pilot in aircraft crash	13	1	12
Animal Related			
Animal related	3	0	3
Asphyxia			
Accidental ligature strangulation	7	2	5
Choked on foreign object	20	4	16
Crushed/suffocated	10	2	8
Drowned	121	39	82
Mechanical/Positional	20	3	17
Drug Use			
Ingested alcohol (ethanol)	33	29	4
Ingested and/or injected drugs	460	119	341
Electrical			
Contacted electrical current	13	0	13
Struck by lightning	1	0	1
Exposure			
Exposed to cold, heat	30	9	21
Fall			
Fall from height	383	26	357
Fire			
Scalded by hot water, hot oil, other agent	1	0	1
Smoke inhalation – carbon monoxide	60	13	47
Victim of fire	26	7	19
Machinery			
Farm or industrial machinery accident	8	1	7
Poisoned			
Inhaled toxic agent accidentally	20	7	13
Traumatic Injury			
Accidental discharge of firearm	9	4	5
Accidental cutting with cutting instrument	2	0	2
Explosion	3	0	3
Received blow/collided with object	4	0	4
Sports/Athletic	2	0	2
Struck by moving object	20	2	18
Traumatic - other	9	0	9
Vehicular			
ATV	8	2	6
Auto - driver	574	165	409
Auto - passenger	217	47	170
Auto - pedestrian	101	32	69
Bicycle	11	4	7
Boat	2	0	2
Mo-ped	2	0	2
Motorcycle	49	13	36
Tractor/Heavy construction equipment	19	1	18
Train	6	2	4
Other	18	4	14
Unknown			
Accident - unknown	18	5	13
Total	**2303**	**543**	**1760**

ETHANOL RELATED SUICIDE DEATHS

Ethanol was detected in 27.1 percent of all suicides, and in 47.4 percent of suicides involving a firearm in 2003.

Figure 60. Suicide Deaths by Presence of Ethanol by Method of Death, 2003

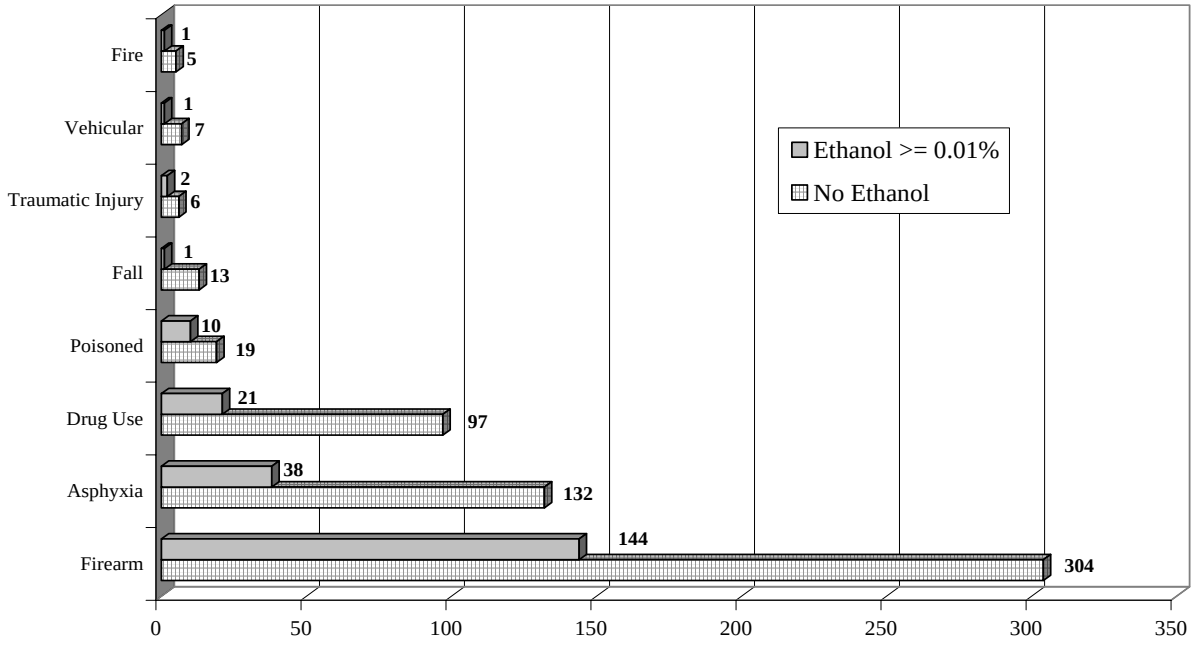


Table 23. Ethanol Related Suicide Deaths by Method of Death, 2003

		Ethanol >=0.01%	
Method of Death	**Total**	**Yes**	**No**
Shot self with firearm	448	144	304
- Handgun	(313)	(100)	(213)
- Rifle	(46)	(12)	(34)
- Shotgun	(69)	(24)	(45)
- Unspecified firearm	(20)	(8)	(12)
Hanged self	137	32	105
Ingested or injected medication	118	21	97
Inhaled toxic agent	27	9	18
Drowned self	19	4	15
Jumped from height	14	1	13
Suffocated self	14	2	12
Burned self	6	1	5
Cut/Slashed self	6	2	4
Struck by train	3	0	3
Suicide as pedestrian	3	1	2
Alcohol poisoning (ethanol)	2	1	1
Driver of motor vehicle	1	1	0
Suicide - other	6	0	6
Total	**804**	**218**	**586**

ETHANOL RELATED HOMICIDE DEATHS

Ethanol was detected in 32.2 percent of all homicide deaths in 2003. In homicide deaths involving a firearm, ethanol was detected in 47.0 percent.

Figure 61. Homicide Deaths by Presence of Alcohol by Method of Death, 2003

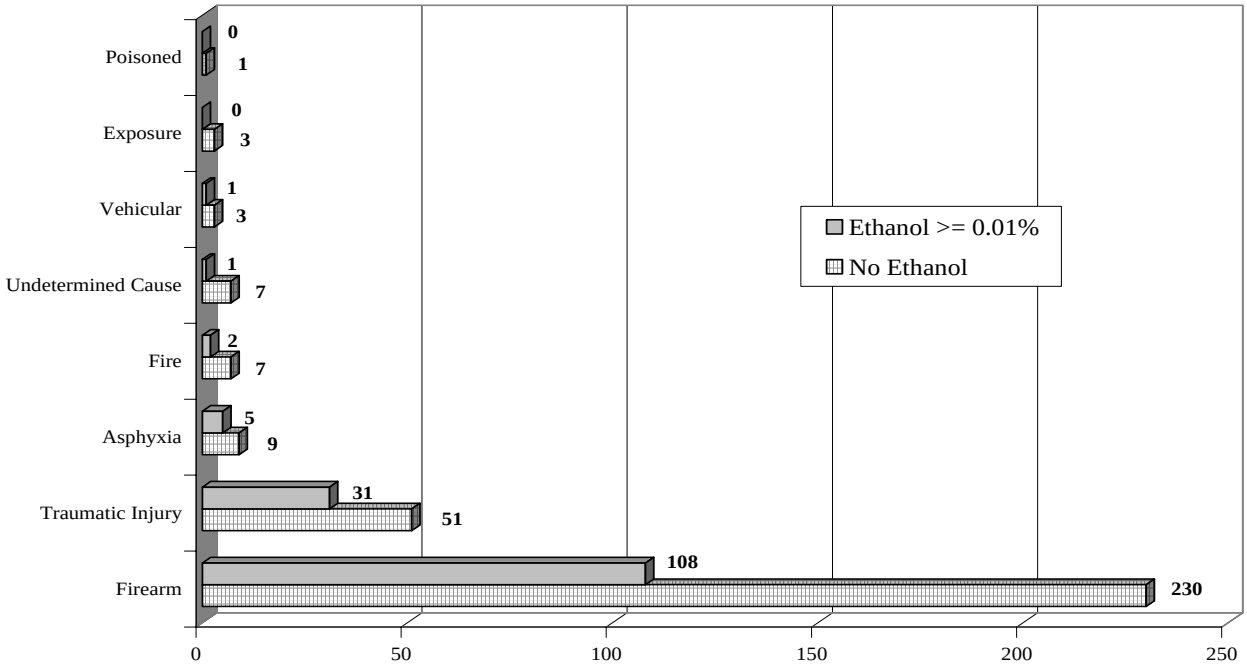


Table 24. Ethanol Related Homicide Deaths by Method of Death, 2003

		Ethanol >=0.01%	
Method of Death	**Total**	**Yes**	**No**
Shot by assailant(s) with firearm	338	108	230
- Handgun	(187)	(58)	(129)
- Rifle	(10)	(3)	(7)
- Shotgun	(27)	(12)	(15)
- Unspecified firearm	(114)	(35)	(79)
Stabbed by assailant(s)	48	20	28
Beaten by assailant(s)	31	11	20
Strangled by assailant(s)	14	5	9
Victim of intentionally set fire	9	2	7
Struck by auto by assailant(s)	3	1	2
Judicial execution	2	0	2
Victim of push/fall from height	2	0	2
Neglect/Starvation	2	0	2
Exposure to cold	1	0	1
Vehicular - Other	1	0	1
Homicide - Other	8	1	7
Total	**459**	**148**	**311**

ETHANOL RELATED UNDETERMINED DEATHS

Table 25. Ethanol Related Undetermined Deaths by Method of Death, 2003

		Ethanol >=0.01%	
Method of Death	**Total**	**Yes**	**No**
Undetermined after autopsy and/or toxicology	42	4	38
Ingested/Injected medication	11	3	8
Gunshot wound	4	1	3
Blunt trauma	3	1	2
Driver/Passenger/Pedestrian	3	1	2
Drowning	3	2	1
Explosion/Victim of fire	3	2	1
Fall from height/same height	1	1	0
Ingested alcohol (ethanol)	1	0	1
Mechanical/Positional	1	0	1
Total	**72**	**15**	**57**

ETHANOL RELATED CAUSES OF DEATH

Table 26. Ethanol Related Natural and Unnatural Deaths by Cause of Death, 2003

		Ethanol >=0.01%	
Natural Deaths	**Total**	**Yes**	**No**
AIDS	12	1	11
Alzheimer's Disease	3	0	3
Aneurysm	28	4	24
Arthritis	1	0	1
Aspiration	9	2	7
Asthma	15	2	13
Blood disorders	3	0	3
Carcinoma	71	2	69
Cerebrovascular	26	3	23
COPD	30	2	28
Congenital Defect	11	1	10
Dehydration	4	1	3
Diabetes	36	5	31
Emboli	58	4	54
Epilepsy	25	4	21
Ethanolism	60	28	32
GI Hemorrhage	50	14	36
Heart Disease	1424	184	1240
Hepatic Failure	41	12	29
Intrauterine Fetal Death	8	0	8
Leukemia	3	0	3
Maternal and Fetal Complications of Birth	13	1	12
Medical treatment	9	0	9
Meningitis	1	0	1
Natural - Other	73	4	69
Obesity	7	0	7
Obstruction (blockage)	4	0	4
Pancreas	4	1	3
Pneumonia	84	4	80
Pulmonary Edema	1	0	1
Renal Failure	7	0	7
Respiratory Distress Syndrome	9	1	8
Sepsis	36	3	33
Spontaneous Hemorrhage	1	0	1
SIDS	82	2	80
Subtotal	**2249**	**285**	**1964**
Unnatural Deaths			
Asphyxia	93	17	76
Carbon Monoxide Intoxication	124	35	89
Child Abuse	4	0	4
Drowning	143	45	98
Electrocution	12	0	12
Ethanol Intoxication	33	28	5
Exposure	32	9	23
Gunshot Wound	795	256	539

Table 26. Ethanol Related Natural and Unnatural Deaths by Cause of Death, 2003 ~ *continued*

Unnatural Deaths ~ *continued*			
Hanging	140	33	107
Head and Neck Injuries	573	145	428
Judicial Execution	2	0	2
Multiple Injuries	763	166	597
Stab Wound	53	21	32
Subdural Hematoma	137	8	129
Substance Intoxication	586	145	441
Thermal Injuries (burns)	32	8	24
Unnatural - Other	21	1	20
Subtotal	**3544**	**917**	**2627**
Uncertifiable Deaths			
Undetermined After Autopsy and/or Investigation	30	2	28
Total	**5821**	**1204**	**4617**

SECTION 6: MOTOR VEHICLE RELATED DEATHS

In 22.0 percent of deaths involving a motor vehicle, the decedent had a measured blood alcohol level at or above the legal limit of 0.08 percent.

Figure 62. Motor Vehicle Deaths with the Presence of Ethanol by Gender by Age, 2003
Measured Ethanol > 0.01%

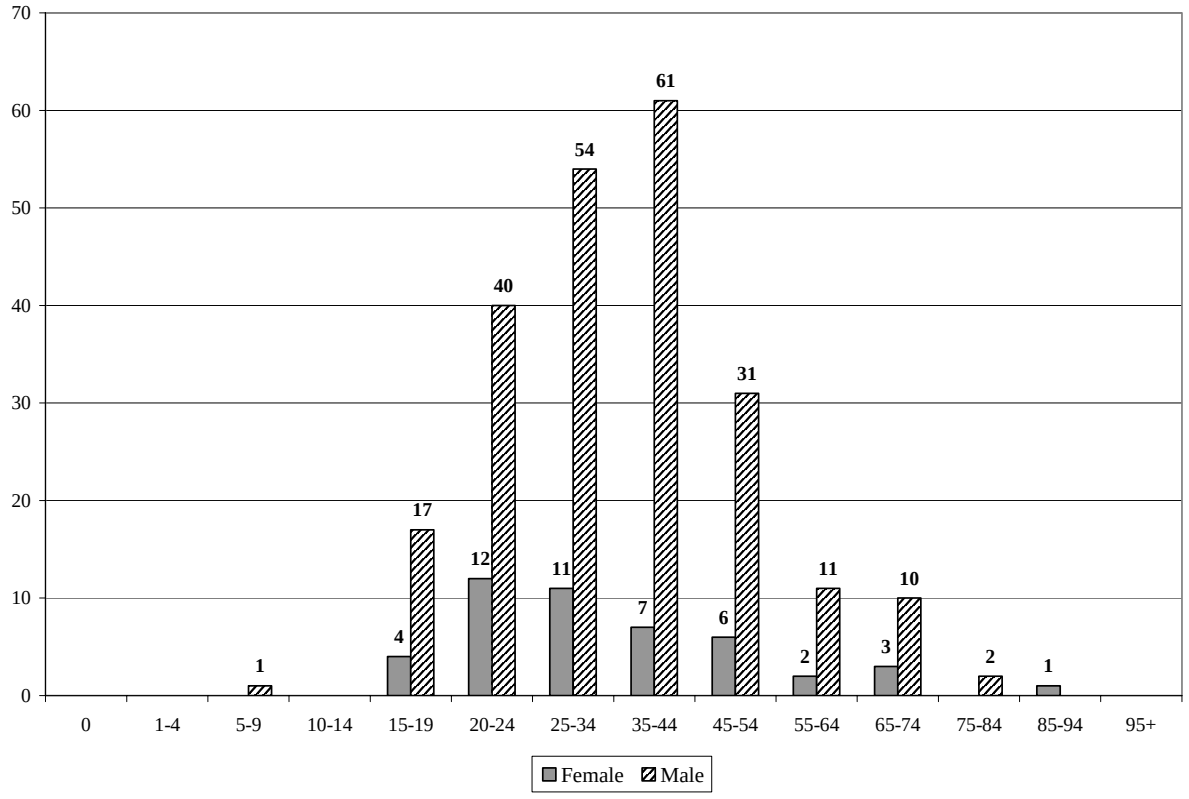


Figure 63. Proportion of Motor Vehicle Deaths with Ethanol Present by Race/Ethnicity, 2003 - Measured Ethanol > 0.01%

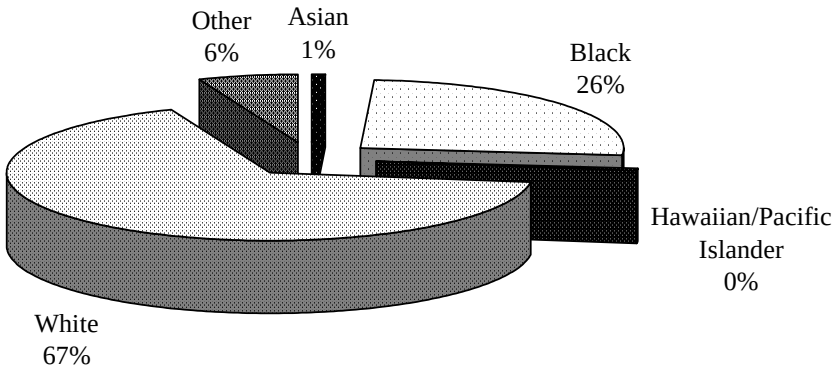


Figure 64. Motor Vehicles Related Deaths by Presence of Ethanol, 2003

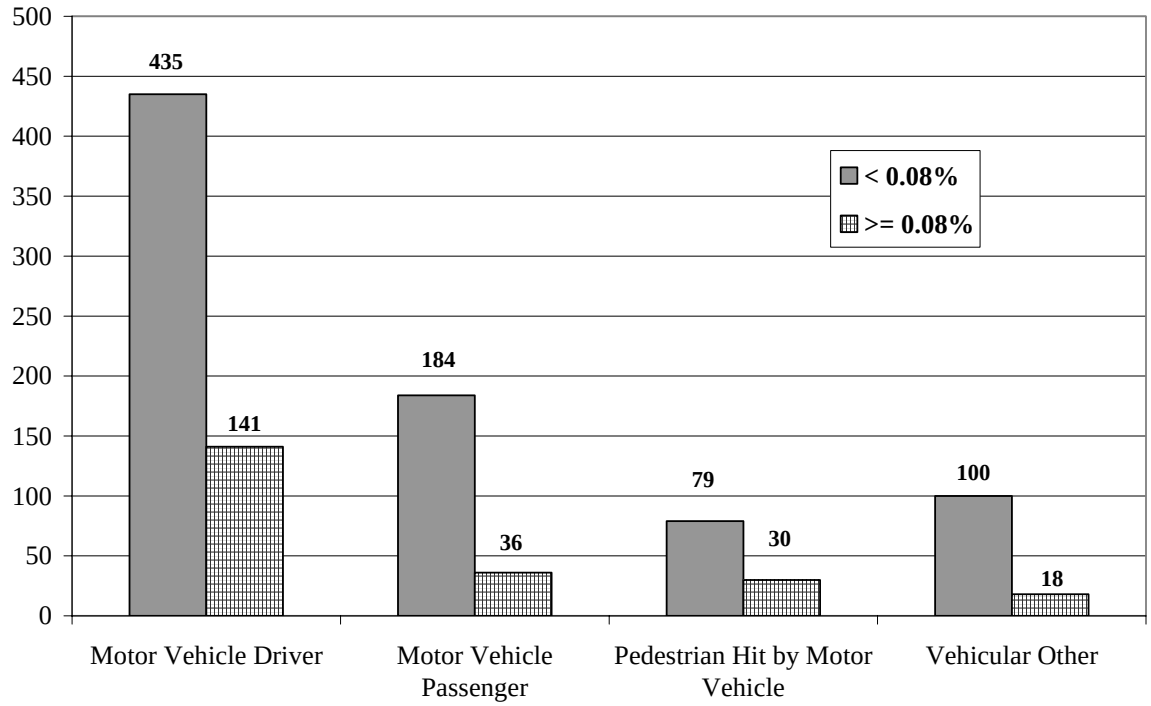


Table 27. Motor Vehicle Related Deaths by Presence of Ethanol, 2003

		Ethanol >=0.08%	
Circumstances	**Total**	**Yes**	**No**
Motor Vehicle Driver	576	141	435
Motor Vehicle Passenger	220	36	184
Pedestrian Hit by Motor Vehicle	109	30	79
Vehicular Other	118	18	100
Total	**1023**	**225**	**798**

SECTION 7: DRUG CAUSED DEATHS

In 2003, accident was the most frequent manner assigned to the 564 drug caused deaths (77.0%). Drug caused deaths were greatest in males (62.9%), and whites (86.0%). Narcotics (60.3%) were the most frequently identified class of compounds in drug related deaths.

Figure 65. Drug Caused Deaths by Gender by Age Group, 2003

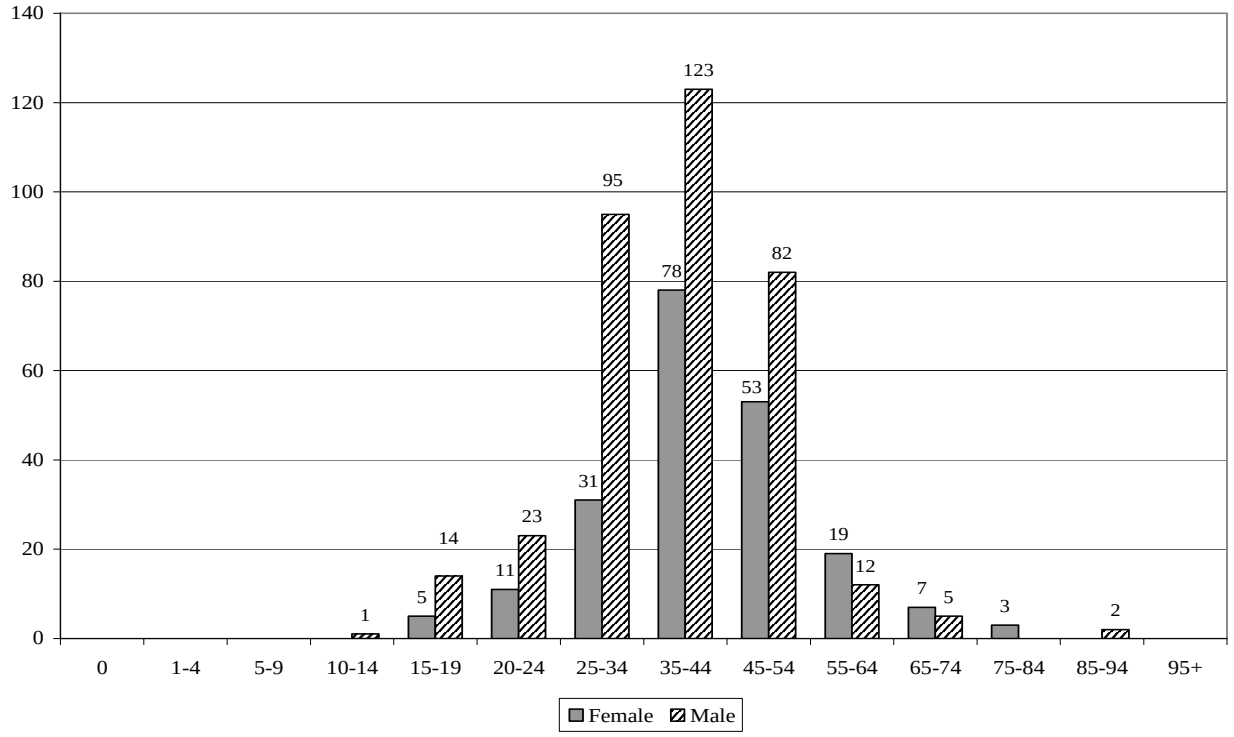


Figure 66. Proportion of Drug Caused Deaths by Race/Ethnicity, 2003

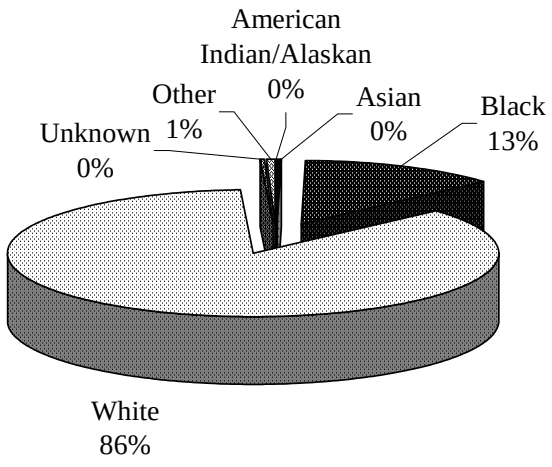


Figure 67. Proportion of Drug Caused Deaths by Manner of Death, 2003

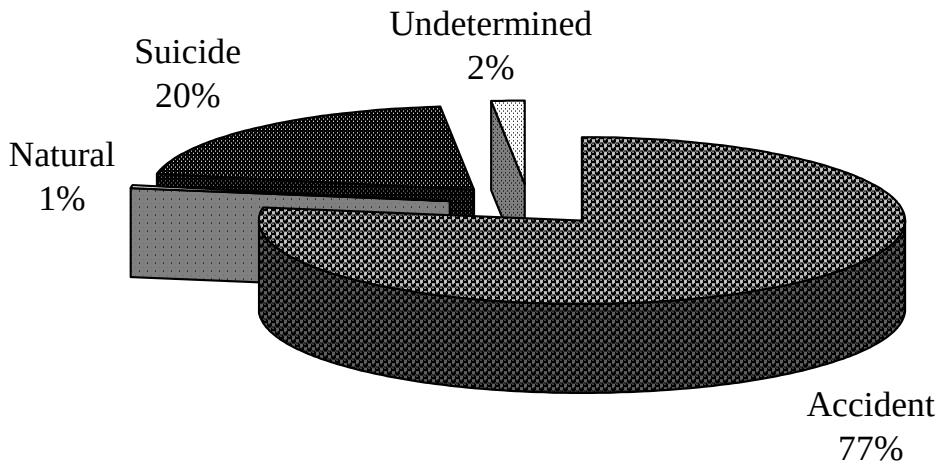


Figure 68. Drug Caused Deaths Trend, 1999-2003

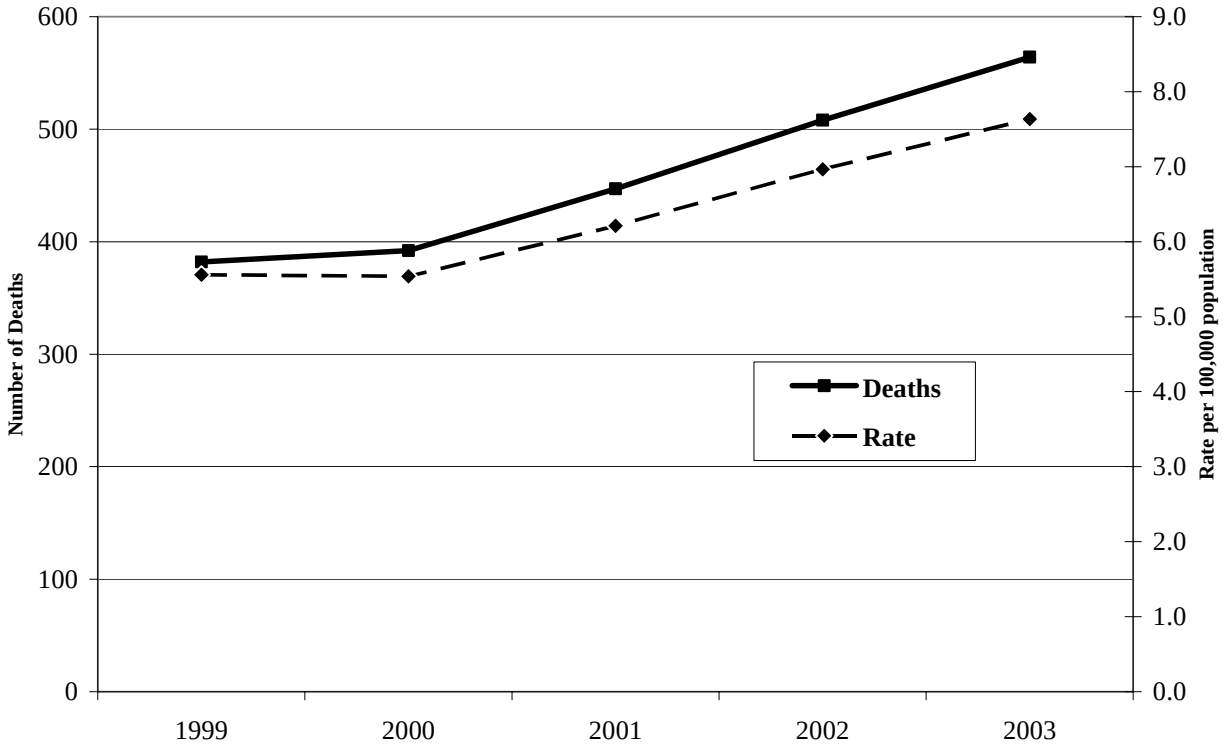


Figure 69. Drug Caused Deaths by Class of Compounds Present, 2003

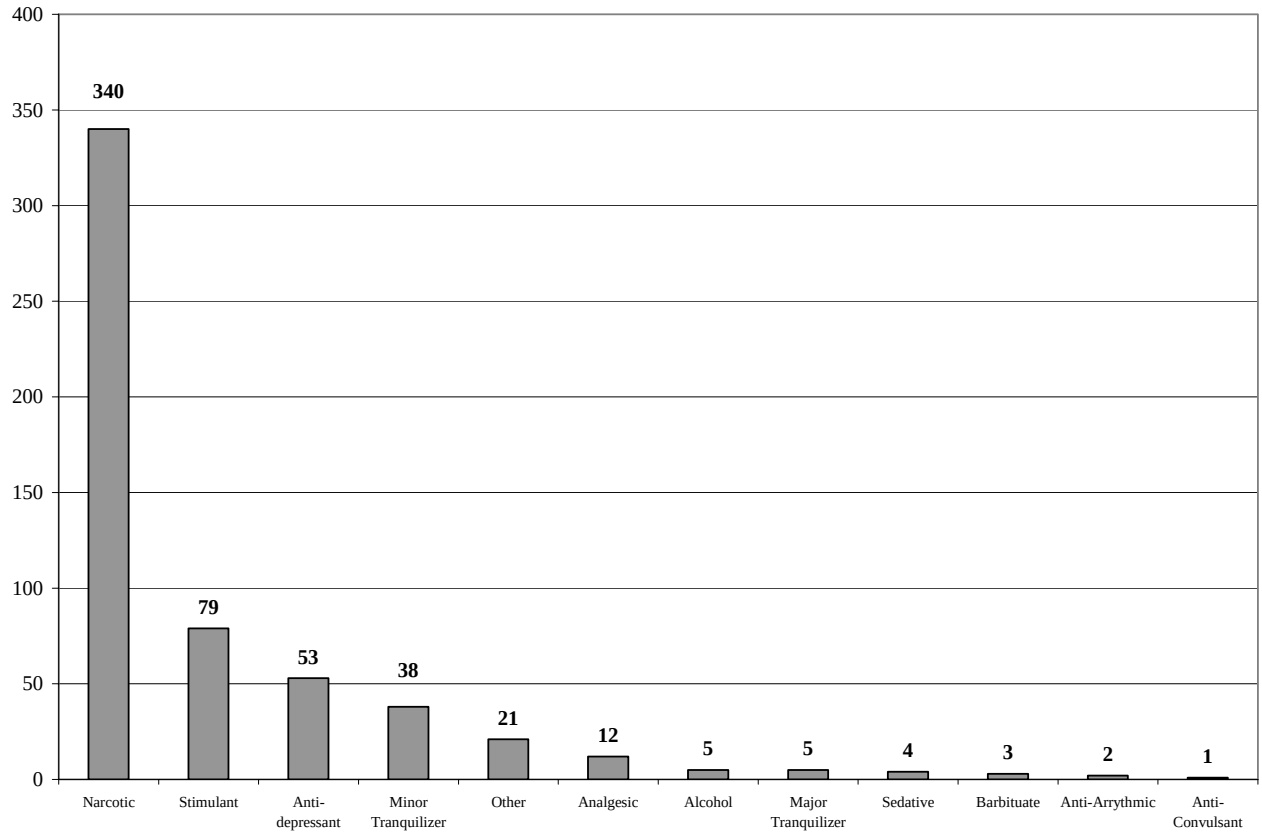


Table 28. Drug Caused Deaths by Manner of Death by Age Group, 2003

	Manner of Death				
Age at Death	**Accident**	**Homicide***	**Suicide**	**Undetermined**	**Total**
10-14	0	0	1	0	1
15-19	17	0	2	0	19
20-24	31	0	3	0	34
25-34	104	0	20	2	126
35-44	164	0	34	3	201
45-54	106	0	26	2	134
55-64	14	0	15	2	31
65-74	3	0	8	1	12
75-84	0	0	3	0	3
85-94	0	0	2	0	2
Total	**439**	**0**	**114**	**10**	**563**

* excludes judicial execution

Table 29. Drug Caused Deaths by County of Residence, 2003

County of Residence	Deaths	Rate*	County of Residence	Deaths	Rate*
Accomack	3	7.7	Manassas	7	18.8
Albemarle	3	3.4	Martinsville	4	26.5
Alexandria	10	7.8	Mecklenburg	1	3.1
Alleghany	1	5.9	Middlesex	1	9.8
Amherst	4	12.5	Montgomery	9	10.5
Arlington	5	2.7	Nelson	1	6.7
Augusta	8	11.9	New Kent	1	6.7
Bedford	5	8.0	Newport News	9	5.0
Bristol	3	17.4	Norfolk	9	3.7
Buchanan	8	31.3	Northumberland	1	7.8
Campbell	2	3.9	Norton	2	51.2
Carroll	4	13.6	Nottoway	2	12.8
Charlottesville	4	10.2	Orange	2	7.1
Chesapeake	12	5.7	Page	2	8.5
Chesterfield	15	5.4	Petersburg	4	12.1
Colonial Heights	1	5.8	Pittsylvania	4	6.5
Craig	3	**58.2**	Portsmouth	12	12.0
Culpeper	6	15.6	Powhatan	2	8.1
Danville	1	2.1	Prince George	1	2.9
Dickenson	4	24.8	Prince William	12	3.7
Dinwiddie	3	12.1	Pulaski	8	22.8
Fairfax City	2	9.1	Radford	2	13.3
Fairfax	36	3.6	Rappahannock	2	28.1
Falls Church	1	9.5	Richmond City	37	19.0
Fauquier	8	13.1	Roanoke City	18	19.4
Floyd	1	7.0	Roanoke	7	8.0
Fluvanna	1	4.3	Rockbridge	2	9.5
Franklin	9	18.3	Rockingham	2	2.9
Frederick	3	4.6	Russell	13	45.0
Fredericksburg	2	9.9	Salem	2	8.1
Giles	5	29.5	Scott	3	13.0
Gloucester	2	5.4	Smyth	3	9.2
Grayson	1	6.0	Southampton	1	5.7
Hampton	10	6.8	Spotsylvania	7	6.5
Hanover	5	5.3	Stafford	10	9.0
Harrisonburg	2	4.9	Staunton	3	12.6
Henrico	23	8.5	Suffolk	3	4.1
Henry	13	22.8	Tazewell	13	29.3
Hopewell	2	8.9	Virginia Beach	21	4.8
Isle of Wight	1	3.1	Warren	1	3.0
James City	2	3.7	Washington	10	19.5
King & Queen	1	15.2	Westmoreland	2	11.8
King George	1	5.5	Winchester	1	4.1
Lee	9	37.9	Wise	14	33.5
Loudoun	5	2.3	Wythe	3	10.7
Louisa	3	10.7	York	3	4.9
Lunenburg	1	7.6	Unknown	2	-
Lynchburg	2	3.1	Out of State	28	-
			Total	**563**	**7.6**

* Rate per 100,000 population

Table 30. Drug/Physiologically Active Compounds Present in Decedents, 2003

Drug/Compound	Total
Alcohol	
ETHANOL	4
ISOPROPANOL	1
Alcohol Total	**5**
Analgesic	
ACETAMINOPHEN	7
SALICYLATE	1
TRAMADOL	4
Analgesic Total	**12**
Anti-Arrythmic/Anti-Hypertensive	
FLECAINIDE	1
VERAPAMIL	1
Anti-Arrythmic/Anti-Hypertensive Total	**2**
Anti-Convulsant	
VALPROIC ACID	1
Anti-Convulsant Total	**1**
Anti-Depressant	
AMITRIPTYLINE	15
BUPROPION (WELLBUTRIN)	4
CITALOPRAM	8
DESIPRAMINE	1
DOXEPIN	4
FLUVOXAMINE	1
IMIPRAMINE	1
NORTRIPTYLENE	1
OLANZAPINE	5
PAROXETINE	6
SERTRALINE	6
TRAZODONE	1
Anti-depressant Total	**53**
Barbituate	
BUTALBITAL	2
PHENOBARBITAL	1
Barbituate Total	**3**
Major Tranquilizer	
PHENCYCLIDINE	1
QUETIAPINE	4
Major Tranquilizer Total	**5**
Minor Tranquilizer	
ALPRAZOLAM	10
CARISOPRODOL	2
DIAZEPAM	6
DIPHENHYDRAMINE	12
FLUOXETINE	3
MEPROBAMATE	1
NORDIAZEPAM	3
ZOLPIDEM	2
Minor Tranquilizer Total	**39**
Narcotic	
CODEINE	8

Table 30. Drug/Physiologically Active Compounds Present in Decedents, 2003 ~ *continued*

Narcotic *continued*	
FENTANYL	21
HYDROCODONE	27
HYDROMORPHONE	6
MEPERIDINE	4
METHADONE	113
MORPHINE	115
NORPROPOXYPHENE	1
OXYCODONE	32
OXYMORPHONE	1
PROPOXYPHENE	12
Narcotic Total	**340**
Other	
CHLORODIFLUOROMETHANE	1
CYANIDE	1
DOXYLAMINE	1
ETHYLENE GLYCOL	2
LITHIUM	1
PENTOXIFYLLINE	1
Other Total	**7**
Sedative	
CYCLOBENZAPRINE	4
Sedative Total	**4**
Stimulant	
BENZOYL ECGONINE	3
COCAINE	75
METHYLENEDIOXYAMPHETAMINE	1
Stimulant total	**79**
Total	**550**

Table 31. Drug Caused Deaths by Manner and Method of Death 2003

Manner of Death	Deaths
Accident	
Heart Disease	1
Medical treatment	1
Asphyxia	1
Drowning	2
Ethanol Poisoning	1
Pneumonia	1
Substance Poisoning	431
Unnatural - Other	1
Subtotal	**439**
Suicide	
Asphyxia	4
Drowning	1
Gunshot Wound	1
Substance Poisoning	108
Subtotal	**114**
Undetermined	
Ethanol Poisoning	1
Substance Poisoning	9
Subtotal	**10**
Total	**563**

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GLOSSARY

Accident – The *manner of death* used when, in other than *natural deaths*, there is no evidence of intent.

Autopsy – A detailed postmortem external and internal examination of a body to determine cause of death.

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

Cause of Death – The agent of effect 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*.

Children – Individuals 18 years of age or younger.

Method of Death – The situation, setting, or condition present at the time of injury or death.

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

County of Residence – The county where a person legally resides. If not a resident of Virginia, the decedent is listed as "out of state".

Local Medical Examiner – A physician appointed by the *Chief Medical Examiner* 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.

Drug Caused Death – A death caused by a drug or combination of drugs. Deaths caused by poisons and volatile substances are excluded.

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.

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 of public health interest is to be investigated by the Medical Examiner.

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

Motor Vehicle 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*).

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*.

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

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

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 sufficient information to assign another manner.

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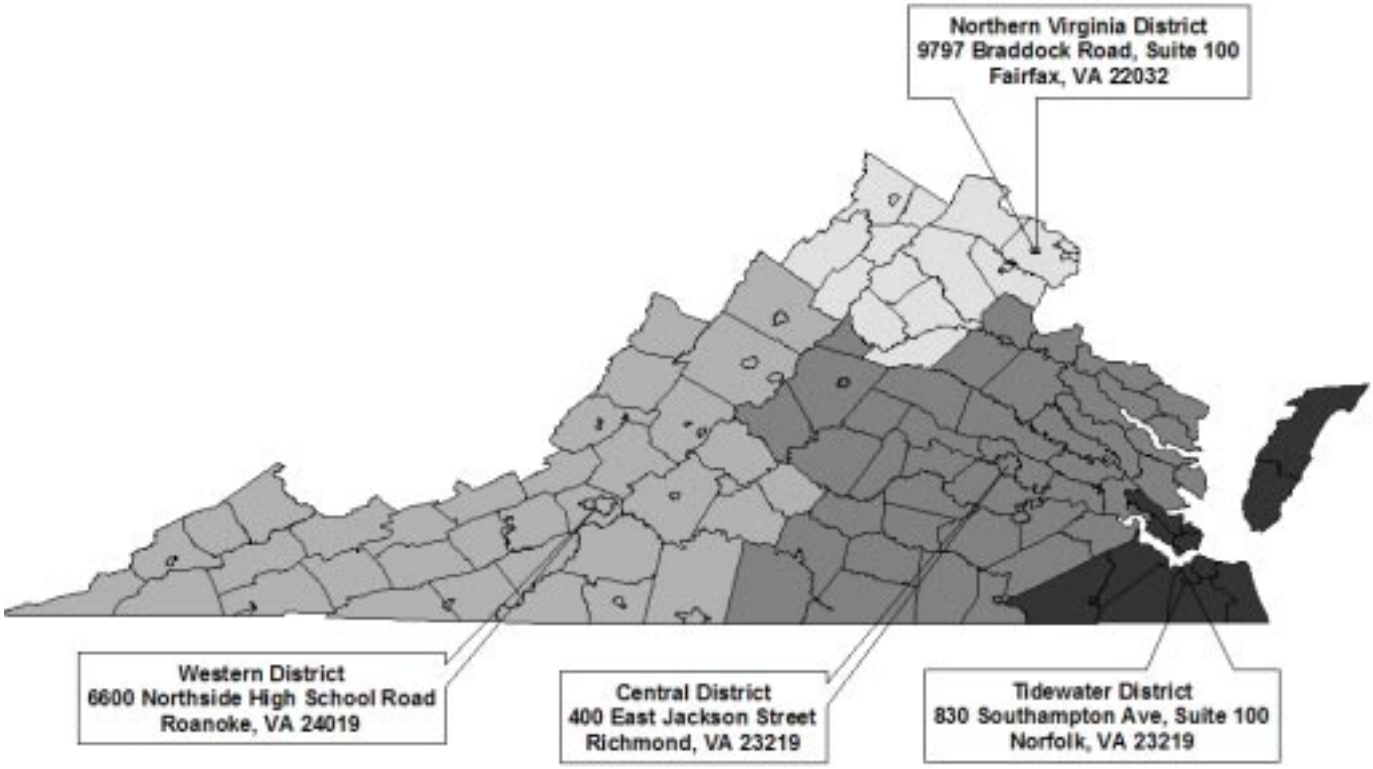
CENTRAL *Counties* of Albemarle, Amelia, Brunswick, Buckingham, Caroline, Charles City, Charlotte, Chesterfield, Cumberland, Dinwiddie, Essex, Fluvanna, Gloucester, Goochland, Greene, Greensville, Halifax, Hanover, Henrico, James City, King and Queen, King George, King William, Lancaster, Louisa, Lunenburg, Mathews, Mecklenburg, Middlesex, Nelson, New Kent, Northumberland, Nottoway, Powhatan, Prince Edward, Prince George, Spotsylvania, Stafford, Surry, Sussex, Richmond, and Westmoreland. *Cities* of Charlottesville, Colonial Heights, Emporia, Fredericksburg, Hopewell, Petersburg, Richmond, South Boston, and Williamsburg.

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

TIDEWATER *Counties* of Accomack, Isle of Wight, Northampton, Southampton, and York. *Cities* of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, and Virginia Beach.

WESTERN *Counties* of Alleghany, Amherst, Appomattox, Augusta, Bath, Bedford, Bland, Botetourt, Buchanan, Campbell, Carroll, Craig, Dickenson, Floyd, Franklin, Giles, Grayson, Henry, Highland, Lee, Montgomery, Patrick, Pittsylvania, Pulaski, Roanoke, Rockbridge, Rockingham, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe. *Cities* of Bedford, Bristol, Buena Vista, Clifton Forge, Covington, Danville, Galax, Harrisonburg, Lexington, Lynchburg, Martinsville, Norton, Radford, Roanoke, Salem, Staunton, and Waynesboro.



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