Office of the Chief Medical Examiner Annual Report 2023

Virginia Department of Health
Office of the Chief Medical Examiner
Compiled by Kathrin 'Rosie' Hobron, MPH
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VDH VIRGINIA DEPARTMENT OF HEALTH
Healthy People in Healthy Communities
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Virginia Office of the Chief Medical Examiner

http://www.vdh.virginia.gov/medical-examiner/

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Introduction

Executive Summary

The Virginia Department of Health, Office of the Chief Medical Examiner (OCME) is proud to present the 2023 Annual Report. In addition to fulfilling accreditation requirements for the Virginia OCME by the National Association of Medical Examiners (NAME), the OCME Annual Report provides specific information about deaths occurring in the Commonwealth of Virginia during the 2023 calendar year and investigated by the OCME. This information is a valuable resource for Virginia's citizens and leaders to identify trends in preventable deaths, which can be used to protect the lives of all Virginians through education and changes in public policy.

As a model statewide death investigation system with four district offices, the OCME fulfills a core function mandated by Code of Virginia, § 32.1-283. By Code, the OCME is tasked with investigating the deaths of individuals who died in Virginia from trauma or violence, when sudden and unexpected, while unattended by a physician, under suspicious circumstances or in the custody of law enforcement or other state or local authority. When deaths are reported to one of the four district OCME offices, the case information is entered into the Virginia Medical Examiner Database (VMEDS) and the case is managed through this statewide data system allowing for consistent, reliable data that can be reviewed and interpreted for the annual report.

Some of the important trends in 2023 among OCME cases include:

- Among manners of death, all categories but suicide decreased in 2023 compared to 2022
- Accidental Deaths
  - Accidental deaths have been increasing in Virginia since 2011; however, in 2022 and 2023, the number of accidental deaths decreased. In 2023, the number of accidental deaths decreased 4.0% compared to 2022 (with rates of 56.2 and 58.8 per 100,000 persons, respectively)
  - Accidents accounted for 53.9% of the deaths investigated by the OCME in 2023 (n= 4,901), which is the greatest proportion of deaths by any manner
  - Black males, followed by White males, had the highest rates of accidental deaths, all causes (116.6 and 81.1 per 100,000, respectively)
  - Over 49% (n=2,421) of all accidental deaths were due to fatal drug overdoses
- Homicides
  - The number of homicides in 2023 decreased 7.0% from the previous year
  - The number of gun-related homicides in 2023 decreased 9.2% compared to 2022 (511 and 563 deaths, respectively)

- Black males had the highest homicide rate in 2023 (43.7 per 100,000) compared to other comparable demographic groups. Black males were victims of homicide at a rate 11.5 times that of Hispanic males, 10.9 times that of White males, and 6.2 times that of Black females
- Males aged 20-24 years had the highest homicide rate (25.5 per 100,000) compared to other age and sex groups.
- Richmond City had both the largest number of homicides by locality of residence (n=54) and the largest number of homicides by locality of injury (n=73). Hopewell had the highest rate of homicide by residence (39.6 per 100,000) and Petersburg had the highest rate of homicide by locality of injury (69.1 per 100,000)

- Suicides
  - In 2023, White populations committed suicide at a rate 4.3 times that of Hispanics, 2.3 times that of Asians, and 1.8 times that of Black populations
- Fatal motor vehicle collisions
  - Black males highest rate of fatal motor vehicle collisions (27.3 per 100,000) compared to other race/ethnicity and sex groups
  - Males 85+ years had the highest rate of fatal motor vehicle collisions (54.9 per 100,000) compared to other comparable demographic groups
- Fatal drug overdoses
  - For the second year in a row, the number of drug/poisoning deaths in 2023 decreased slightly compared to the previous year (decrease of 2.8%; with rates of 29.2 and 30.1 per 100,000 persons, respectively)
  - For the fifth year in a row, Black males had the highest rate of fatal drug overdoses, all substances, followed by White males and Black females (78.9, 38.4, and 25.6 per 100,000, respectively)
  - Over 98% of all fatal opioid overdoses in 2023 were accidents
  - In 2023, fentanyl (prescription, illicit, and analogs) was involved in 76.2% of all fatal overdoses, all substances. These deaths often involve other drugs in addition to fentanyl.
- Gun-related deaths
  - In 2023, gun-related deaths of all manners decreased 5.3% compared to 2022
  - The majority (57.6%) of gun-related deaths were due to suicide in 2023, similar to previous years

Office of the Chief Medical Examiner

Annual Report 2023

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Introduction

This report represents the deaths investigated by the Virginia Department of Health, Office of the Chief Medical Examiner in 2023.

Data Collection and Preparation

The data in this report reflect deaths accepted by the Office of the Chief Medical Examiner (OCME) pursuant to §32.1-283 of the Code of Virginia for the 2023 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 and Prevention (CDC). 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 and Methodology

Data is based upon both Virginia residents and non-Virginia residents, whose deaths have come under the jurisdiction of the Virginia Office of the Chief Medical Examiner.

- Rates
  - Rates are per 100,000 persons of the specific Virginia population being described
  - Crude rates are used for all deaths occurring in Virginia, regardless of residential status
  - Rates calculated from small case counts (<5) are considered unreliable and should be interpreted with caution
  - Population estimates for rate calculations from 2021-2023 use Single-Race Population Estimates from the US Census. Past reports used Bridged Population estimates from the National Center for Health Statistics; however, these estimates were discontinued in 2020.

- Race/Ethnicity (based on information provided from next of kin on decedent's death certificate)
  - Asian, Black, Native American, and White races represent those who have been identified as non-Hispanic ethnicity
  - 'Hispanic' are persons identified as White race with Hispanic ethnicity
  - 'Other' race are persons that are identified as more than one race or Black, Asian, or Native American race with Hispanic ethnicity

- Toxicology
  - Results are based on blood specimens and vitreous fluid

Overview of the 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 office within the Virginia Department of Health. The OCME is comprised of four district offices, each 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, 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 other correctional institutions, as well as deaths 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 (SIDS)
- Any other suspicious, unusual, or unnatural death

The OCME receives death reports in each of the four offices, takes custody of deaths that fall under OCME jurisdiction as outlined by the Code of Virginia, and conducts medicolegal death investigations into those fatalities. In Virginia, this is performed by a statewide medical examiner system comprised of a chief medical examiner, several assistant chief medical examiners, and medicolegal death investigators in four district offices, as well as local medical examiners in communities across the state. Medicolegal death investigators receive initial notification of death and determine, under the supervision and review of assistant chief medical examiners, if the death is under the jurisdiction of the OCME. After determining that a death is under OCME jurisdiction, medicolegal death investigators and/or local medical examiners may attend the death scene to document and review circumstances surrounding death. In 2023, approximately 137 local medical examiners worked with the OCME to examine decedents, collect toxicology samples, and sign certificates of death. Using professionally established guidelines, and under the direction of assistance chief medical examiners, certain cases were determined to require a medicolegal autopsy, which includes both an internal and external examination.

When an autopsy is required, it is conducted at one of four district offices: Central, Northern, Tidewater, or Western. Each OCME district is staffed by assistant chief medical examiners who are board certified

forensic pathologists (American Board of Pathology), board certified medicolegal death investigators (American Board of Medicolegal Death Investigators), administrative, and morgue personnel. The Chief Medical Examiner is responsible for the overall operations of Virginia's medical examiner system.

The Virginia OCME is a model medical examiner system with two separate mission elements that form the core of OCME staff members' efforts.

Medicolegal Mission

- Conduct medicolegal death investigations
- Perform examinations to certify cause and manner of death and recover evidence
- Testify in court proceedings
- Educate peers and professionals on subjects related to death investigation

Public Health Mission

- Reduce violent death by conducting surveillance and fatality reviews
- 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 and tissue donation and transplantation
- Administer the Virginia State Anatomical Program to provide cadavers for medical education

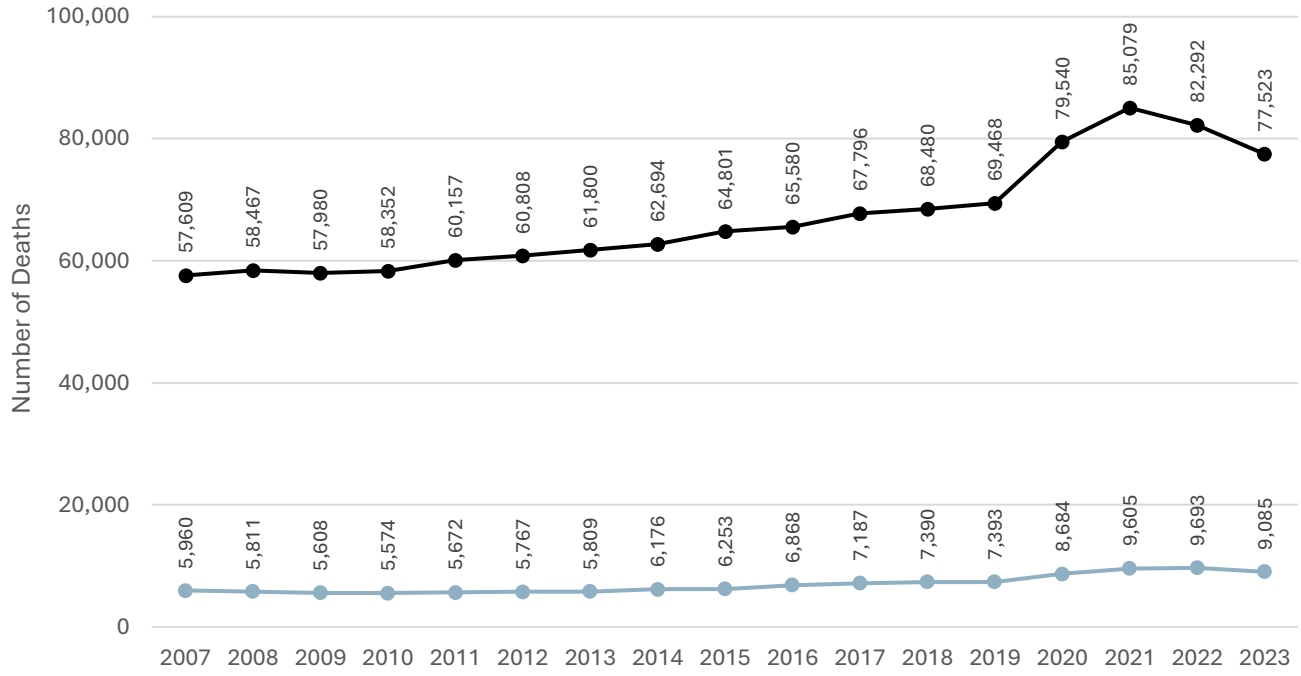
Virginia's local medical examiners and assistant chief medical examiners are committed to public safety and public health. To promote public safety, they testify to their findings in criminal and civil courts throughout the Commonwealth. They advance public health through their investigations of deaths that present a hazard to Virginia's citizens, such as emerging infections and bioterrorism.

All-Cause Mortality Compared to OCME Cases

The Virginia Department of Health, Office of Vital Records, manages all death certificates filed in the state of Virginia. For deaths that do not fall under OCME jurisdiction, the physician in charge of the patient's care for the illness or condition which resulted in death is primarily responsible for completing the death certificate. For deaths that fall under OCME jurisdiction, the OCME is responsible for determining the cause and manner of death and completing the death certificate.

Annually from 2007 to 2023, the OCME accepted, on average, 10.4% of deaths that occurred in Virginia under OCME jurisdiction each year. In 2023, the OCME accepted 9,085 deaths of the 77,523 deaths (11.7%) that occurred in the state.

Total Number of All-Cause Deaths that Occurred in Virginia Compared to Deaths that Fell Under OCME Jurisdiction by Year of Death, 2007-2023



Virginia Demographics in 2023

In 2023, the estimated population of the Commonwealth was 8,715,698 persons. The average age of Virginia residents was 38.5 years and females represented 50.6% of the population. Whites constituted 59.1% of the population, Blacks 19.1%, Hispanics 11.2%, Asians 7.3%, Native Americans 0.3%, and 3.0% of two or more races.

Division of Death Prevention, Fatality Review and Surveillance Programs

In addition to conducting medicolegal death investigations to identify the cause and manner of death, the OCME oversees several public health surveillance projects and fatality review team initiatives. Surveillance projects include the Virginia Violent Death Reporting System (VVDRS), the Overdose Data to Action (OD2A) grant, the Sudden Death in the Young Case Registry (SDY), Enhancing Reviews and Surveillance

to Eliminate Maternal Mortality (ERASE MM), and the Pregnancy-Associated Mortality Surveillance System (PAMSS). Fatality review is performed on child and maternal deaths at the state level and at the local and regional level on adult, child, overdose, and domestic violence related deaths.

Surveillance projects and fatality review teams examine various types of preventable deaths to provide a better understanding of factors contributing to the death so that legislators, policy makers, and other stakeholders can make informed decisions for injury and violence prevention. Fatality review and surveillance is retrospective examination, with most programs being approximately 1-3 years behind the current year. The data collection and review process require a "deep dive" into a decedent's medical, mental, social, educational, and criminal background, which takes time, as records must be requested, collected, collated, reviewed, and summarized.

Virginia Violent Death Reporting System (VVDRS) was implemented in 2003 as part of the National Violent Death Reporting System (NVDRS). Virginia was among the first six states and the first statewide medical examiner system to be funded for this project, which is now operating in all 50 states and two territories.

The VVDRS collects information about deaths of Virginians who die in Virginia due to violence (suicide, homicide, legal intervention, unintentional 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.

The Overdose Data to Action (OD2A) grant was implemented in 2019, at the end of the Enhanced State Opioid Overdose Surveillance Project (ESOOS, 2017-2019) and is a collaborative effort between multiple offices throughout the Virginia Department of Health, including The Office of Family Health Services, Office of Emergency Preparedness, Office of the Chief Medical Examiner, Office of Epidemiology, the Office of Emergency Medical Services, and other local and state partners. The multi-arm project strives to collect and understand fatal and non-fatal accidental overdose events and then use that data to inform policy and programs to prevent such events. Data is collected using the aforementioned NVDRS and other surveillance systems. The Department of Forensic Science also receives funding as part of this award to implement quantification programs to quantify opioid derivatives for use in toxicology testing and monitoring.

The OCME's arm, the State Unintentional Drug Overdose Reporting System (SUDORS), goal is to prevent accidental death through the collection of surveillance data to create public health strategies to address opioid addiction. SUDORS captures information on accidental and undetermined overdose deaths in Virginia. While much of this data is also collected through the VVDRS, the SUDORS collects additional

information such as descriptions of paraphernalia found at the scene, prescription monitoring reports, naloxone administration, and any history of substance abuse, treatment, or relapse.

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 and 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 Attorneys, social services, courts, probation and parole, domestic violence programs, mental health, and healthcare.

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 multidisciplinary team conducts retrospective reviews of the circumstances surrounding violent and unexpected child death and develops consensus recommendations for intervention and prevention of future child deaths. The team reviews child deaths in a topical manner. By reviewing cases based on a specific type of death, the team is able to determine risk and protective factors associated with that type of injury and to develop targeted recommendations for intervention and prevention. Team members include representatives from pediatrics, emergency medicine, child psychiatry, law enforcement, mental health, social services, forensic pathology, Commonwealth Attorneys, local fire and emergency medical services providers, injury prevention groups, child advocacy organizations, and other state agencies.

Over the years, the team has identified common trends observed in child deaths, including the presence of family violence and economic instability as risk factors for homicide of young children, the importance of adult supervision in preventing unintentional injury death, the need for policy and education to prevent child drownings, and the prevalence of family substance abuse and mental health problems in cases of sleep-related infant deaths and deaths due to poisoning. Through its many reviews, the Virginia State Child Fatality Review Team has discerned that child death in Virginia is patterned and largely preventable.

Infant and Child Mortality Surveillance was created in 2015. The team implemented the Infant and Child Mortality Surveillance System, for those aged 0-17 years in an effort to guide and better inform discussions, planning and legislative action that affects the health and well-being of children and families in the Commonwealth. This project seeks to provide reports detailing the circumstances and characteristics of

both infant and child deaths occurring in Virginia. In 2023, a new database was implemented in partnership with the National Child Fatality Data Coordinating Center. This new database builds on the work of the Sudden Death in the Young Case Registry and allows for the collection of data on all child deaths that fall under the jurisdiction of the Office of the Chief Medical Examiner's Office. This new database will streamline the data collection process, as well as create a comprehensive data system that is congruent with other work being done by the division.

Child fatality 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 and the Sudden Death in the Young Project with funds granted by the Centers for Disease Control and Prevention.

Regional Child Fatality Review Teams were established in all five Virginia Department of Social Services (DSS) regions in the Commonwealth. These teams review all child deaths investigated by a local department of social services for suspicions of abuse or neglect and that fall within the parameters set forth by Virginia's Children's Ombudsman. The OCME provides training and technical assistance to these teams, as requested, assisting them with the theory and practice of effective child fatality review, developing guidance documents, and providing trainings for team members, coordinators, and recorders.

Virginia's Pregnancy-Associated Mortality Surveillance System (PAMSS) and Maternal Mortality Review Team (MMRT) are housed in the OCME. Surveillance of all deaths of women occurring during pregnancy or within one year of pregnancy (termed "pregnancy-associated death") is conducted to provide up-to-date information on patterns and trends. Data from PAMSS includes not only surveillance data, but also data collected from the MMRT process. Current PAMMS data indicates pregnancy-associated maternal death in Virginia remains a significant public health problem. The ERASE MM support agencies and organizations that coordinate and manage Maternal Mortality Review Teams to identify, review, and characterize pregnancy-related deaths and identify prevention opportunities.

Rising maternal mortality rates throughout the United States have led to renewed interest in expanding state-based review teams. Virginia's Maternal Mortality Review Team is one of the longest continuously functioning multidisciplinary review teams in the US. The team was established in March 2002 as a partnership between the Office of Family Health Services and the OCME. The team was codified during the 2019 General Assembly session via House Bill 2546 effective July 1, 2019, with the OCME continuing to provide coordination for the team. The Maternal Mortality Review Team reviews all cases of pregnancy-associated death, regardless of the cause or manner of death or outcome of the pregnancy. Systematic, retrospective review of these deaths is performed to understanding the circumstances surrounding the death so that recommendations and interventions can be made to prevent future deaths.

The team is multidisciplinary and includes representatives from: Medical Society of Virginia; Virginia Section of the American College of Obstetricians and Gynecologists; Virginia College of Emergency Physicians; 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; local health departments; and state planning agencies. 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.

Virginia's Sudden Death in the Young (SDY) Project began in January 2015 in four communities served by the Tidewater OCME: the cities of Hampton, Newport News, Norfolk, and Virginia Beach. In 2018, three additional cities and three counties were added to the project. Those additions include the cities of Chesapeake, Suffolk, and Portsmouth and the counties of Accomack, Northampton, and York. In 2023, the program expanded to include the Western Tidewater Region and parts of the Central Region. Using techniques from surveillance and fatality review, this project involves intensive data collection and multidisciplinary review of all deaths involving infants, children, and youth up to 19 years of age for which the cause of death was undetermined or not fully understood. Understanding the precise etiology of these deaths and defining who is at-risk is a necessary first step to designing interventions and preventions to reduce these deaths. Virginia is one of 10 states participating in this national project.

The SDY project involves an intensive death investigation of each case. This requires the collection and review of extensive records for the child and family including past medical histories, social service histories, school records for the child where applicable, criminal histories and other relevant records for the case. The information gathered from the death investigation is used by both a multidisciplinary child fatality review team and a clinical review team. The current project will pilot the development of a centralized SDY Child Fatality Review Team, aimed at identifying the socioeconomic, systematic, and other related factors that may have contributed to the death of a child. Their role will be to assess family protective and risk factors for each death, to evaluate the quality of agencies response, and to identify prevention strategies. The clinical review team is made up of a pediatric neurologist, geneticist, maternal fetal medicine specialist, pediatrician, cardiologist, a social worker, OB/GYN, and a forensic pathologist. Their role is to identify undiagnosed medical risk factors that may have contributed to the child's death. The critical purpose of these investigations and reviews is to determine if causes of death can be further clarified, refined, and described, and then ultimately lead to the prevention of these premature deaths.

An optional component of the project allows consenting families to participate in a study of these deaths through an SDY Case Registry, which is being conducted by the CDC, the National Heart, Lung, and Blood Institute (NHLBI), and the National Institute of Neurological Disorders and Stroke (NINDS) at the National Institutes of Health. Consent includes the storage of bio-specimens for DNA banking and testing

in the event that medical insights or breakthroughs in the future promise additional information about the child's death.

Adult Fatality Review was established for Virginia localities effective July 1, 2015. Similar to child and domestic violence death review efforts, local communities may now convene such teams to examine deaths of any persons 60 years of age or older or any vulnerable or incapacitated adult 18 years of age or older, under three different scenarios: (1) persons who were the subject of an adult protective services or law enforcement investigation; (2) adults whose death was due to abuse, neglect, or exploitation or acts suggesting abuse, neglect, or exploitation; and (3) persons whose death was investigated by the Office of the Chief Medical Examiner as suspicious, unusual, or unnatural. The goal of this process is to identify at risk populations in their communities, opportunities for improved response to adult abuse and neglect, and best practices for preventing further abuse and violence. Currently there is no funding for a State Adult Fatality Review Team and efforts to solicit grant funds have not been successful or funds have not been available for this work. Currently, the Adult Fatality Review remains an unfunded mandate.

Local and Regional Overdose Fatality Review was established for Virginia localities effective July 1, 2018. Currently, there are no formal teams, but interest is growing. Like child, adult, and domestic violence death review efforts, local communities may now convene such teams to examine deaths of any persons who died of an overdose related death. Localities may establish a team under this statute (Code of Virginia §32.1-283.7) for the purpose of: (1) conducting contemporaneous reviews of local overdose deaths, (2) promoting cooperation and coordination among agencies involved in investigations of overdose deaths or in providing services to surviving family members, (3) developing an understanding of the causes and incidence of overdose deaths in the locality, (4) developing plans for and recommending changes within the agencies represented on the local team to prevent overdose deaths, and (5) advising the Department and other relevant state agencies on changes to law, policy, or practice to prevent overdose deaths. The goal of this process is to identify at risk populations in their communities, opportunities for improved response to overdoses, and best practices for preventing further overdose related deaths.

In Virginia, information learned from fatality review efforts supports the development of recommendations and information sharing with critical stakeholders to reduce injury and death. The Division of Death Prevention provides data and technical assistance to those in our community. Data can be requested from any of our projects, by reaching out to Division Director or the Project Manager for the program of interest.

More information and who to contact can be found at: https://www.vdh.virginia.gov/medical-examiner/division-of-death-prevention/

Training and Education

Forensic Pathology Training Programs

Website – http://www.vdh.virginia.gov/medical-examiner/forensic-pathology-training-programs/

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 forensic pathologists of the Central, Tidewater, and Western District offices are the core faculty of the Department of Legal Medicine at VCU, chaired by the Chief Medical Examiner. OCME office staff has full access to facilities at VCU and its medical, dental, pharmacy, hospital administration, nursing, and other health science schools. The Department of Legal Medicine Faculty also participate as attending physicians for the forensic pathology fellowship.

The forensic pathology training program is designed to provide training and experience to pathologists pursuing a career in forensics. It is the aim of the forensic pathology training program that, by the end of the fellowship year, the trainee can adequately manage medicolegal death investigations with self-assurance and technical competence. After the 12-month fellowship, the physician should have obtained enough experience to be eligible to take the American Board of Pathology examination in the subspecialty of Forensic Pathology. Upon completion, the trainee will be ready to accept a position in all types of Medical Examiner/Coroner systems. All district OCME offices are approved to host and train physicians for the fellowship. The fellowship will interview candidates for 2025-26 via the fellowship arm of the National Resident Matching Program.

The OCME offers forensic rotations to residents, medical students, and pathology assistant students. Medical students from VCU and the Eastern Virginia Medical School (EVMS) typically rotate for a 2–4 week elective to learn autopsy techniques and death certification. Pathology assistant students from EVMS rotate for 8 weeks to learn autopsy techniques and procedures at the Tidewater and Central Offices. The OCME also offers month long rotations for resident physicians from VCU, University of Virginia, Walter Reed Hospital, and National Institute of Health who desire exposure to forensic pathology as part of their anatomical pathology training. Residents from other in-state or out-of-state programs may be accepted for training.

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 medicolegal procedures, and review of reports and records. One requirement within the reports and records section is an annual statistical report, which the Virginia OCME fulfills with this report. The following two tables provide data on the NAME required fields on 2023 death investigations:

	Central	Northern	Tidewater	Western	Total
Total Deaths that Occurred in Virginia	21,921	20,819	17,236	17,539	77,523*
Total Deaths Reported to OCME	6,425	4,328	3,409	4,883	19,045
OCME Cases by Examination Type					
Complete examinations (autopsy)	969	477	521	407	2,374
External examination	1,880	1,505	1,623	1,497	6,505
Partial examination	30	64	83	29	206
Total Cases Accepted by the OCME	2,879	2,046	2,227	1,933	9,085
OCME Cases by Manner of Death					
Accident	1,635	978	1,170	1,118	4,901
Homicide	202	88	221	96	607
Natural	659	554	530	419	2,162
Suicide	331	381	255	263	1,230
Undetermined	47	43	51	37	178
Undefined for Fetal Death*	5	2	0	0	7
Total Cases Accepted by the OCME	2,879	2,046	2,227	1,933	9,085

* Eight deaths listed an unknown death locality

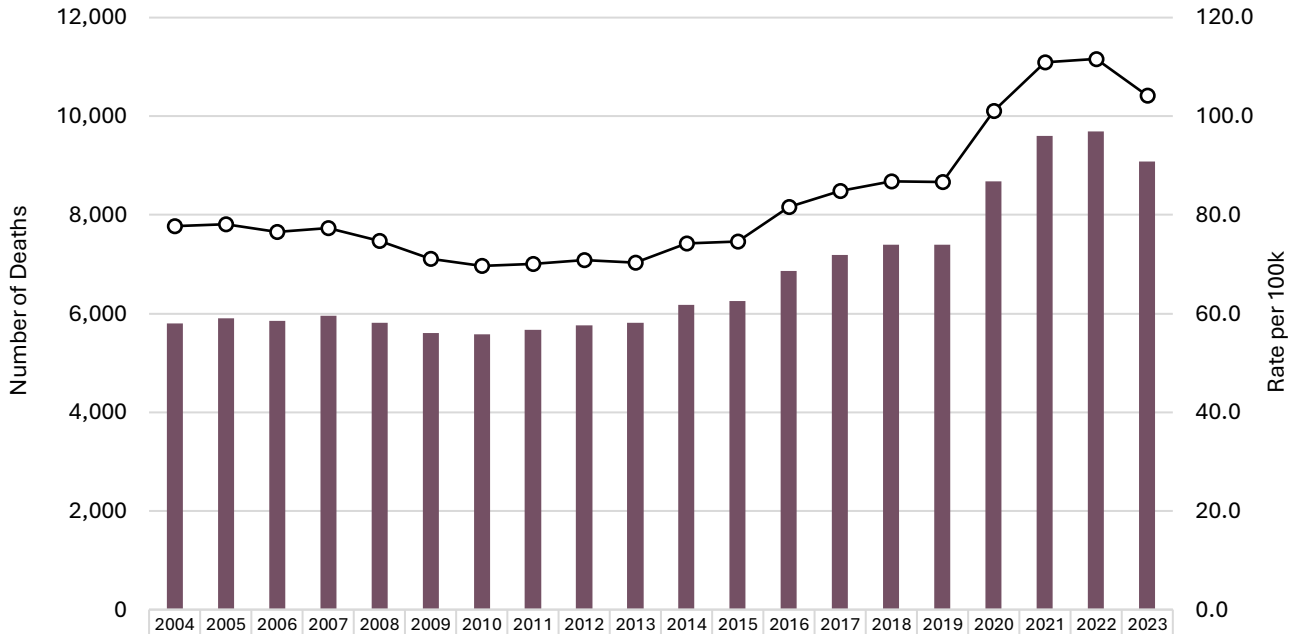
NAME Accreditation Metric	Central	Northern	Tidewater	Western	Total
Bodies transported by office	2,879	2,046	2,227	1,933	9,085
Bodies transported to office	1,892	1,068	1,016	860	4,836
Cases with toxicology (including retro cases)	1,945	1,354	1,570	1,052	5,921
Exhumations	0	1	0	0	1
Eye donations on OCME cases	19	21	135	2	177
Hospital autopsies under OCME jurisdiction	0	0	0	0	0
Organ and tissue donations on OCME cases	34	58	6	2	100
Retrospective cases (cases handled separately)	17	16	22	17	72
Scene visits	280	210	275	147	912
Unclaimed bodies	176	51	36	25	288
Unidentified bodies after examination (long term)	1	0	0	2	3

Section 1: Total OCME Cases (N = 9,085)

In 2023, 19,045 deaths were reported to the Office of the Chief Medical Examiner (OCME), which accounted for 24.6% of the estimated total deaths that occurred in Virginia. The OCME accepted 9,085 or 47.7% of these deaths as either autopsies or external examinations (views). [NOTE: Retrospective cases are not included in the accepted total case count but are examined separately in Section 9. While these deaths were investigated in 2023, they may not necessarily have occurred in 2023]. The caseload for 2023 represented a 6.3% decrease compared to 2022. Of the deaths investigated by the OCME in 2023:

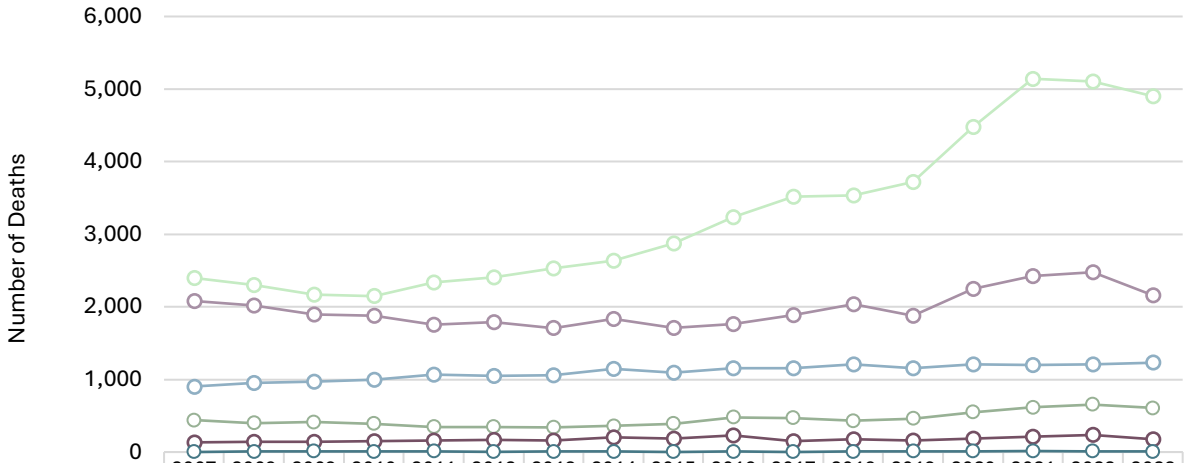
- Among manners of death, all categories but suicide decreased in 2023 compared to 2022
- Black males continue to have disproportionate number of homicides compared to their portion within the general population
- White males continue to have the highest rate of suicide in the Commonwealth
- Males continue to represent a larger portion of OCME deaths than females (70.1% in 2023)
- The 55-64 year old age group had the greatest number of OCME deaths, representing 16.8% of OCME cases
- Within Virginia, Fairfax County had the largest number of residential deaths (n=520) and Richmond City had the largest number of by injury locality (n=584). Bath County had both the highest rate of death by residential locality (296.2 per 100,000) and death by injury locality (370.3 per 100,000)

Figure 1.1 Number and Rate of OCME Cases by Year of Death, 2004-2023



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	5,799	5,908	5,851	5,960	5,811	5,608	5,574	5,672	5,767	5,809	6,176	6,253	6,868	7,187	7,390	7,393	8,684	9,605	9,693	9,085
Mortality Rate	77.7	78.1	76.6	77.3	74.8	71.1	69.7	70.1	70.8	70.3	74.2	74.6	81.6	84.9	86.8	86.6	101.1	110.9	111.6	104.2

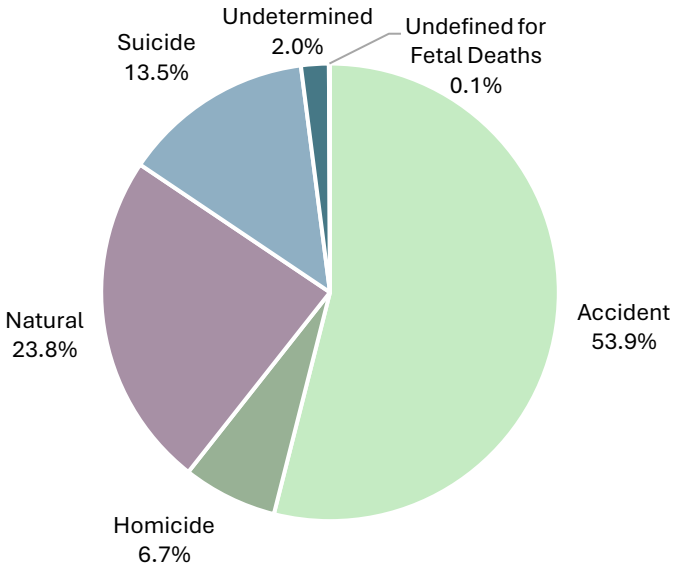
Figure 1.2 Number of OCME Cases by Manner of Death, 2007-2023



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Accident	2,397	2,299	2,173	2,147	2,340	2,411	2,534	2,632	2,871	3,238	3,520	3,534	3,717	4,483	5,142	5,105	4,901
Homicide	440	399	412	391	345	344	339	359	389	477	469	430	461	549	613	653	607
Natural	2,084	2,016	1,898	1,881	1,752	1,788	1,706	1,830	1,711	1,762	1,887	2,036	1,882	2,248	2,421	2,477	2,162
Suicide	903	948	973	994	1,064	1,052	1,061	1,145	1,096	1,157	1,156	1,211	1,159	1,209	1,200	1,211	1,230
Undetermined	133	142	142	154	162	170	163	203	182	229	152	173	163	186	215	235	178
Undefined for Fetal Deaths	3	7	10	7	9	2	6	7	4	5	3	6	11	9	14	12	7

Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Figure 1.3 Percentage of OCME Cases by Manner of Death, 2023



Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Table 1.1 Number of OCME Cases by Manner of Death and District, 2023

Manner of Death	Central	Northern	Tidewater	Western	Total
Accident	1,635	978	1,170	1,118	4,901
Homicide	202	88	221	96	607
Natural	659	554	530	419	2,162
Suicide	331	381	255	263	1,230
Undetermined	47	43	51	37	178
Undefined for Fetal Deaths	5	2	0	0	7
Total	**2,879**	**2,046**	**2,227**	**1,933**	**9,085**

Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Table 1.2 Number of OCME Cases by District and Autopsy Status, 2023

OCME District	Received Autopsy	No Autopsy	Total
Central	999	1,880	2,879
Northern	541	1,505	2,046
Tidewater	604	1,623	2,227
Western	436	1,497	1,933
Total	**2,580**	**6,505**	**9,085**

Table 1.3 Number of OCME Cases by Manner of Death and Autopsy Status, 2023

Manner of Death	Received Autopsy	No Autopsy	Total
Accident	802	4,099	4,901
Homicide	606	1	607
Natural	402	1,760	2,162
Suicide	586	644	1,230
Undetermined	177	1	178
Undefined for Fetal Deaths	7	0	7
Total	**2,580**	**6,505**	**9,085**

Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Table 1.4 Number of OCME Cases by Age Group and Autopsy Status, 2023

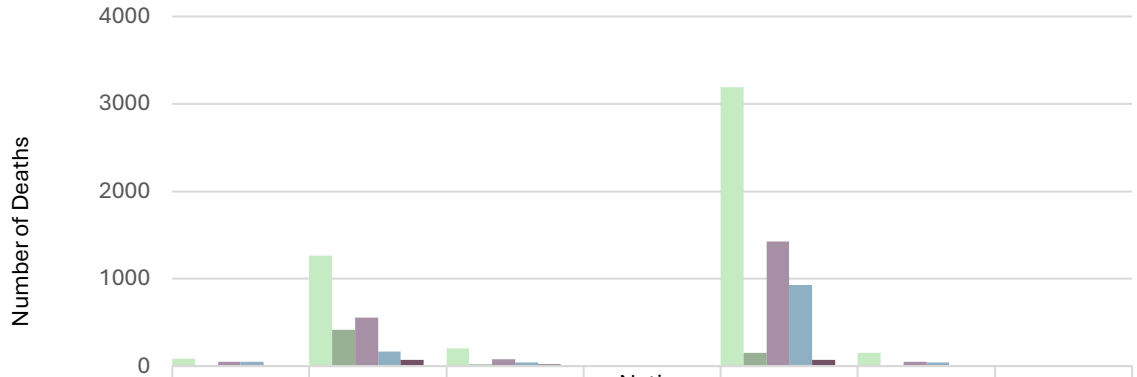
Age Group	Received Autopsy	No Autopsy	% Received Autopsy	Total
<1	122	2	98.4%	124
1-4	48	5	90.6%	53
5-9	14	5	73.7%	19
10-14	34	12	73.9%	46
15-19	171	77	69.0%	248
20-24	274	205	57.2%	479
25-34	562	625	47.3%	1,187
35-44	405	1,012	28.6%	1,417
45-54	254	990	20.4%	1,244
55-64	261	1,269	17.1%	1,530
65-74	224	943	19.2%	1,167
75-84	135	718	15.8%	853
85+	61	641	8.7%	702
Unknown	8	1	88.9%	9
Fetus	7	0	100.0%	7
Total	**2,580**	**6,505**	**28.4%**	**9,085**

Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Table 1.5 Number and Percentage of OCME Cases by Race/Ethnicity, 2023

Race/Ethnicity	Number	Percent
Asian	194	2.1%
Black	2472	27.2%
Hispanic	359	4.0%
Native American	11	0.1%
White	5767	63.5%
Other	265	2.9%
Unknown	17	0.2%
Total	**9085**	**100.0%**

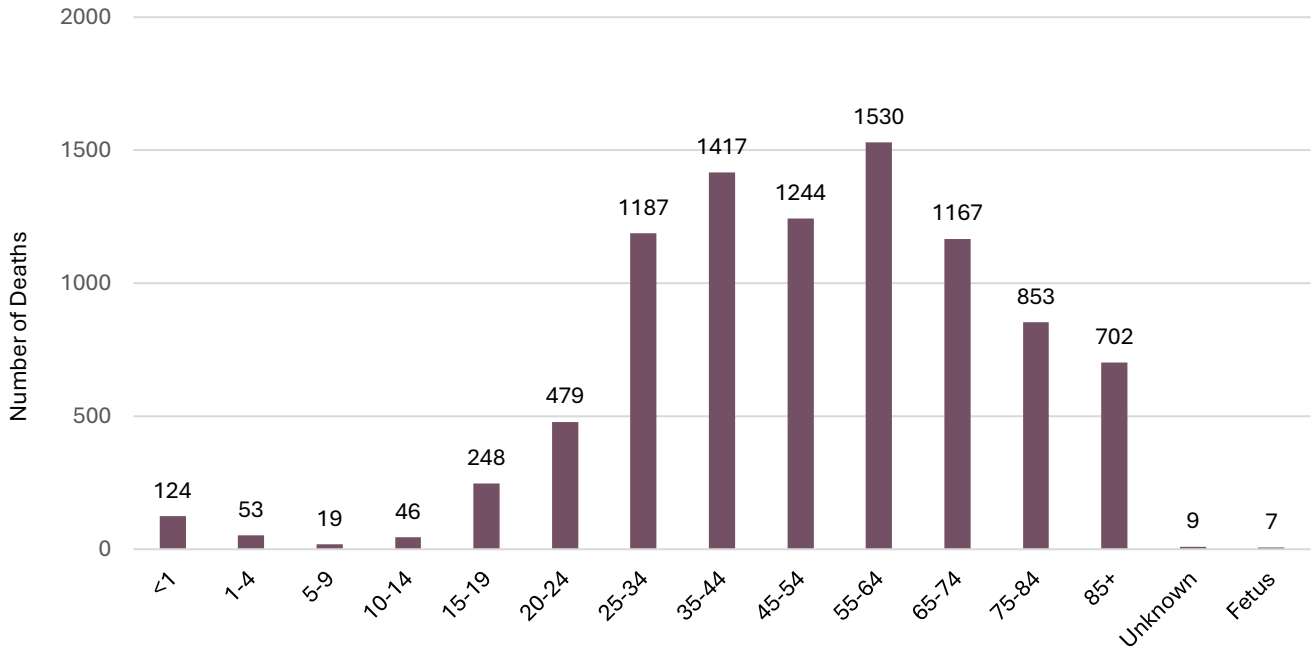
Figure 1.4 Number of OCME Cases by Manner of Death and Race/Ethnicity, 2023



	Asian	Black	Hispanic	Native American	White	Other	Unknown
Accident	84	1266	202	6	3187	151	5
Homicide	4	412	23	0	150	16	2
Natural	52	555	75	4	1424	48	4
Suicide	50	165	41	1	931	42	0
Undetermined	4	73	18	0	72	7	4
Undefined for Fetal Deaths	0	1	0	0	3	1	2

Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Figure 1.5 Number of OCME Cases by Age Group, 2023



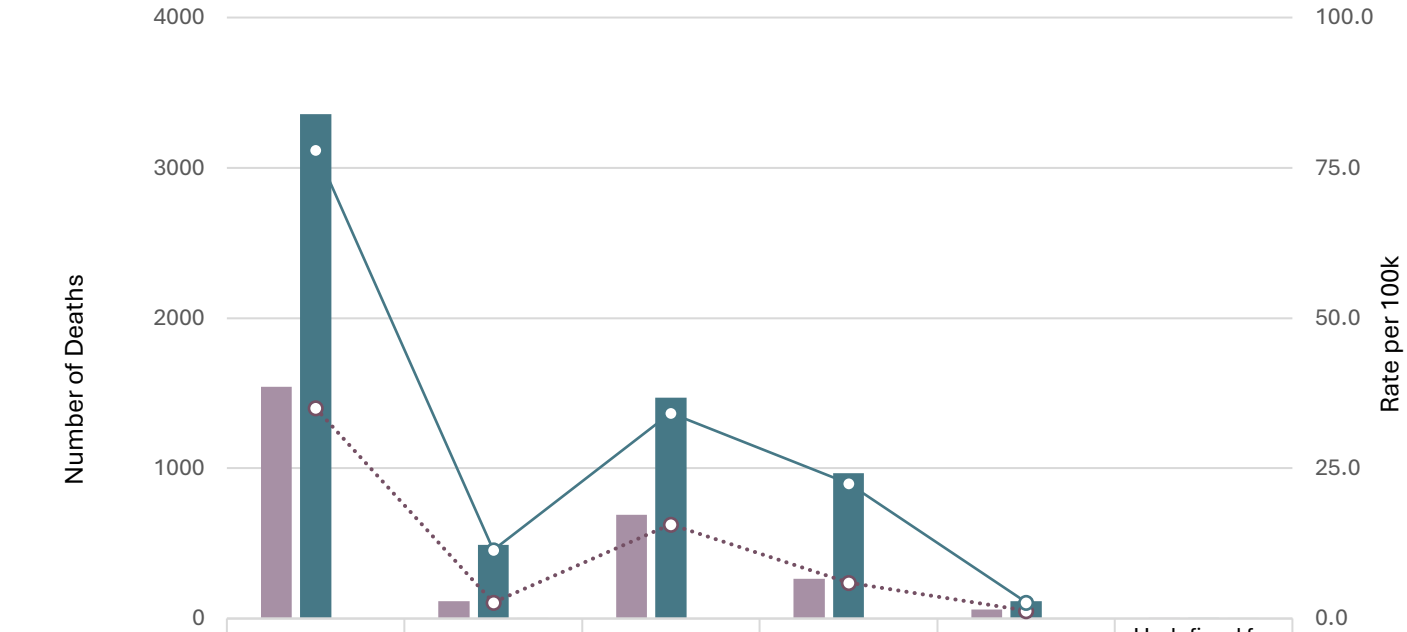
Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Table 1.6 Number and Percentage of OCME Cases by Manner of Death and Sex, 2023

Manner of Death	Female		Male		Unknown		Total	
	N	%	N	%	N	%	N	%
Accident	1,543	17.0%	3,358	37.0%	0	0.0%	4,901	53.9%
Homicide	117	1.3%	489	5.4%	1	0.0%	607	6.7%
Natural	692	7.6%	1,470	16.2%	0	0.0%	2,162	23.8%
Suicide	263	2.9%	967	10.6%	0	0.0%	1,230	13.5%
Undetermined	58	0.6%	117	1.3%	3	0.0%	178	2.0%
Undefined for Fetal Deaths	2	0.0%	4	0.0%	1	0.0%	7	0.1%
Total	**2,675**	**29.4%**	**6,405**	**70.5%**	**5**	**0.1%**	**9,085**	**100.0%**

Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Figure 1.6 Number and Rate of OCME Cases by Manner of Death and Sex, 2023



	Accident	Homicide	Natural	Suicide	Undetermined	Undefined for Fetal Deaths
Female	1543	117	692	263	58	2
Male	3358	489	1470	967	117	4
Unknown	0	1	0	0	3	1
Female Rate	35.0	2.7	15.7	6.0	1.3	*
Male Rate	78.0	11.4	34.1	22.5	2.7	*

Note: Rates are not calculated for 'undefined for fetal deaths' categories due to incomparable rate calculations

Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Table 1.7 Number of OCME Cases by Sex, Age Group, and Manner of Death, 2023

Sex	Age Group	Accident	Homicide	Natural	Suicide	Undetermined	Undefined for Fetal Deaths	Total
Female	<1	14	6	5	0	34	0	59
	1-4	7	3	5	0	4	0	19
	5-9	4	2	2	0	0	0	8
	10-14	2	0	1	6	2	0	11
	15-19	28	6	4	8	0	0	46
	20-24	67	13	8	19	2	0	109
	25-34	195	19	34	34	6	0	288
	35-44	248	22	69	45	3	0	387
	45-54	180	14	81	46	0	0	321
	55-64	167	13	145	51	2	0	378
	65-74	155	11	158	22	2	0	348
	75-84	189	5	111	23	1	0	329
	85+	286	2	69	9	2	0	368
	Unknown	1	1	0	0	0	0	2
	Fetus	0	0	0	0	0	2	2
	Subtotal	1543	117	692	263	58	2	2675
Male	<1	8	4	12	0	41	0	65
	1-4	14	2	5	0	13	0	34
	5-9	5	2	3	0	1	0	11
	10-14	14	6	7	8	0	0	35
	15-19	82	69	8	37	6	0	202
	20-24	180	75	8	105	2	0	370
	25-34	530	129	71	157	12	0	899
	35-44	615	86	175	146	8	0	1030
	45-54	499	48	230	140	6	0	923
	55-64	564	36	386	153	13	0	1152
	65-74	338	26	341	106	8	0	819
	75-84	276	5	163	77	3	0	524
	85+	233	1	59	38	3	0	334
	Unknown	0	0	2	0	1	0	3
	Fetus	0	0	0	0	0	4	4
	Subtotal	3358	489	1470	967	117	4	6405
Unknown	Unknown	0	1	0	0	3	0	4
	Fetus	0	0	0	0	0	1	1
	Subtotal	0	1	0	0	3	1	5
Total		**4901**	**607**	**2162**	**1230**	**178**	**7**	**9085**

Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Figure 1.7 Number of OCME Cases by Month of Death, 2023

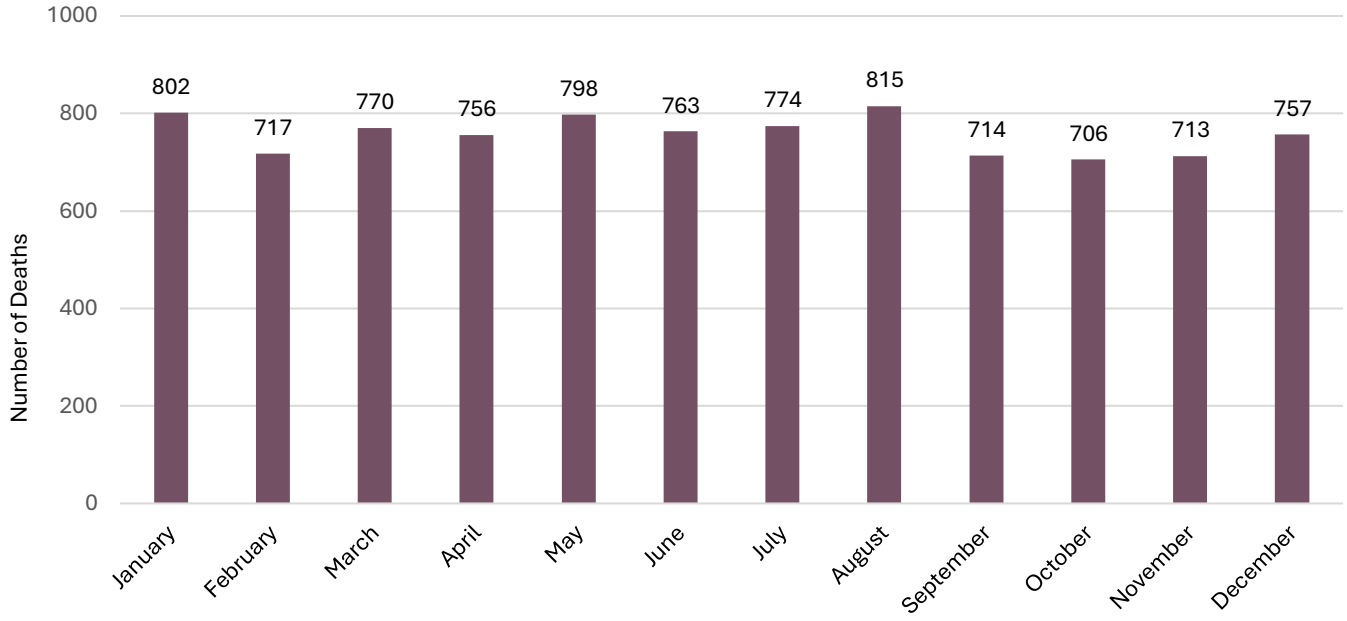
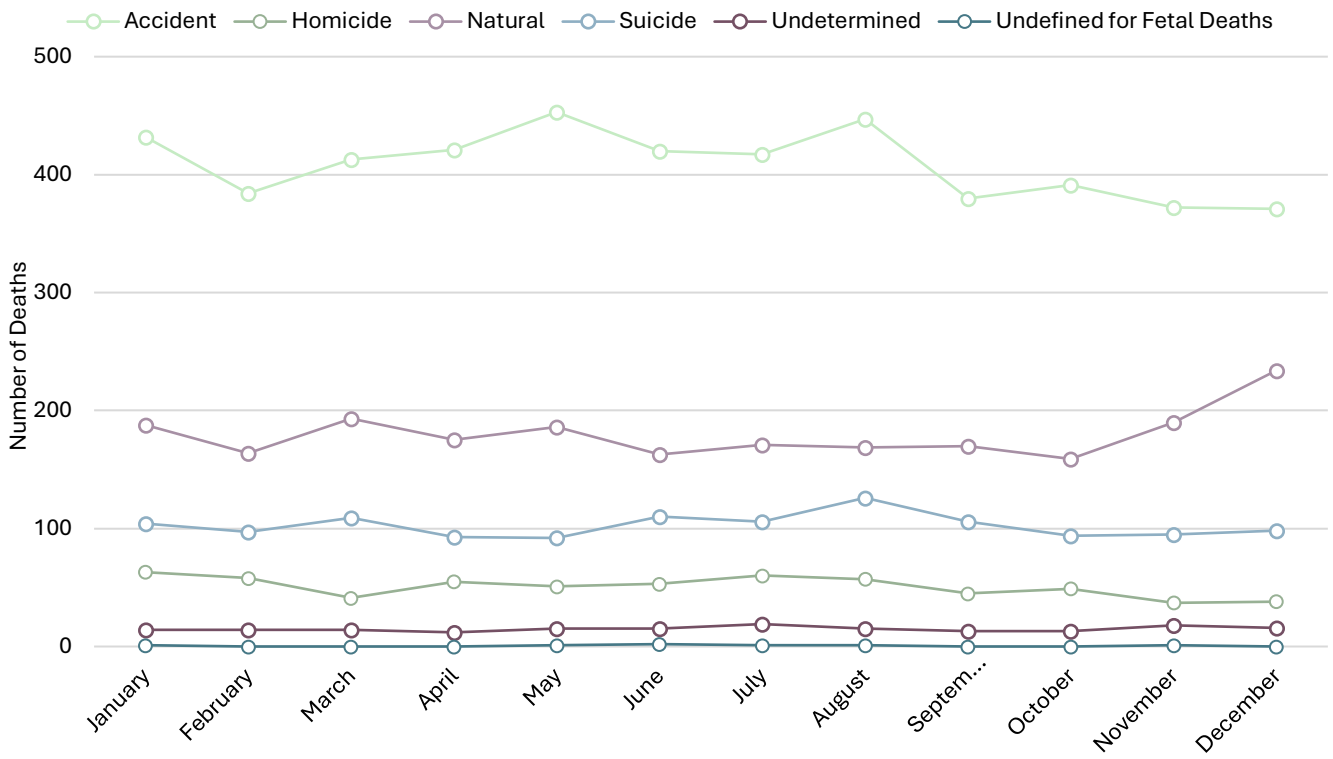


Figure 1.8 Number of OCME Cases by Month and Manner of Death, 2023



Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Figure 1.9 Number of OCME Cases by Day of Death, 2023

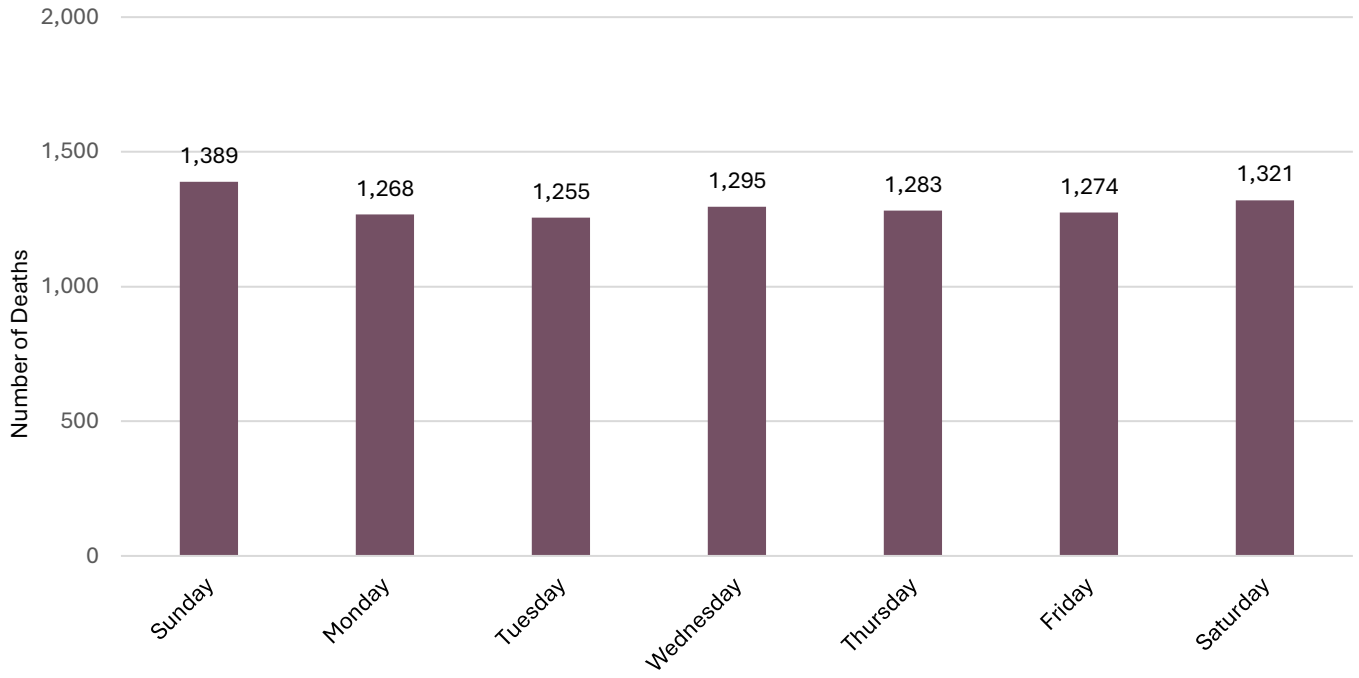
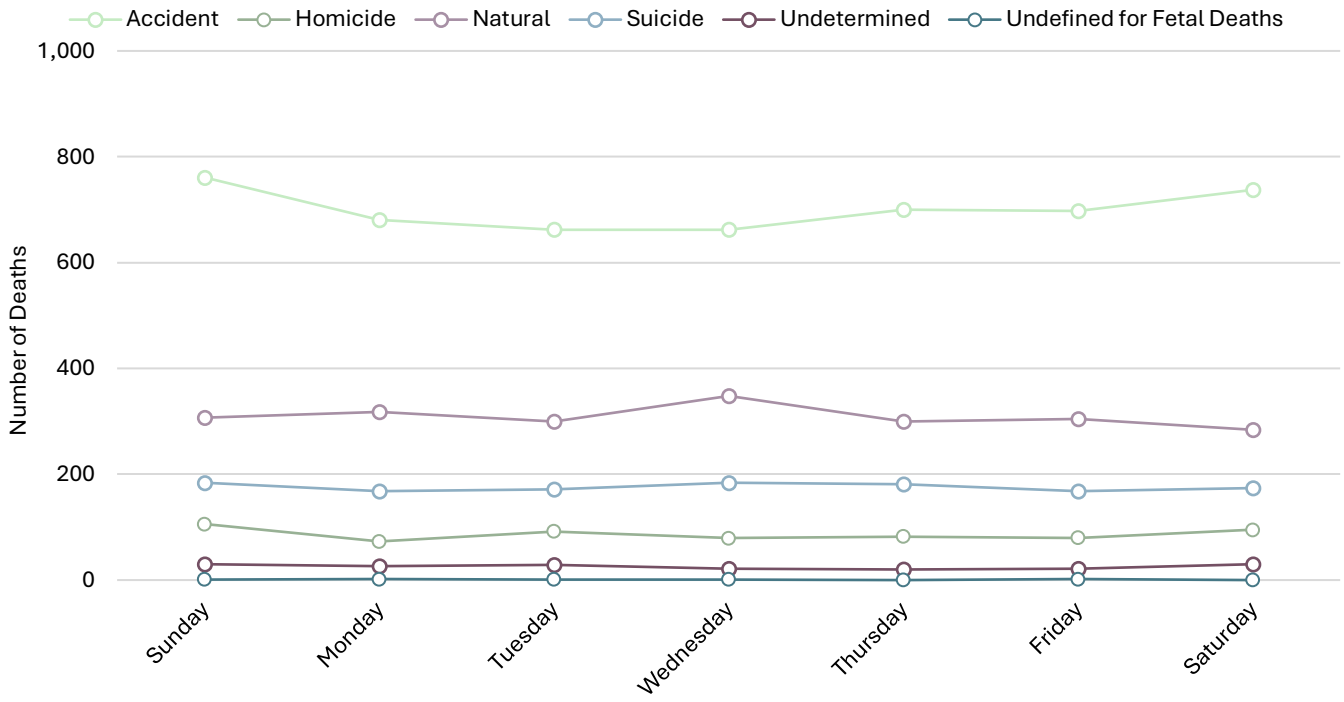


Figure 1.10 Number of OCME Cases by Day and Manner of Death, 2023



Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Table 1.8 Number and Rate of OCME Cases by Manner of Death and Locality of Residence, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

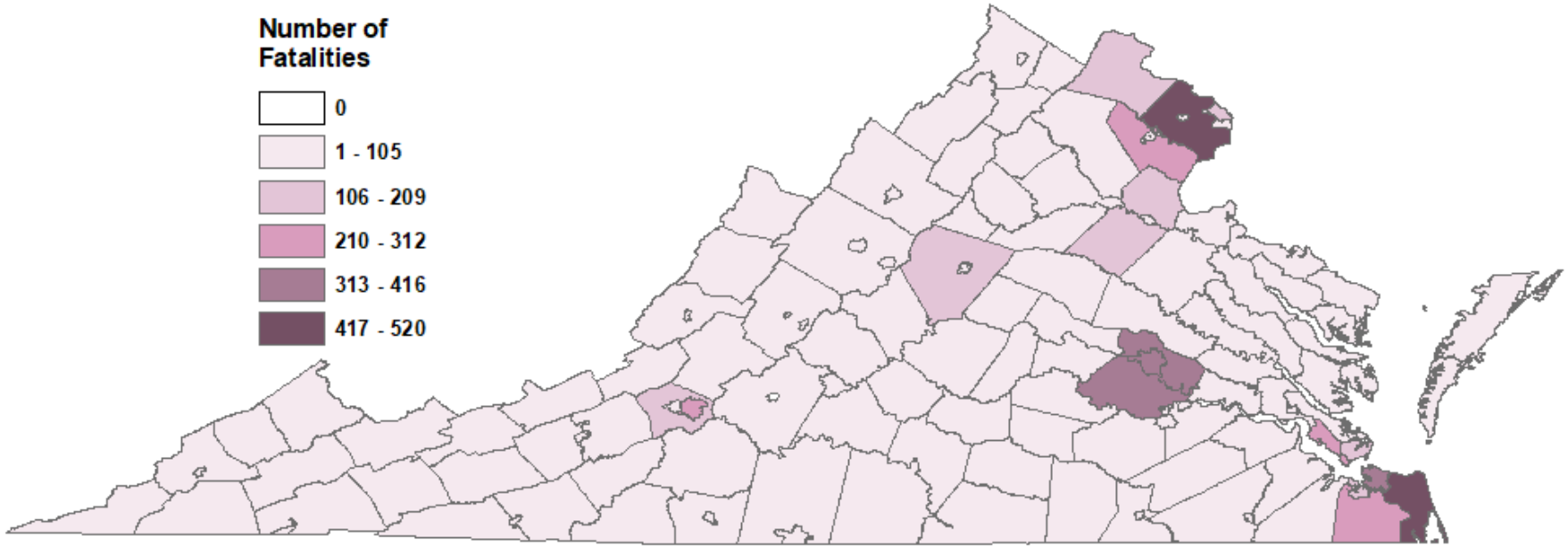
Table 1.9 Number and Rate of OCME Cases by Manner of Death and Locality of Injury, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

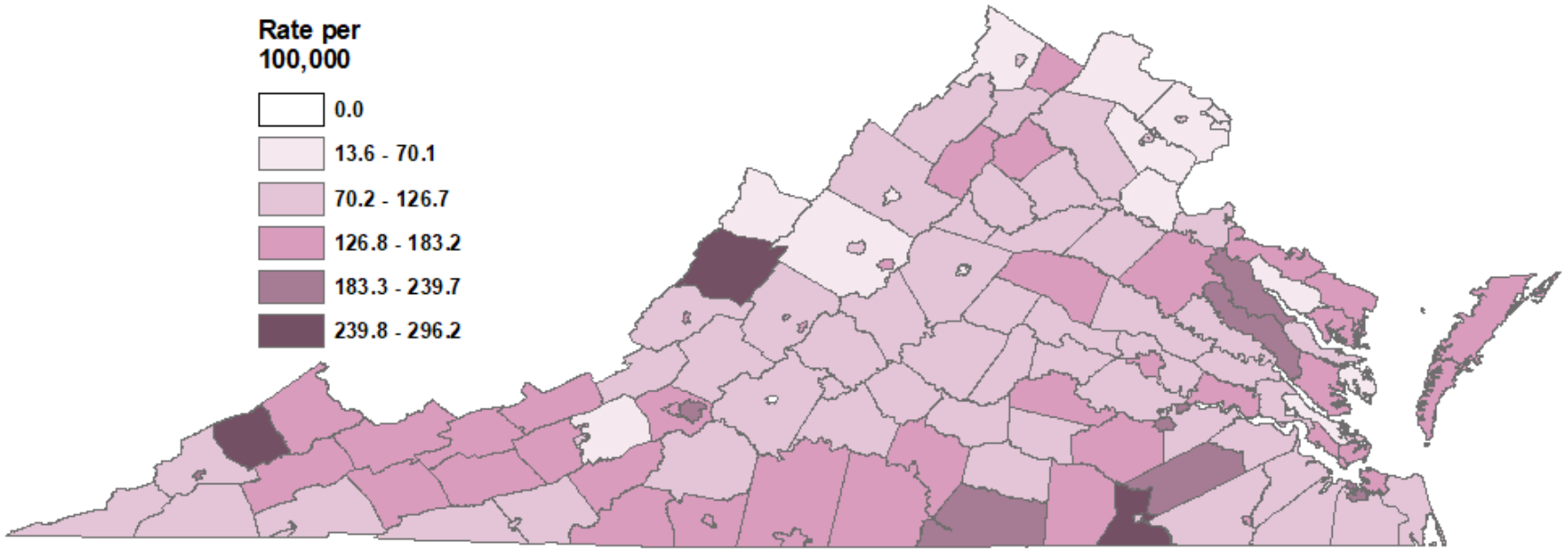
Table 1.10 Number of OCME Cases by Manner of Death and Locality of Death, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

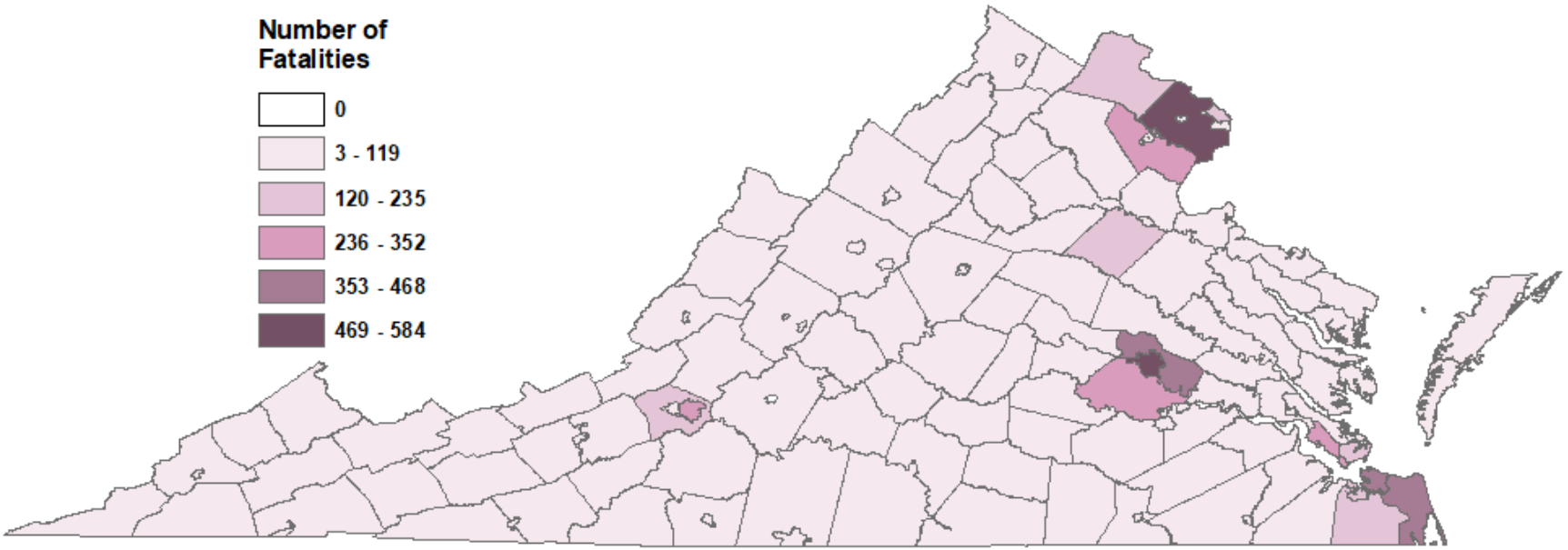
Map 1.1 Number of OCME Cases by Locality of Residence, 2023



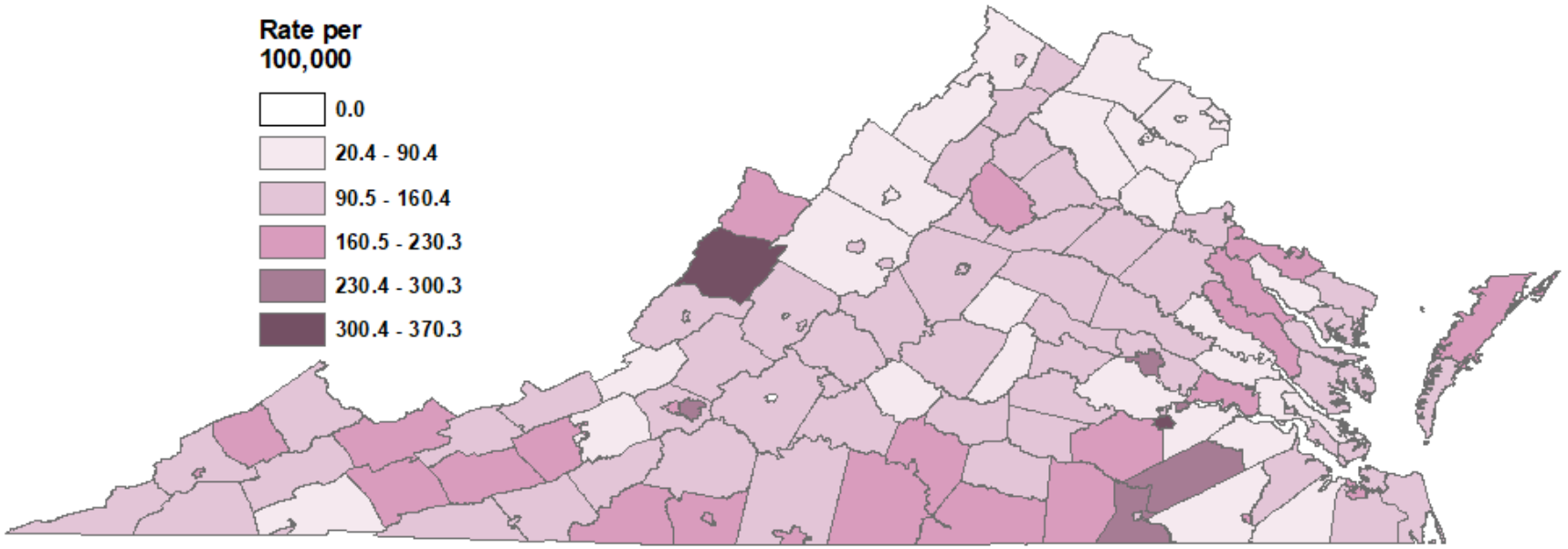
Map 1.2 Rates of OCME Cases by Locality of Residence, 2023



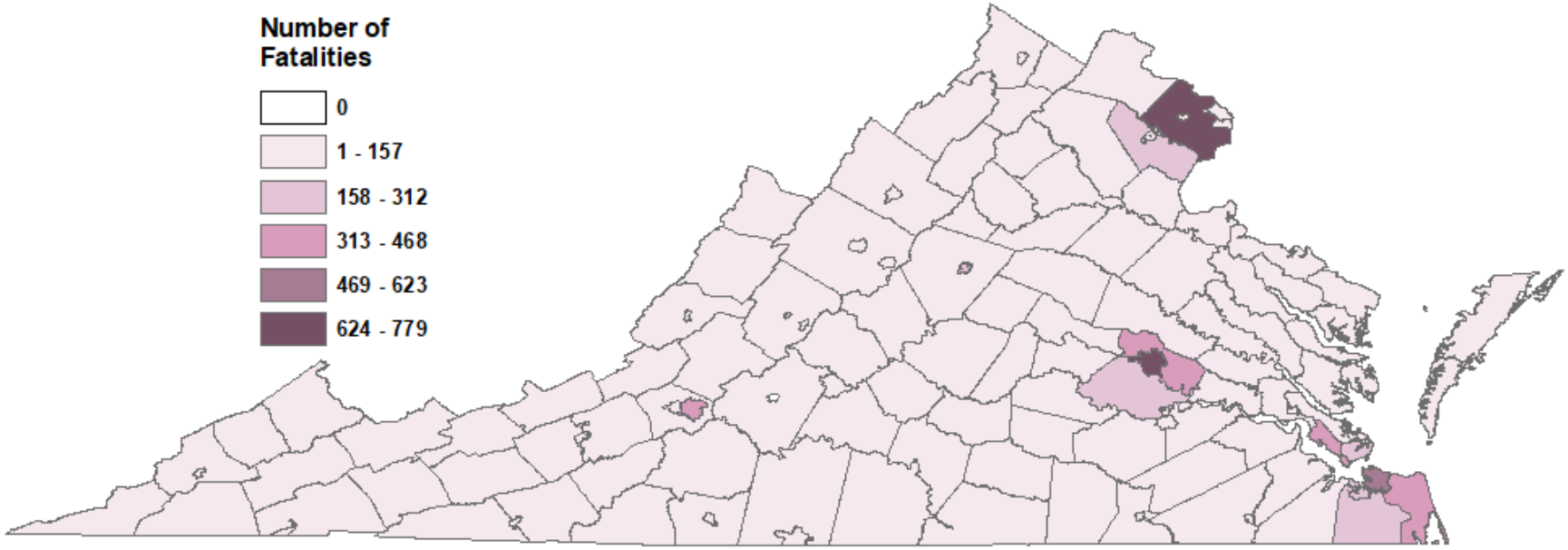
Map 1.3 Number of OCME Cases by Locality of Injury, 2023



Map 1.4 Rate of OCME Cases by Locality of Injury, 2023



Map 1.5 Number of OCME Cases by Locality of Death, 2023



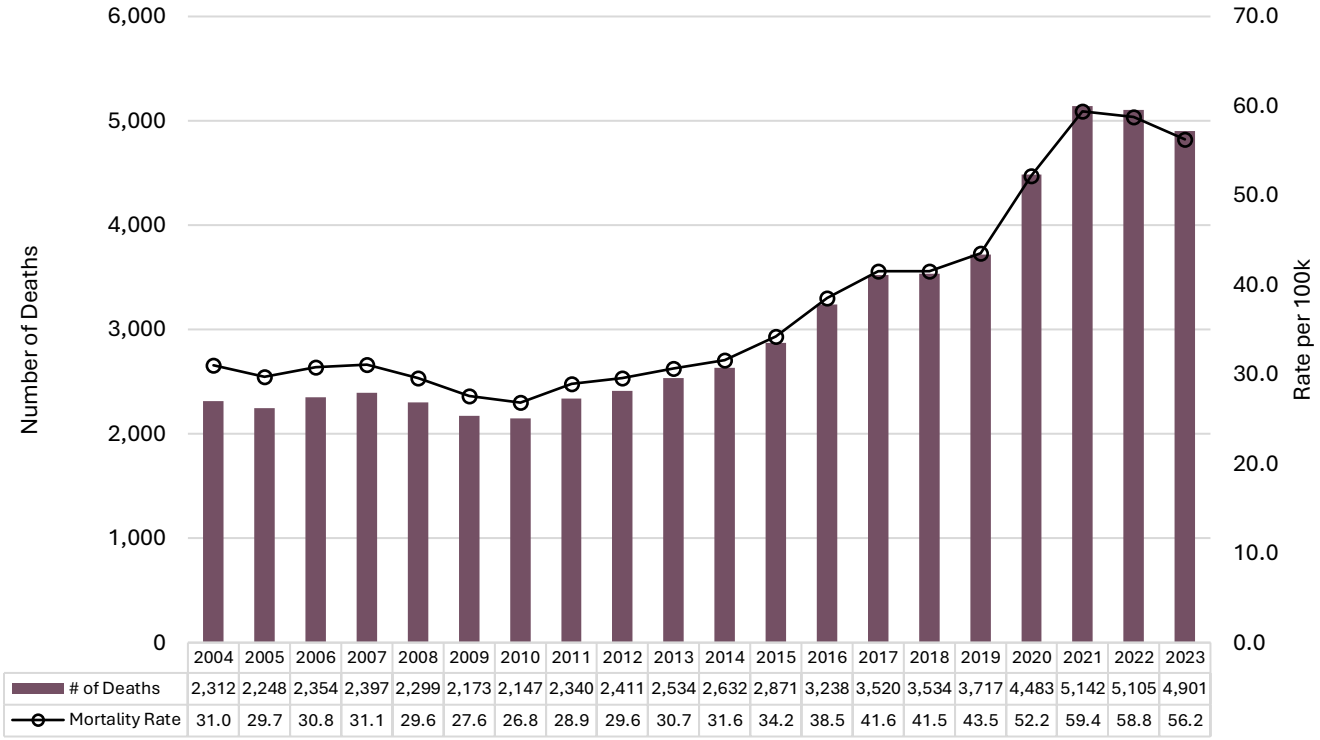
Section 2: Manners of Death (N = 4,901)

ACCIDENTAL DEATHS (N = 4,901)

Accidents accounted for 53.9% of the deaths investigated by the OCME in 2023, which is the greatest proportion of deaths by any manner.

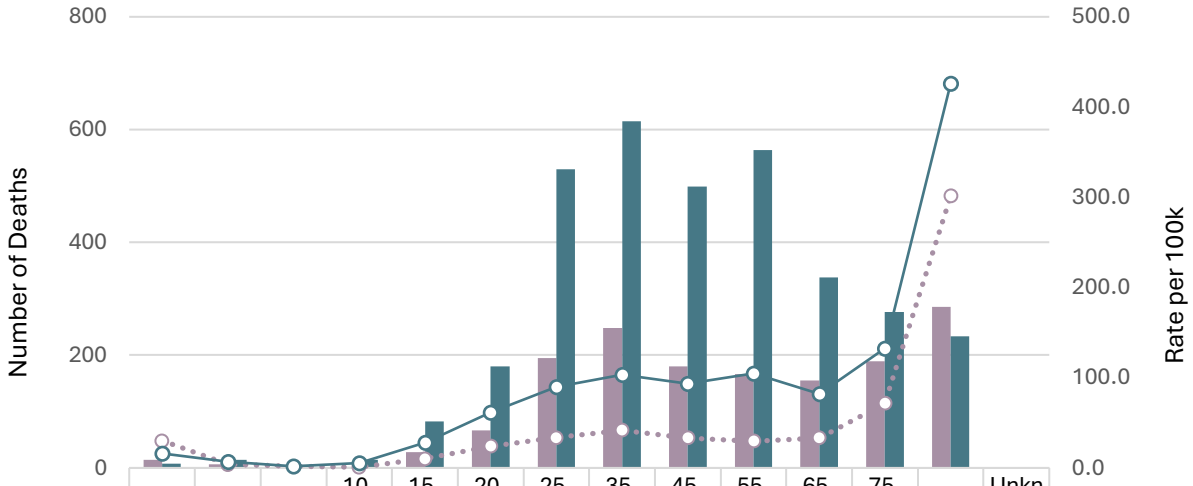
- The total number of accidental deaths decreased 4.0% in 2023 compared to 2022
- Fatal drug overdoses were the most common cause of accidental death (49.4%), followed by accidental falls (21.9%)
- Black males, followed by White males, had the highest rates of accidental deaths, all causes (116.6 and 81.1 per 100,000, respectively)
- Seniors 85 years and older had the highest mortality rate due to falls (305.4 per 100,000 persons)
- Of the 3,474 (70.9%) decedents of accidental death that were tested for ethanol, 947 (27.3%) had ethanol detected through toxicology. Of those tested, 538 (15.5%) had a blood alcohol concentration of 0.08% or greater; the level of legal intoxication

Figure 2.1 Number and Rate of Accidental Deaths by Year of Death, 2004-2023



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	2,312	2,248	2,354	2,397	2,299	2,173	2,147	2,340	2,411	2,534	2,632	2,871	3,238	3,520	3,534	3,717	4,483	5,142	5,105	4,901
Mortality Rate	31.0	29.7	30.8	31.1	29.6	27.6	26.8	28.9	29.6	30.7	31.6	34.2	38.5	41.6	41.5	43.5	52.2	59.4	58.8	56.2

Figure 2.2 Number and Rate of Accidental Deaths by Age Group and Sex, 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unknown
Female	14	7	4	2	28	67	195	248	180	167	155	189	286	1
Male	8	14	5	14	82	180	530	615	499	564	338	276	233	0
Female Rate	30.3	3.7	1.6	0.8	10.1	24.1	33.7	41.9	33.3	29.6	33.2	71.6	301.2	*
Male Rate	16.3	7.0	1.9	5.1	28.2	61.2	89.5	103.6	93.4	105.0	82.4	132.4	426.1	*

Note: Rates cannot be calculated for 'unknown' categories due to unknown population denominators

Figure 2.3 Percentage of Accidental Deaths by Race/Ethnicity, 2023

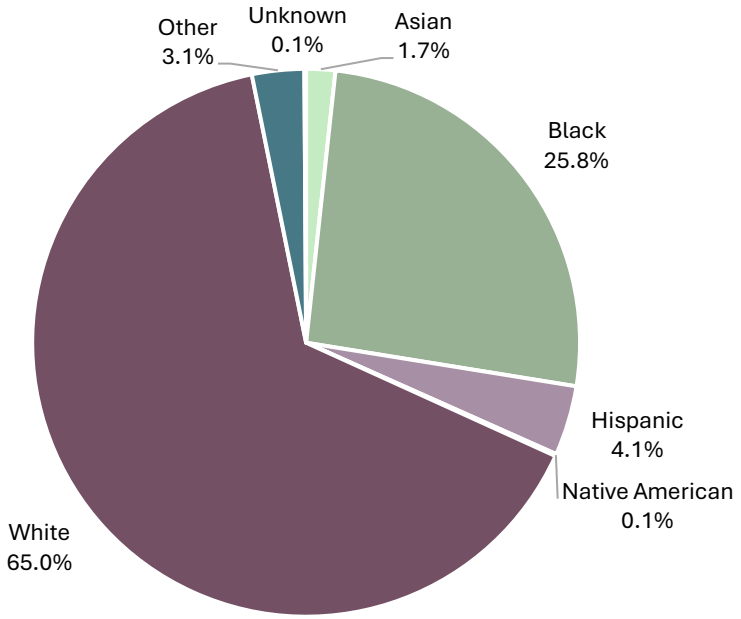
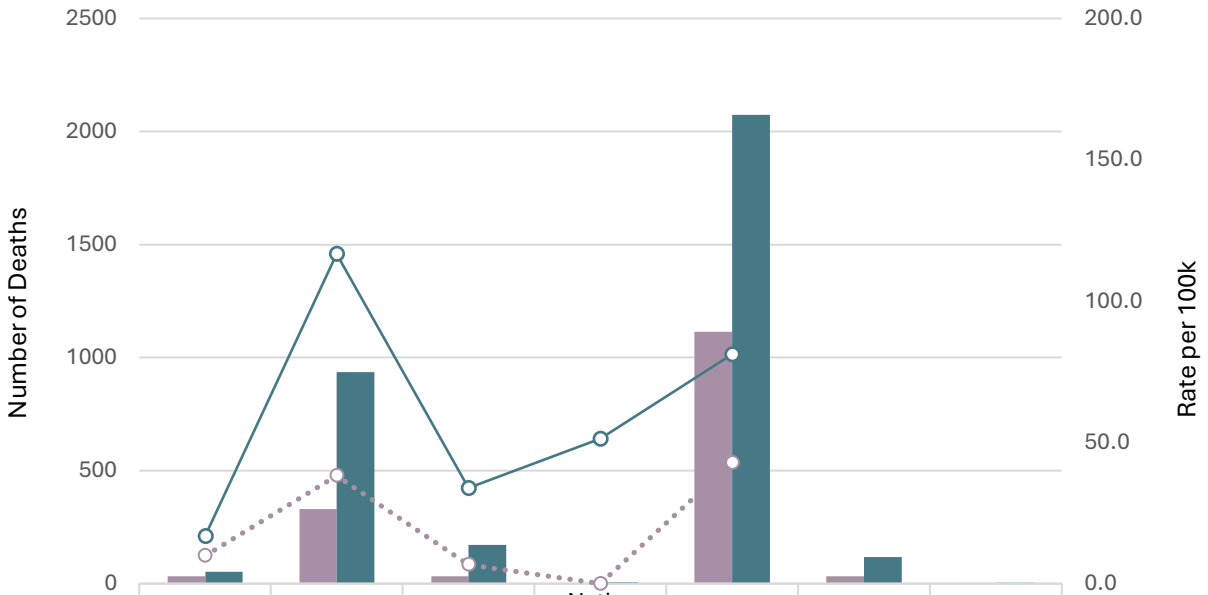


Figure 2.4 Number and Rate of Accidental Deaths by Race/Ethnicity and Sex, 2023



	Asian	Black	Hispanic	Native American	White	Other	Unknown
Female	33	330	32	0	1113	33	2
Male	51	936	170	6	2074	118	3
Female Rate	9.9	38.3	6.8	0.0	42.9	*	*
Male Rate	16.8	116.6	33.9	51.4	81.1	*	*

Note: Rates cannot be calculated for 'other' or 'unknown' categories due to unknown population denominators

Table 2.1 Number of Accidental Deaths by Cause and Method of Death, 2023

Method of Death	Autopsied	Total Cases
Animal/Insect		
Bit, stung, or kicked by an animal/insect	0	3
Asphyxia		
Carbon monoxide poisoning (motor vehicle exhaust)	2	3
Carbon monoxide poisoning (other)	2	2
Choked on food/foreign object	4	61
Drowned	53	80
Hanged	2	6
Mechanical/Positional asphyxia	7	13
Oxygen depletion/replacement	0	1
Plastic bag asphyxia	0	1
Strangled/Neck compression	1	1
Suffocated/Smothered	16	16
Other asphyxia	1	2
Drug Poisoning		
Ingested and/or injected ethanol, illicit, prescription, and/or other type of drug	464	2,421
Electrical		
Contacted electrical current	3	8
Exposure		
Exposed to cold	12	19
Exposed to heat	2	4
Fall/Jump		
Fell/Jumped from any height	36	1,071
Fire		
Thermal burns and/or inhalation of combustion products	34	60
Motor Vehicle Collision		
Aircraft	10	11
All-terrain vehicle	3	23
Armored vehicle	1	1
Bicycle	3	22
Boat	0	1
Bulldozer	1	1
Bus	0	1
Car	44	365
Construction heavy equipment	6	8
Dump truck	0	1
Electric scooter	0	2
Farm equipment	0	7
Golf cart	1	2

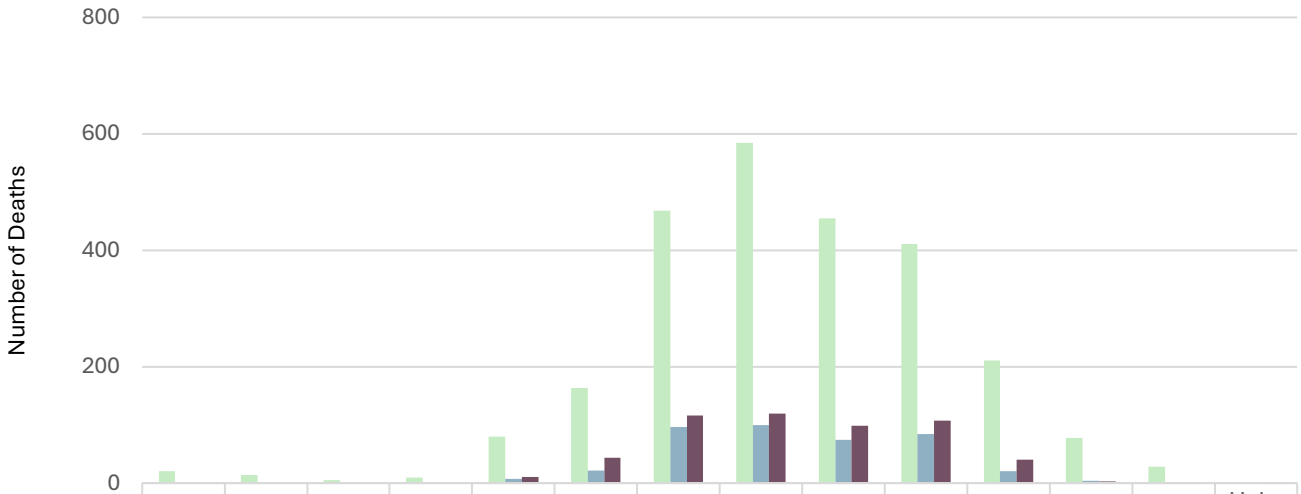
Lawnmower	0	5
Mo-Ped	1	5
Motorcycle	11	139
Multiple	4	10
Pickup truck	11	110
Scooter	0	1
Skateboard	0	1
Sport utility vehicle	14	160
Tractor trailer	3	22
Train	2	12
Truck (other)	2	14
Van	0	23
Unknown	24	105
Traumatic Injury		
Accidental discharge of firearm		
Handgun	3	3
Rifle	1	1
Shotgun	1	1
Explosion	1	4
Hit/Crushed by falling object	6	26
Sharp force injury	2	2
Other/Undetermined		
Other	8	40
Total Accidental Deaths	**802**	**4,901**

Table 2.2 Number and Rate of the Top Five Accidental Methods of Death by Age Group, 2023

Age Group	Choked on Food/Foreign Object		Drowning		Drug Use		Fall		Motor Vehicle Collision		Total
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
<1	0	0.0	2	2.1	0	0.0	0	0.0	2	2.1	4
1-4	2	0.5	6	1.5	0	0.0	1	0.3	6	1.5	15
5-9	0	0.0	3	0.6	0	0.0	1	0.2	5	1.0	9
10-14	1	0.2	3	0.6	2	0.4	0	0.0	8	1.5	14
15-19	0	0.0	8	1.4	37	6.5	1	0.2	57	10.0	103
20-24	0	0.0	9	1.6	142	24.8	1	0.2	89	15.6	241
25-34	1	0.1	12	1.0	516	44.1	5	0.4	180	15.4	714
35-44	3	0.3	8	0.7	651	54.9	11	0.9	167	14.1	840
45-54	4	0.4	7	0.7	495	46.0	20	1.9	123	11.4	649
55-64	5	0.5	9	0.8	430	39.0	78	7.1	171	15.5	693
65-74	19	2.2	8	0.9	138	15.7	163	18.6	127	14.5	455
75-84	15	3.2	4	0.8	9	1.9	333	70.5	75	15.9	436
85+	11	7.4	1	0.7	1	0.7	457	305.4	41	27.4	511
Unknown	0	ND	0	ND	0	ND	0	ND	1	ND	1
Total	**61**	**0.7**	**80**	**0.9**	**2,421**	**27.8**	**1,071**	**12.3**	**1,052**	**12.1**	**4,685**

Note: Highlighted pink cells indicate the highest rate among the method of death within the corresponding age group; rates are per 100,000; ND represents no denominator

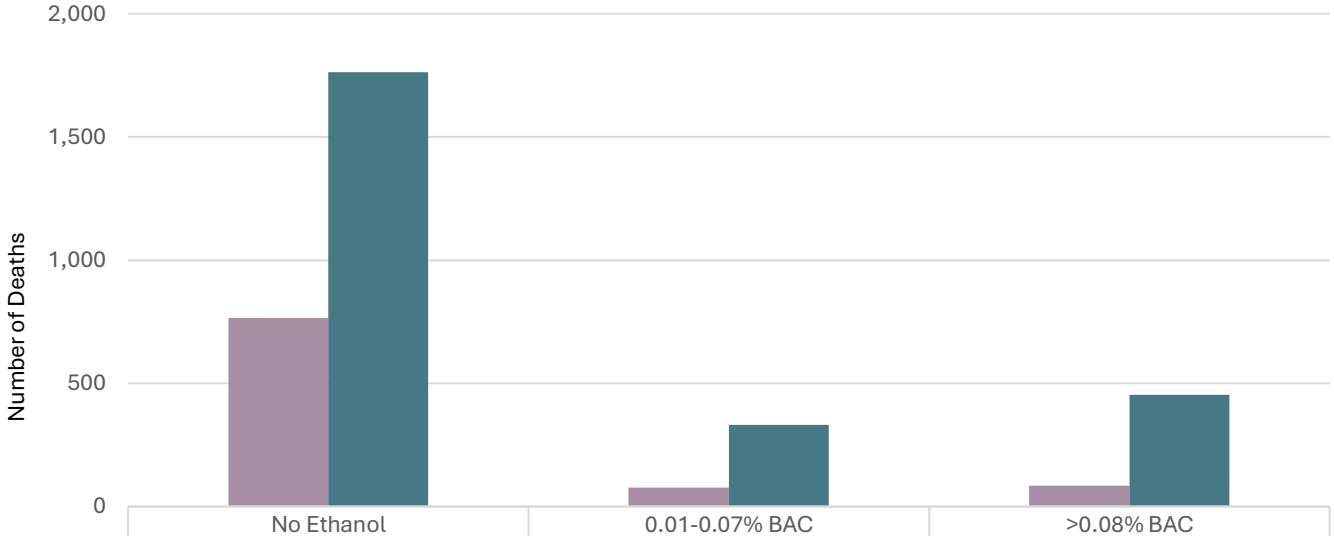
Figure 2.5 Number of Accidental Deaths by Age Group and Ethanol Level (N=3,474), 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unknown
No Ethanol	20	14	5	9	80	163	468	585	455	411	211	78	28	0
0.01-0.07% BAC	0	0	0	0	7	22	96	100	74	84	20	4	2	0
>0.08% BAC	0	0	0	0	10	43	116	119	98	107	40	3	1	1

Note: Of the 4,901 accidental deaths, 70.9% (n=3,474) received toxicology testing

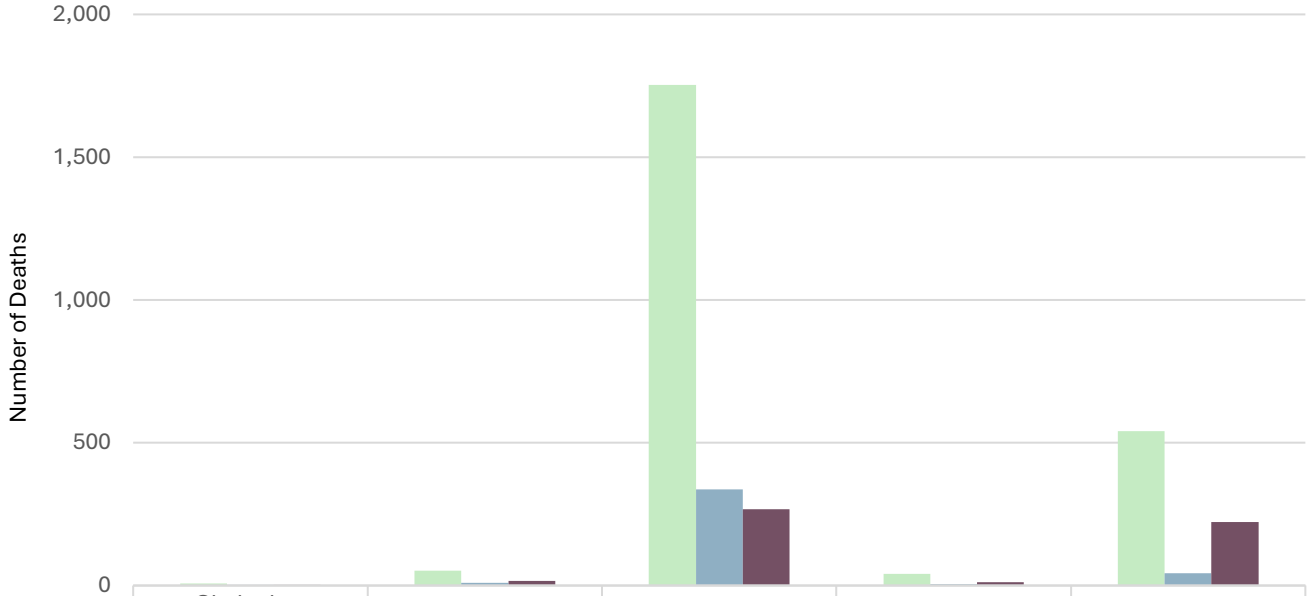
Figure 2.6 Number of Accidental Deaths by Ethanol Level and Sex (N=3,474), 2023



	No Ethanol	0.01-0.07% BAC	>0.08% BAC
Female	764	77	85
Male	1,763	332	453

Note: Of the 4,901 accidental deaths, 70.9% (n=3,474) received toxicology testing

Figure 2.7 Number of the Top 5 Accidental Methods of Death by Ethanol Level, 2023



	Choked on Food/Foreign Object (N=10)	Drowning (N=79)	Drug Use (N=2,355)	Fall (N=56)	Motor Vehicle Collision (N=807)
No Ethanol	7	53	1,752	40	541
0.01-0.07% BAC	2	10	336	4	43
>0.08% BAC	1	16	267	12	223

Figure 2.8 Number of Accidental Deaths by Month of Death, 2023

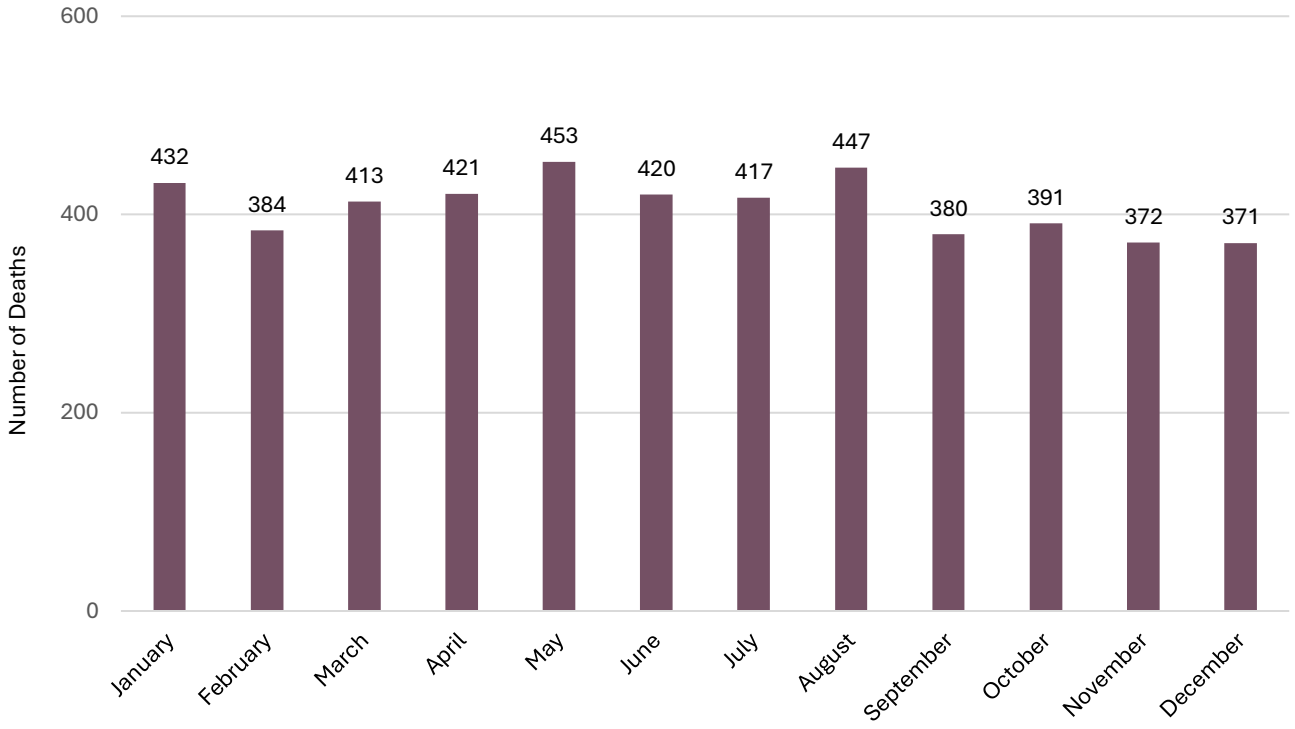


Figure 2.9 Number of Accidental Deaths by Day of Death, 2023

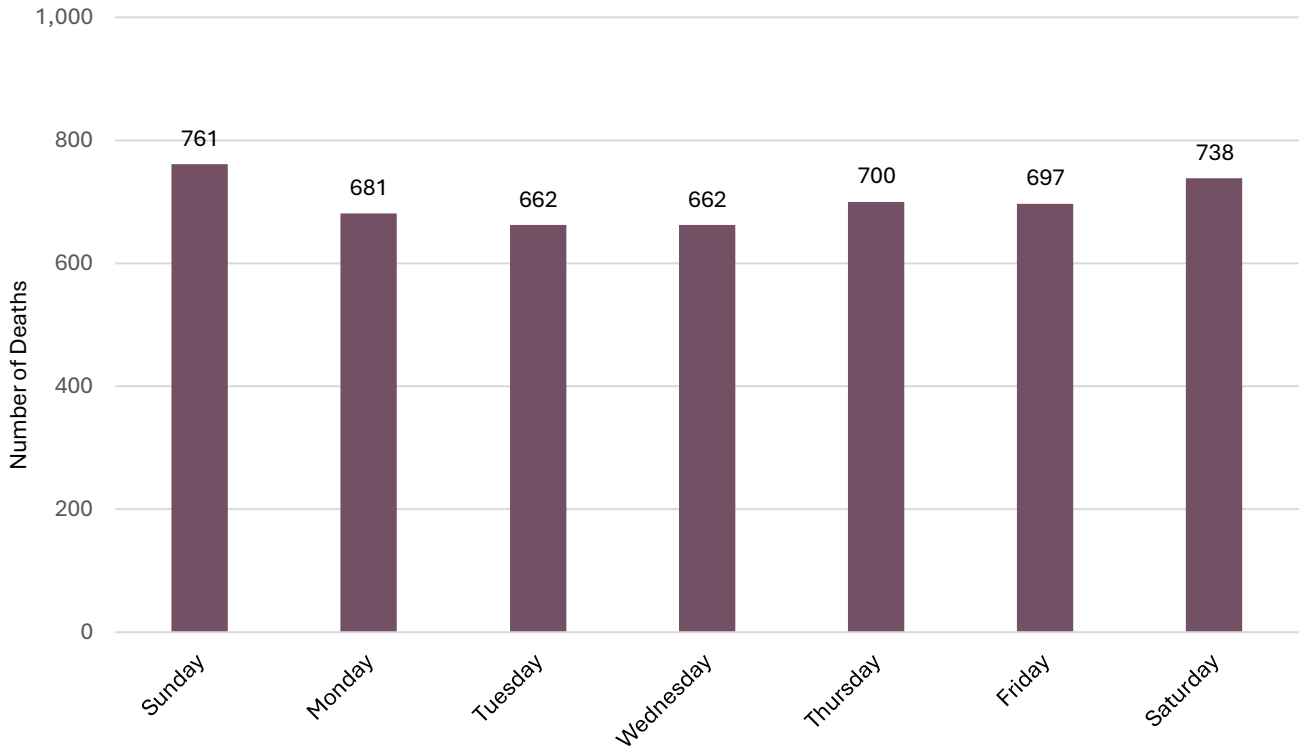


Table 2.3 Number of Accidental Deaths by Locality of Injury and Year of Death, 2007-2023

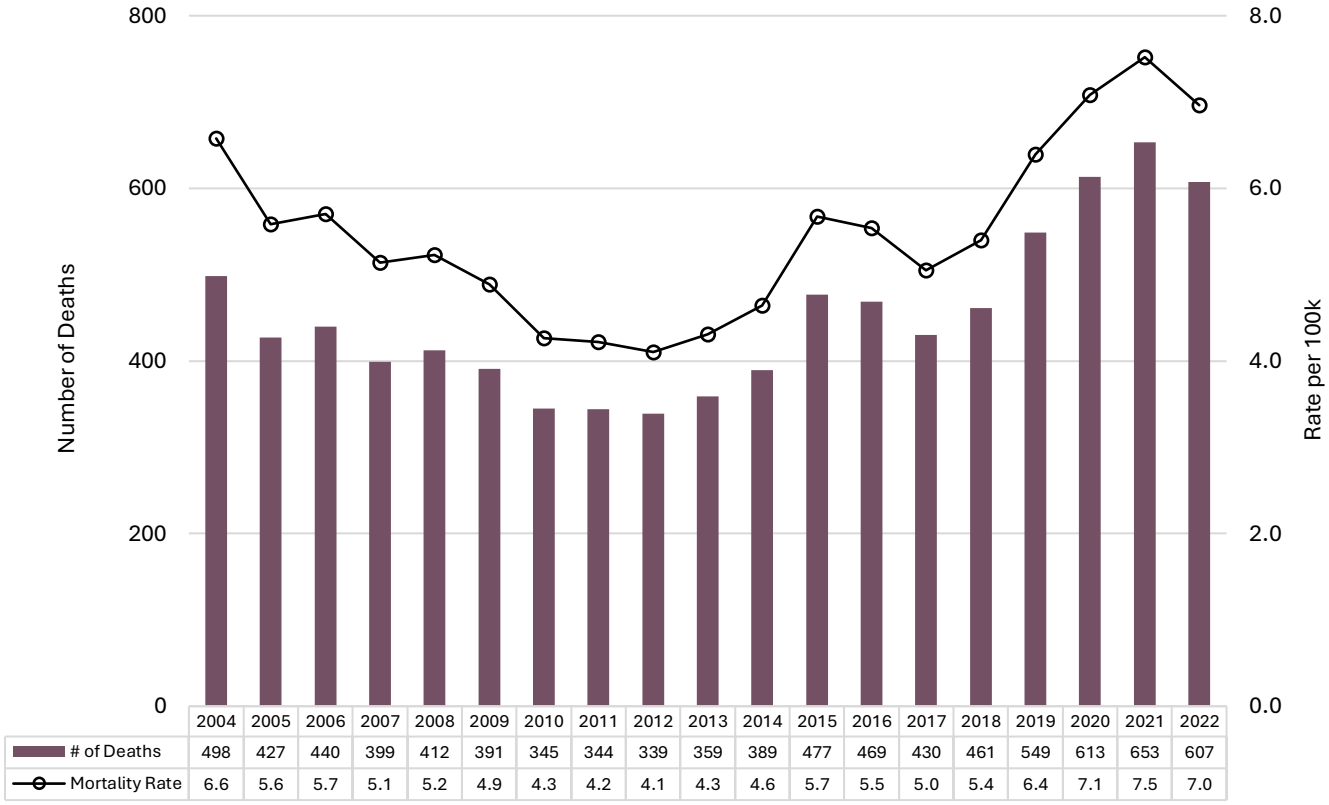
Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

HOMICIDE DEATHS (N = 607)

The number of homicides in 2023 decreased 7.0% compared to 2022. As previous years have shown, homicides most frequently occurred among males (80.6%) and among Blacks (67.9%). Black males and males aged 20-24 years demonstrate the highest homicide rate in 2023 (43.7 and 25.5 per 100,000, respectively) compared to other comparable demographic groups.

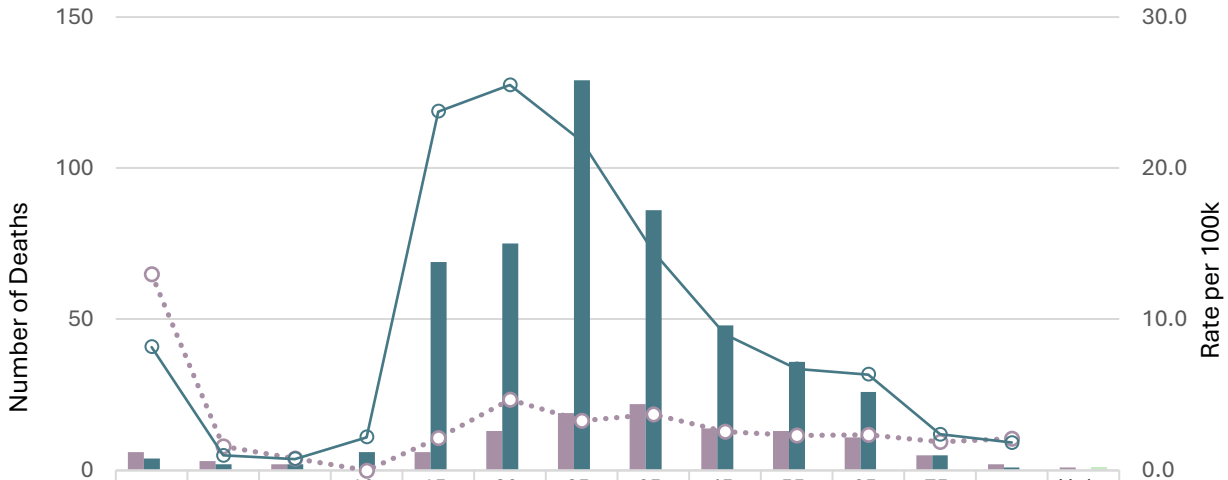
- Over 84% of all homicides in 2023 were due to a firearm. Over 47% of all homicides were specifically due to a handgun
- Of the 95.1% of homicide victims tested for ethanol, 30.8% had ethanol present. Furthermore, 18.7% of those tested had a blood alcohol concentration of 0.08% or greater
- Richmond City had both the largest number of homicides by locality of residence (n=54) and the largest number of homicides by locality of injury (n=73). Hopewell had the highest rate of homicide by residence (39.6 per 100,000) and Petersburg had the highest rate of homicide by locality of injury (69.1 per 100,000)

Figure 2.10 Number and Rate of Homicide Deaths by Year of Death, 2004-2023



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
# of Deaths	498	427	440	399	412	391	345	344	339	359	389	477	469	430	461	549	613	653	607
Mortality Rate	6.6	5.6	5.7	5.1	5.2	4.9	4.3	4.2	4.1	4.3	4.6	5.7	5.5	5.0	5.4	6.4	7.1	7.5	7.0

Figure 2.11 Number and Rate of Homicide Deaths by Age Group and Sex, 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unknown
Female	6	3	2	0	6	13	19	22	14	13	11	5	2	1
Male	4	2	2	6	69	75	129	86	48	36	26	5	1	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Female Rate	13.0	1.6	0.8	0.0	2.2	4.7	3.3	3.7	2.6	2.3	2.4	1.9	2.1	*
Male Rate	8.2	1.0	0.7	2.2	23.8	25.5	21.8	14.5	9.0	6.7	6.3	2.4	1.8	*

Note: Rates cannot be calculated for 'unknown' categories due to unknown population denominators

Figure 2.12 Percentage of Homicide Deaths by Race/Ethnicity, 2023

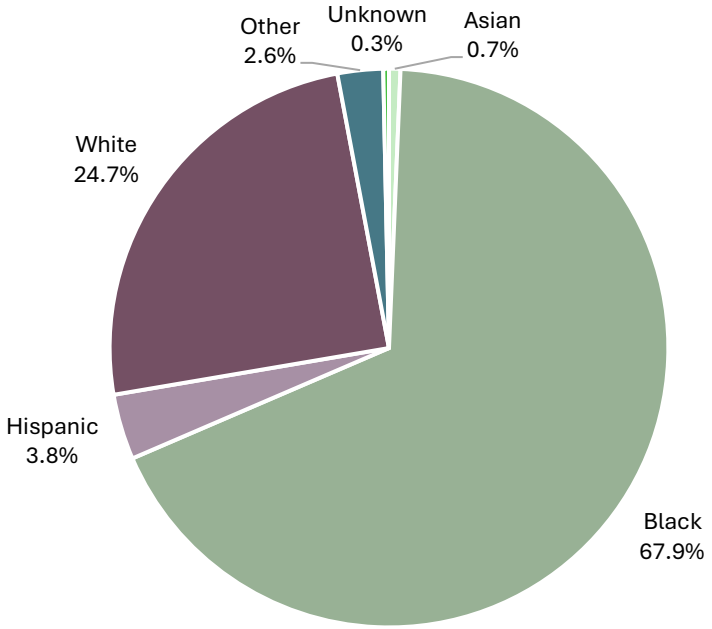
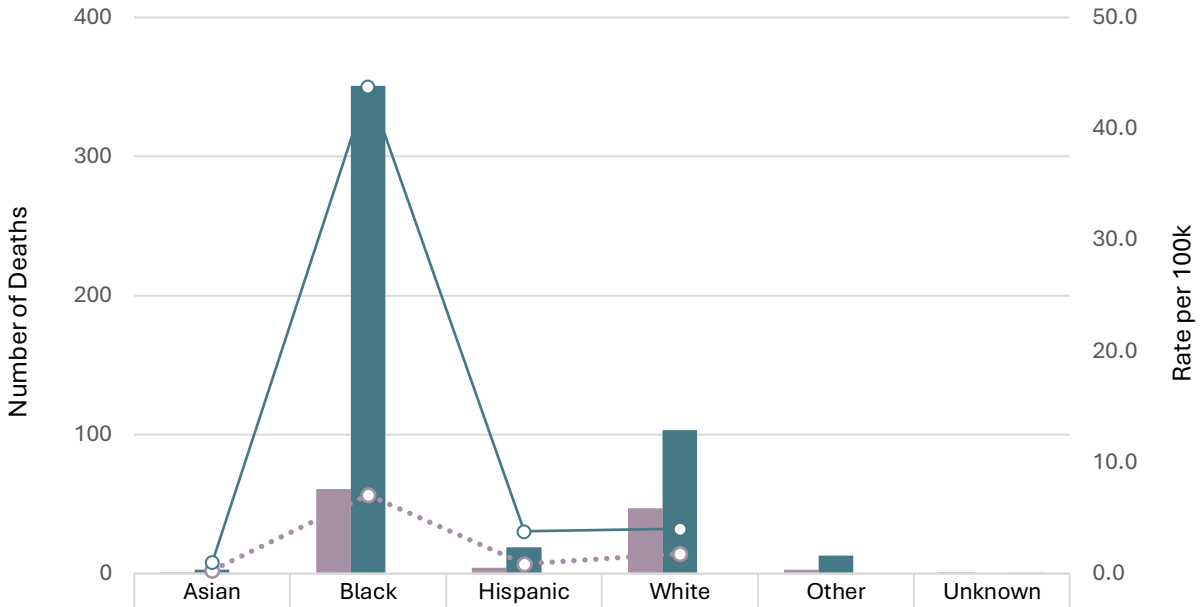


Figure 2.13 Number and Rate of Homicide Deaths by Race/Ethnicity and Sex, 2023



	Asian	Black	Hispanic	White	Other	Unknown
Female	1	61	4	47	3	1
Male	3	351	19	103	13	0
Unknown	0	0	0	0	0	1
Female Rate	0.3	7.1	0.8	1.8	*	*
Male Rate	1.0	43.7	3.8	4.0	*	*

Note: Rates cannot be calculated for 'other' or 'unknown' categories due to unknown population denominators

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution

Table 2.4 Number of Homicide Deaths by Cause and Method of Death, 2023

Method of Death	Autopsied	Total Cases
Asphyxia		
Carbon monoxide poisoning (other)	1	1
Mechanical/Positional asphyxia	1	1
Strangled/Neck compression	6	6
Suffocated/Smothered	1	1
Drug Poisoning		
Ingested and/or injected ethanol, illicit, prescription, and/or other type of drug	1	1
Fall/Jump		
Fell/Jumped from any height	1	1
Fire		
Thermal burns and/or inhalation of combustion products	3	3
Motor Vehicle Collision		
Struck by vehicle	3	3
Traumatic Injury		
Shot by assailant(s)		
Handgun	290	290
Multiple	13	13
Rifle	19	19
Shotgun	5	5
Unknown	183	184
Beaten by assailant(s)	31	31
Stabbed by assailant(s)	41	41
Other traumatic injury	6	6
Other/Undetermined		
Other	1	1
Total Accidental Deaths	**606**	**607**

Figure 2.14 Number of Top 5 Leading Homicide Deaths by Method, 2023

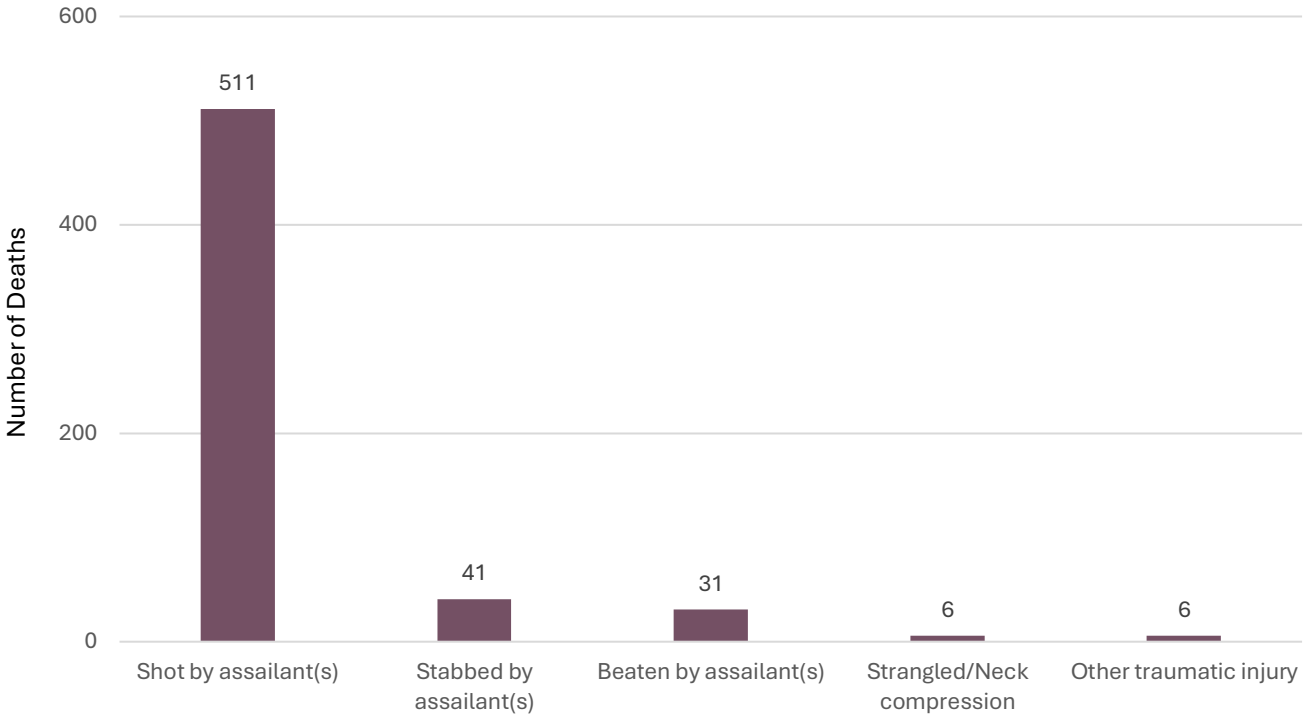
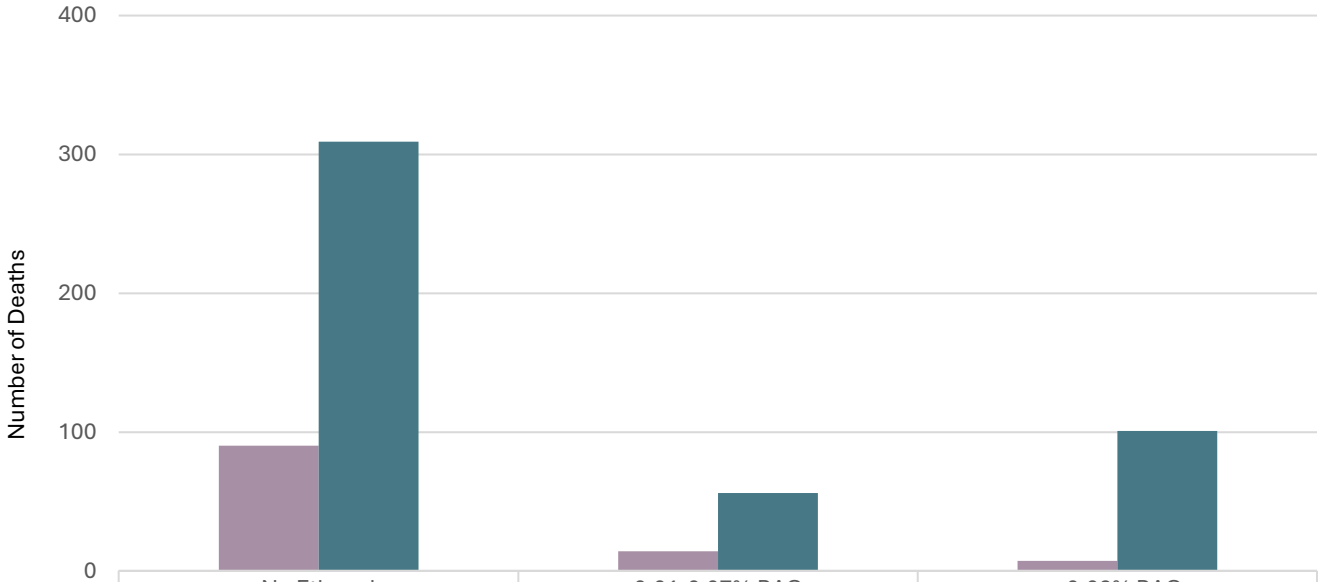


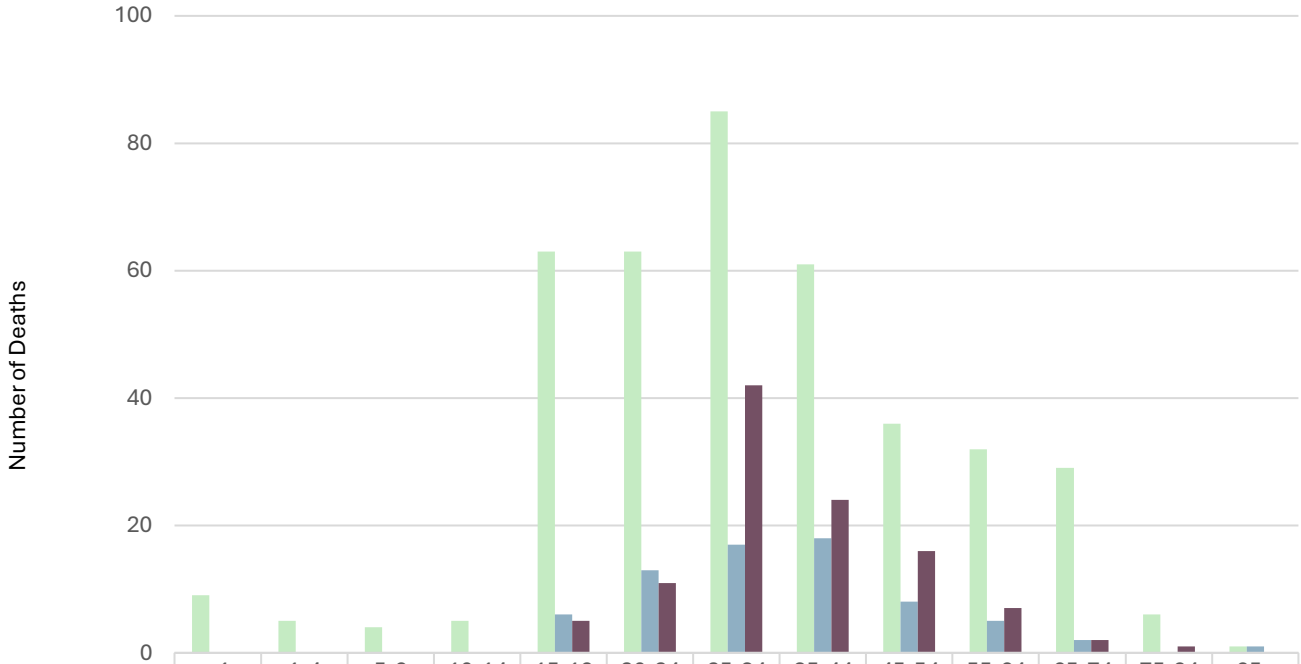
Figure 2.15 Number of Homicide Deaths by Ethanol Level and Sex (N=577), 2023



	No Ethanol	0.01-0.07% BAC	>0.08% BAC
Female	90	14	7
Male	309	56	101

Note: Of the 607 homicide deaths, 95.1% (n=577) received toxicology testing

Figure 2.16 Number of Homicide Deaths by Age Group and Ethanol Level (N=577), 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
No Ethanol	9	5	4	5	63	63	85	61	36	32	29	6	1
0.01-0.07% BAC	0	0	0	0	6	13	17	18	8	5	2	0	1
>0.08% BAC	0	0	0	0	5	11	42	24	16	7	2	1	0

Note: Of the 607 homicide deaths, 95.1% (n=577) received toxicology testing

Table 2.5 Number of Homicide Deaths by Method of Death and Ethanol Level (N=577), 2023

Method of Death	No Ethanol	0.01-0.07% BAC	>0.08% BAC
Asphyxia			
Carbon monoxide poisoning (other)	1	0	0
Mechanical/Positional asphyxia	1	0	0
Strangled/Neck compression	6	0	0
Suffocated/Smothered	1	0	0
Drug Poisoning			
Ingested and/or injected ethanol, illicit, prescription, and/or other type of drug	1	0	0
Fall/Jump			
Fell/Jumped from any height	0	0	0
Fire			
Thermal burns and/or inhalation of combustion products	2	1	0
Motor Vehicle Collision			
Struck by vehicle	2	0	1
Traumatic Injury			
Shot by assailant(s)			
Handgun	180	44	62
Multiple	5	0	7
Rifle	13	2	2
Shotgun	5	0	0
Unknown	125	18	28
Beaten by assailant(s)	21	1	2
Stabbed by assailant(s)	32	4	5
Other traumatic injury	4	0	1
Other/Undetermined			
Other	0	0	0
Total Accidental Deaths	**399**	**70**	**108**

Note: Of the 607 homicide deaths, 95.1% (n=577) received toxicology testing

Figure 2.17 Number of Homicide Deaths by Month of Death, 2023

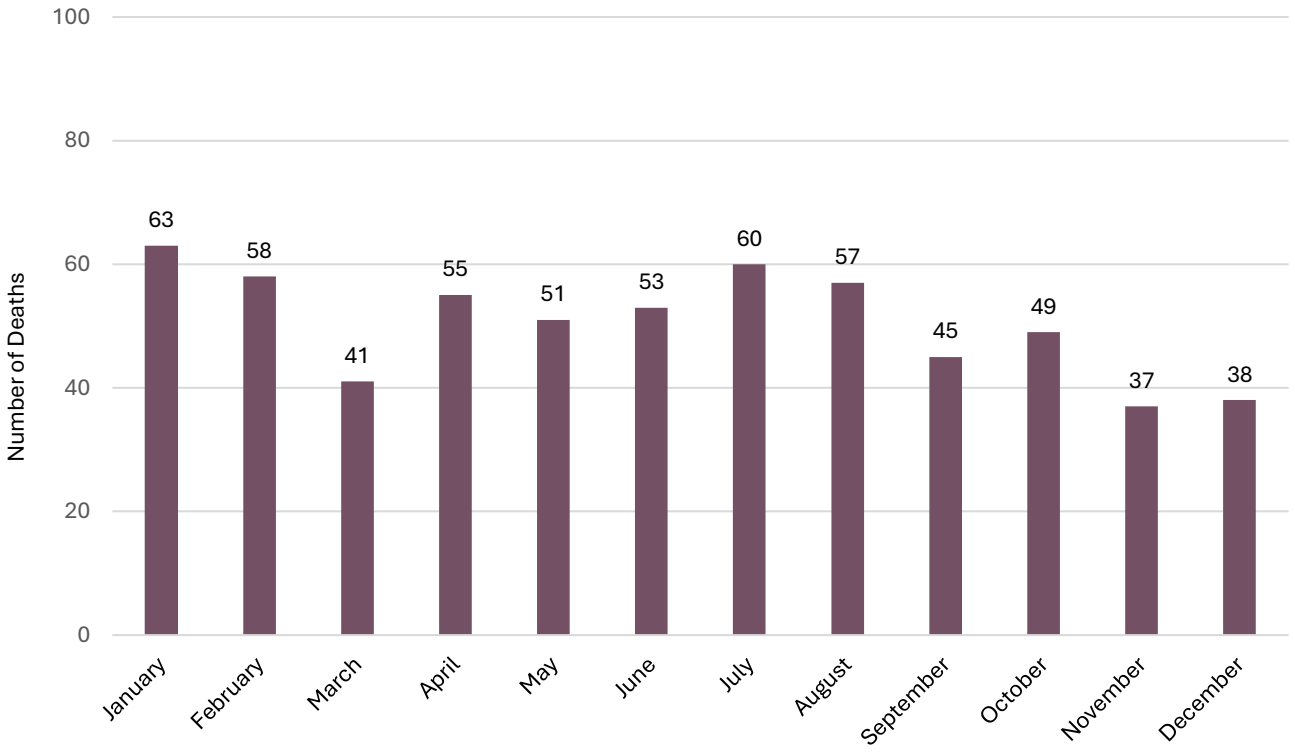


Figure 2.18 Number of Homicide Deaths by Day of Week, 2023

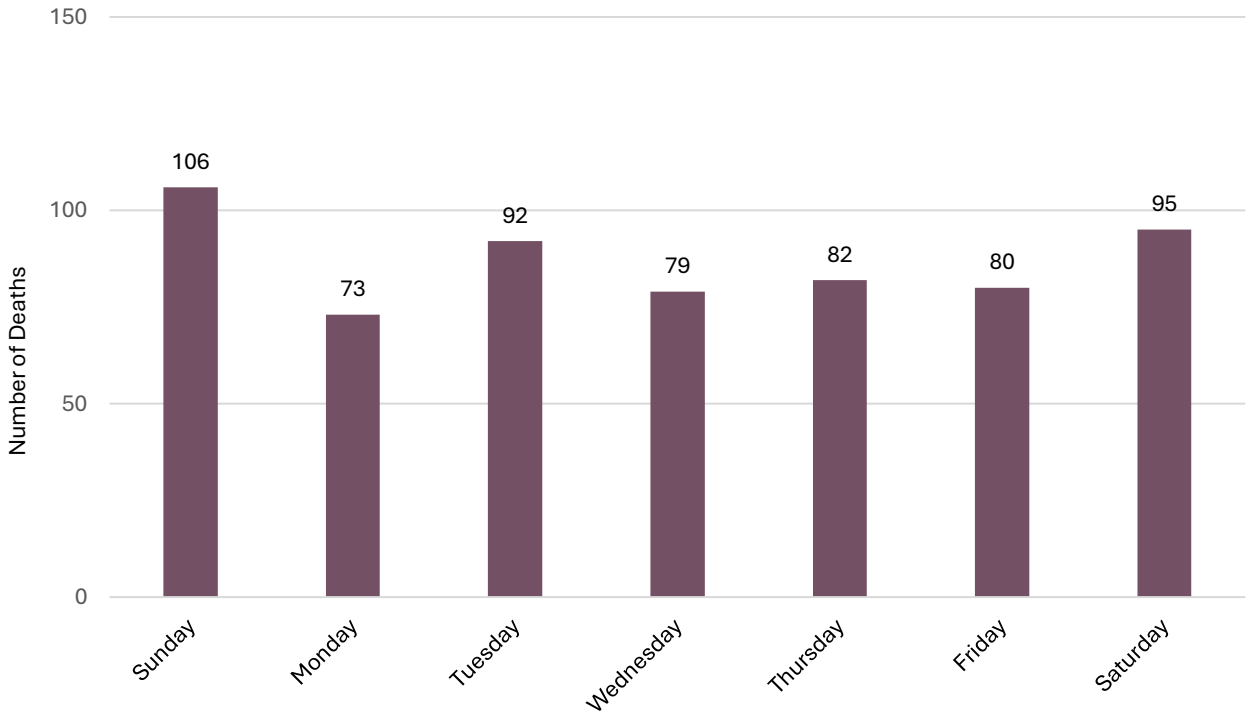


Table 2.6 Number and Rate of Homicide Deaths by Locality of Residence, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

Table 2.7 Top 10 Localities with the Largest Number of Residential Homicides, 2023

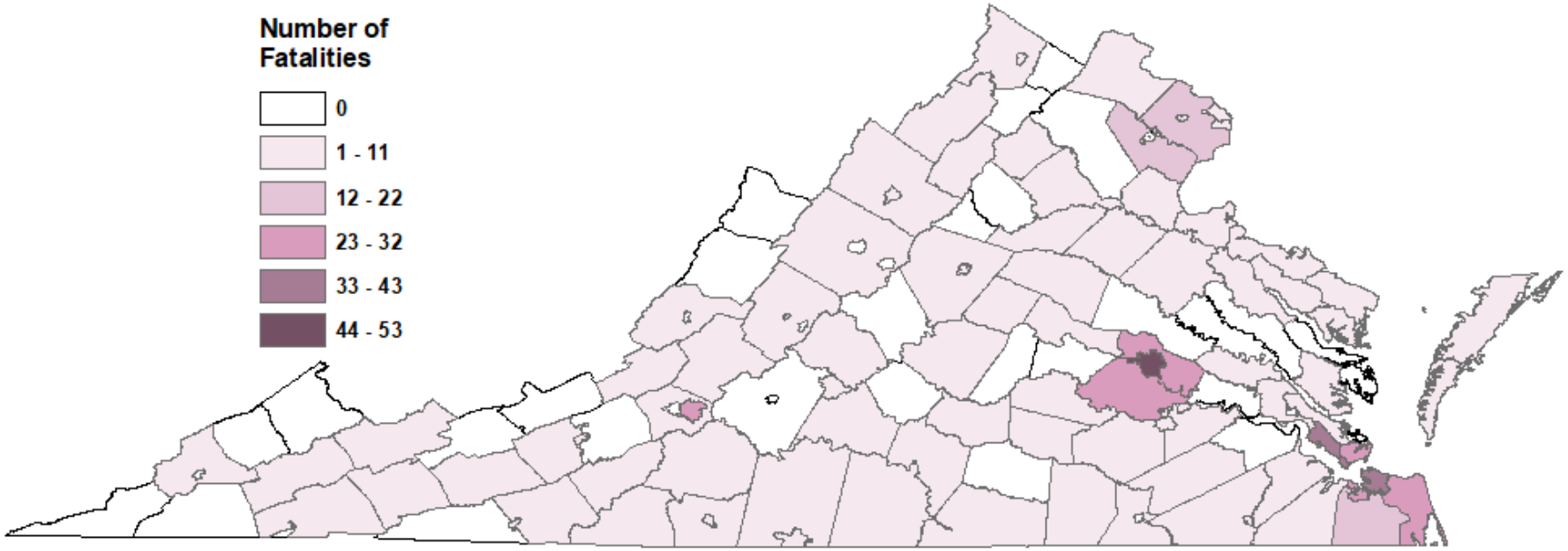
Rank #	Residence Locality	N
1	Richmond City	53
2	Norfolk City	41
3	Newport News City	39
4	Out of State	38
5	Roanoke City	31
6	Henrico County	29
7	Hampton City	28
	Virginia Beach City	28
9	Portsmouth City	27
10	Chesterfield County	23

Table 2.8 Top 10 Localities with the Highest Rate of Residential Homicides, 2023

Rank #	Residence Locality	Rate
1	Hopewell City	39.6
2	Franklin City	36.0*
3	Petersburg City	33.0
4	Roanoke City	31.9
5	Martinsville City	29.1*
6	Essex County	28.3*
7	Portsmouth City	27.9
8	Northumberland County	24.2*
9	Richmond City	23.1
10	Newport News City	21.3

*Unstable rate based on small sample size (<5 deaths)

Map 2.1 Number of Homicides by Locality of Residence, 2023



Map 2.2 Homicide Rates by Locality of Residence, 2023

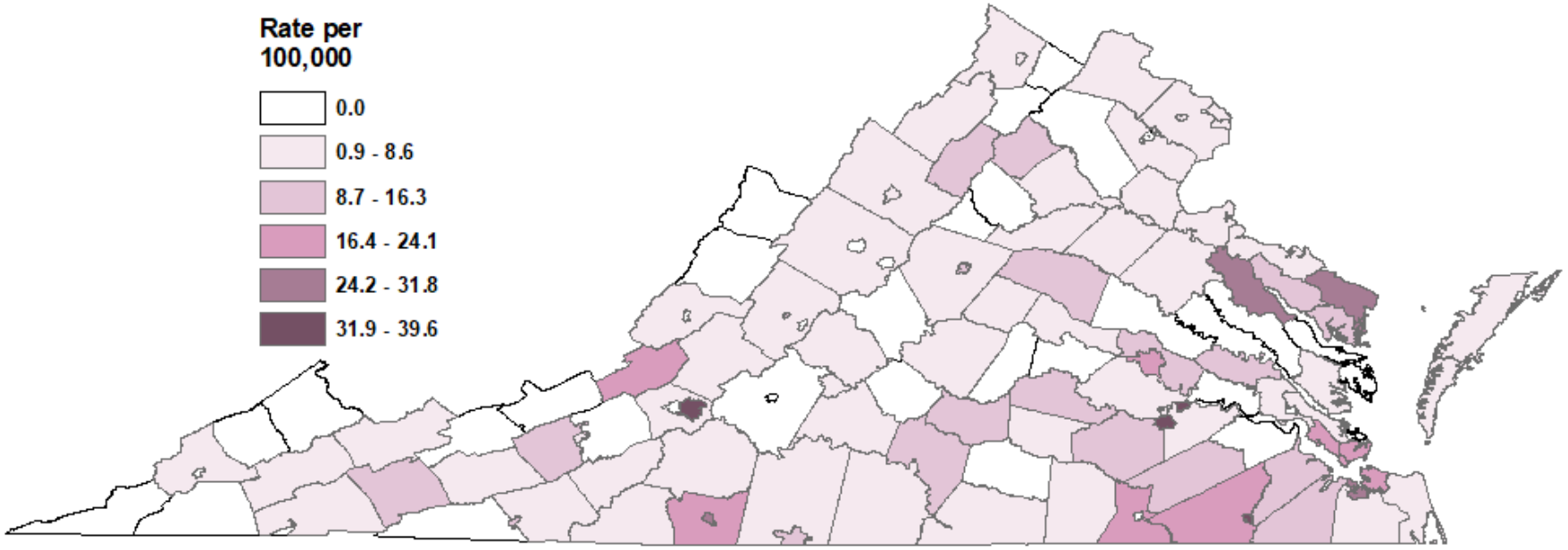


Table 2.9 Number and Rate of Homicide Deaths by Locality of Injury, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

Table 2.10 Top 10 Localities with the Largest Number of Homicides by Locality of Injury, 2023

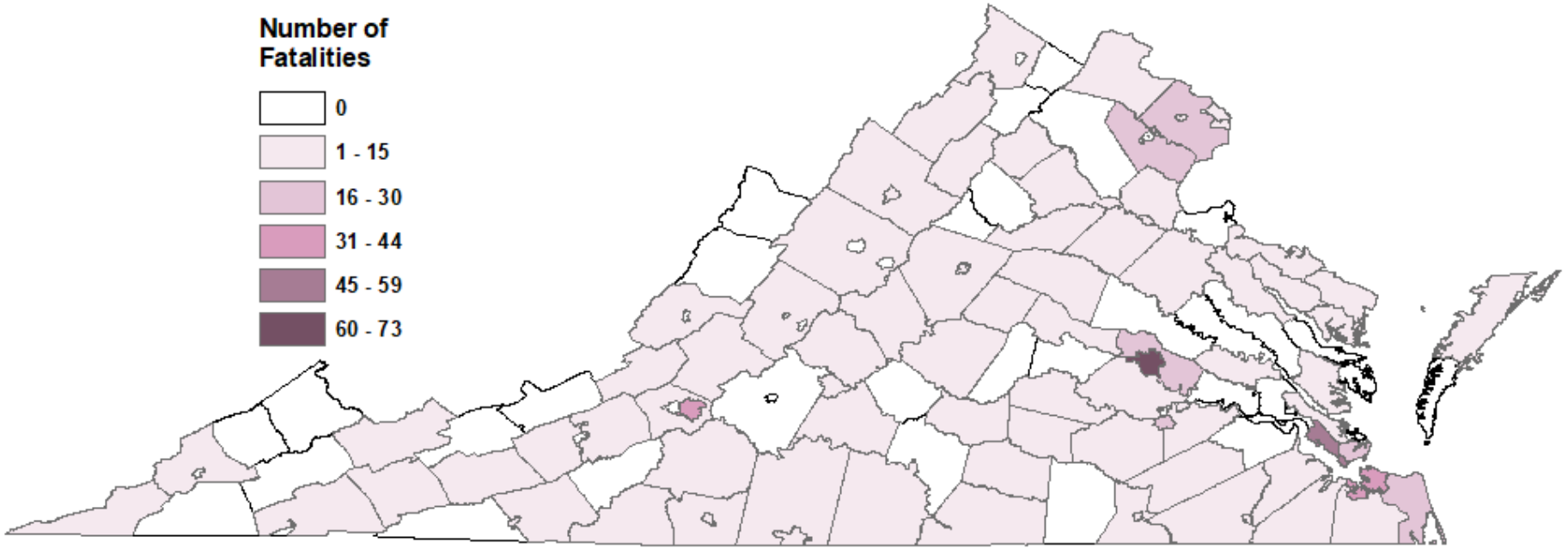
Rank #	Locality of Injury	N
1	Richmond City	73
2	Newport News City	45
3	Norfolk City	40
4	Portsmouth City	35
5	Roanoke City	33
6	Hampton City	28
7	Henrico County	27
	Prince William County	27
9	Virginia Beach City	25
10	Petersburg City	23

Table 2.11 Top 10 Localities with the Highest Rate of Homicide by Locality of Injury, 2023

Rank #	Locality of Injury	Rate
1	Petersburg City	69.1
2	Emporia City	36.6*
3	Portsmouth City	36.2
4	Hopewell City	35.2
5	Roanoke City	34.0
6	Richmond City	31.8
7	Martinsville City	29.1*
8	Essex County	28.3*
9	Newport News City	24.6
10	Franklin City	24.0*

*Unstable rate based on small sample size (<5 deaths)

Map 2.3 Number of Homicides by Locality of Injury, 2023



Map 2.4 Homicide Rates by Locality of Injury, 2023

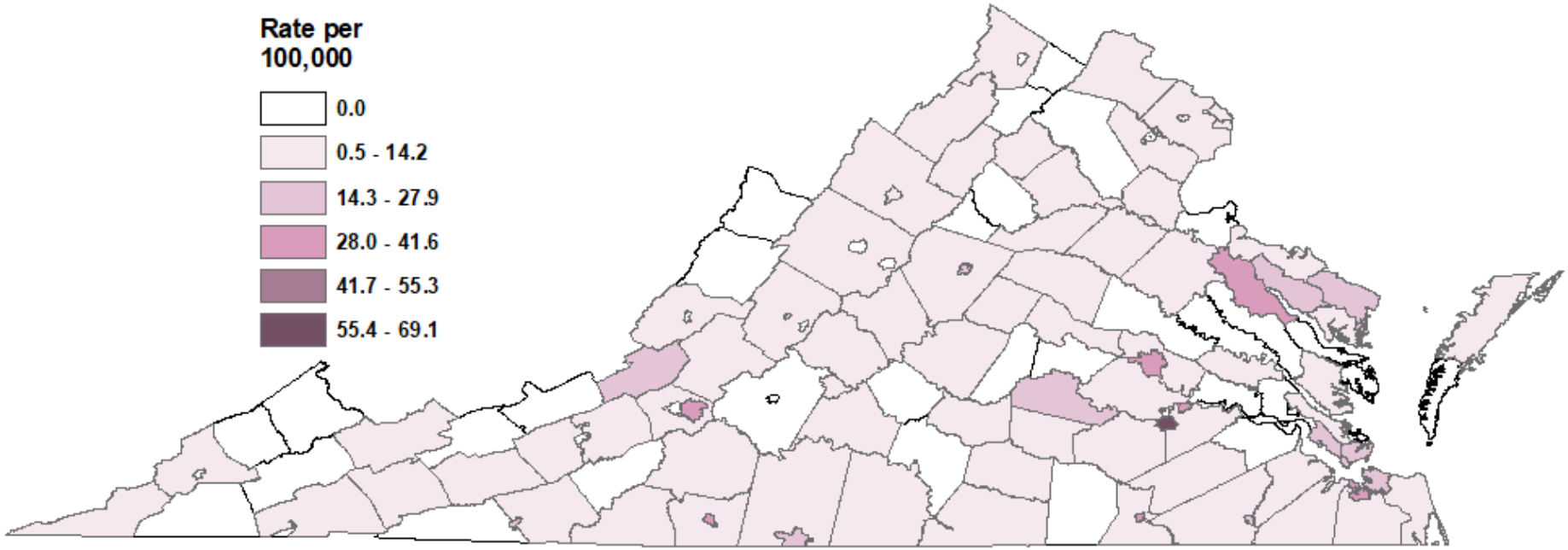


Table 2.12 Number of Homicide Deaths by Locality of Death and Year of Death, 2006-2023

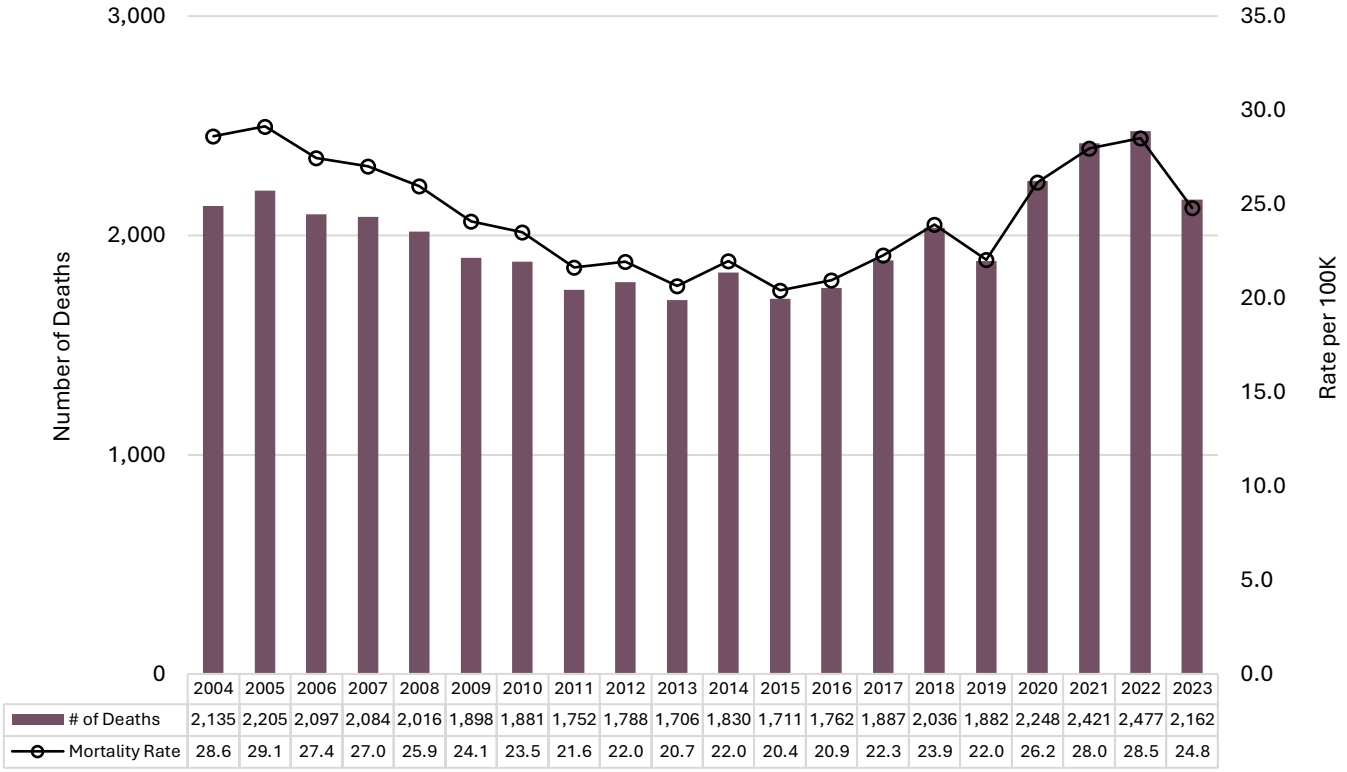
Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

NATURAL DEATHS (N = 2,162)

Most natural deaths that occur in Virginia do not fall under the jurisdiction of the OCME. Natural deaths enter the medical examiner system as deaths that are sudden, unexpected, or suspicious, which upon examination and investigation are then established as natural. Natural deaths may also fall under the OCME's jurisdiction when the decedent does not have a primary care physician to certify their deaths, the decedent dies while in-custody, or the decedent is a patient of a state mental health facility.

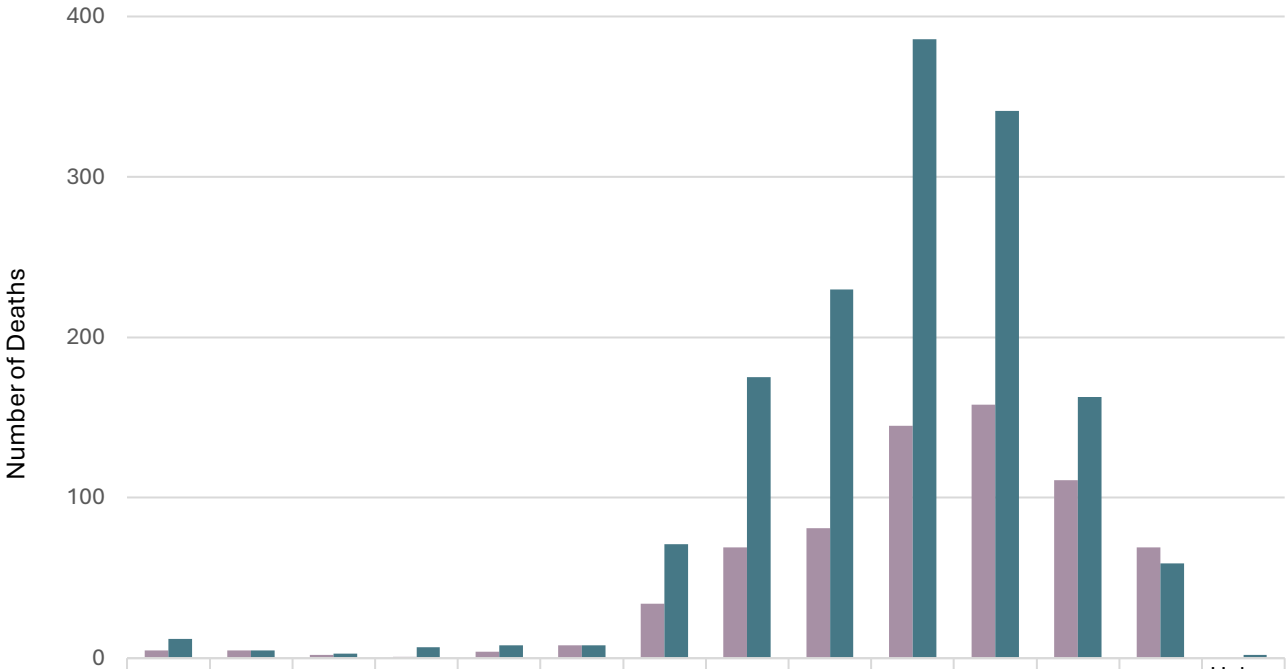
- Natural deaths accounted for 23.8% of all deaths investigated by the OCME in 2023
- The number of natural deaths accepted by OCME decreased in 2023 compared with 2022 (a decrease of 315 deaths or 12.7%).

Figure 2.19 Number and Rate of Natural Deaths Investigated by the OCME by Year of Death, 2004-2023



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	2,135	2,205	2,097	2,084	2,016	1,898	1,881	1,752	1,788	1,706	1,830	1,711	1,762	1,887	2,036	1,882	2,248	2,421	2,477	2,162
Mortality Rate	28.6	29.1	27.4	27.0	25.9	24.1	23.5	21.6	22.0	20.7	22.0	20.4	20.9	22.3	23.9	22.0	26.2	28.0	28.5	24.8

Figure 2.20 Number of Natural Deaths Investigated by the OCME by Age Group and Sex, 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unknown
Female	5	5	2	1	4	8	34	69	81	145	158	111	69	0
Male	12	5	3	7	8	8	71	175	230	386	341	163	59	2

Table 2.13 Number of Natural Deaths Investigated by the OCME by Cause and Method of Death, 2023

Method of Death	Autopsied	Total Cases
Cardiovascular Diseases/Disorders		
Atherosclerosis	45	839
Acute Coronary Insufficiency	8	190
Arrhythmogenic Right Ventricular Dysplasia	1	1
Atherosclerosis and Hypertension	58	168
Cardiac Arrhythmia (not specified)	29	45
Cardiomyopathy (not specified)	5	12
Congenital Defect	4	4
Hypertension	37	240
Valvular	2	4
Vascular Dissection/Rupture	5	5
Other Cardiac Disease/Disorder	10	24
Central Nervous System Diseases/Disorders		
CNS Malignancy	1	3
Degenerative Disease	7	13
Meningitis (Bacterial or Viral)	2	3
Seizure Disorder	6	16
Vascular Disease	8	19
Other CNS Disease/Disorder	5	12
Gastrointestinal Diseases/Disorders		
Cirrhosis	3	4
GI Hemorrhage	1	18
GI Malignancy	10	22
Hepatitis	2	2
Other GI Disease/Disorder	18	24
Genitourinal Diseases/Disorders		
Genitourinal Malignancy	6	16
Renal Disease	1	5
Other Genitourinal Disease/Disorder	3	4
Other Natural Diseases/Disorders		
Other Malignancy	0	1
Other Natural Death/Disease	6	17
Perinatal and Pediatric Diseases/Disorders		
Fetal Complications	4	4
Maternal Complications	1	1
Other Perinatal and Pediatric Disease/Disorder	3	3
Pulmonary Disease/Disorders		
Asthma	1	3
COPD	4	34
Emboli	12	19

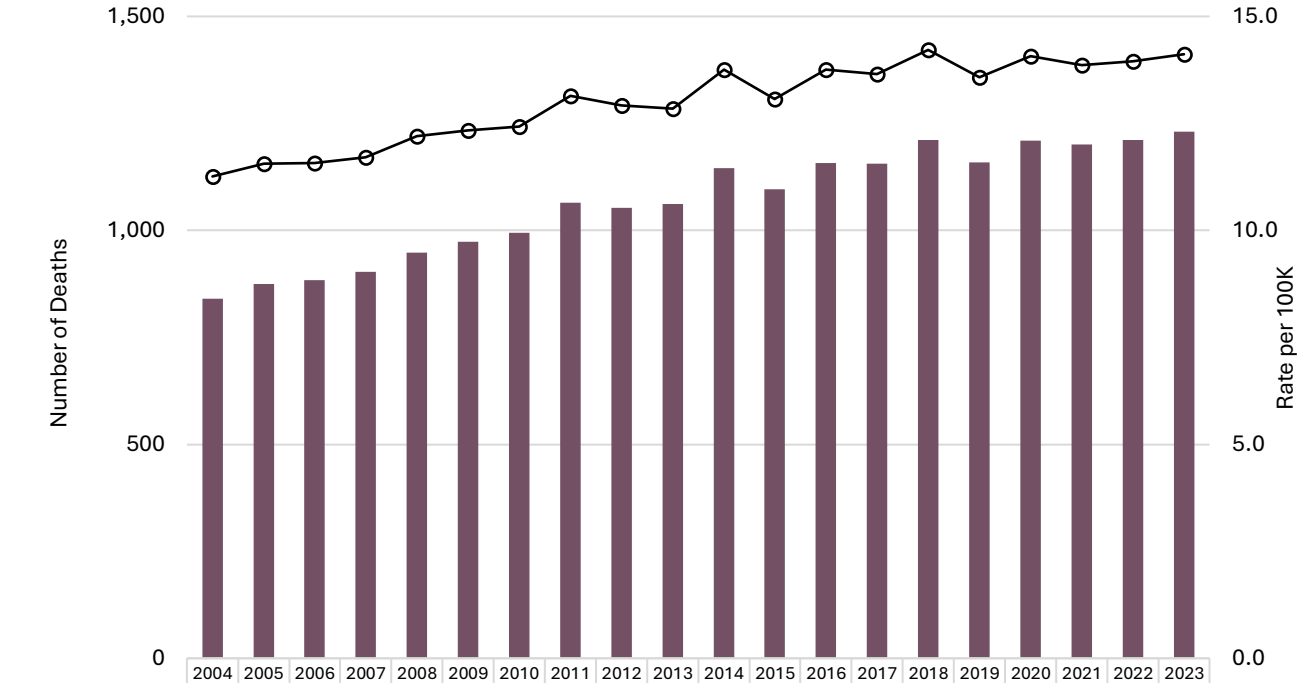
Pneumonia	15	27
Pulmonary Malignancy	5	14
Other Pulmonary Disease/Disorder	5	7
Systemic Diseases/Disorders		
Blood Disorder	1	5
Chronic Alcoholism	29	182
Chronic Drug Abuse	0	11
Complications of Dementia (Including Inanition)	2	4
Diabetes	12	76
HIV/AIDS	0	1
Metastatic Malignancy of Unknown Primary	2	6
Obesity	6	18
Sepsis	6	10
Other Infectious Disease	2	10
Other Systemic Disease/Disorder	9	16
Total Natural Deaths	**402**	**2,162**

SUICIDE DEATHS (N = 1,230)

In general, suicide deaths have been slowly increasing over the last two decades. The number of suicide deaths in 2023 compared to 2022 increased slightly (1.6%; 1,230 deaths and 1,211 deaths, respectively). The largest number of victims were male (78.6%), White (75.7%), and aged 55-64 years of age (16.6%). Males 85+ years of age and older as well as white males had the highest rates of suicide compared to other groups within the total population (69.5 and 28.6 per 100,000 persons, respectively).

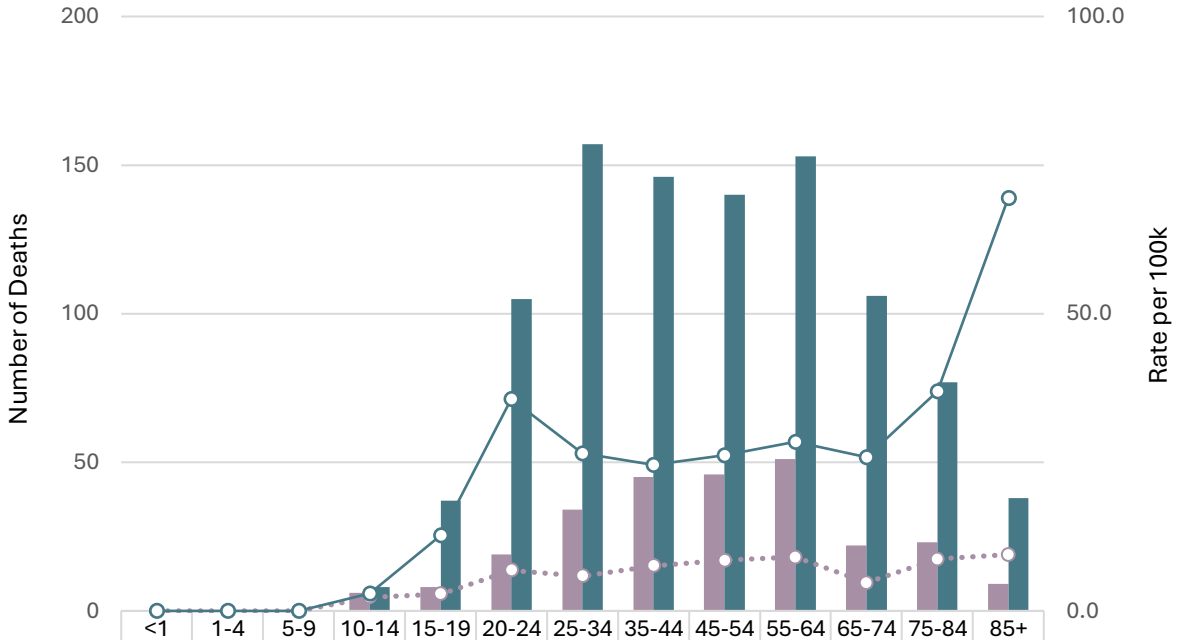
- White populations committed suicide at a rate 4.3 times that of Hispanics, 2.3 times that of Asians, and 1.8 times that of Black populations
- Males were 3.7 times more likely to commit suicide than females
- Firearms (specifically handguns), hangings, and drug use were the three most commonly used methods in suicides, with these deaths representing 58.9%, 21.5%, and 9.1% of all suicides, respectively

Figure 2.21 Number and Rate of Suicide Deaths by Year of Death, 2004-2023



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	840	875	884	903	948	973	994	1,064	1,052	1,061	1,145	1,096	1,157	1,156	1,211	1,159	1,209	1,200	1,211	1,230
Mortality Rate	11.3	11.6	11.6	11.7	12.2	12.3	12.4	13.1	12.9	12.8	13.8	13.1	13.8	13.6	14.2	13.6	14.1	13.9	13.9	14.1

Figure 2.22 Number and Rate of Suicide Deaths by Age Group and Sex, 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Female	0	0	0	6	8	19	34	45	46	51	22	23	9
Male	0	0	0	8	37	105	157	146	140	153	106	77	38
Female Rate	0.0	0.0	0.0	2.3	2.9	6.8	5.9	7.6	8.5	9.0	4.7	8.7	9.5
Male Rate	0.0	0.0	0.0	2.9	12.7	35.7	26.5	24.6	26.2	28.5	25.8	36.9	69.5

Figure 2.23 Percentage of Suicide Deaths by Race/Ethnicity, 2023

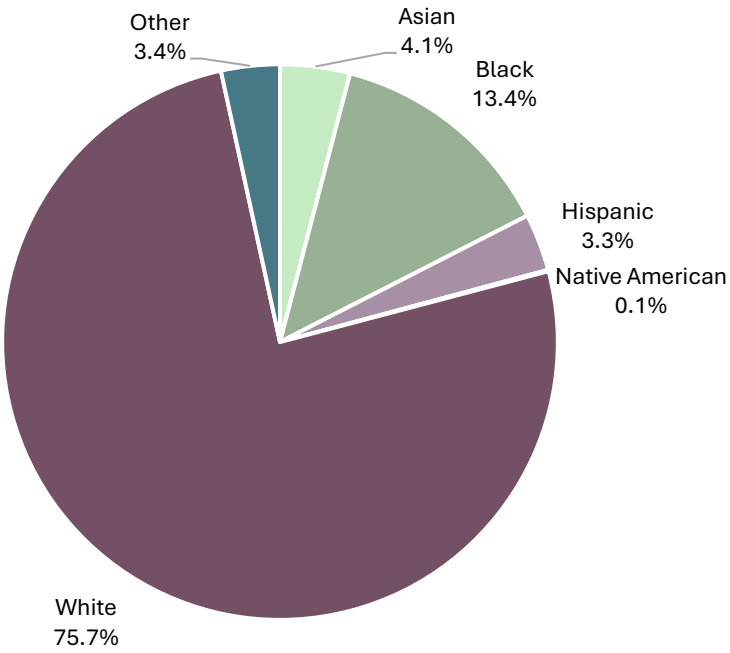
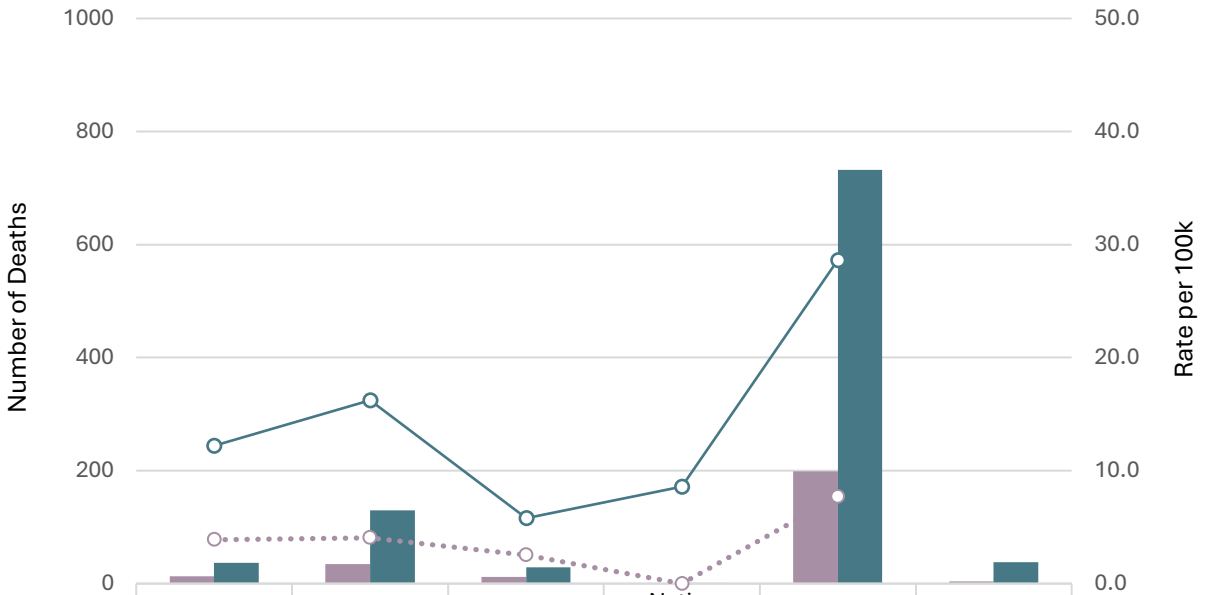


Figure 2.24 Number and Rate of Suicide Deaths by Race/Ethnicity and Sex, 2023



	Asian	Black	Hispanic	Native American	White	Other
Female	13	35	12	0	199	4
Male	37	130	29	1	732	38
Female Rate	3.9	4.1	2.5	0.0	7.7	*
Male Rate	12.2	16.2	5.8	8.6	28.6	*

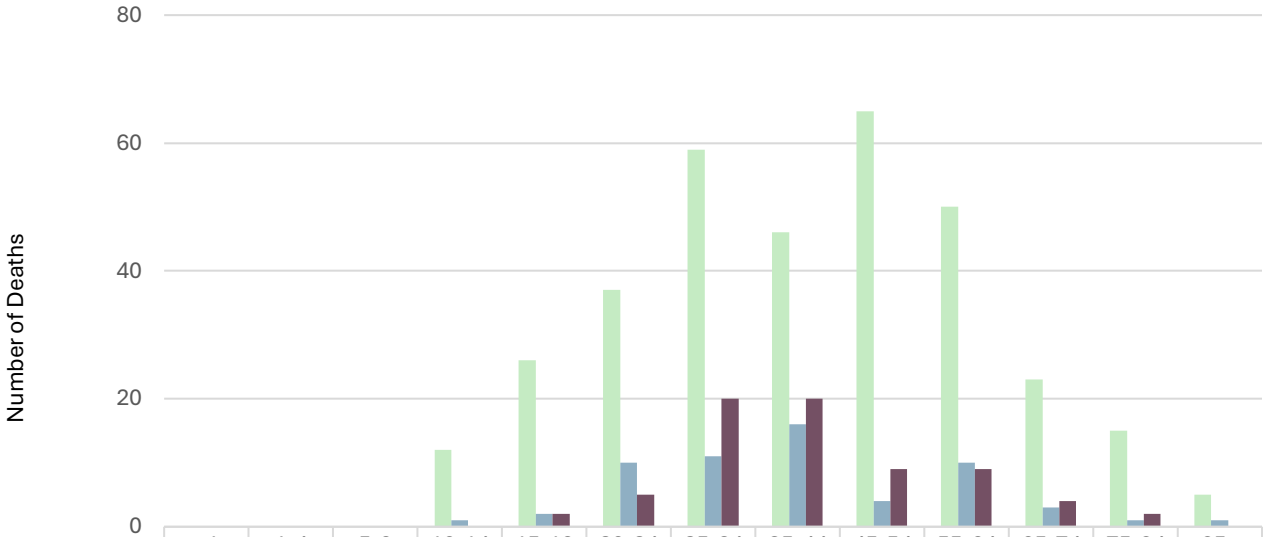
Note: Rates cannot be calculated for 'other' categories due to unknown population denominators

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution

Table 2.14 Number of Suicide Deaths by Cause and Method of Death, 2023

Method of Death		Autopsied	Total Cases
Asphyxia			
	Carbon monoxide (CO) poisoning-motor vehicle exhaust	0	6
	Carbon monoxide (CO) poisoning-other	0	5
	Drowned	10	11
	Hanged	43	265
	Helium asphyxia	0	2
	Oxygen depletion or replacement	0	9
	Plastic bag asphyxia	3	12
	Strangled/Neck compression	1	1
	Suffocated/Smothered	0	2
Drug Use			
	Ingested and/or injected illicit, prescription, and/or other type of drug	18	114
Fire			
	Thermal and/or inhalational Injuries	6	8
Jump/Fall			
	Jumped/Fell from height	4	25
Motor Vehicle Collision			
	Car	0	4
	Construction heavy equipment	0	1
	Pickup truck	0	1
	Sport utility vehicle	0	1
	Tractor trailer	0	1
	Train	0	6
Traumatic Injury			
	Cut/Stabbed self	11	30
	Gunshot wound		
	Handgun	406	613
	Multiple	0	1
	Rifle	35	44
	Shotgun	41	54
	Unknown	8	12
	Other traumatic injury	0	2
Total Suicide Deaths		**586**	**1230**

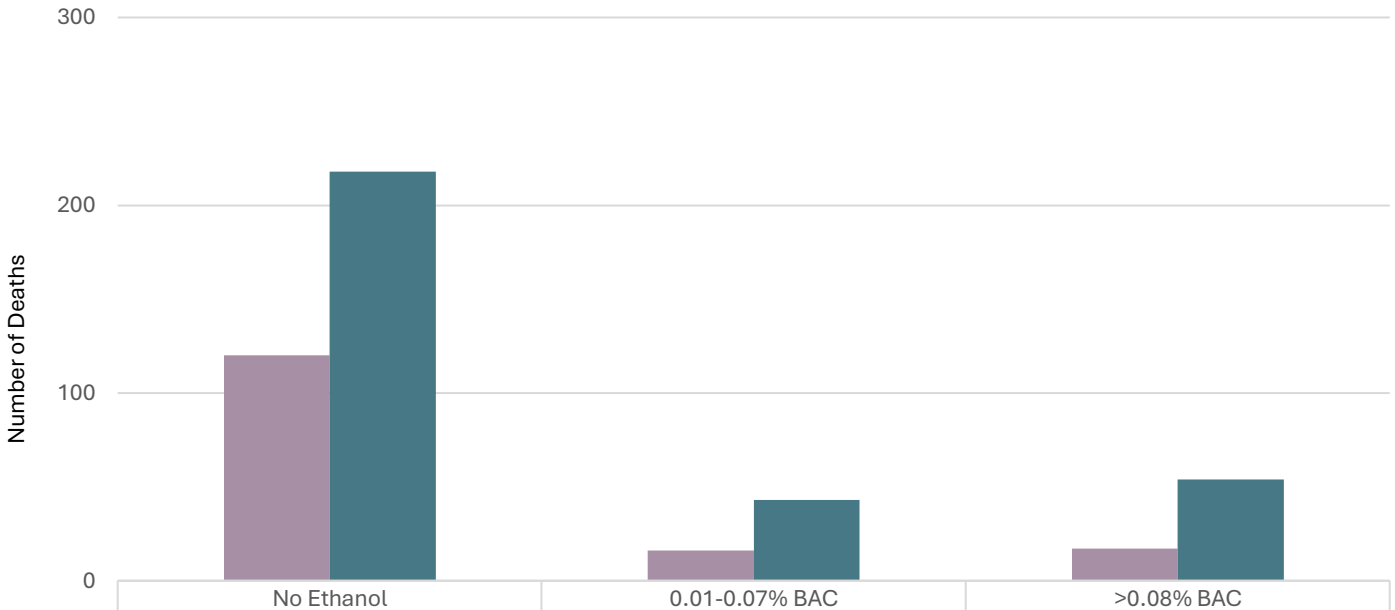
Figure 2.25 Number of Suicide Deaths by Age Group and Ethanol Level (N=468), 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
No Ethanol	0	0	0	12	26	37	59	46	65	50	23	15	5
0.01-0.07% BAC	0	0	0	1	2	10	11	16	4	10	3	1	1
>0.08% BAC	0	0	0	0	2	5	20	20	9	9	4	2	0

Note: Of the 1,230 suicide deaths, 38.0% (n=468) received toxicology testing

Figure 2.26 Number of Suicide Deaths by Sex and Ethanol Level (N=468), 2023



	No Ethanol	0.01-0.07% BAC	>0.08% BAC
Female	120	16	17
Male	218	43	54

Note: Of the 1,230 suicide deaths, 38.0% (n=468) received toxicology testing

Table 2.15 Number of Suicide Deaths by Method of Death and Ethanol Level (N=448), 2023

Method of Death	No Ethanol	0.01-0.07% BAC	>0.08% BAC	Total Cases
Asphyxia				
Carbon monoxide (CO) poisoning-motor vehicle exhaust	4	1	1	6
Carbon monoxide (CO) poisoning-other	4	1	0	5
Drowned	8	1	1	10
Hanged	71	12	12	95
Helium asphyxia	2	0	0	2
Oxygen depletion or replacement	6	2	0	8
Plastic bag asphyxia	8	0	0	8
Strangled/Neck compression	1	0	0	1
Suffocated/Smothered	0	1	1	2
Drug Use				
Ingested and/or injected illicit, prescription, and/or other type of drug	84	11	11	106
Fire				
Thermal and/or inhalational Injuries	5	2	0	7
Jump/Fall				
Jumped/Fell from height	17	2	1	20
Motor Vehicle Collision				
Car	4	0	0	4
Construction heavy equipment	1	0	0	1
Pickup truck	0	0	0	0
Sport utility vehicle	1	0	0	1
Tractor trailer	1	0	0	1
Train	4	1	0	5
Traumatic Injury				
Cut/Stabbed self	15	3	0	18
Gunshot wound				
Handgun	87	20	35	142
Multiple	0	0	1	1
Rifle	4	1	2	7
Shotgun	7	1	4	12
Unknown	3	0	2	5
Other traumatic injury	1	0	0	1
Total Suicide Deaths	**338**	**59**	**71**	**468**

Note: Of the 1,230 suicide deaths, 38.0% (n=468) received toxicology testing

Figure 2.27 Number of Suicide Deaths by Month of Death, 2023

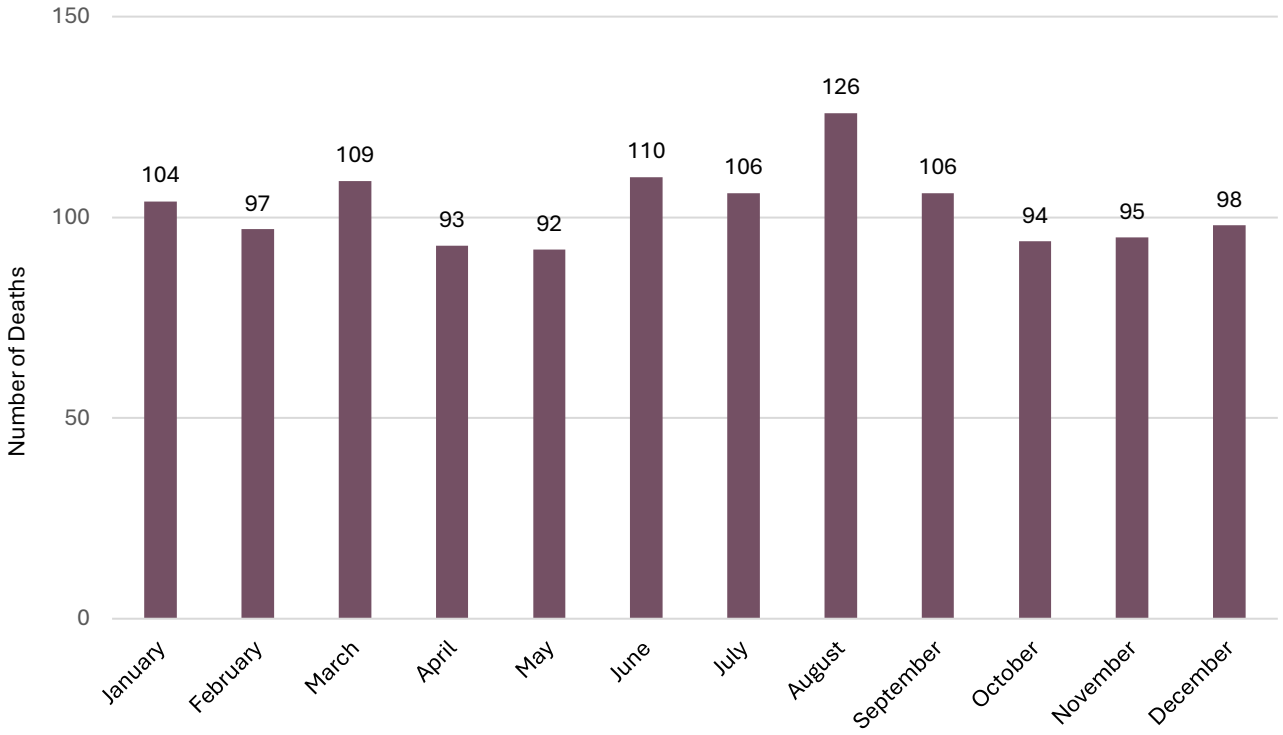


Figure 2.28 Number of Suicide Deaths by Day of the Week, 2023

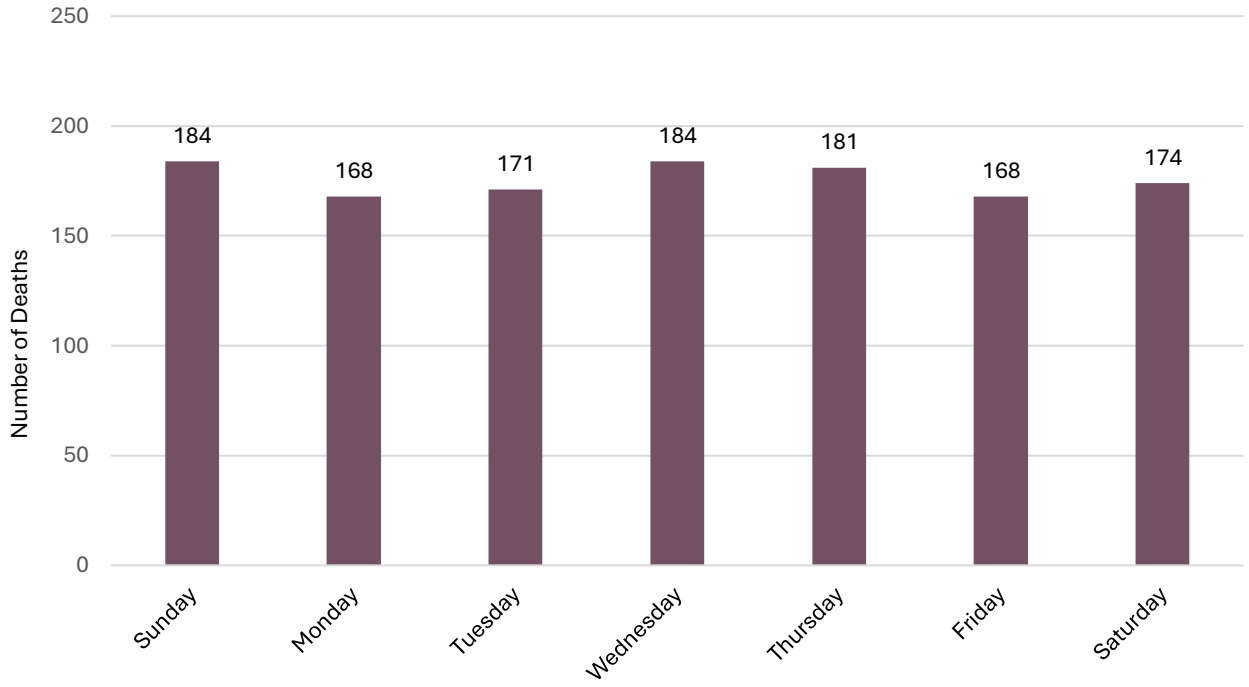


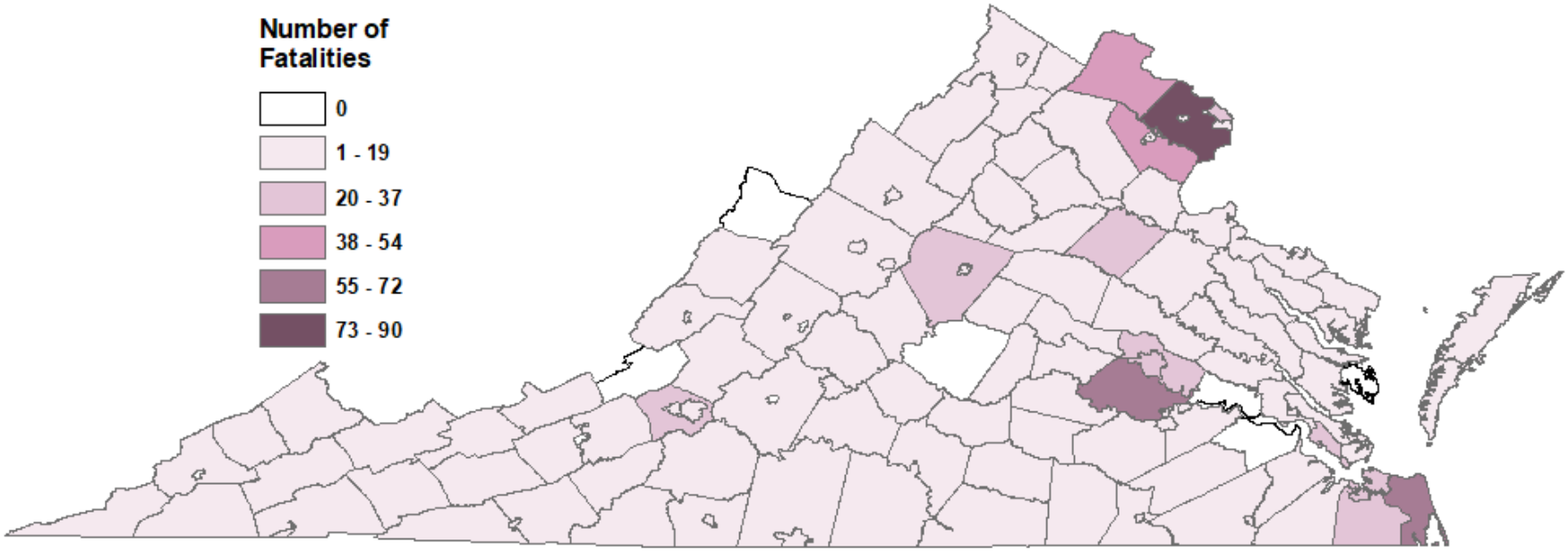
Table 2.16 Number and Rate of Suicide Deaths by Locality of Residence, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

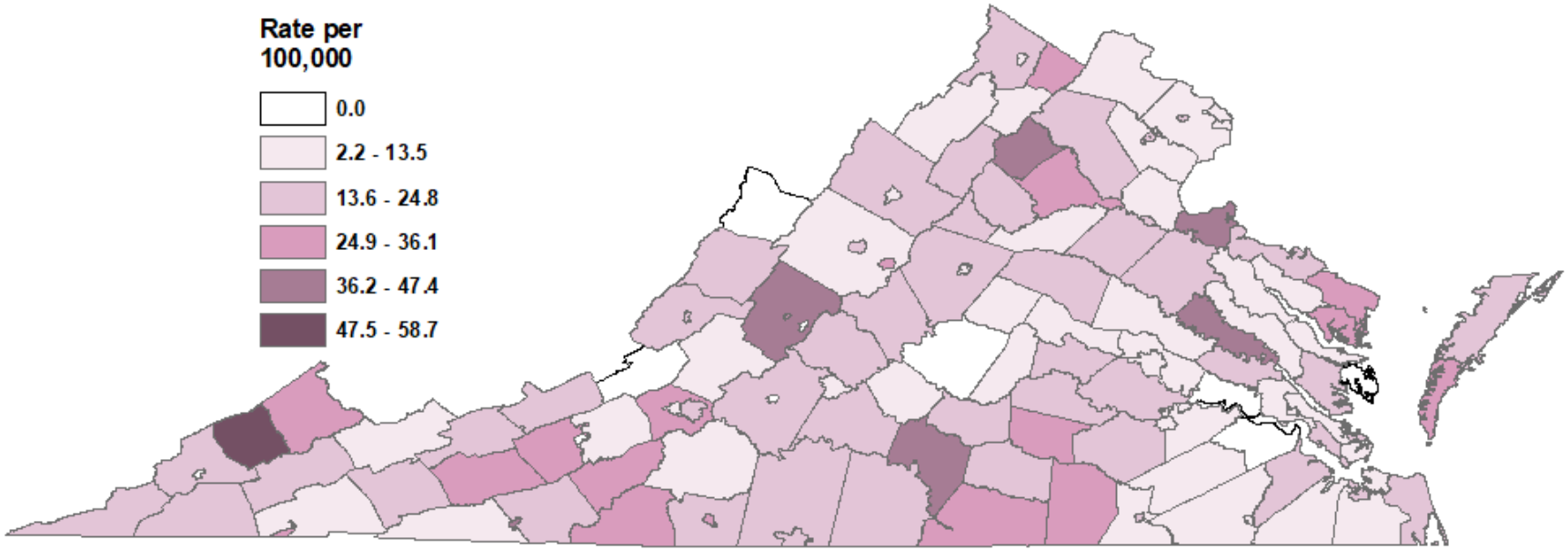
Table 2.17 Number of Suicide Deaths by Locality of Injury and Year of Death, 2006-2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

Map 2.5 Number of Suicides by Locality of Residence, 2023



Map 2.6 Suicide Rates by Locality of Residence, 2023

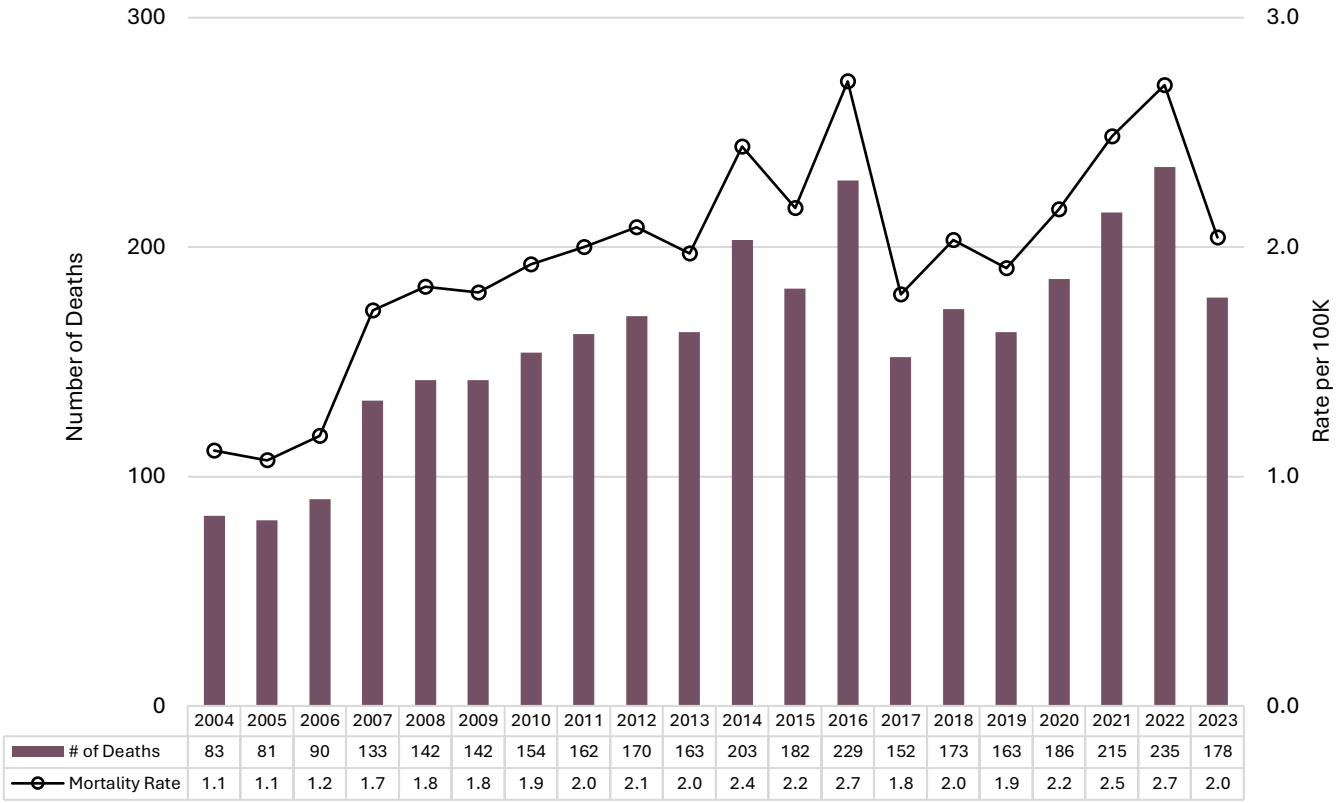


UNDETERMINED DEATHS (N = 178)

Undetermined deaths are those in which after examination, two or more manners cannot be eliminated and therefore the death must be ruled undetermined. In 2023, the number of undetermined deaths decreased 24.3% compared to 2022. Generally, undetermined deaths have mostly increased since 2006 mainly due to the transition in diagnostic criteria of sudden infant death syndrome (SIDS) to sudden unexpected infant death (SUID), where SIDS deaths are classified as natural deaths and SUID deaths are classified as undetermined deaths.

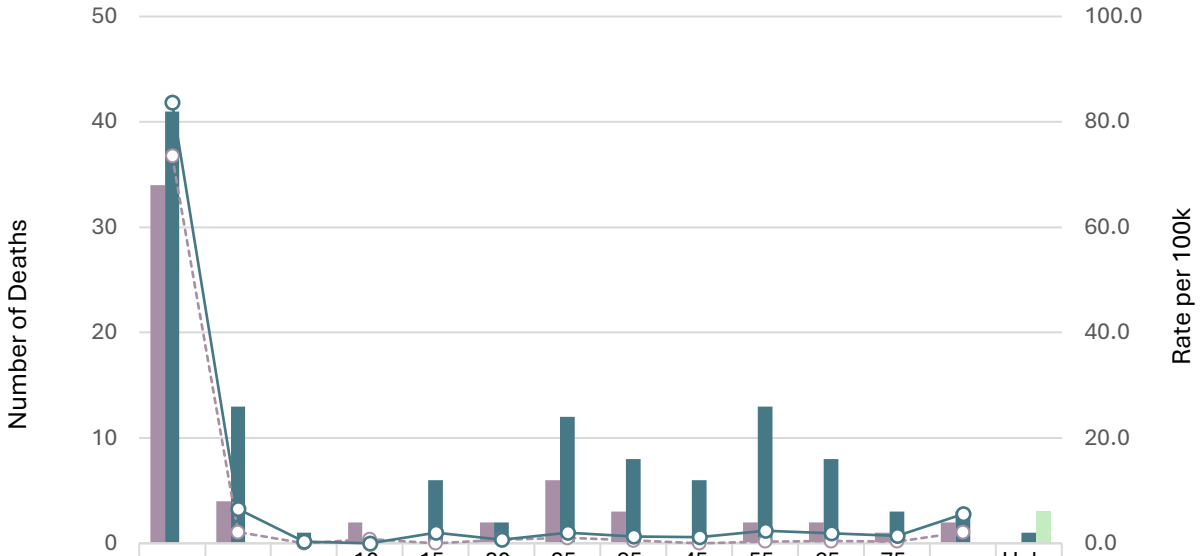
- Nearly 33% of the cases assigned an undetermined manner had a determined cause of death
- Over 42% % of deaths with an undetermined manner were among infants less than 1 year of age

Figure 2.29 Number and Rate of Undetermined Deaths by Year of Death, 2004-2023



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	83	81	90	133	142	142	154	162	170	163	203	182	229	152	173	163	186	215	235	178
Mortality Rate	1.1	1.1	1.2	1.7	1.8	1.8	1.9	2.0	2.1	2.0	2.4	2.2	2.7	1.8	2.0	1.9	2.2	2.5	2.7	2.0

Figure 2.30 Number and Rate of Undetermined Deaths by Age Group and Sex, 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unknown
Female	34	4	0	2	0	2	6	3	0	2	2	1	2	0
Male	41	13	1	0	6	2	12	8	6	13	8	3	3	1
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Female Rate	73.5	2.1	0.0	0.8	0.0	0.7	1.0	0.5	0.0	0.4	0.4	0.4	2.1	*
Male Rate	83.6	6.5	0.4	0.0	2.1	0.7	2.0	1.3	1.1	2.4	2.0	1.4	5.5	*

Note: Rates cannot be calculated for 'unknown' categories due to unknown population denominators

Figure 2.31 Percentage of Undetermined Deaths by Race/Ethnicity, 2023

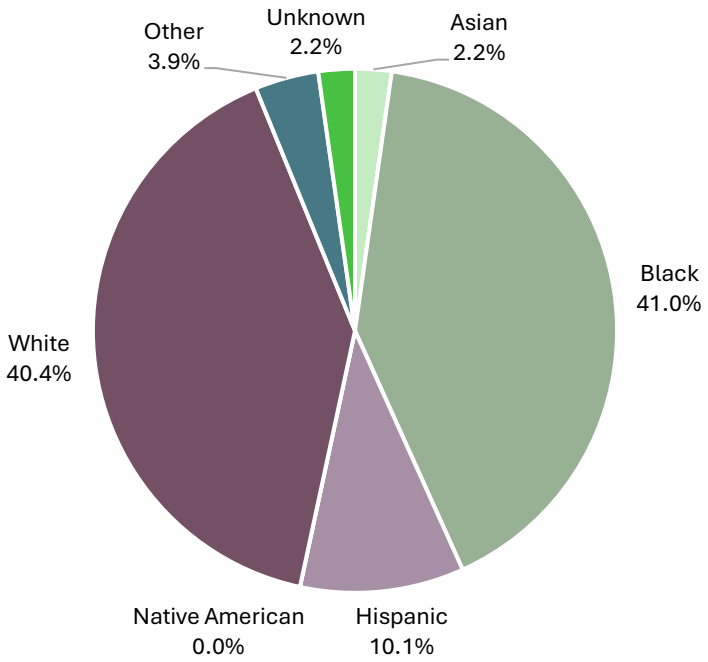


Table 2.18 Number of Undetermined Deaths by Cause of Death, 2023

Method of Death	Autopsied	Total Cases
Asphyxia		
Carbon monoxide (CO) poisoning-motor vehicle exhaust	2	2
Drowned	5	5
Hanged	1	1
Drug Use		
Ingested and/or injected illicit, prescription, and/or OTC medication	8	8
Fire		
Thermal and/or inhalational Injuries	1	1
Jump/Fall		
Jumped/Fell from height	5	6
Motor Vehicle		
Motorcycle	1	1
Traumatic Injury		
Gunshot wound		
Handgun	15	15
Shotgun	1	1
Unknown	1	1
Sharp force injury	1	1
Other/Unknown traumatic causes	7	7
Other Cause of Death		
Dehydration and/or starvation	1	1
Other	8	8
Subtotal (Undetermined Manner with Determined Cause of Death)	57	58
Undetermined Manner of Death and Undetermined Cause of Death		
Skeletal/Mummified remains	25	25
Sudden Unexpected Infant Death (SUID)	69	69
Undetermined after autopsy and/or toxicology	26	26
Subtotal (Undetermined Manner and Undetermined Cause of Death)	120	120
Total Undetermined Deaths	**177**	**178**

Section 3: Deaths of Children (N = 352)

Child deaths are deaths of persons aged 17 years and younger.

The OCME investigated 352 deaths of children, representing 3.9% of all OCME deaths in 2023.

- Males represented 66.2% of all child cases
- Undetermined deaths of infants <1 year of age certified as sudden unexpected infant death (SUID) represented 19.6% of all OCME child deaths in 2023

Figure 3.1 Number of Child Deaths by Manner, 2023

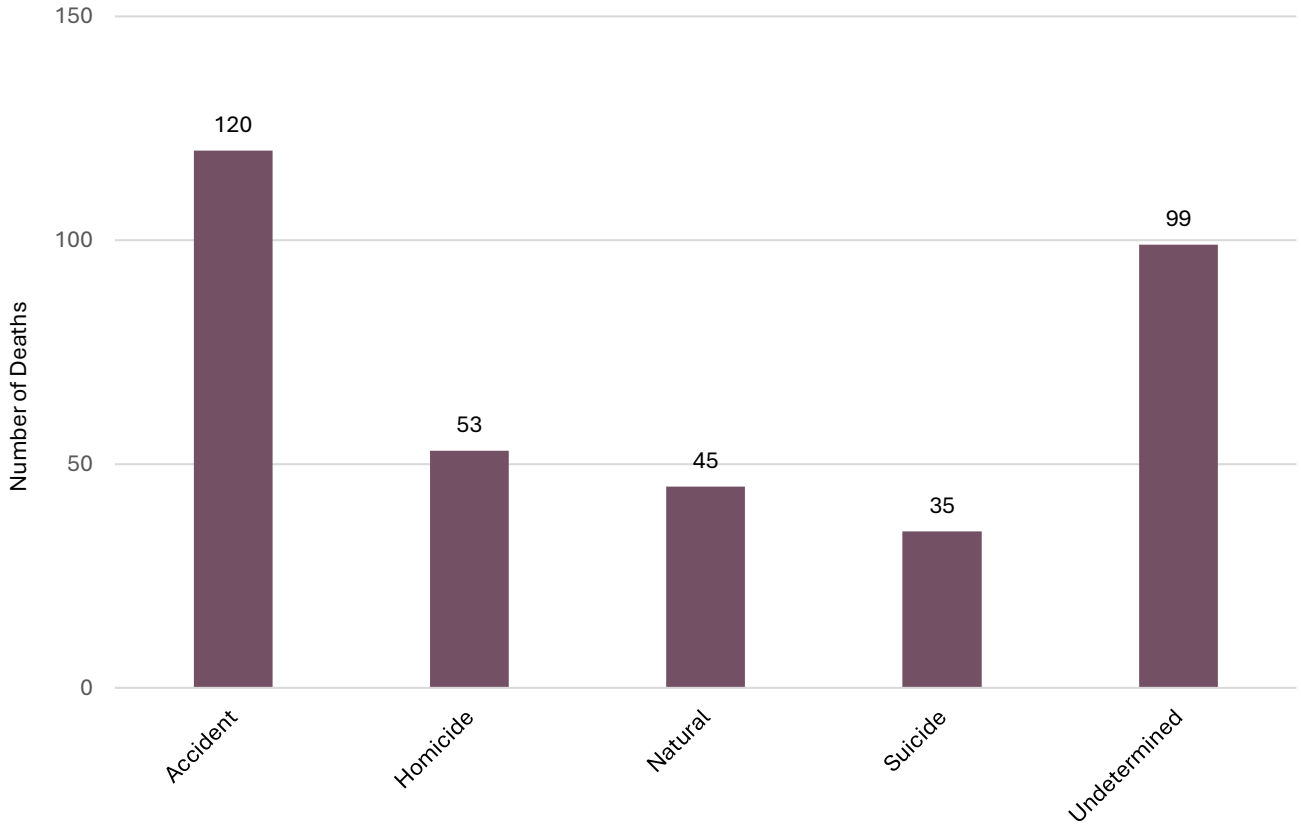
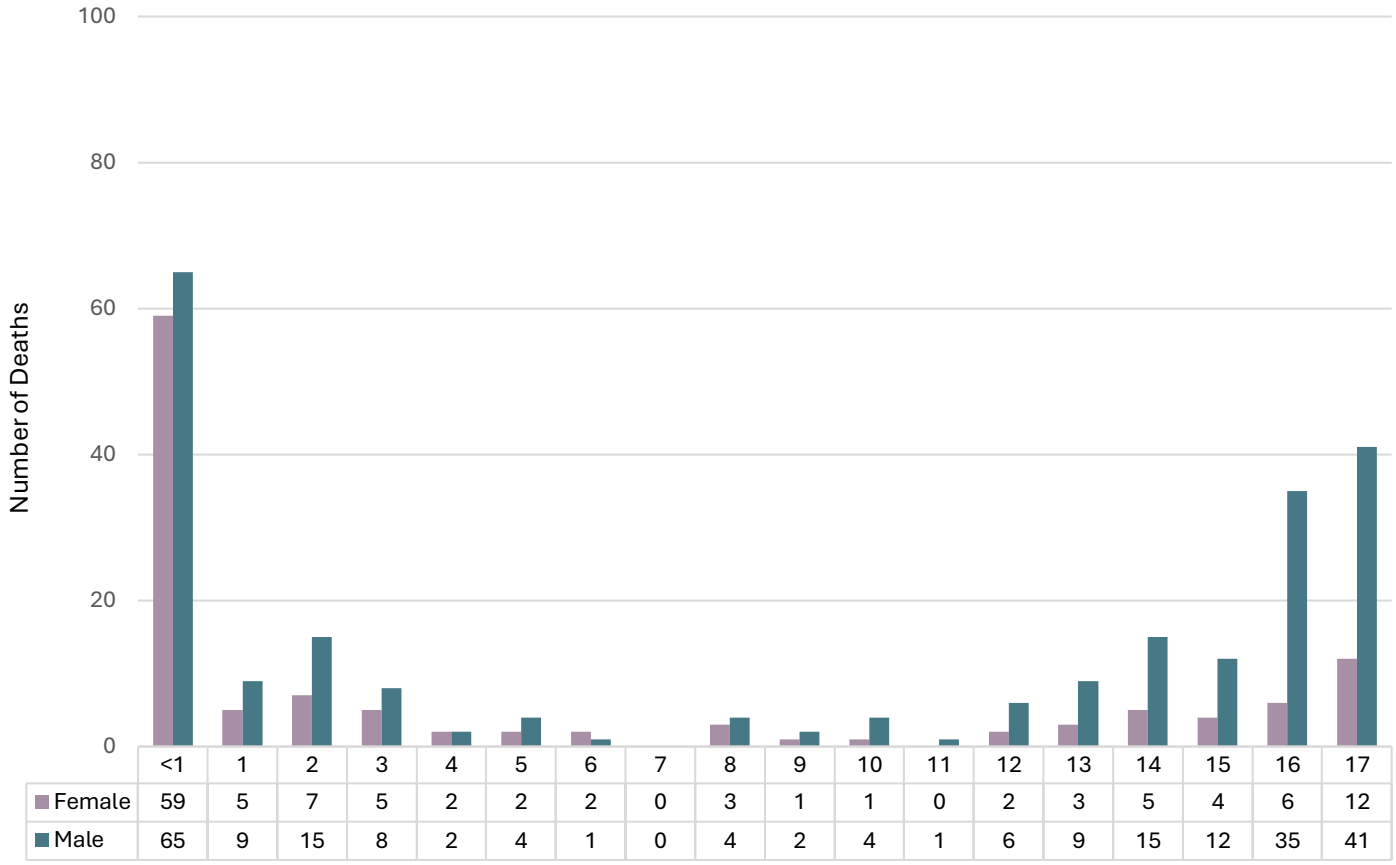


Figure 3.2 Number of Child Deaths by Age and Sex, 2023



	<1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Female	59	5	7	5	2	2	2	0	3	1	1	0	2	3	5	4	6	12
Male	65	9	15	8	2	4	1	0	4	2	4	1	6	9	15	12	35	41

Figure 3.3 Percentage of Child Deaths by Race/Ethnicity, 2023

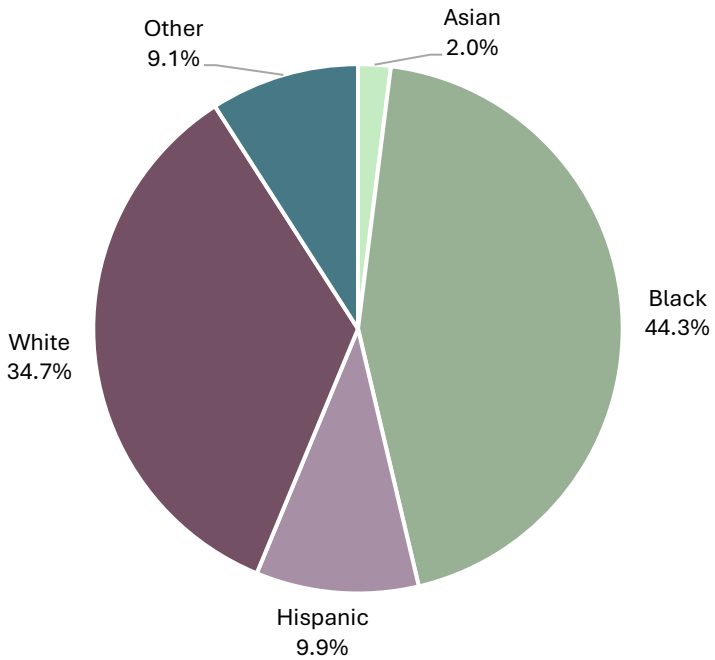
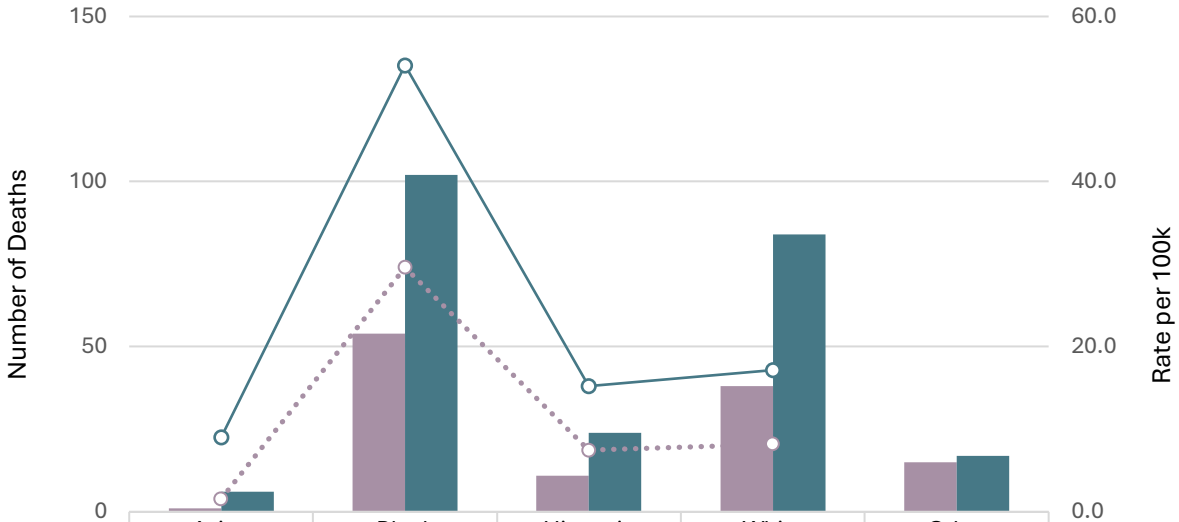


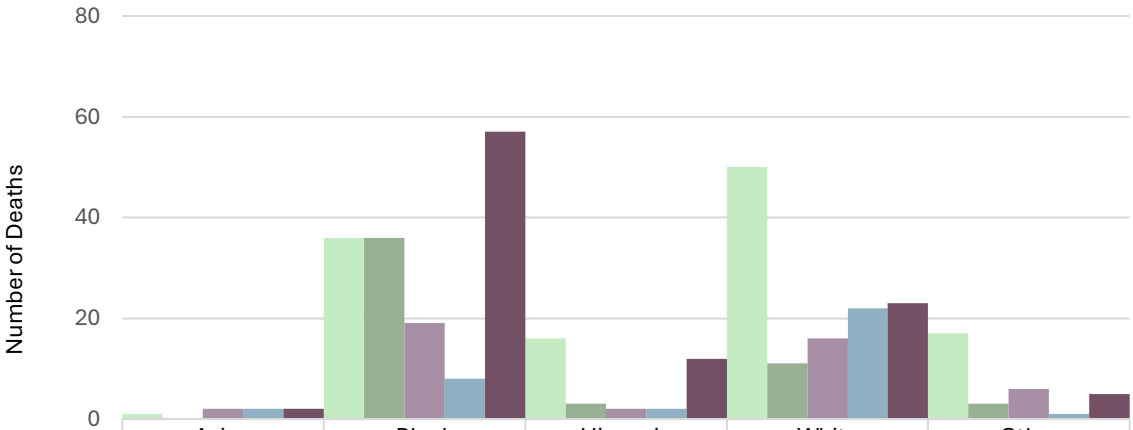
Figure 3.4 Number and Rate of Child Deaths by Sex and Race/Ethnicity, 2023



	Asian	Black	Hispanic	White	Other
Female	1	54	11	38	15
Male	6	102	24	84	17
Female Rate	1.6	29.6	7.4	8.2	*
Male Rate	9.0	54.1	15.2	17.1	*

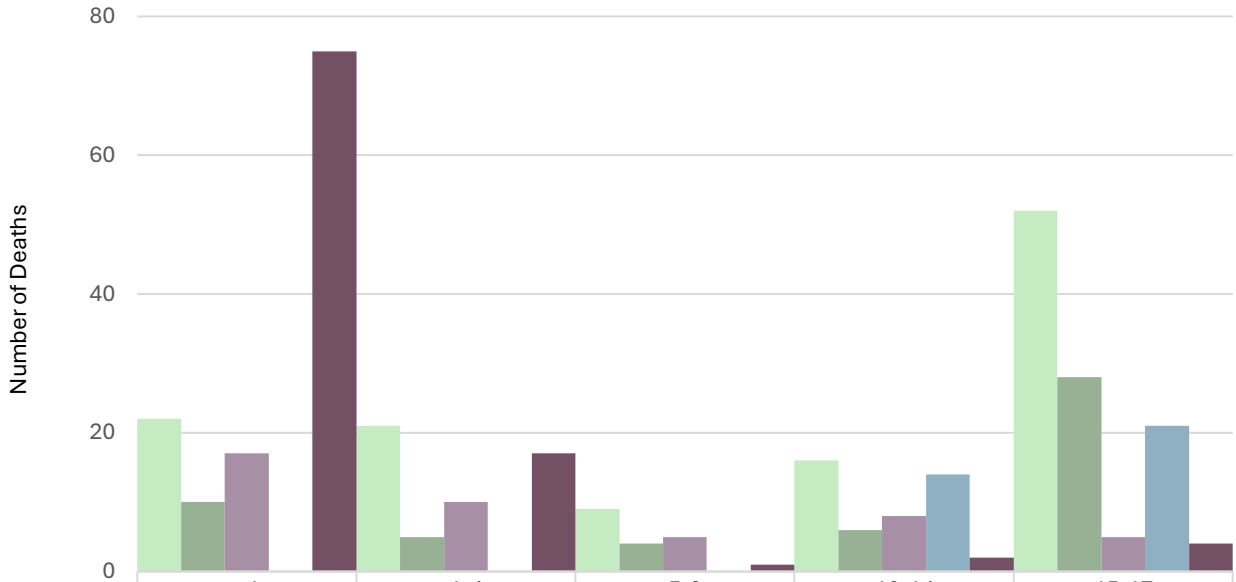
Note: Rates cannot be calculated for 'other' categories due to unknown population denominators
Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution

Figure 3.5 Number of Child Deaths by Manner and Race/Ethnicity, 2023



	Asian	Black	Hispanic	White	Other
Accident	1	36	16	50	17
Homicide	0	36	3	11	3
Natural	2	19	2	16	6
Suicide	2	8	2	22	1
Undetermined	2	57	12	23	5

Figure 3.6 Number of Child Deaths by Manner and Age Group, 2023



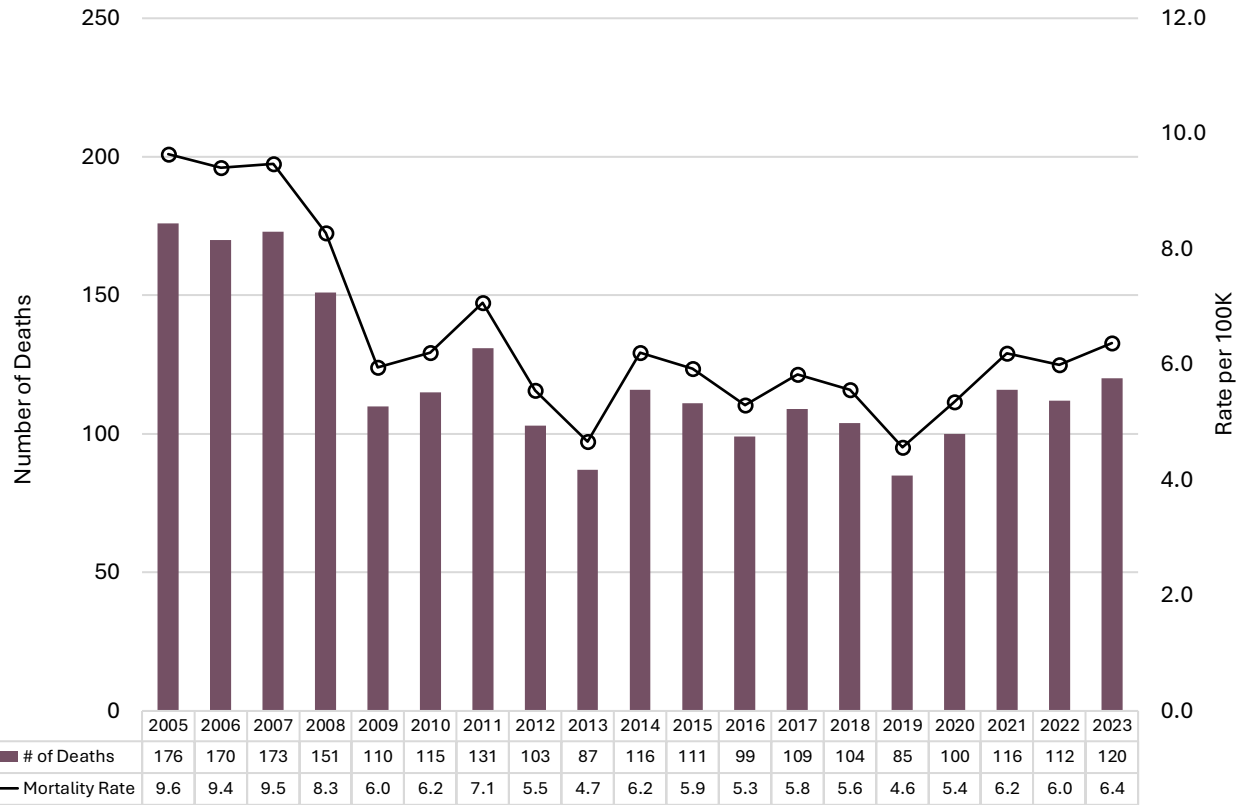
	<1	1-4	5-9	10-14	15-17
Accident	22	21	9	16	52
Homicide	10	5	4	6	28
Natural	17	10	5	8	5
Suicide	0	0	0	14	21
Undetermined	75	17	1	2	4

ACCIDENTAL CHILD DEATHS (N = 120)

The number of accidental child deaths increased by 7.1% in 2023 compared to 2022.

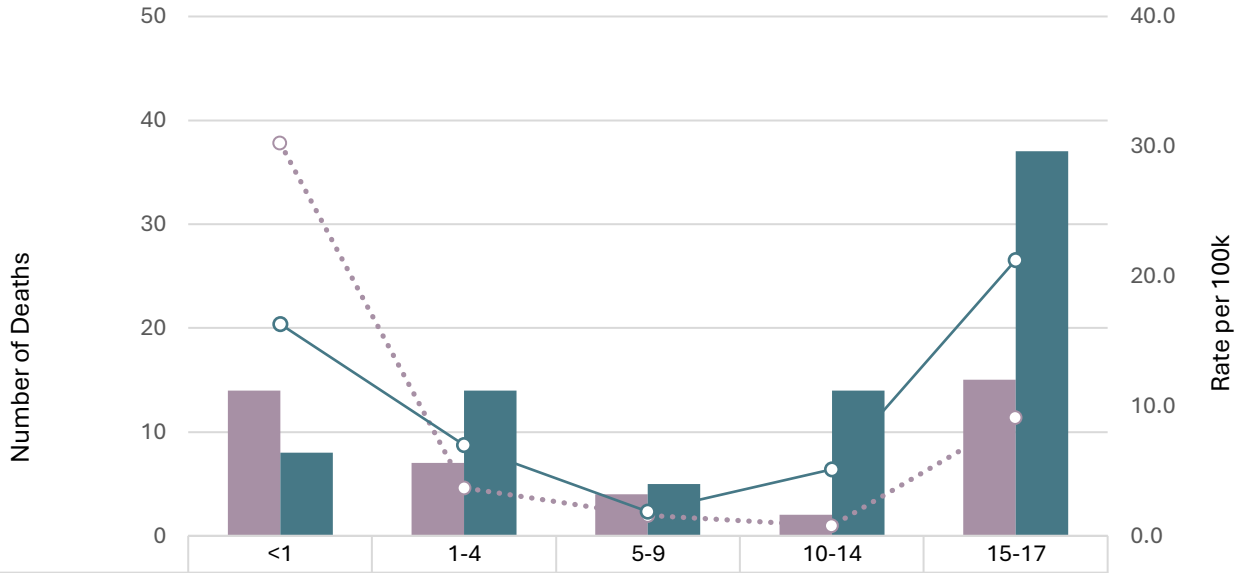
- The largest number of accidental deaths occurred among males (65.0%), Whites (41.7%), and children aged 15-17 years of age (43.3%)
- Black males and Hispanic males had the highest rate of accidental death (11.7 and 8.3 deaths per 100,000 persons aged 0-17 years, respectively)
- Motor vehicle accidents were the leading method of death (40.0%), followed by accidental drownings (15.0%)

Figure 3.7 Number and Rate of Accidental Child Deaths by Year, 2004-2023



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	176	170	173	151	110	115	131	103	87	116	111	99	109	104	85	100	116	112	120
Mortality Rate	9.6	9.4	9.5	8.3	6.0	6.2	7.1	5.5	4.7	6.2	5.9	5.3	5.8	5.6	4.6	5.4	6.2	6.0	6.4

Figure 3.8 Number and Rate of Accidental Child Deaths by Age Group and Sex, 2023



	<1	1-4	5-9	10-14	15-17
Female	14	7	4	2	15
Male	8	14	5	14	37
Female Rate	30.3	3.7	1.6	0.8	9.1
Male Rate	16.3	7.0	1.9	5.1	21.2

Figure 3.9 Percentage of Accidental Child Deaths by Race/Ethnicity, 2023

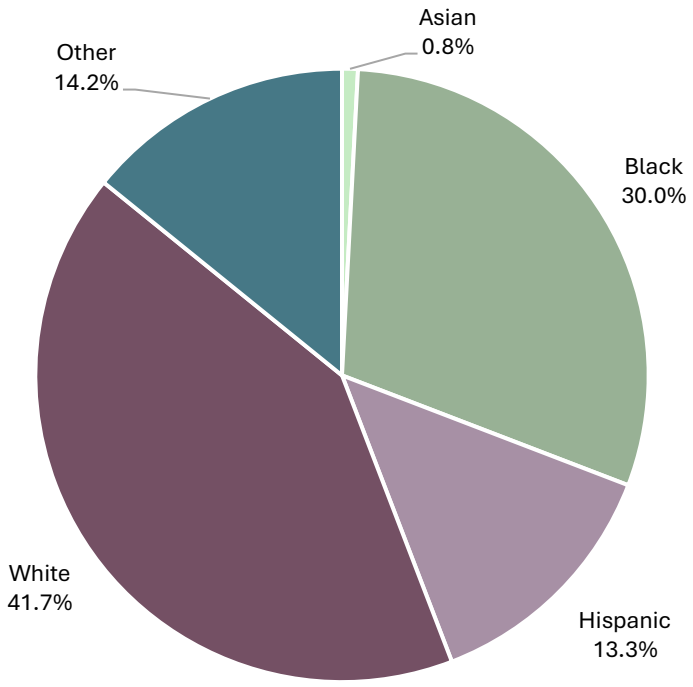
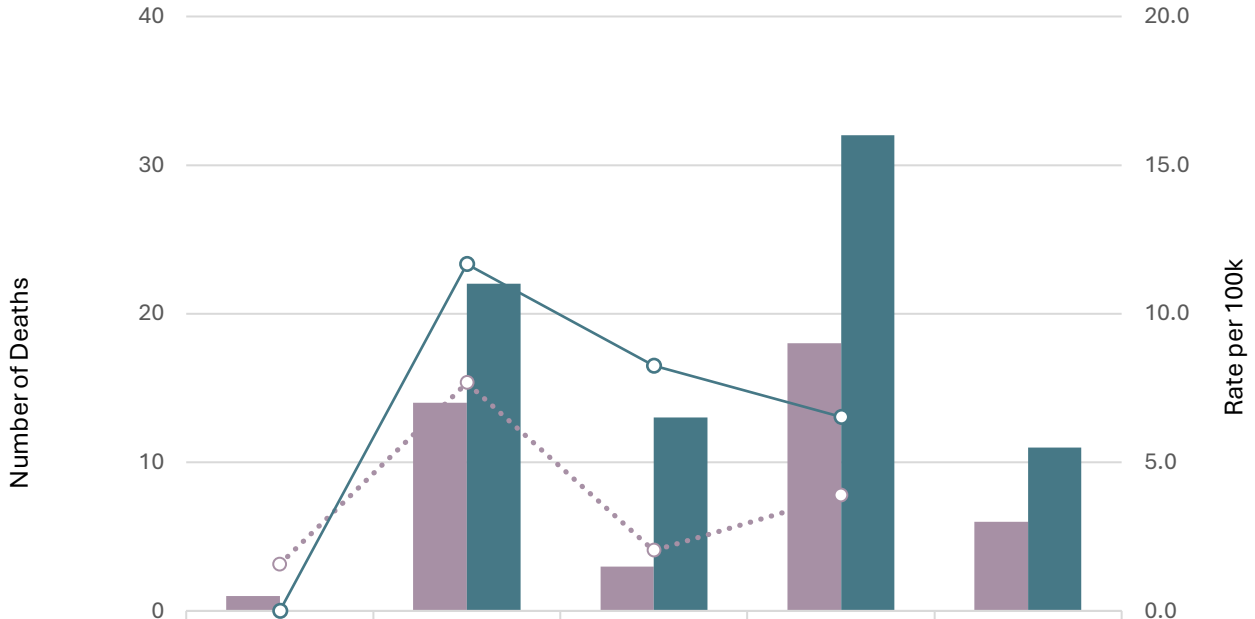


Figure 3.10 Number and Rate of Accidental Child Deaths by Sex and Race/Ethnicity, 2023



	Asian	Black	Hispanic	White	Other
Female	1	14	3	18	6
Male	0	22	13	32	11
Female Rate	1.6	7.7	2.0	3.9	*
Male Rate	0.0	11.7	8.3	6.5	*

Note: Rates cannot be calculated for 'other' categories due to unknown population denominators

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution

Figure 3.11 Number of Accidental Child Deaths by Month of Death, 2023

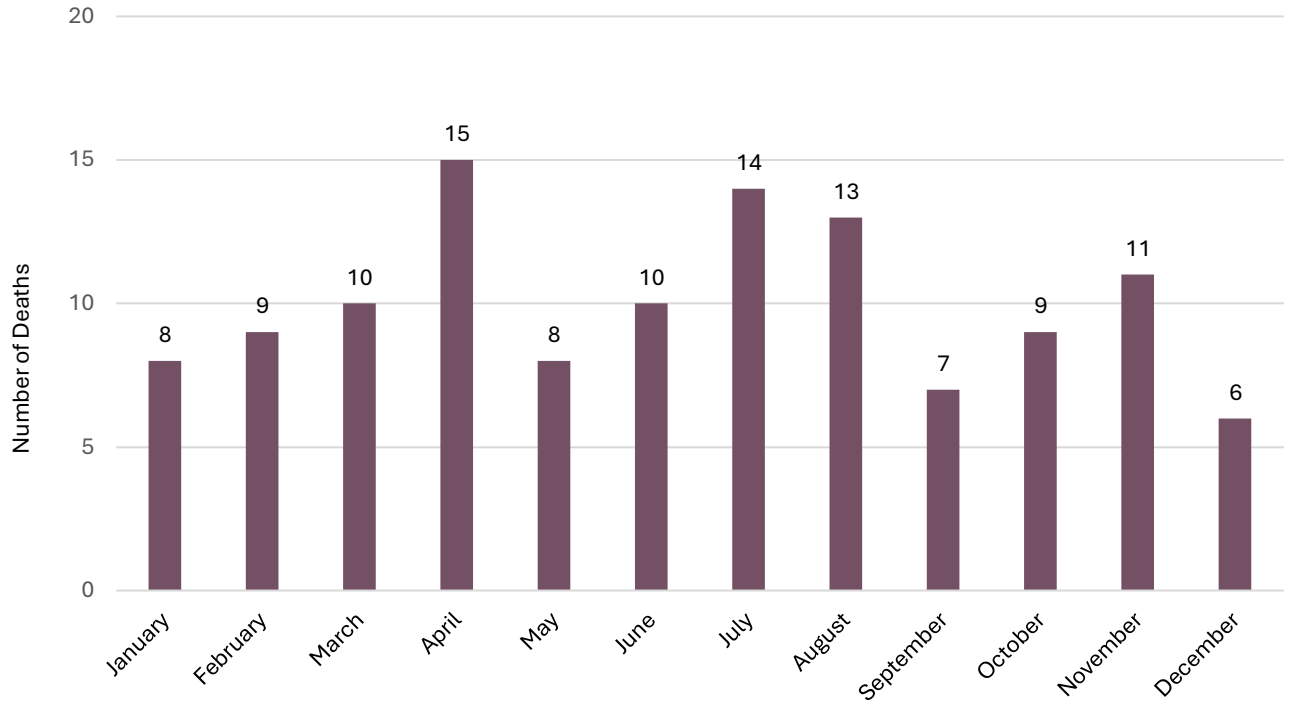


Figure 3.12 Number of Accidental Child Deaths by Day of Week, 2023

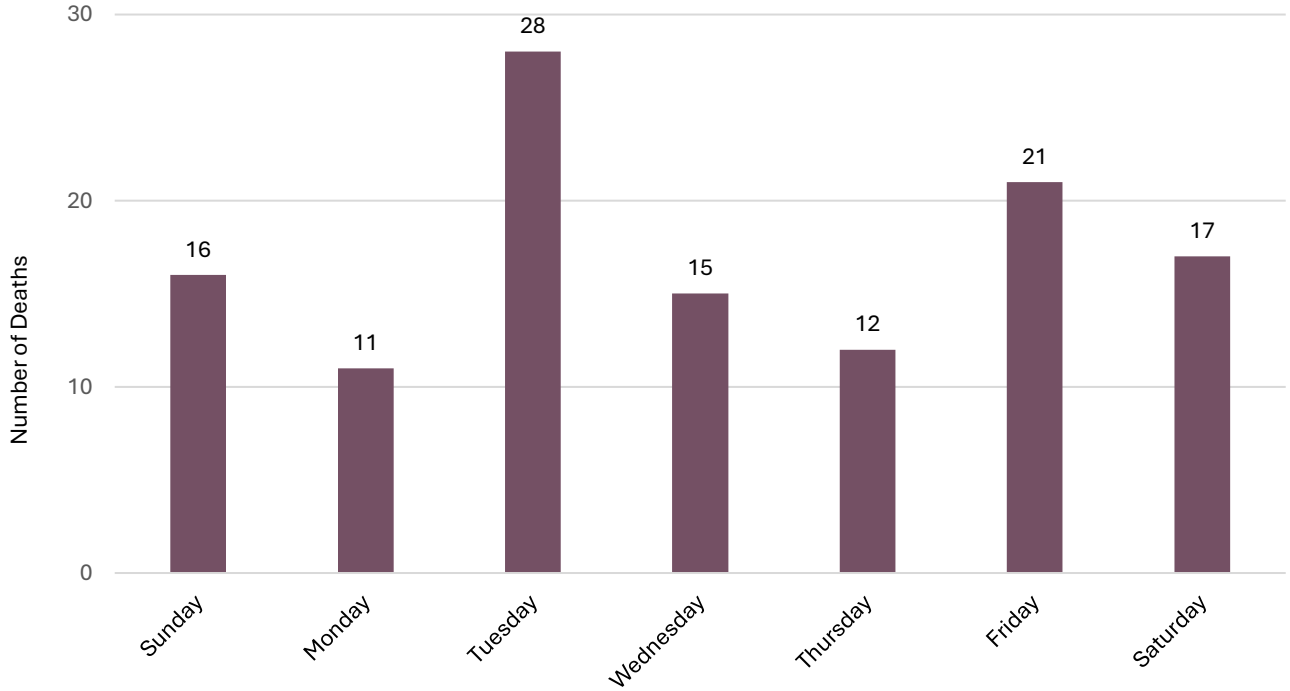


Table 3.1 Number of Accidental Child Deaths by Cause and Method of Death, 2023

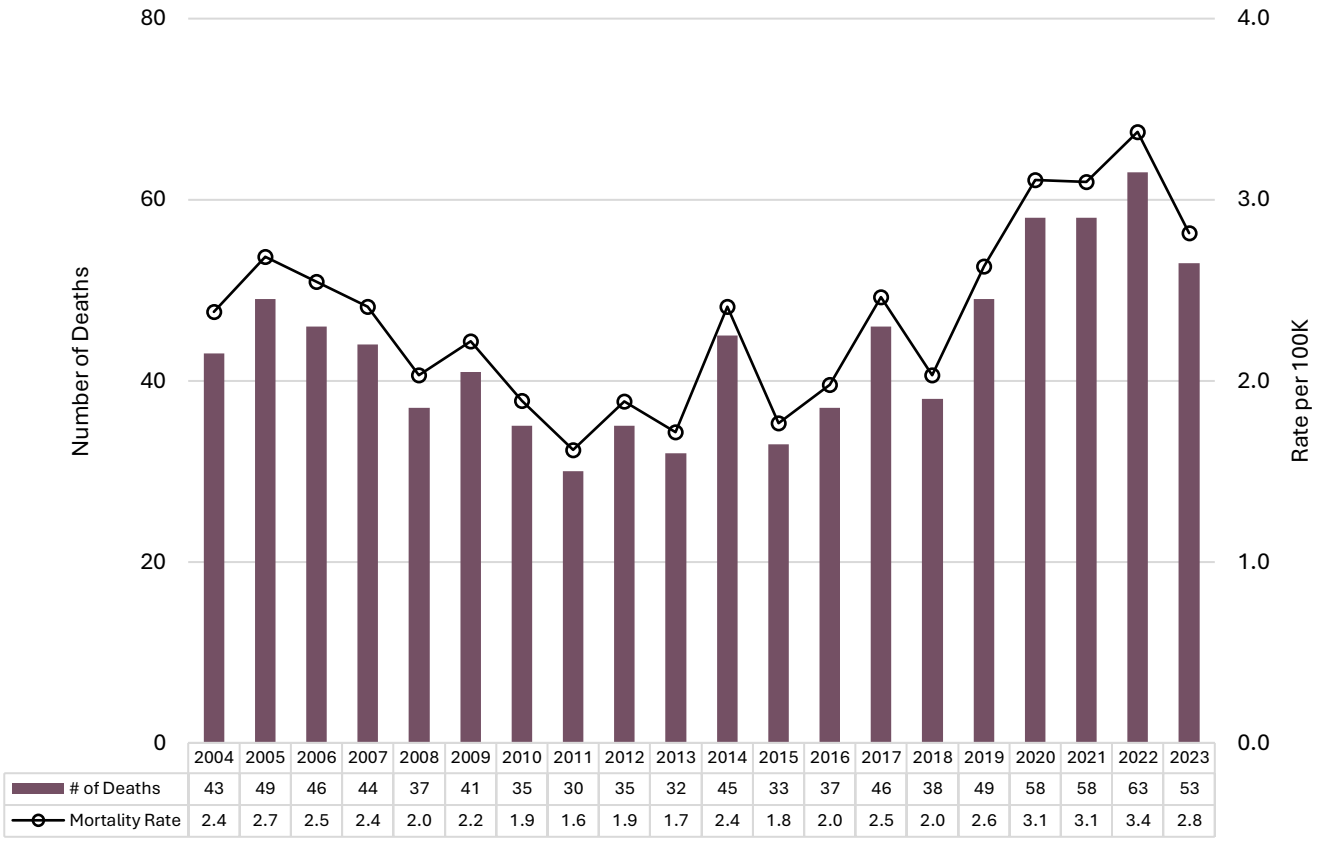
Method of Death	Autopsied	Total Cases
Asphyxia		
Carbon monoxide (CO) poisoning-motor vehicle exhaust	1	1
Choked on food/foreign object	1	3
Drowned	12	18
Hanged	2	2
Mechanical/Positional asphyxia	2	3
Strangled/Neck compression	1	1
Suffocated/Smothered	16	16
Drug Use		
Ingested and/or injected illicit, prescription, and/or other type of drug	14	16
Environmental Exposure		
Exposure to heat	2	2
Jump/Fall		
Jumped/Fell from height	1	2
Fire		
Thermal burns and/or inhalation of combustion products	1	1
Motor Vehicle		
Aircraft	1	1
All terrain vehicle	0	2
Bicycle	1	2
Car	1	20
Golf cart	0	1
Motorcycle	0	2
Pickup truck	2	5
Scooter	0	1
Sport utility vehicle	2	9
Train	0	1
Van	0	1
Unknown	1	3
Traumatic Injury		
Explosion	0	1
Gunshot wound		
Handgun	2	2
Falling object	1	1
Sharp force injury	0	1
Other Unnatural Deaths		
Other	0	2
Total Accidental Child Deaths	**64**	**120**

CHILD HOMICIDE DEATHS (N = 53)

The number of child homicide deaths in 2023 decreased 15.9% compared to 2022. Homicides represented 15.1% of all child deaths.

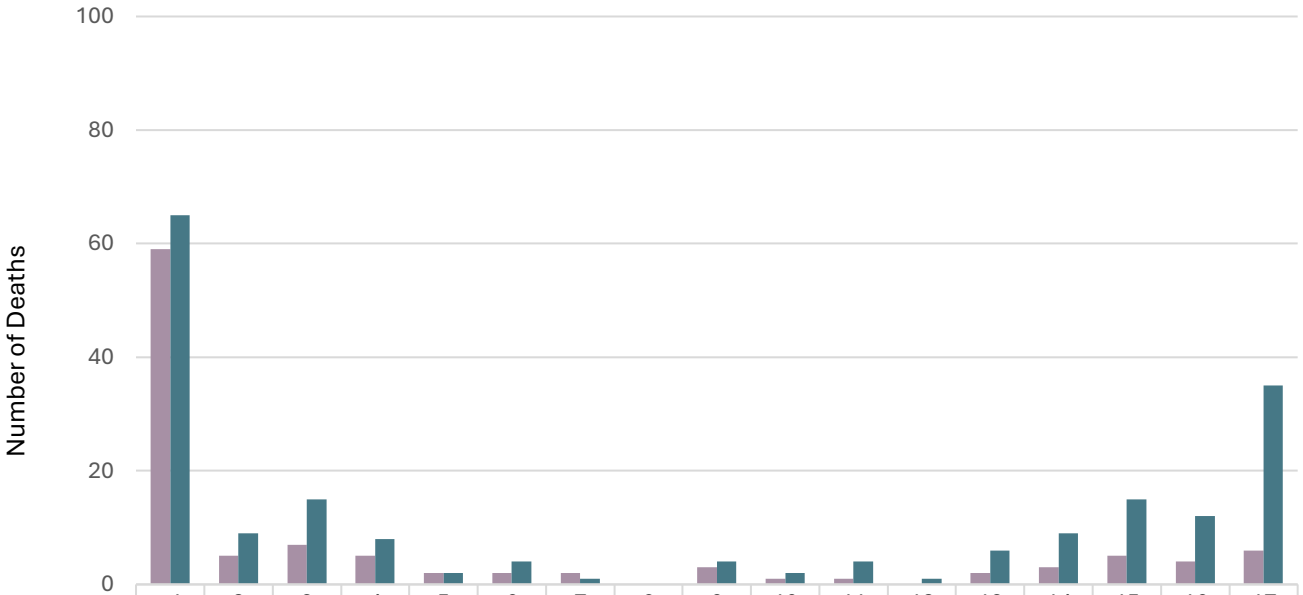
- Homicides in children in 2023 occurred most frequently among males (75.5%) and among Blacks (67.9%)
- Black males had the highest rate of child homicides with 14.8 deaths per 100,000 persons aged 0-17 years
- Gunshot wounds (71.7%) were the most common method of child homicide in 2023, followed by beatings (24.5%)

Figure 3.13 Number and Rate of Child Homicide Deaths by Year, 2004-2023



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	43	49	46	44	37	41	35	30	35	32	45	33	37	46	38	49	58	58	63	53
Mortality Rate	2.4	2.7	2.5	2.4	2.0	2.2	1.9	1.6	1.9	1.7	2.4	1.8	2.0	2.5	2.0	2.6	3.1	3.1	3.4	2.8

Figure 3.14 Number of Child Homicide Deaths by Age and Sex, 2023



	<1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Female	59	5	7	5	2	2	2	0	3	1	1	0	2	3	5	4	6
Male	65	9	15	8	2	4	1	0	4	2	4	1	6	9	15	12	35

Figure 3.15 Percentage of Child Homicide Deaths by Race/Ethnicity, 2023

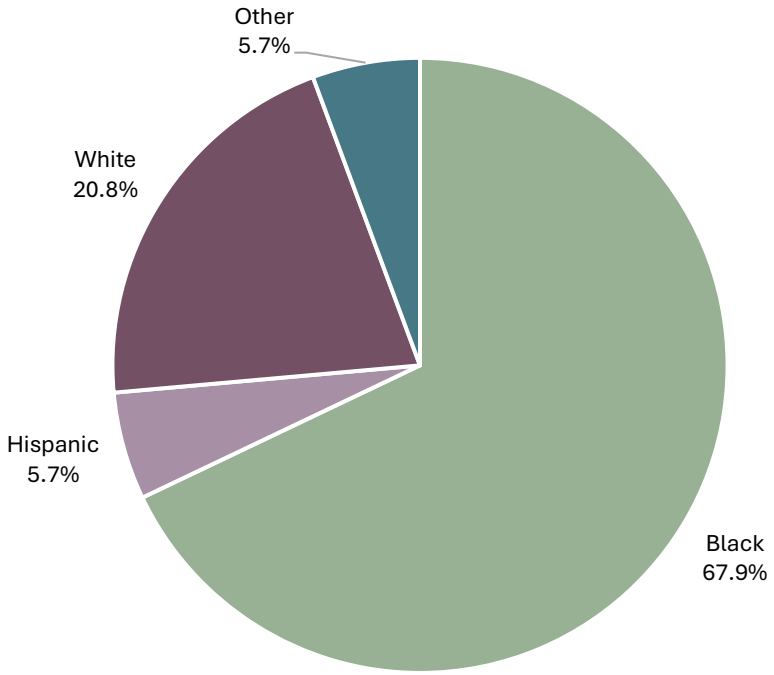
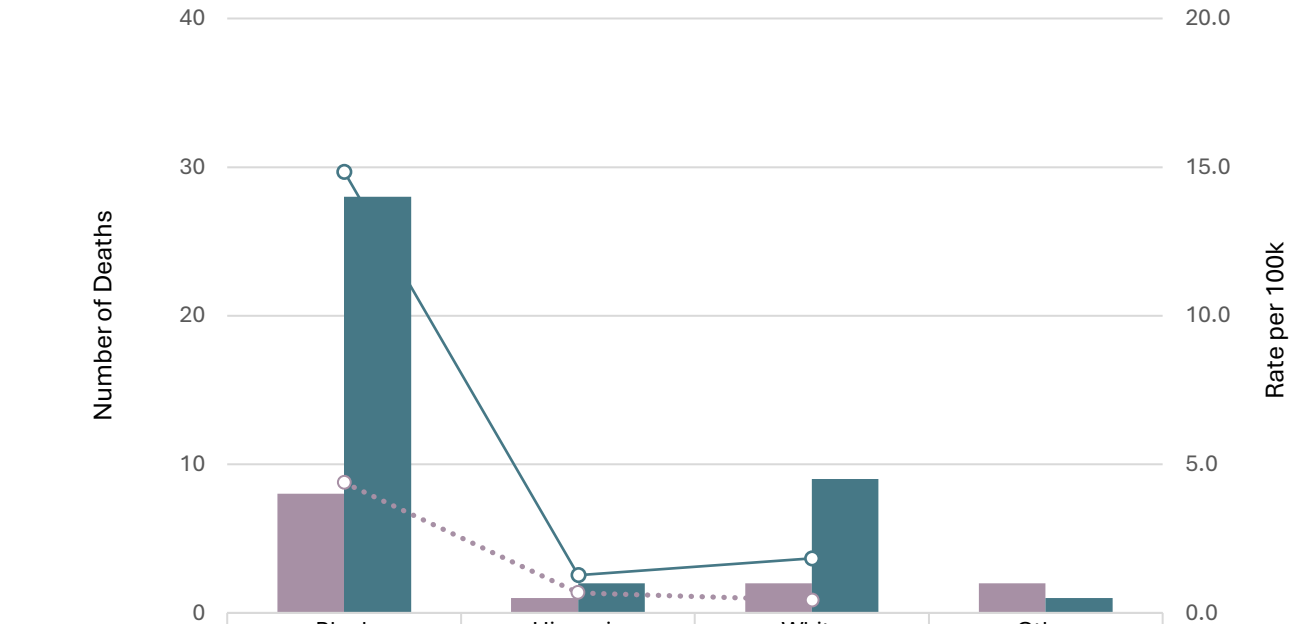


Figure 3.16 Number and Rate of Child Homicide Deaths by Sex and Race/Ethnicity, 2023



	Black	Hispanic	White	Other
Female	8	1	2	2
Male	28	2	9	1
Female Rate	4.4	0.7	0.4	*
Male Rate	14.8	1.3	1.8	*

Note: Rates cannot be calculated for 'other' categories due to unknown population denominators

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution

Figure 3.17 Number of Child Homicide Deaths by Month of Death, 2023

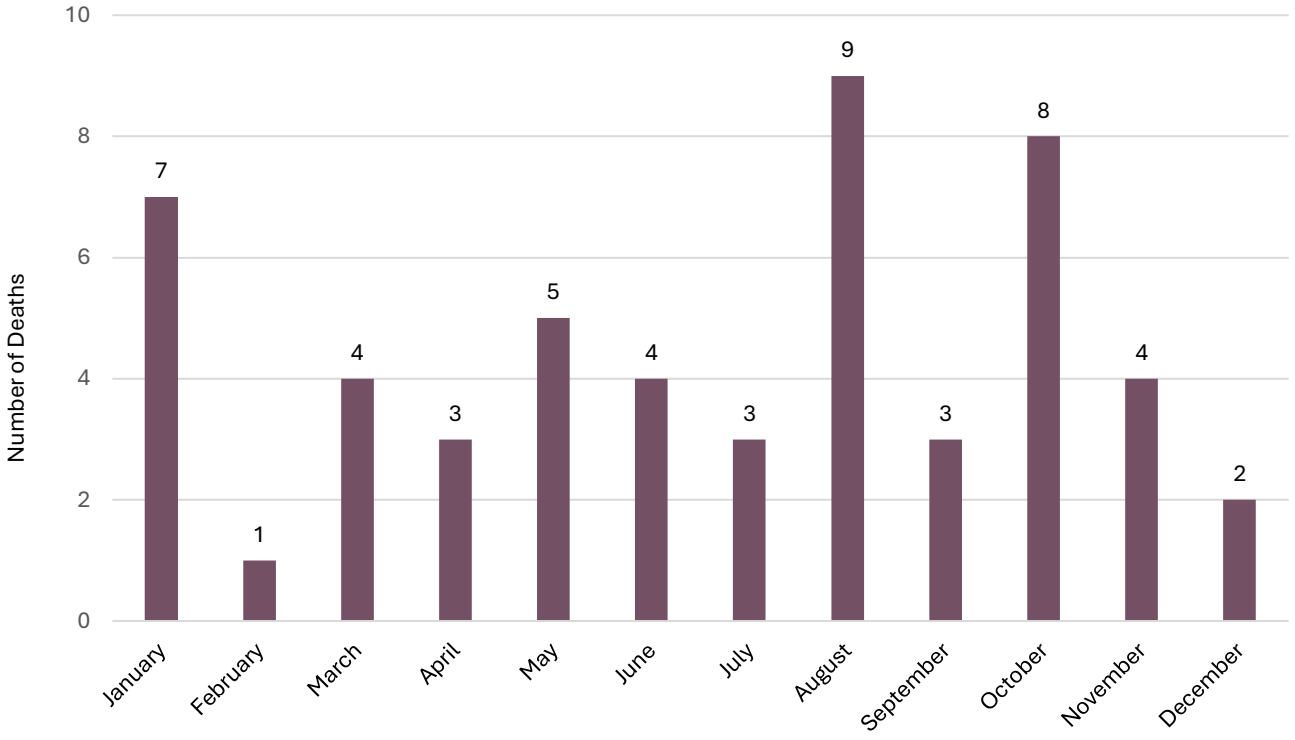


Figure 3.18 Number of Child Homicide Deaths by Day of the Week, 2023

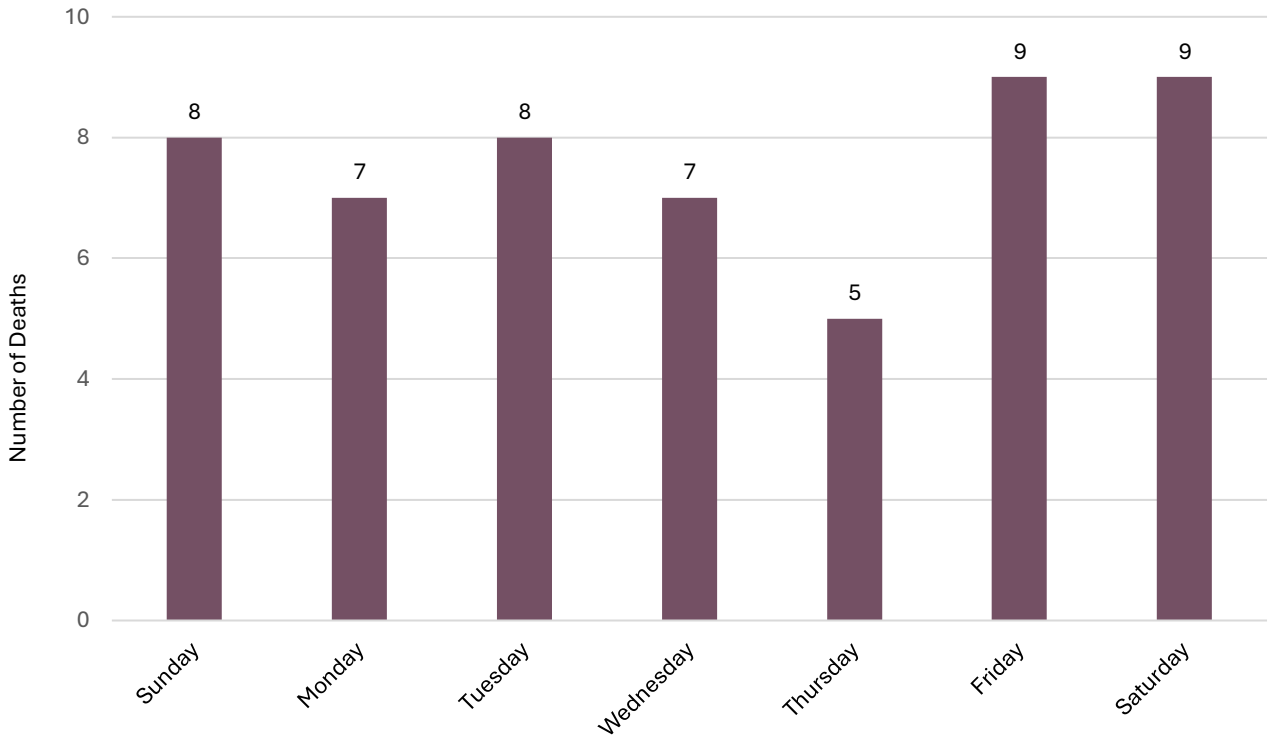


Table 3.2 Number of Child Homicide Deaths by Cause and Method of Death, 2023

Method of Death	Autopsied	Total Cases
Drug Use		
Ingested and/or injected illicit, prescription, and/or other type of drug	1	1
Motor Vehicle		
Car	1	1
Traumatic Injury		
Beaten by assailant(s)	13	13
Shot by assailant(s) with firearm		
Handgun	21	21
Rifle	1	1
Unknown	16	16
Total Child Homicide Deaths	**53**	**53**

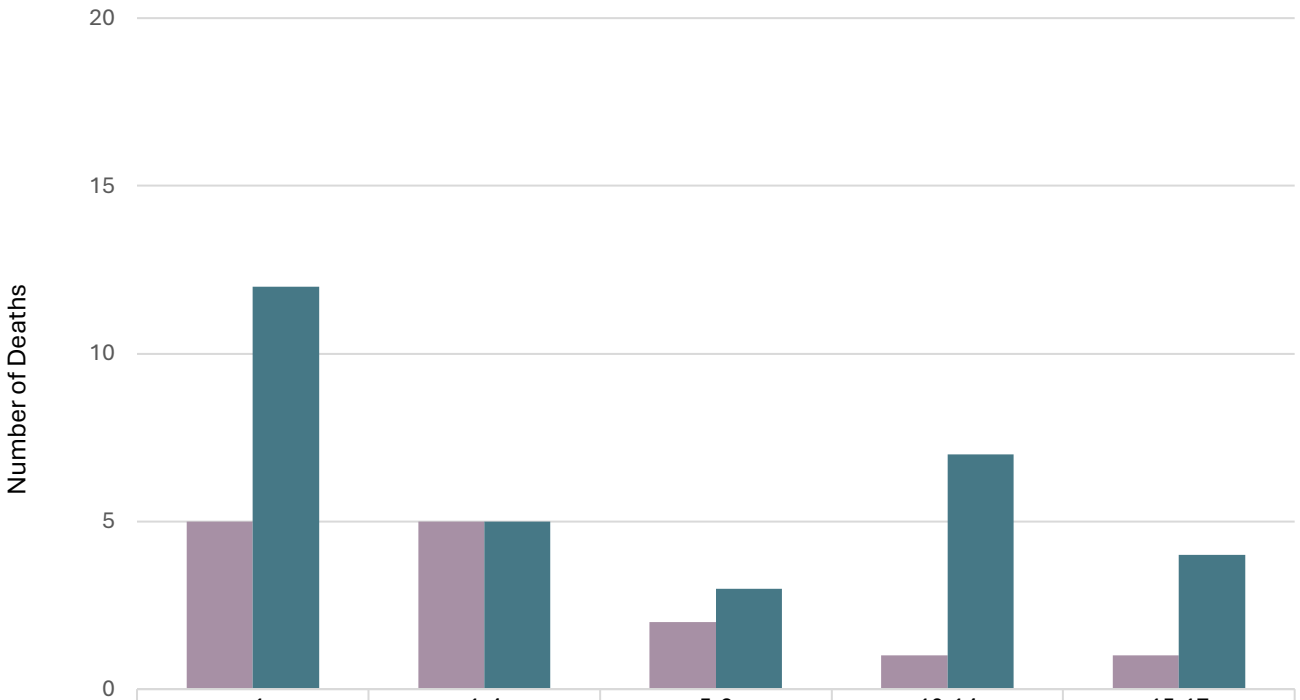
NATURAL CHILD DEATHS (N = 45)

Infants made up the largest proportion of natural child deaths (37.8%) that fell under the OCME's jurisdiction.

- Various cardiovascular diseases/disorders were the most common causes of natural child deaths in 2023

NOTE: Due to the change of OCME case definitions which includes the addition of the sudden unexpected infant death (SUID) classification of infant death in 2007 (undetermined manner of death), sudden infant death syndrome (SIDS) cases have drastically decreased (natural manner of death)

Figure 3.19 Number of Natural Child Deaths by Age Group and Sex, 2023



	<1	1-4	5-9	10-14	15-17
Female	5	5	2	1	1
Male	12	5	3	7	4

Figure 3.20 Percentage of Natural Child Deaths by Race/Ethnicity, 2023

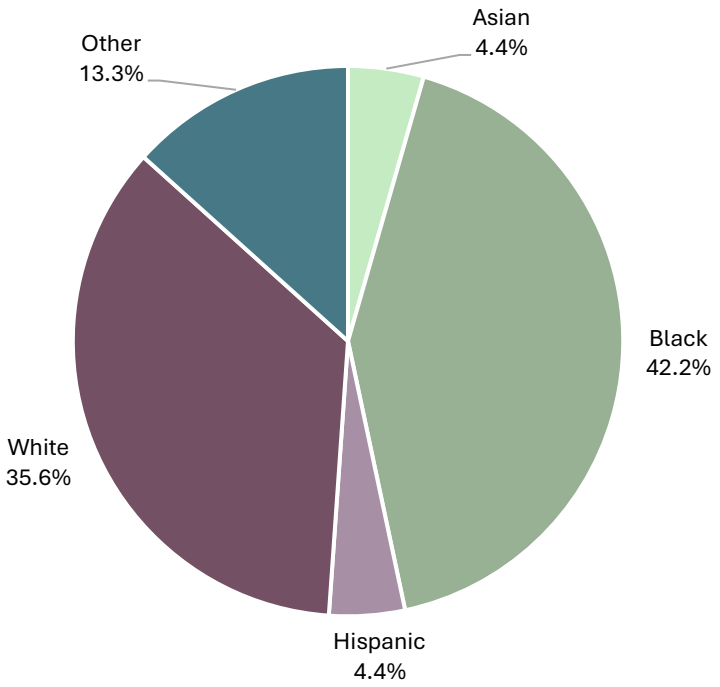


Figure 3.21 Number of OCME SIDS Cases by Year of Death, 2004-2023

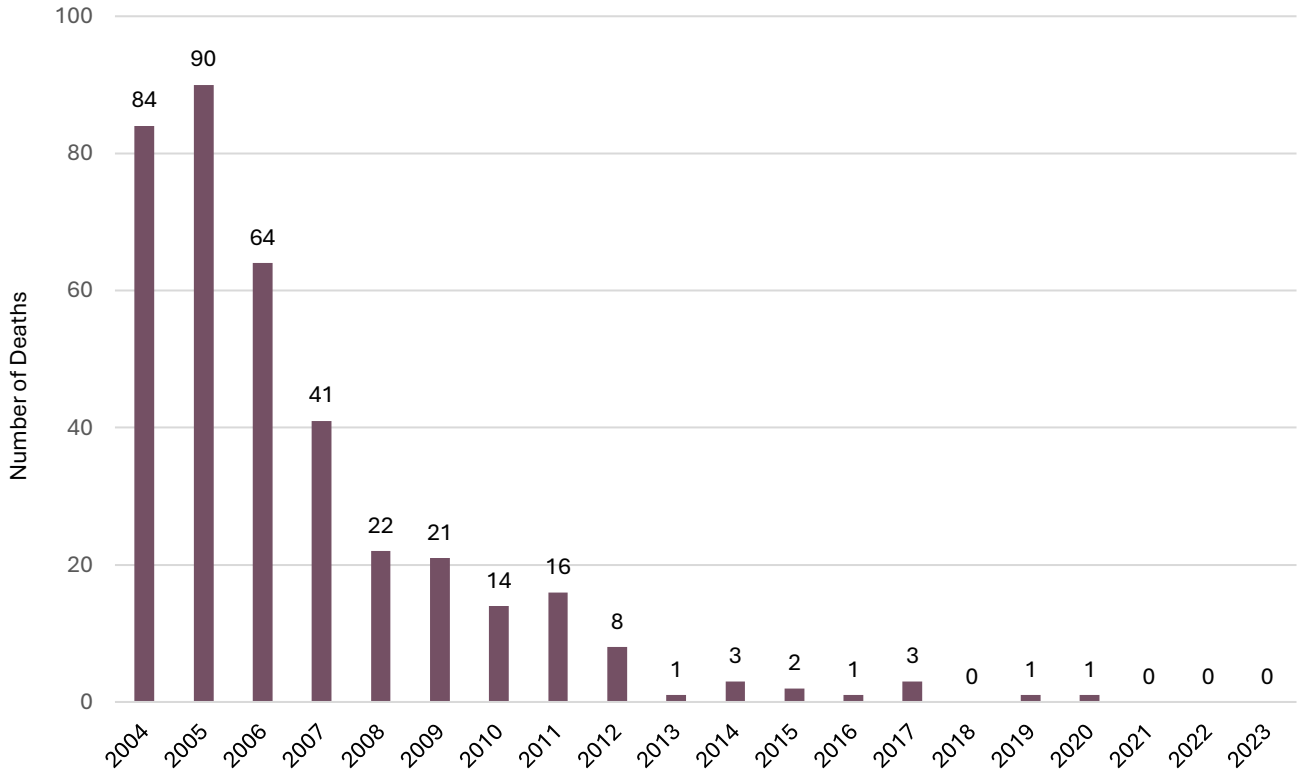


Table 3.3 Number of Natural Child Deaths by Cause and Method of Death, 2023

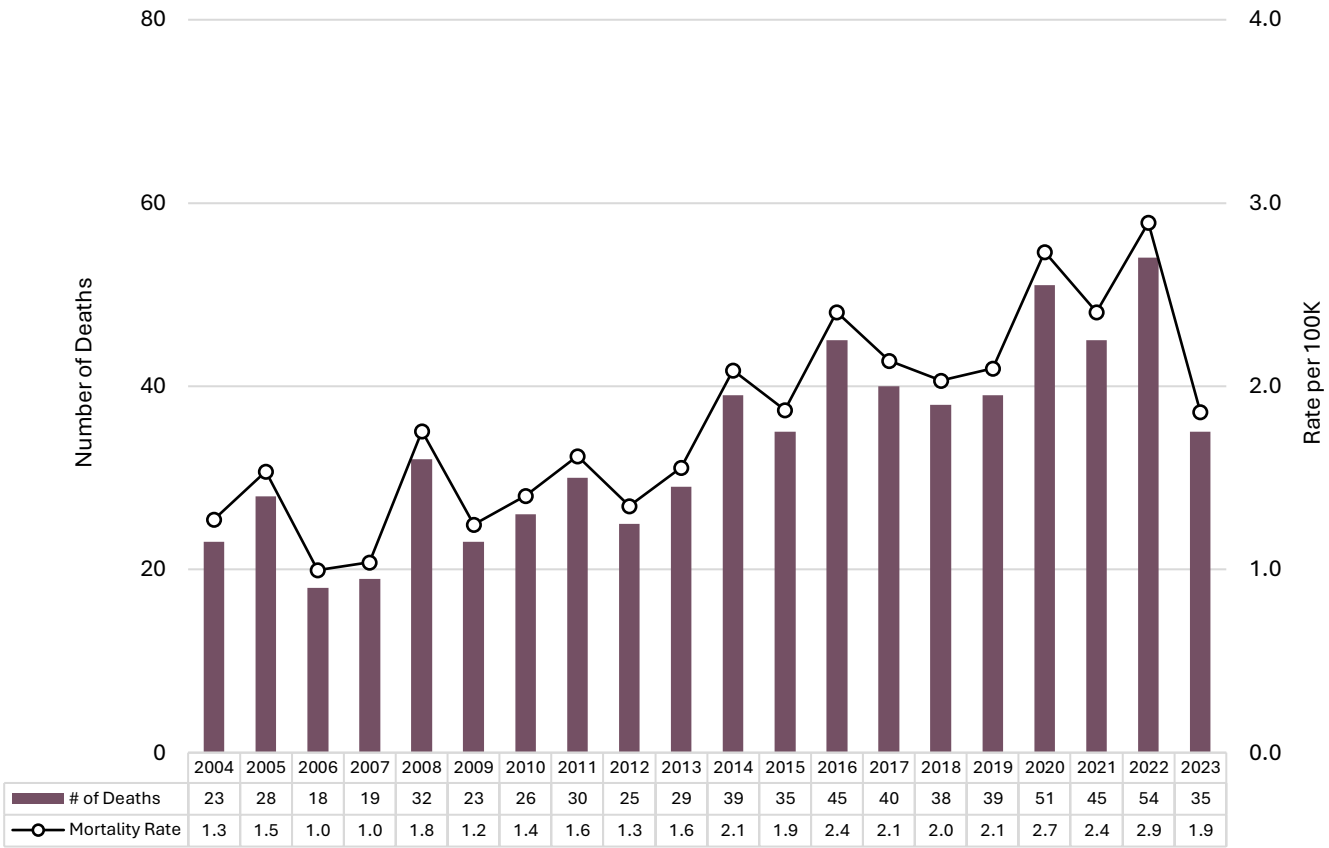
Method of Death	Autopsied	Total Cases
Cardiovascular Diseases/Disorders		
Arrhythmogenic Right Ventricular Dysplasia	1	1
Congenital Defect	4	4
Cardiac Arrhythmia (not specified)	4	4
Cardiomyopathy (not specified)	1	1
Other Cardiac Disease/Disorder	3	3
Central Nervous System Diseases/Disorders		
Degenerative Disease	1	1
Meningitis (Bacterial or Viral)	2	2
Seizure Disorder	1	1
Gastrointestinal Disease/Disorder		
Other GI Disease/Disorder	4	4
Perinatal and Pediatric Diseases/Disorders		
Fetal Complications	4	4
Other Perinatal and Pediatric Diseases/Disorders	3	3
Pulmonary Diseases/Disorders		
Pneumonia	5	5
Other Pulmonary Disease/Disorder	4	4
Systemic Diseases/Disorders		
Diabetes	1	1
Obesity	1	1
Sepsis	2	2
Other Systemic Disease/Disorder	2	2
Other Natural Disease/Disorder		
Other Natural Disease/Disorder	2	2
Total Natural Child Deaths	**45**	**45**

CHILD SUICIDE DEATHS (N = 35)

The number of child suicide deaths in 2023 decreased 35.2% compared to 2022.

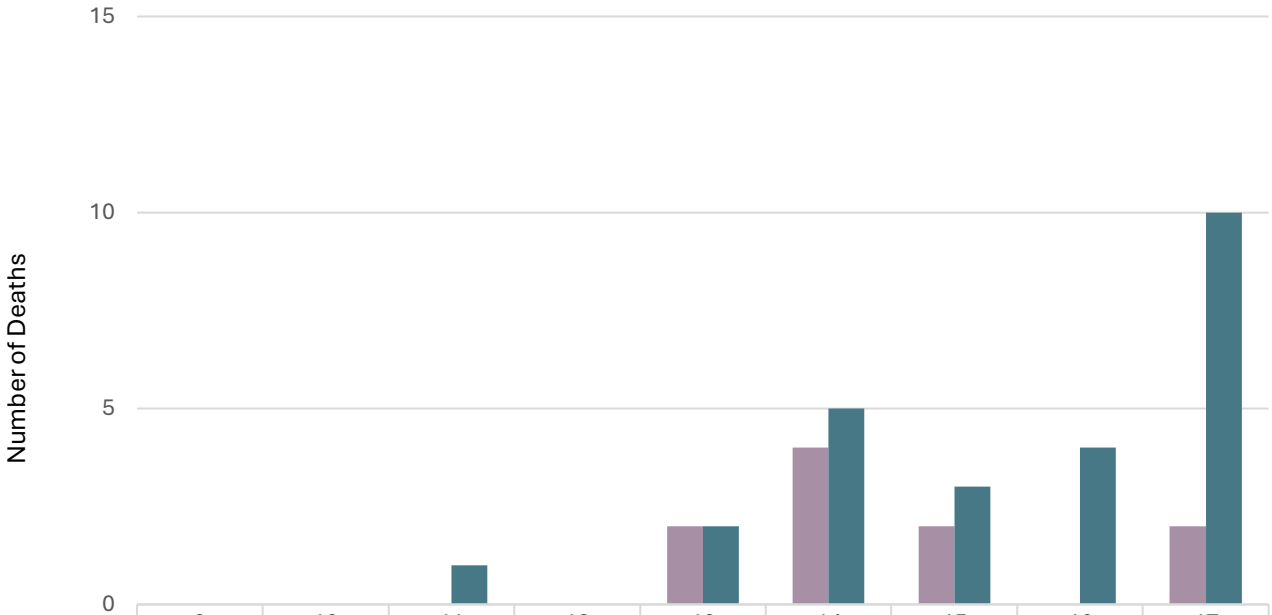
- Child suicides are very similar to adult suicides as they occur more frequently in males (71.4%) and among Whites (62.9%)
- The most common methods of child suicides were gunshot wounds (45.7%) and hangings (40.0%)

Figure 3.22 Number and Rate of Child Suicide Deaths by Year, 2004-2023



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	23	28	18	19	32	23	26	30	25	29	39	35	45	40	38	39	51	45	54	35
Mortality Rate	1.3	1.5	1.0	1.0	1.8	1.2	1.4	1.6	1.3	1.6	2.1	1.9	2.4	2.1	2.0	2.1	2.7	2.4	2.9	1.9

Figure 3.23 Number of Child Suicide Deaths by Age and Sex, 2023



	9	10	11	12	13	14	15	16	17
Female	0	0	0	0	2	4	2	0	2
Male	0	0	1	0	2	5	3	4	10

Figure 3.24 Percentage of Child Suicide Deaths by Race/Ethnicity, 2023

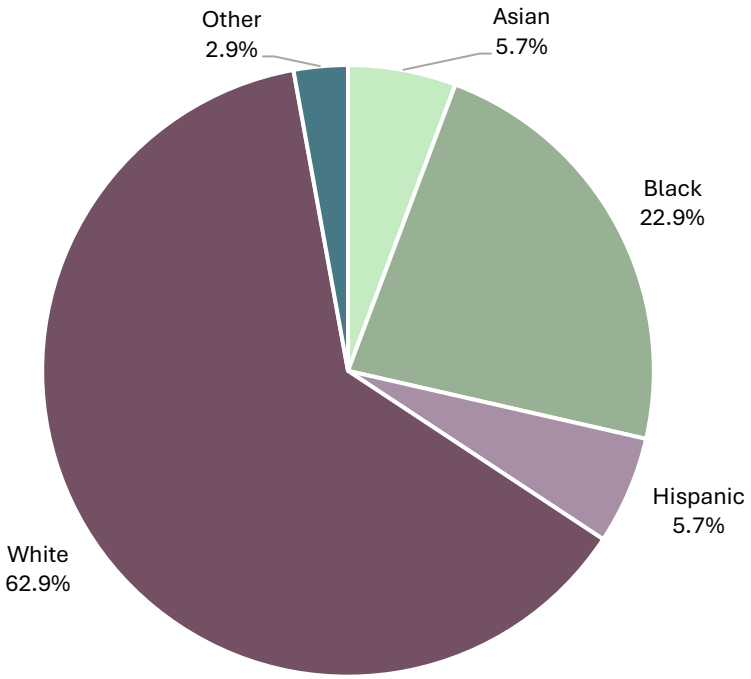
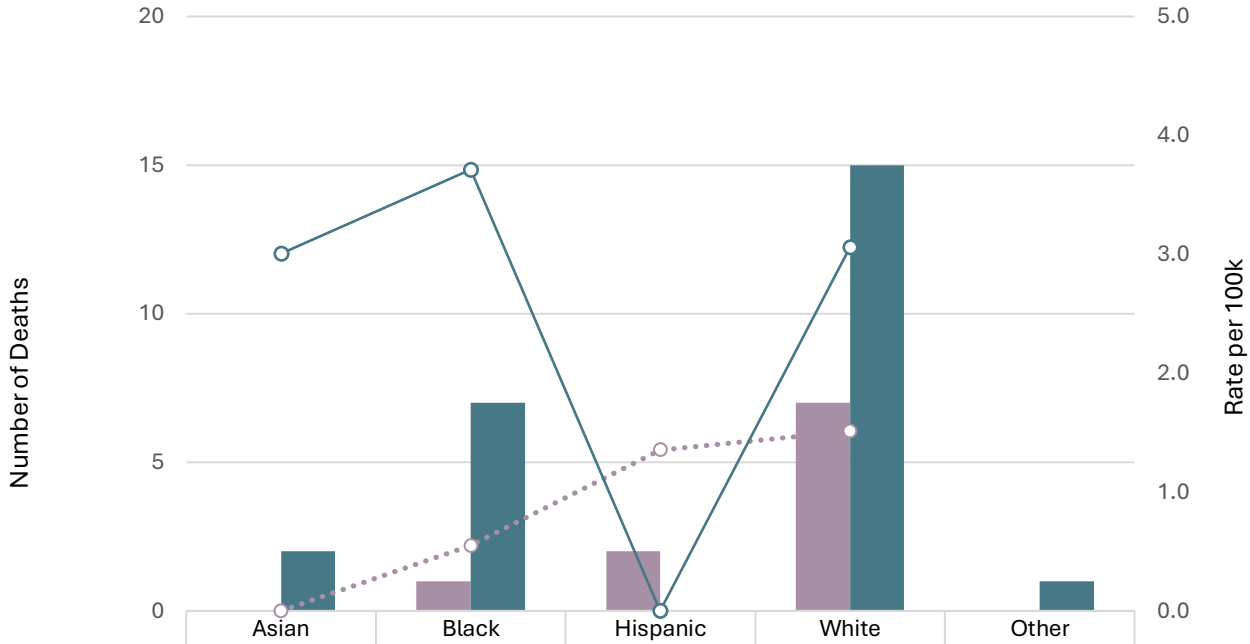


Figure 3.25 Number and Rate of Child Suicide Deaths by Sex and Race/Ethnicity, 2023



	Asian	Black	Hispanic	White	Other
Female	0	1	2	7	0
Male	2	7	0	15	1
Female Rate	0.0	0.5	1.4	1.5	*
Male Rate	3.0	3.7	0.0	3.1	*

Note: Rates cannot be calculated for 'other' categories due to unknown population denominators

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution

Figure 3.26 Number of Child Suicide Deaths by Month, 2023

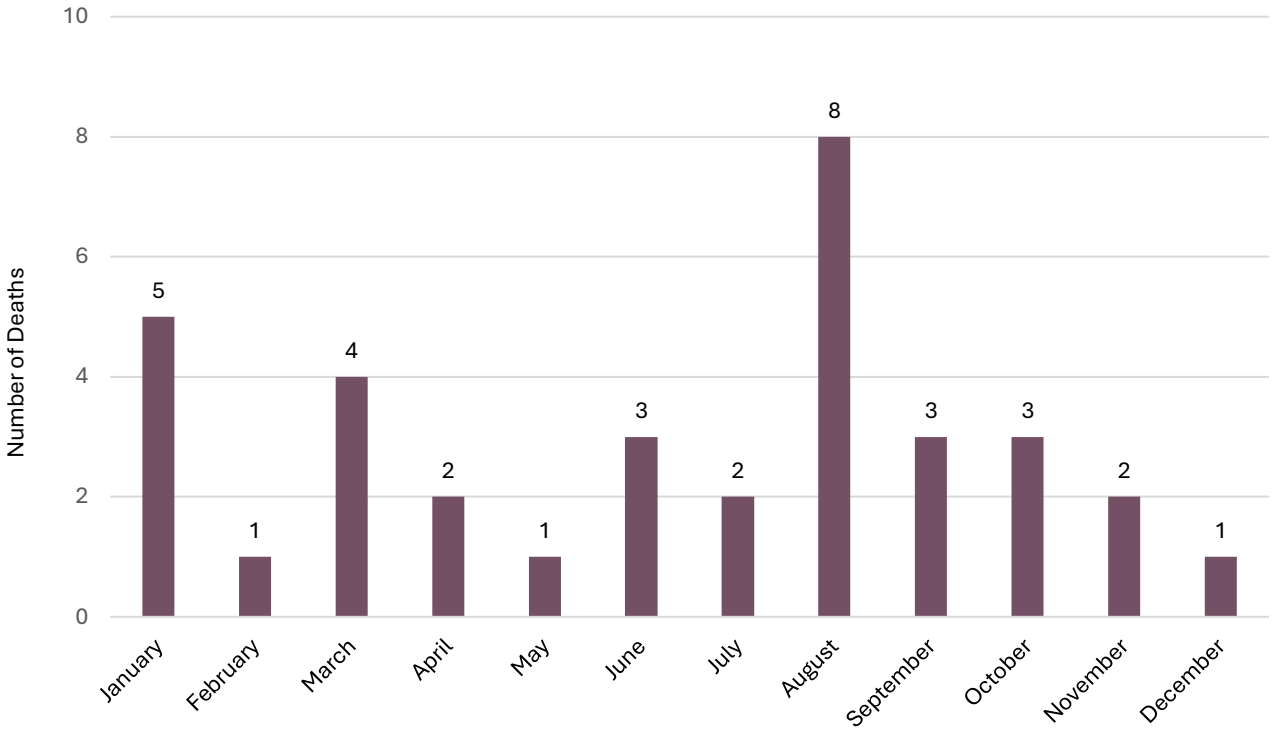


Figure 3.27 Number of Child Suicide Deaths by Day of the Week, 2023

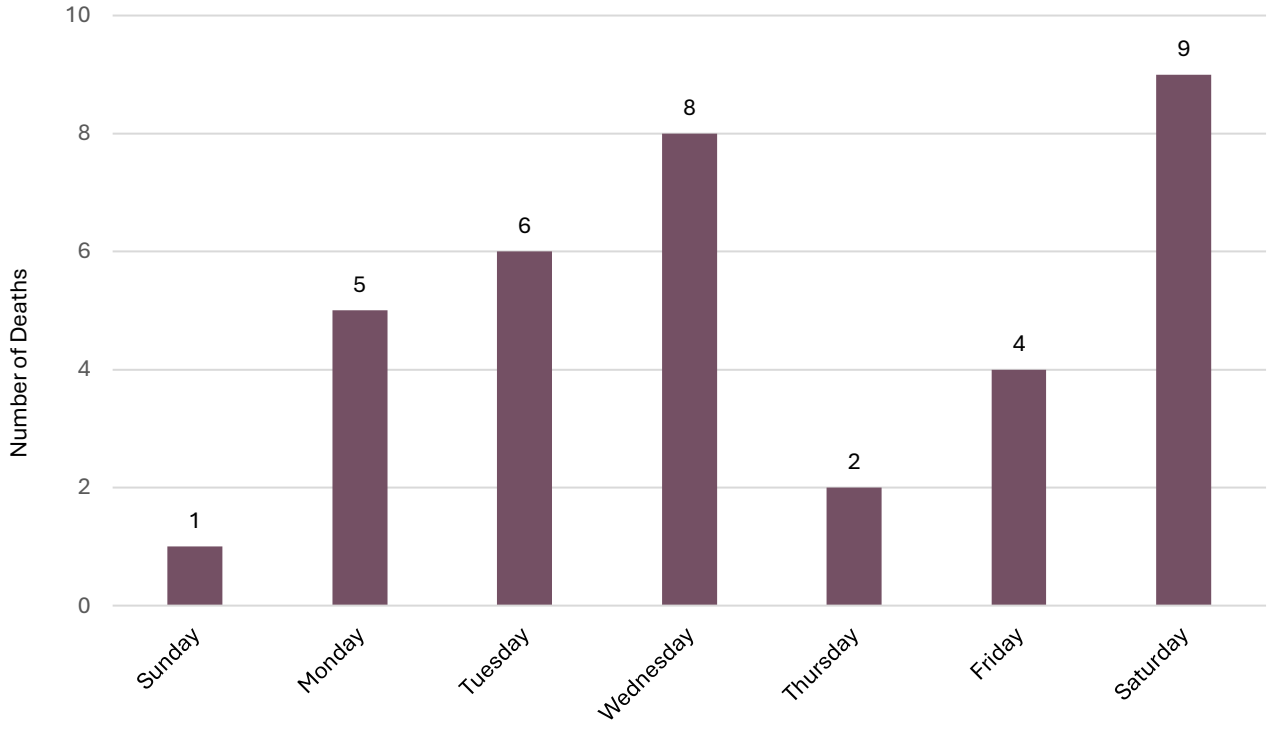


Table 3.4 Number of Child Suicide Deaths by Cause and Method of Death, 2023

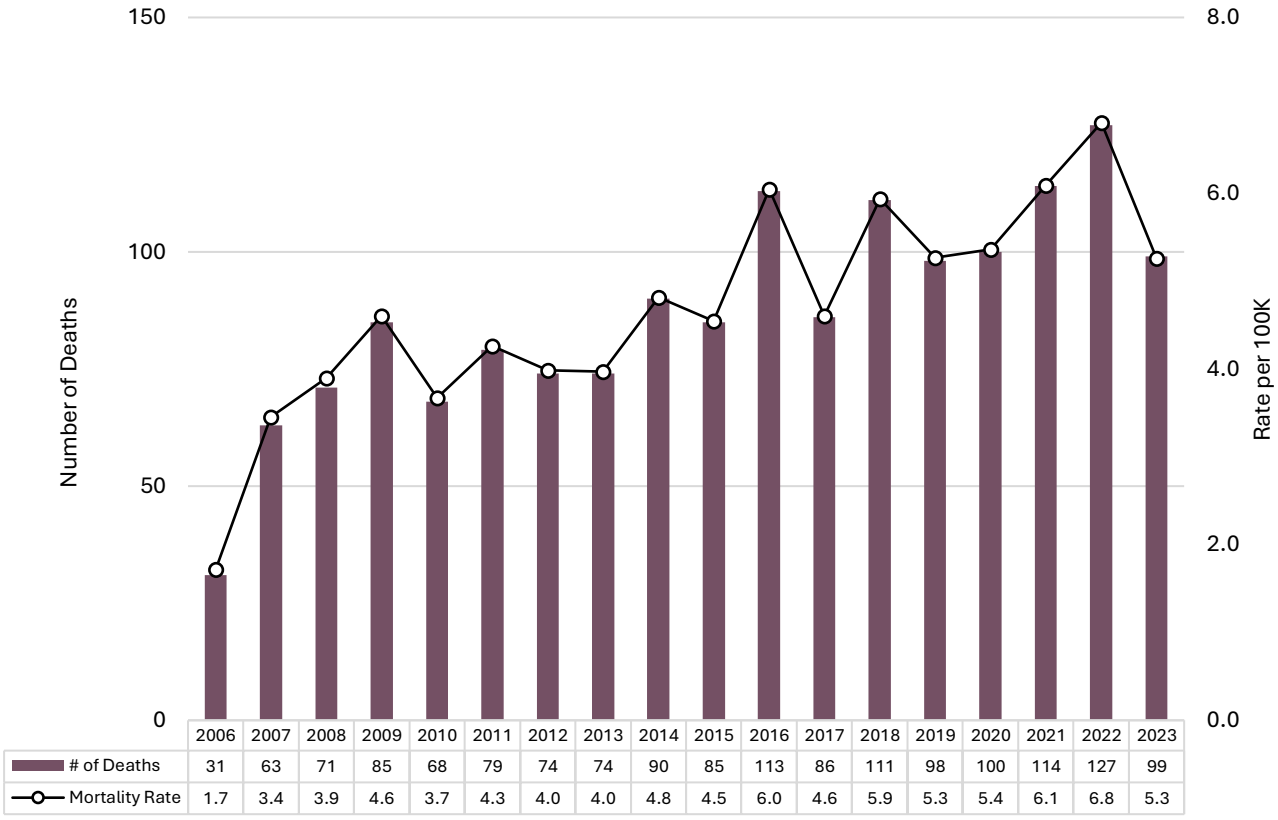
Method of Death	Autopsied	Total Cases
Asphyxia		
Hanged	13	14
Plastic bag asphyxia	1	1
Drug Use		
Ingested and/or injected illicit, prescription, and/or other type of drug	3	3
Motor Vehicle		
Car	0	1
Traumatic Injury		
Shot by assailant(s) with firearm		
Handgun	10	11
Rifle	3	3
Unknown	2	2
Total Child Suicide Deaths	**32**	**35**

UNDETERMINED CHILD DEATHS (N = 99)

Ninety-nine undetermined deaths of children occurred in 2023; a decreased of 22.0% from 2022 and representing 28.1% of all child deaths that fell under OCME jurisdiction in 2023.

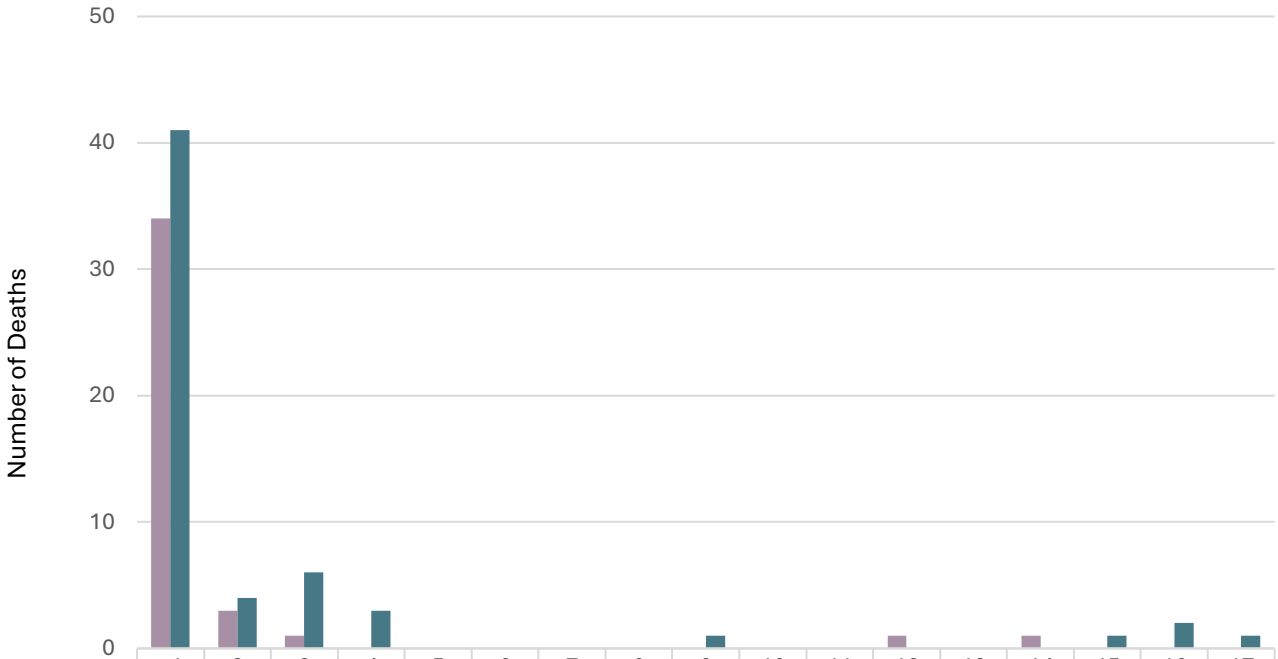
- Infants <1 year old accounted for 75.8% of undetermined deaths
- Sudden unexpected infant death (SUID) deaths of infants <1 year of age represented 69.7% of all undetermined child deaths

Figure 3.28 Number and Rate of Undetermined Child Deaths by Year, 2006-2023



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	31	63	71	85	68	79	74	74	90	85	113	86	111	98	100	114	127	99
Mortality Rate	1.7	3.4	3.9	4.6	3.7	4.3	4.0	4.0	4.8	4.5	6.0	4.6	5.9	5.3	5.4	6.1	6.8	5.3

Figure 3.29 Number of Undetermined Child Deaths by Age and Sex, 2023



	<1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Female	34	3	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0
Male	41	4	6	3	0	0	0	0	1	0	0	0	0	0	1	2	1

Figure 3.30 Percentage of Undetermined Child Deaths by Race/Ethnicity, 2023

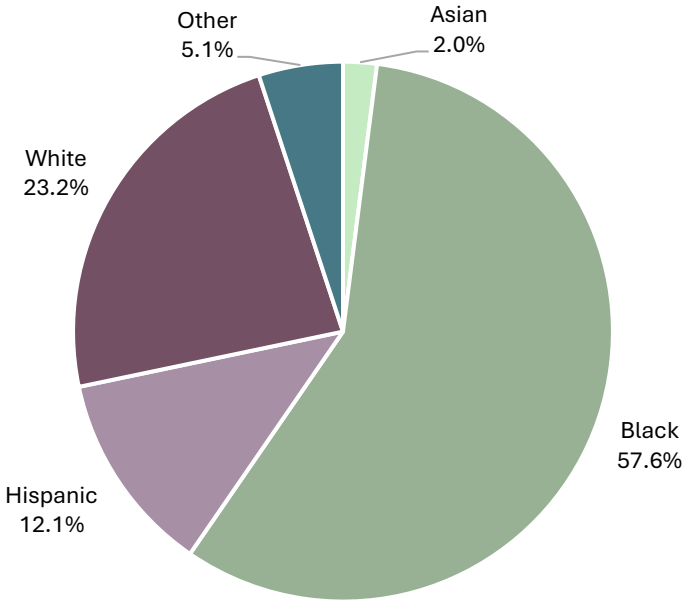
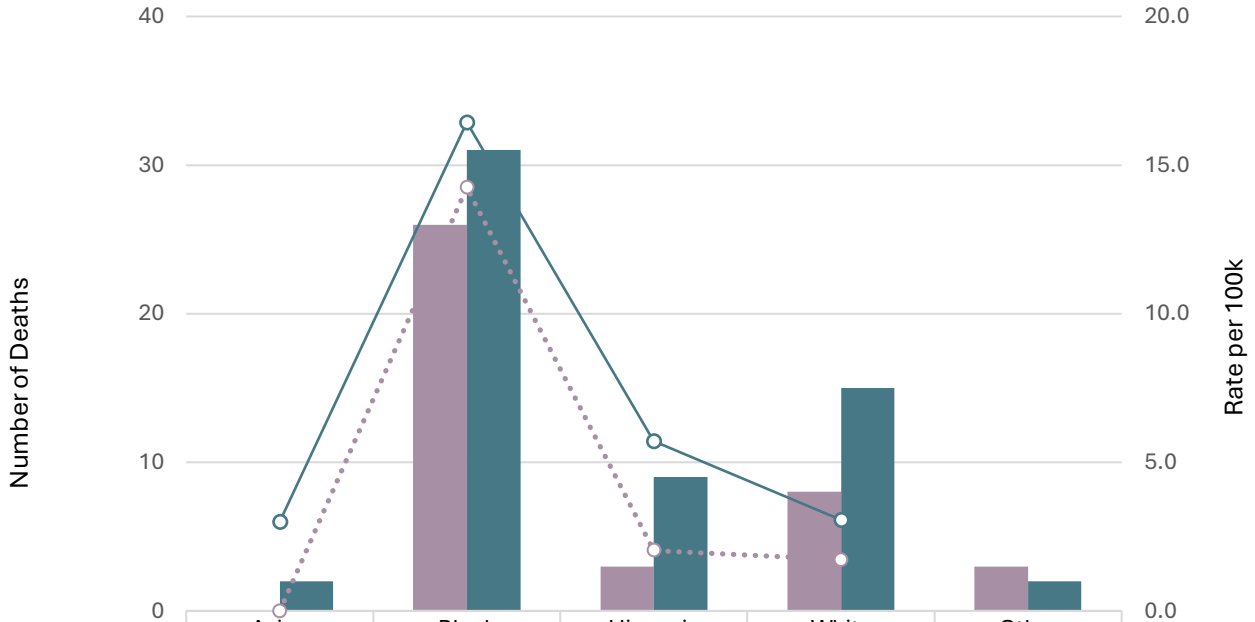


Figure 3.31 Number and Rate of Undetermined Child Deaths by Sex and Race/Ethnicity, 2023



	Asian	Black	Hispanic	White	Other
Female	0	26	3	8	3
Male	2	31	9	15	2
Female Rate	0.0	14.2	2.0	1.7	*
Male Rate	3.0	16.4	5.7	3.1	*

Note: Rates cannot be calculated for 'other' categories due to unknown population denominators

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution

Table 3.5 Number of Undetermined Child Deaths by Cause and Method of Death, 2023

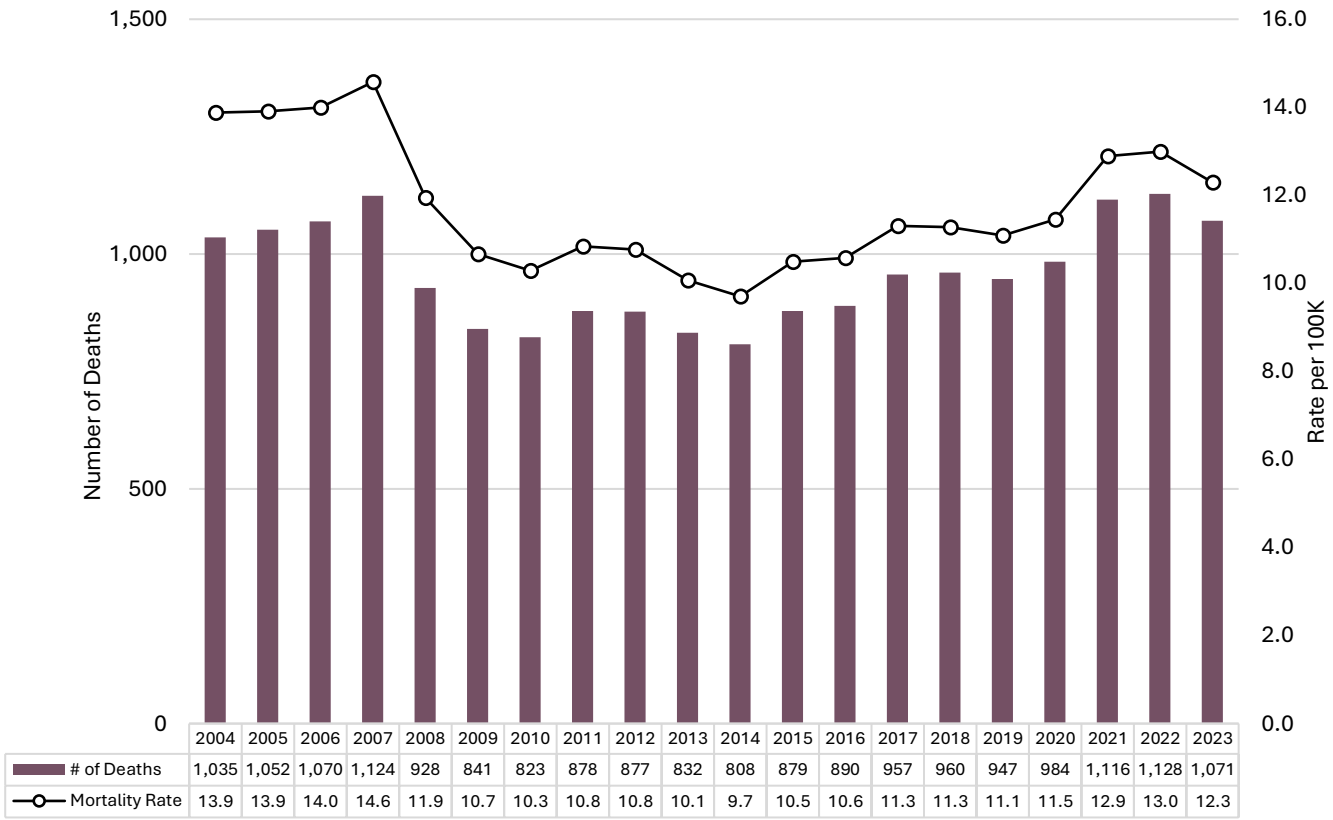
Method of Death	Autopsied	Total Cases
Drug Use		
Ingested and/or injected illicit, prescription, and/or OTC medication	5	5
Gunshot Wound		
Gunshot wound		
Handgun	5	5
Other Cause of Death		
Dehydration and/or starvation	1	1
Other	4	4
Subtotal (Undetermined Manner with Determined Cause of Death)	15	15
Undetermined Manner of Death and Undetermined Cause of Death		
Sudden Unexpected Infant Death (SUID)	69	69
Undetermined after autopsy and/or toxicology	15	15
Subtotal (Undetermined Manner and Undetermined Cause of Death)	84	84
Total Undetermined Child Deaths	**99**	**99**

Section 4: Motor Vehicle Fatalities (N = 1,071)

The OCME investigated 1,071 motor vehicle collision-related deaths in 2023, which was a slight decrease compared to 2022 (1,071 and 1,128 deaths, respectively, or a 5.1% decrease).

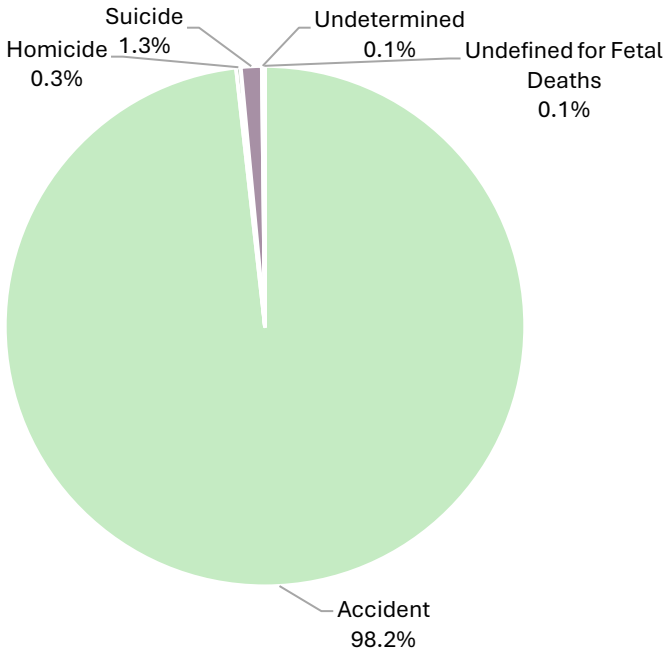
- The vast majority of cases were accidents (98.2%) and victims were most often male (74.7%)
- Of the 823 (76.8%) motor vehicle fatalities tested for ethanol, 27.2% (n=224) had a blood alcohol concentration greater than or equal to 0.08%; of those 224 decedents who were at or above the legal limit of alcohol, 74.6% were drivers
- Persons aged 25-34 years old had more deaths (17.3%) due to motor vehicle incidents than any other age group, but males 85+ years had the highest rate of death (54.9 deaths per 100,000)
- Black males had the highest rate of fatal motor vehicle collisions (27.3 per 100.000)

Figure 4.1 Number and Rate of Motor Vehicle Deaths by Year, 2004-2023



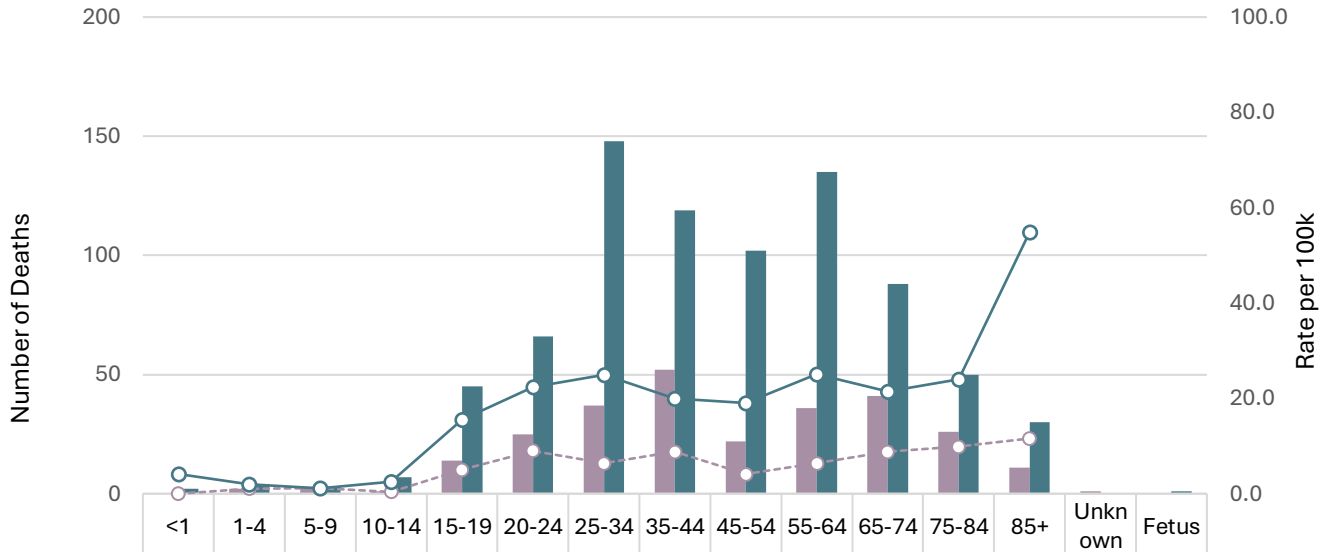
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	1,035	1,052	1,070	1,124	928	841	823	878	877	832	808	879	890	957	960	947	984	1,116	1,128	1,071
Mortality Rate	13.9	13.9	14.0	14.6	11.9	10.7	10.3	10.8	10.8	10.1	9.7	10.5	10.6	11.3	11.3	11.1	11.5	12.9	13.0	12.3

Figure 4.2 Percentage of Motor Vehicle Deaths by Manner, 2023



Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Figure 4.3 Number and Rate of Motor Vehicle Deaths by Age Group and Sex, 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unknown	Fetus
Female	0	2	3	1	14	25	37	52	22	36	41	26	11	1	0
Male	2	4	3	7	45	66	148	119	102	135	88	50	30	0	1
Female Rate	0.0	1.1	1.2	0.4	5.0	9.0	6.4	8.8	4.1	6.4	8.8	9.9	11.6	*	*
Male Rate	4.1	2.0	1.1	2.6	15.5	22.4	25.0	20.0	19.1	25.1	21.5	24.0	54.9	*	*

Note: Rates cannot be calculated for 'other' and 'fetus' categories due to unknown population denominators and incomparable rate calculations

Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Figure 4.4 Percentage of Motor Vehicle Deaths by Race/Ethnicity, 2023

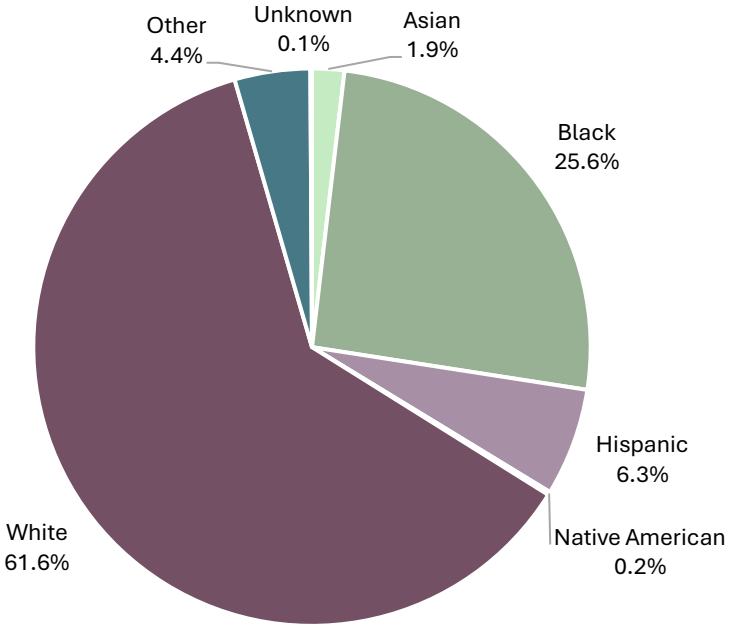
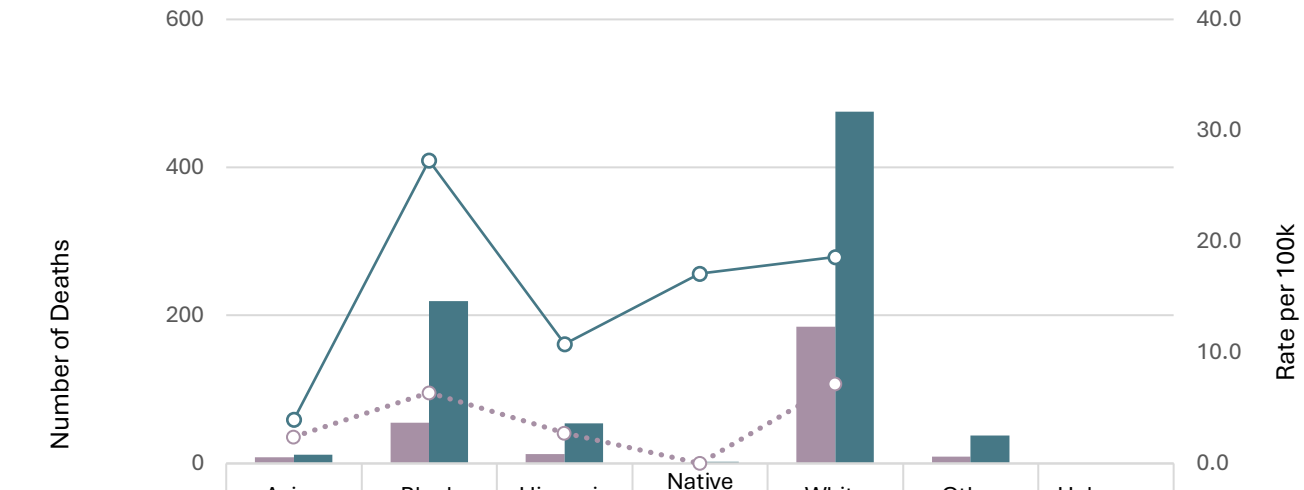


Figure 4.5 Number and Rate of Motor Vehicle Deaths by Race/Ethnicity and Sex, 2023

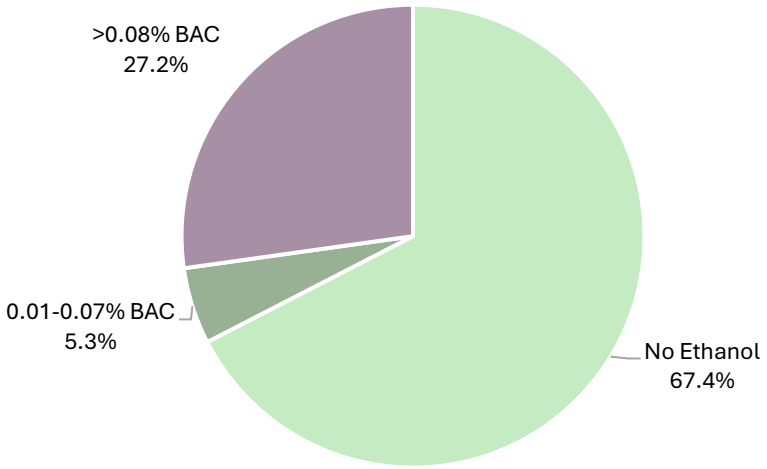


	Asian	Black	Hispanic	Native American	White	Other	Unknown
Female	8	55	13	0	185	9	1
Male	12	219	54	2	475	38	0
Female Rate	2.4	6.4	2.7	0.0	7.1	*	*
Male Rate	4.0	27.3	10.8	17.1	18.6	*	*

Note: Rates cannot be calculated for 'other' and 'unknown' categories due to unknown population denominators

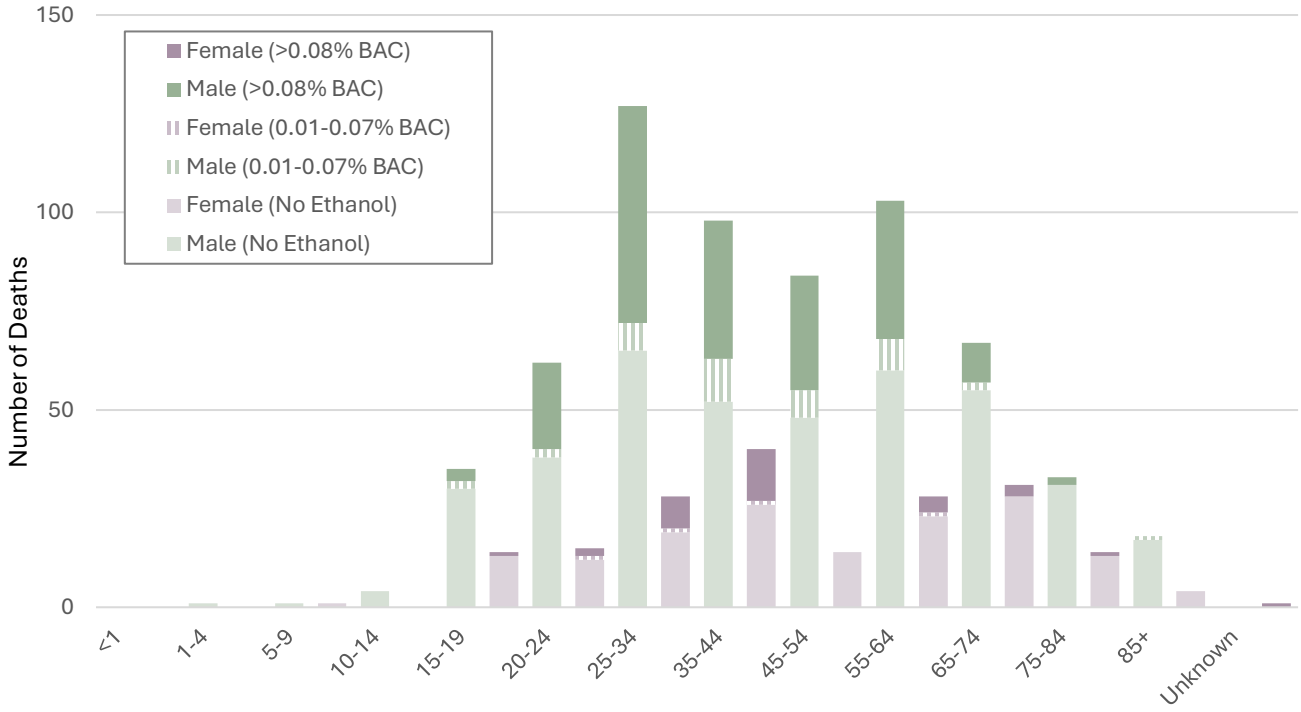
Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution

Figure 4.6 Percentage of Motor Vehicle Deaths by Ethanol Amount (N=823), 2023



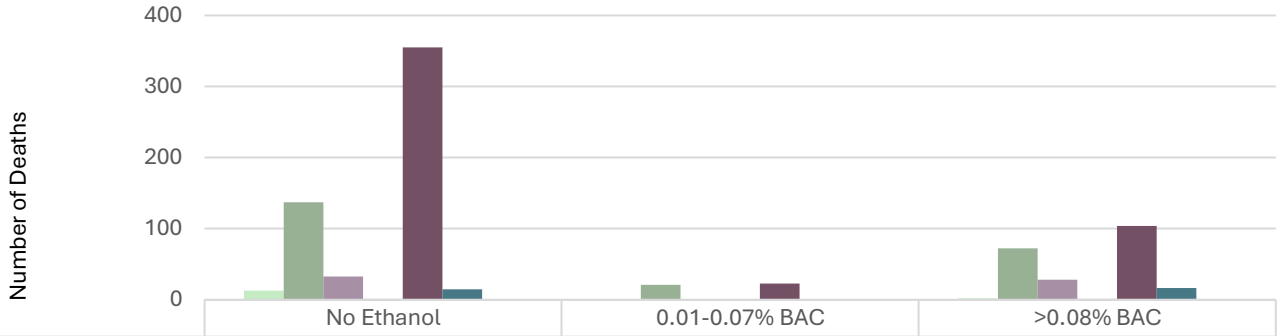
Note: Of the 1,071 motor vehicle deaths, 76.8% (n=823) received toxicology testing

Figure 4.7 Number of Motor Vehicle Deaths by Age Group, Sex, and Ethanol Amount (N=823), 2023



Note: Of the 1,071 motor vehicle deaths, 76.8% (n=823) received toxicology testing

Figure 4.8 Number of Motor Vehicle Deaths by Ethanol Level and Race/Ethnicity (N=823), 2023



	No Ethanol	0.01-0.07% BAC	>0.08% BAC
Asian	13	0	2
Black	137	21	72
Hispanic	33	0	28
Native American	1	0	1
White	355	23	104
Other	15	0	17
Unknown	1	0	0

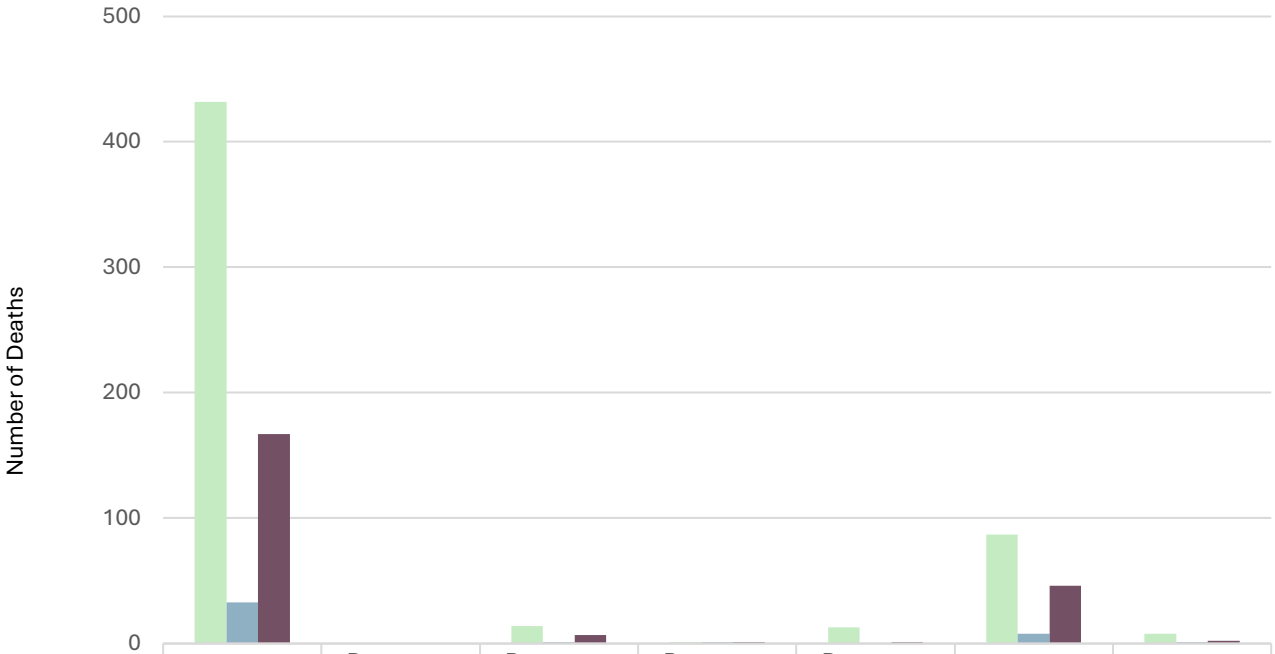
Note: Of the 1,071 motor vehicle deaths, 76.8% (n=823) received toxicology testing

Table 4.1 Number of Motor Vehicle Deaths by Age Group and Position during Collision, 2023

Age Group	Driver	Passenger Cargo	Passenger Front	Passenger Other	Passenger Rear	Pedestrian	Unknown	Total
<1	0	0	0	1	1	0	0	2
1-4	1	1	0	0	1	3	0	6
5-9	0	1	0	0	3	2	0	6
10-14	2	0	4	0	2	0	0	8
15-19	34	0	12	1	10	2	0	59
20-24	66	0	10	0	4	11	0	91
25-34	133	2	19	2	5	21	3	185
35-44	111	0	8	3	3	43	3	171
45-54	88	1	6	1	3	20	5	124
55-64	123	1	11	1	4	24	7	171
65-74	89	0	5	2	4	25	4	129
75-84	57	0	6	0	4	6	3	76
85+	29	0	4	0	1	5	2	41
Unknown	1	0	0	0	0	0	0	1
Fetus	0	0	1	0	0	0	0	1
Total	**734**	**6**	**86**	**11**	**45**	**162**	**27**	**1071**

Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Figure 4.9 Number of Motor Vehicle Deaths by Position during Collision and Ethanol Level (N=823), 2023



	Driver	Passenger Cargo	Passenger Front	Passenger Other	Passenger Rear	Pedestrian	Unknown
No Ethanol	432	0	14	1	13	87	8
0.01-0.07% BAC	33	0	1	1	0	8	1
>0.08% BAC	167	0	7	1	1	46	2

Note: Of the 1,071 motor vehicle deaths, 76.8% (n=823) received toxicology testing

Table 4.2 Number of Motor Vehicle Deaths by Position during Collision, Vehicle Type, and Ethanol Level (N=823), 2023

Position During Collision	Vehicle Type	No Ethanol	0.01-0.07% BAC	>0.08% BAC	Total
Driver	Aircraft	4	0	0	4
	All Terrain Vehicle	7	1	5	13
	Bicycle	11	0	5	16
	Boat	0	0	1	1
	Bus	0	0	1	1
	Car	156	14	64	234
	Construction Heavy Equipment	2	0	0	2
	Dump Truck	1	0	0	1
	Electric Scooter	1	1	0	2
	Farm Equipment	3	0	0	3
	Golf Cart	1	0	0	1
	Lawnmower	1	0	1	2
	Mo-Ped	4	0	0	4
	Motorcycle	81	8	27	116
	Multiple	2	0	0	2
	Pickup Truck	41	5	21	67
	Scooter	1	0	0	1
	Skateboard	1	0	0	1
	Sport Utility Vehicle	66	3	27	96
	Tractor Trailer	15	0	0	15
	Truck Other	5	0	2	7
	Unknown	19	0	9	28
	Van	10	1	4	15
	Subtotal	432	33	167	632
Passenger Front	Aircraft	1	0	0	1
	Car	7	1	2	10
	Pickup Truck	2	0	2	4
	Sport Utility Vehicle	3	0	2	5
	Truck Other	1	0	1	2
	Subtotal	14	1	7	22
Passenger Other	Car	0	1	1	2
	Motorcycle	1	0	0	1
	Subtotal	1	1	1	3
Passenger Rear	Armored Vehicle	1	0	0	1
	Car	6	0	1	7
	Golf Cart	1	0	0	1
	Mo-Ped	1	0	0	1

	Sport Utility Vehicle	2	0	0	2
	Unknown	2	0	0	2
	Subtotal	13	0	1	14
Pedestrian	Bicycle	1	0	0	1
	Bulldozer	1	0	0	1
	Car	19	2	17	38
	Construction Heavy Equipment	7	0	0	7
	Multiple	3	0	4	7
	Pickup Truck	7	2	6	15
	Sport Utility Vehicle	15	1	4	20
	Tractor Trailer	5	0	1	6
	Train	13	2	1	16
	Truck Other	1	0	1	2
	Unknown	12	1	11	24
	Van	3	0	1	4
	Subtotal	87	8	46	141
Unknown	Car	1	0	0	1
	Farm Equipment	1	0	0	1
	Pickup Truck	0	0	1	1
	Unknown	6	1	1	8
	Subtotal	8	1	2	11

Note: Of the 1,071 motor vehicle deaths, 76.8% (n=823) received toxicology testing

Figure 4.10 Number of Motor Vehicle Fatalities by Month of Death, 2023

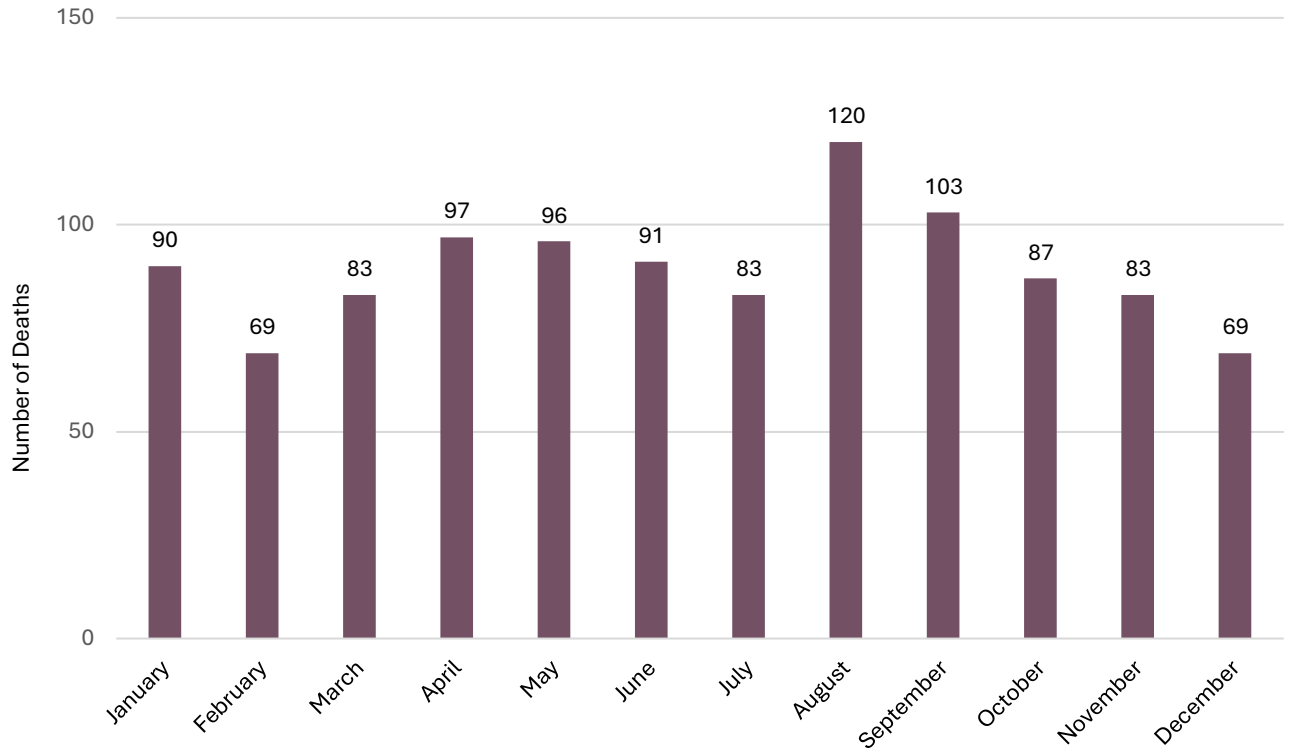


Figure 4.11 Number of Motor Vehicle Fatalities by Day of Week, 2023

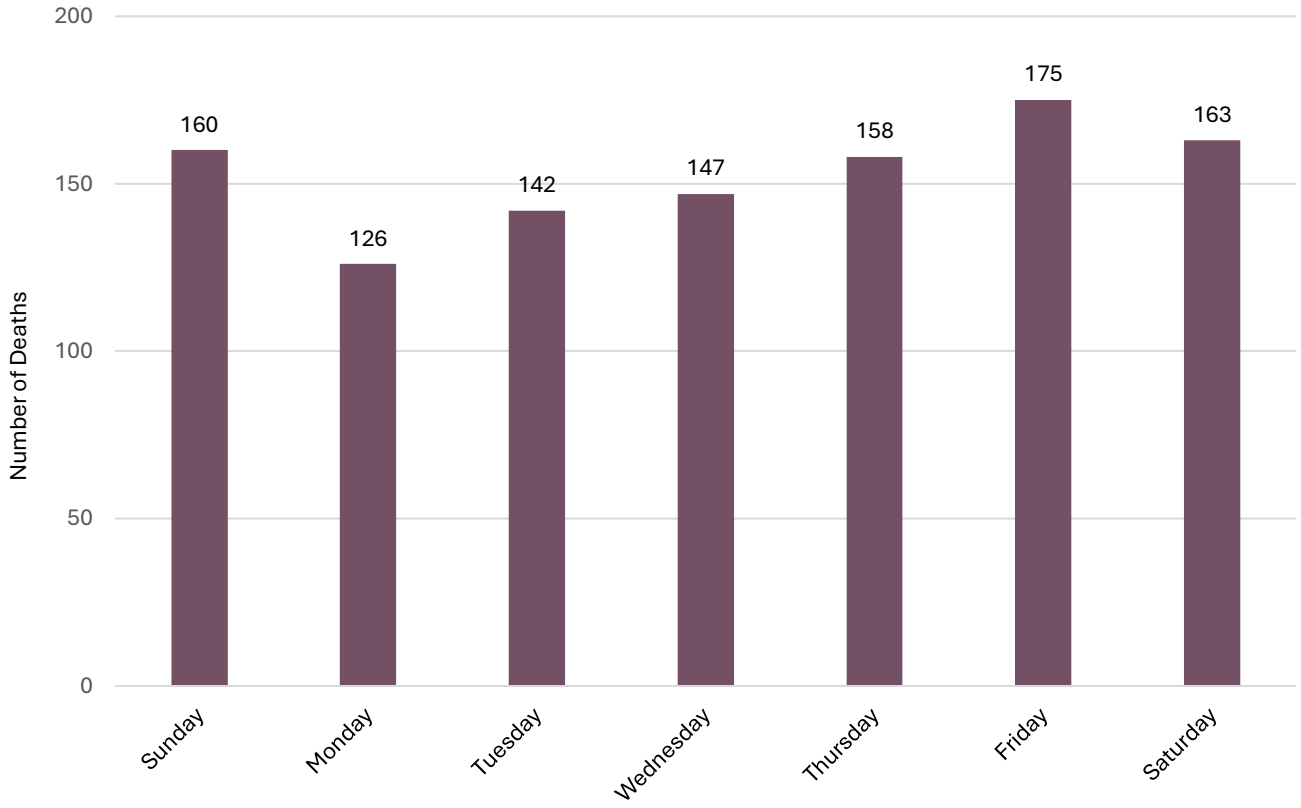


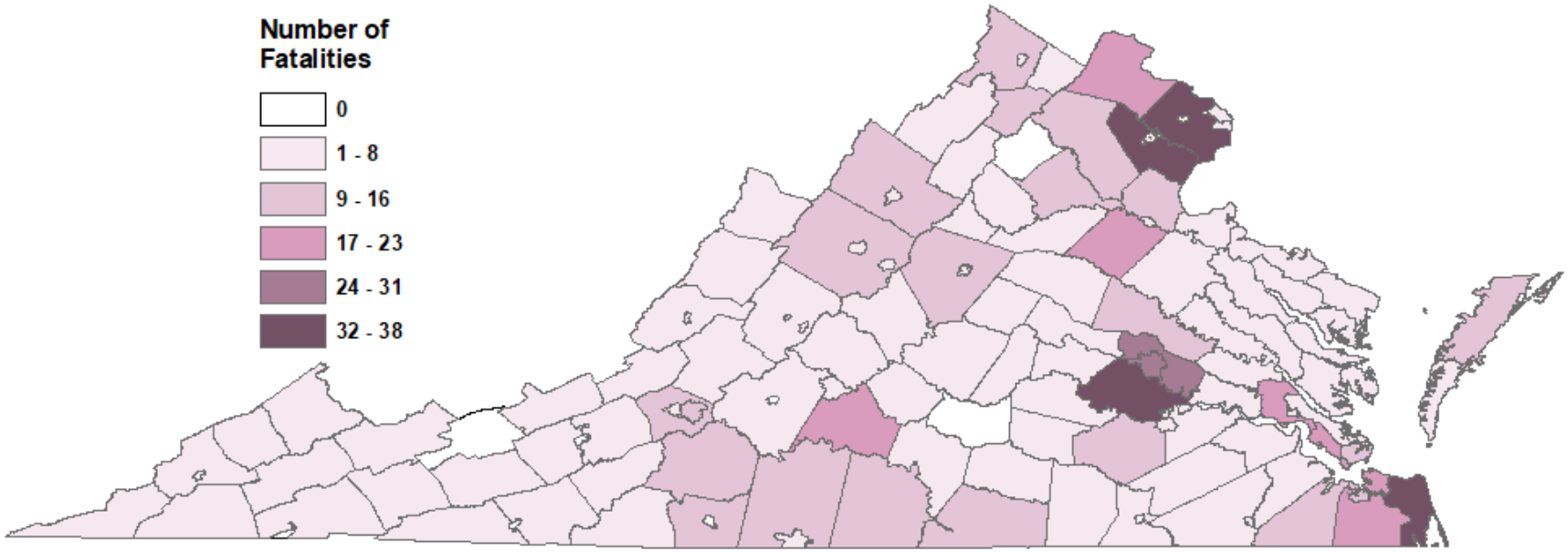
Table 4.3 Number and Rate of Motor Vehicle Deaths by Locality of Residence, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

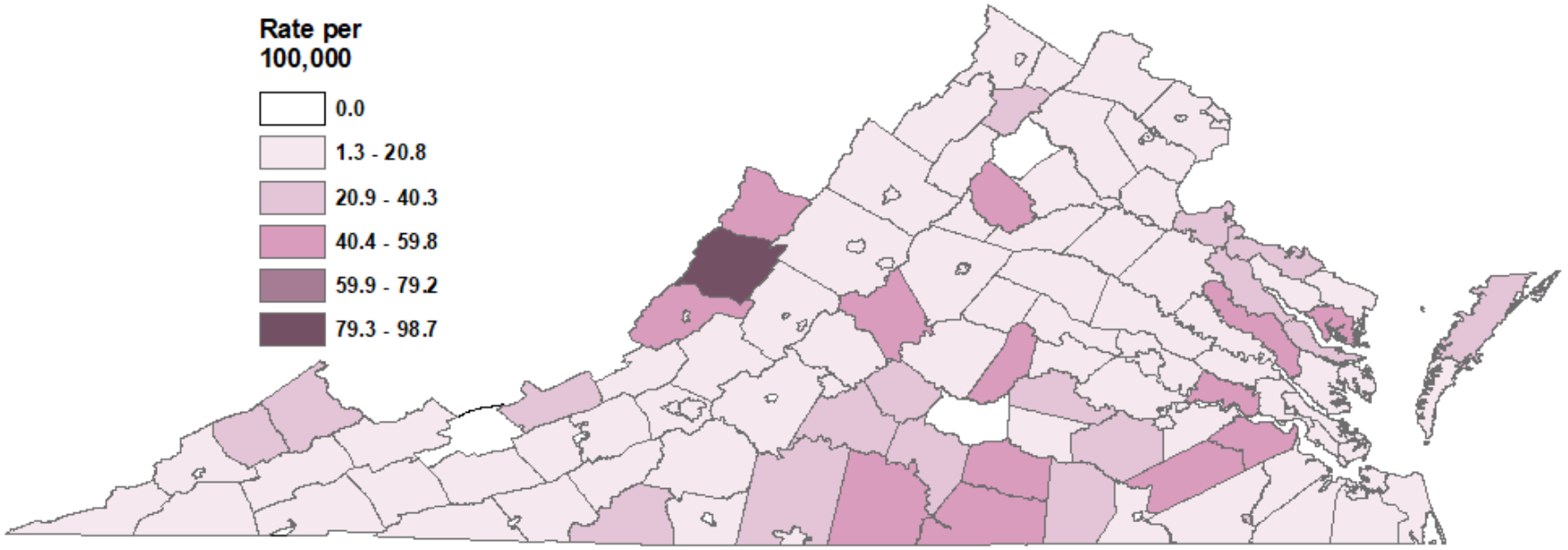
Table 4.4 Number and Rate of Motor Vehicle Deaths by Locality of Injury, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

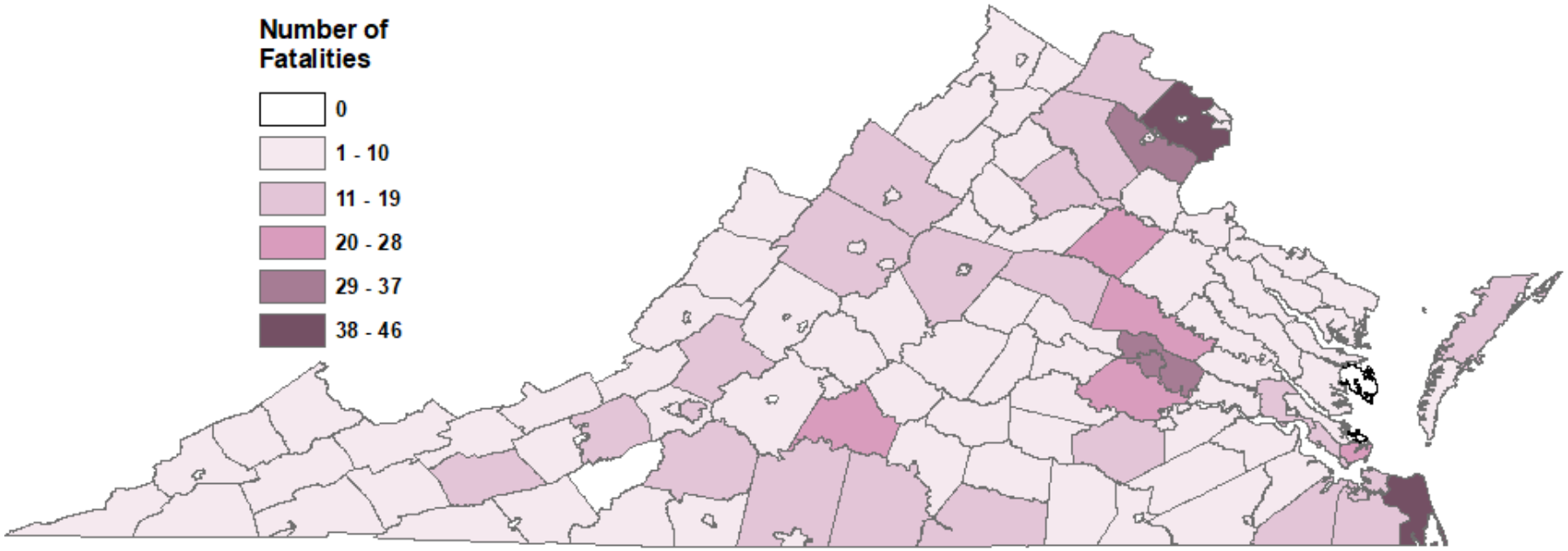
Map 4.1 Number of Motor Vehicle Fatalities by Locality of Residence, 2023



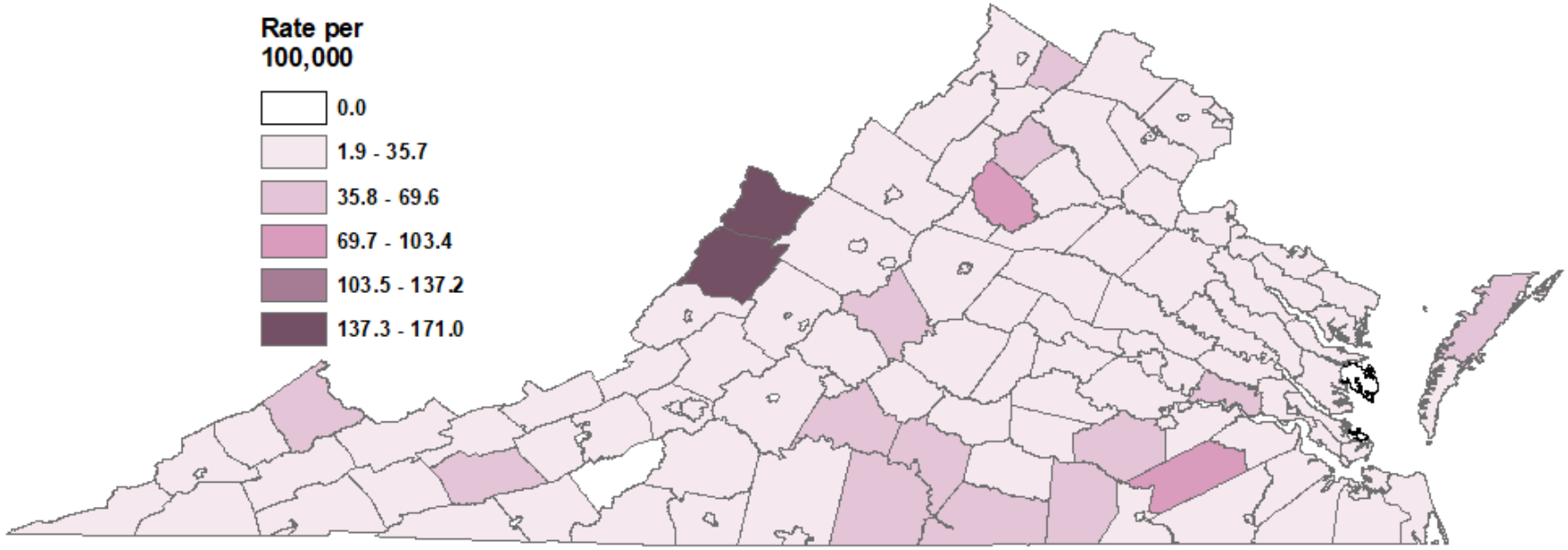
Map 4.2 Rate of Motor Vehicle Fatalities by Locality of Residence, 2023



Map 4.3 Number of Motor Vehicle Fatalities by Locality of Injury, 2023



Map 4.4 Rate of Motor Vehicle Fatalities by Locality of Injury, 2023



Section 5: Drug/Poison Fatalities (N = 2,544)

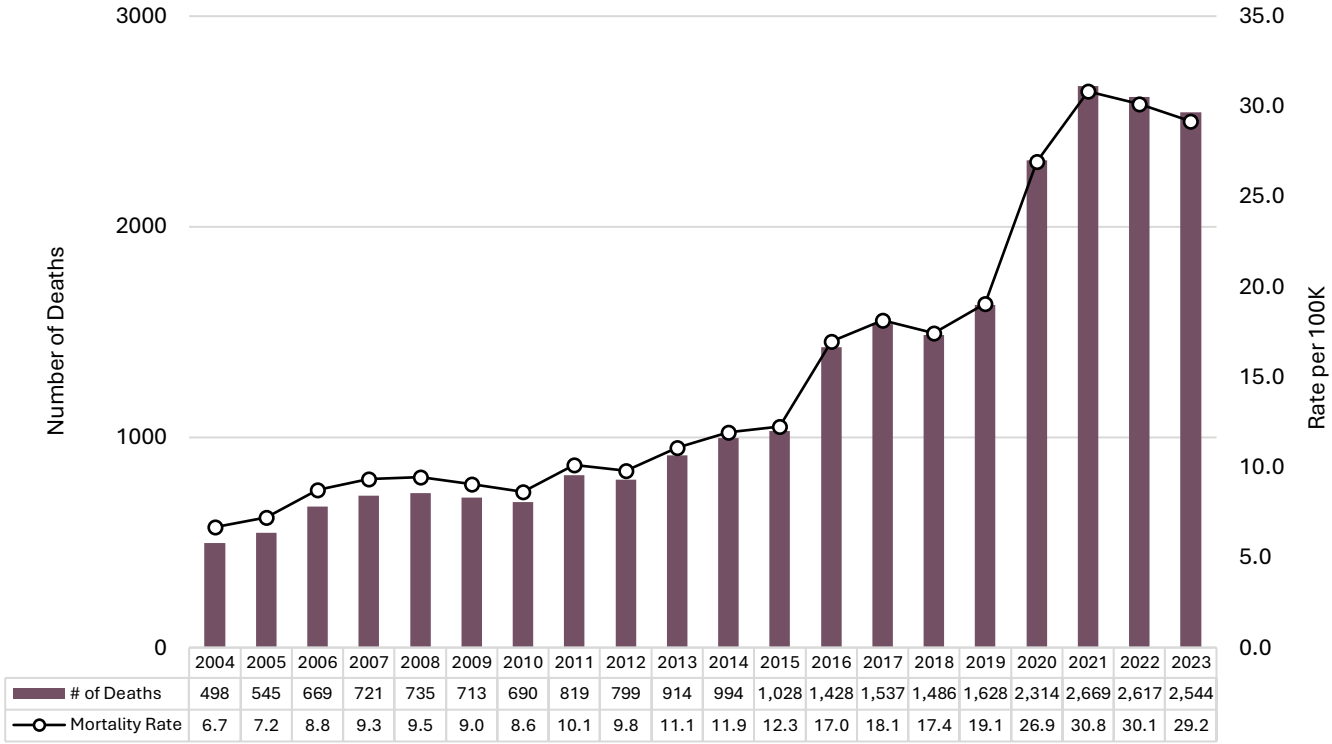
ALL DRUG/POISON DEATHS (N = 2,544)

The number of fatal drug overdoses in 2023 decreased 2.8% compared to 2022. The number of fatal drug overdoses in 2021 was the largest number ever seen in Virginia.

- The 2023 rate of drug/poison deaths that occurred in Virginia was 29.2 per 100,000 persons
- The majority were accidents (95.2%), male (70.8%), White (57.5%), and 35-44 years old (26.2%)
- Fentanyl was involved in 76.2% of all drug overdose deaths in 2023
- Black males had the highest rate of fatal overdoses, all substances in 2023, followed by White males and Black females (78.9, 38.4, and 25.6 per 100,000, respectively)

Note: more recent and more detailed statistics on fatal drug overdoses can be found in the Quarterly Drug Deaths Report and associated spreadsheets of deaths by locality: https://www.vdh.virginia.gov/medical-examiner/forensic-epidemiology/

Figure 5.1 Number and Rate of Fatal Drug/Poison Overdoses by Year of Death, 2004-2023



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	498	545	669	721	735	713	690	819	799	914	994	1,028	1,428	1,537	1,486	1,628	2,314	2,669	2,617	2,544
Mortality Rate	6.7	7.2	8.8	9.3	9.5	9.0	8.6	10.1	9.8	11.1	11.9	12.3	17.0	18.1	17.4	19.1	26.9	30.8	30.1	29.2

Table 5.1 Number and Percentage of Fatal Drug/Poison Overdoses by OCME District, 2023

OCME District	Number	Percentage
Central	878	34.5%
Northern	505	19.9%
Tidewater	634	24.9%
Western	527	20.7%
Total	**2,544**	**100.0%**

Figure 5.2 Percentage of Fatal Drug/Poison Overdoses by Manner of Death, 2023

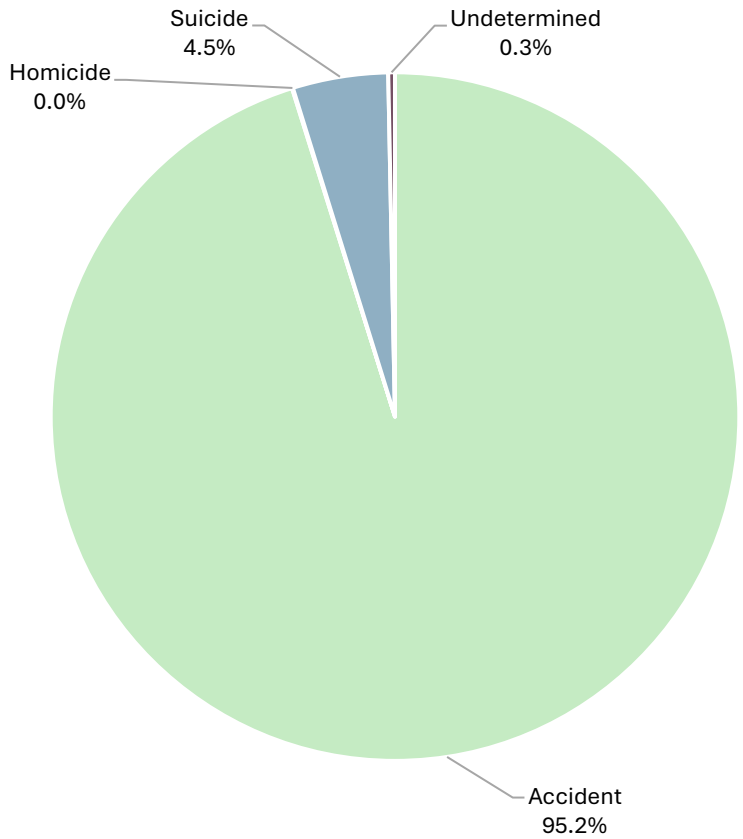
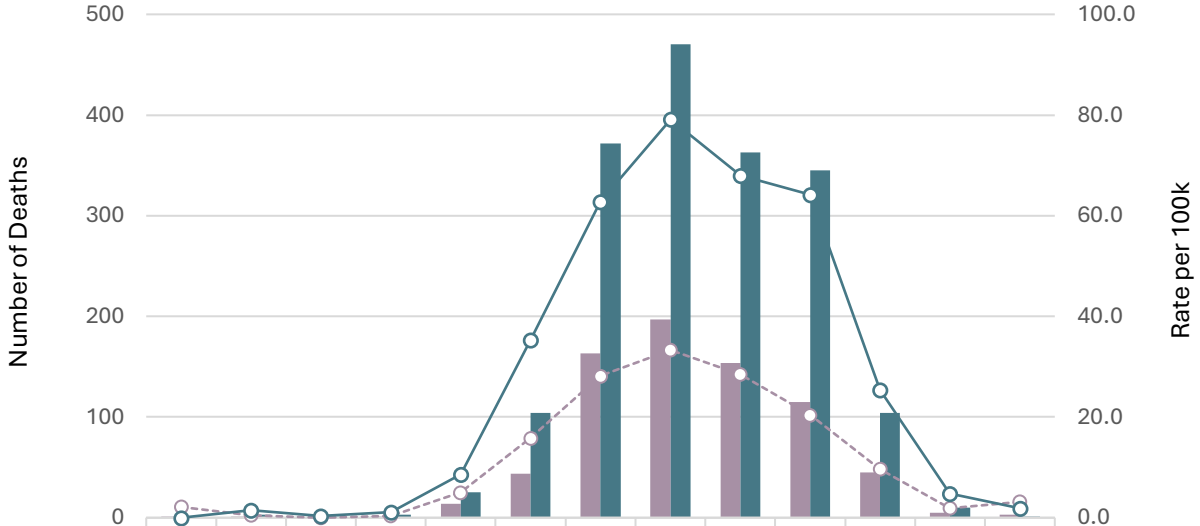


Figure 5.3 Number and Rate of Fatal Drug/Poison Overdoses by Age Group and Sex, 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Female	1	1	0	1	14	44	163	197	154	115	45	5	3
Male	0	3	1	3	25	104	372	470	363	345	104	10	1
Female Rate	2.2	0.5	0.0	0.4	5.0	15.8	28.1	33.3	28.5	20.4	9.6	1.9	3.2
Male Rate	0.0	1.5	0.4	1.1	8.6	35.4	62.8	79.1	68.0	64.2	25.4	4.8	1.8

Table 5.2 Number of Fatal Drug/Poison Overdoses by Age Group and Manner of Death, 2023

Age Group (years)	Accident	Homicide	Suicide	Undetermined	Total
<1	0	1	0	0	1
1-4	0	0	0	4	4
5-9	0	0	0	1	1
10-14	2	0	2	0	4
15-19	37	0	2	0	39
20-24	142	0	6	0	148
25-34	516	0	17	2	535
35-44	651	0	16	0	667
45-54	495	0	22	0	517
55-64	430	0	29	1	460
65-74	138	0	11	0	149
75-84	9	0	6	0	15
85+	1	0	3	0	4
Total	**2,421**	**1**	**114**	**8**	**2,544**

Figure 5.4 Percentage of Fatal Drug/Poison Overdoses by Race/Ethnicity, 2023

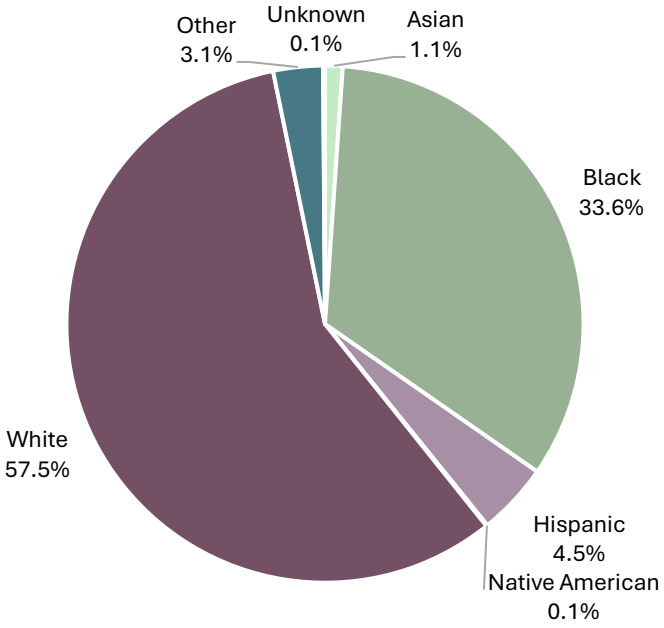
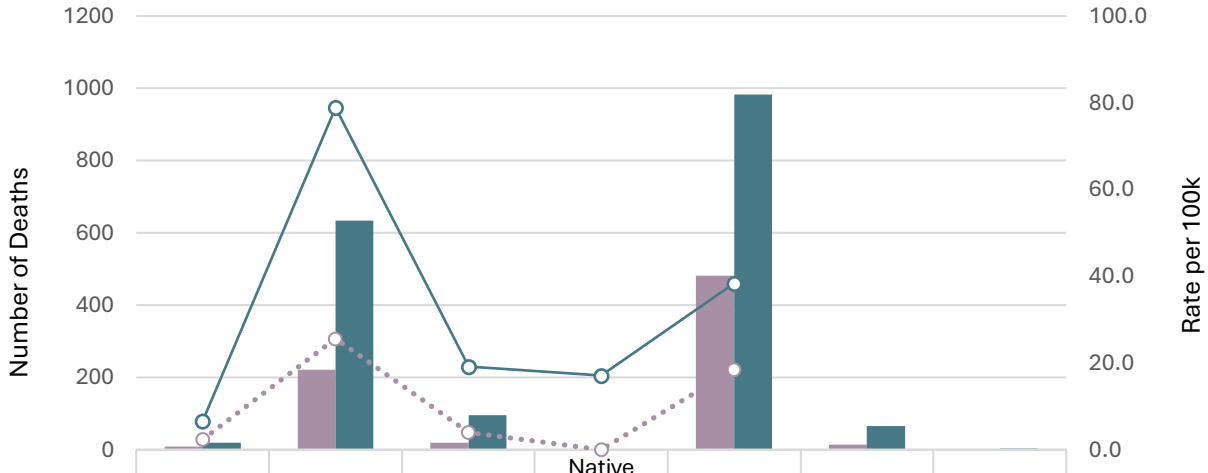


Figure 5.5 Number and Rate of Fatal Drug/Poison Overdoses by Race/Ethnicity and Sex, 2023



	Asian	Black	Hispanic	Native American	White	Other	Unknown
Female	8	221	19	0	481	14	0
Male	20	633	96	2	982	65	3
Female Rate	2.4	25.6	4.0	0.0	18.5	*	*
Male Rate	6.6	78.9	19.2	17.1	38.4	*	*

Note: Rates cannot be calculated for 'other' and 'unknown' categories due to unknown population denominators

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution

Figure 5.6 Number of Fatal Drug/Poison Overdoses by Month of Death, 2023

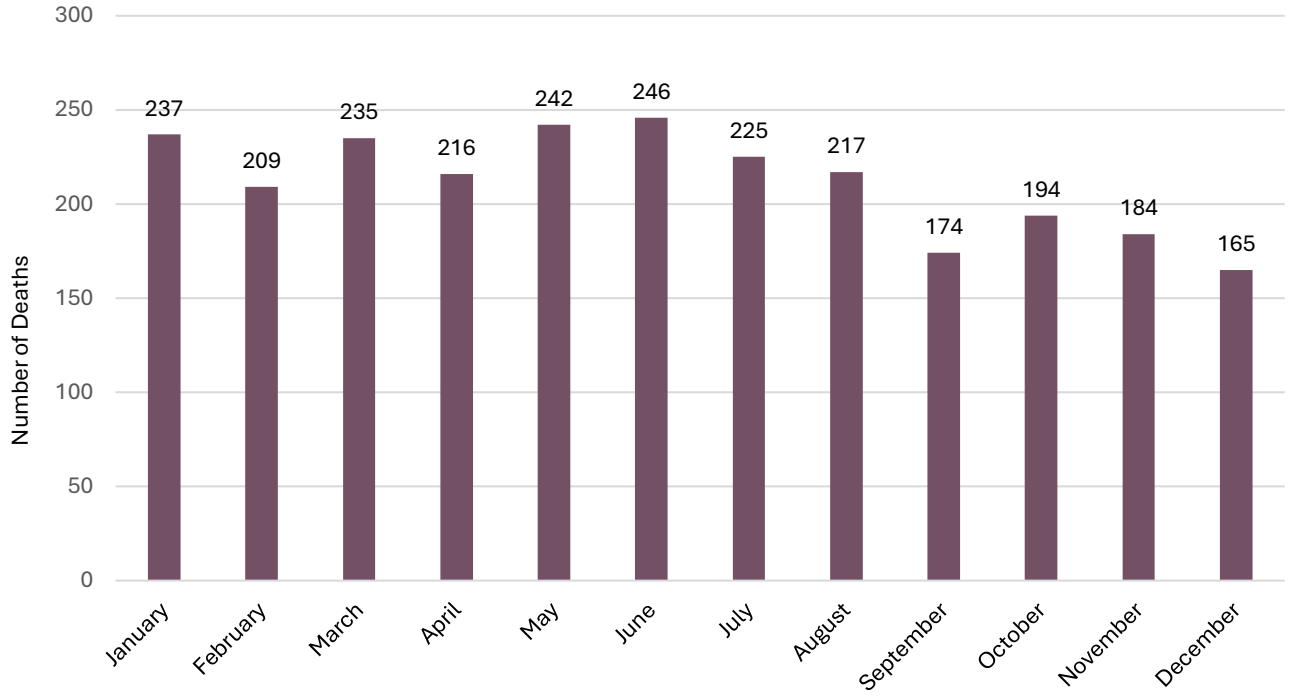


Figure 5.7 Number of Fatal Drug/Poison Overdoses by Day of Week, 2023

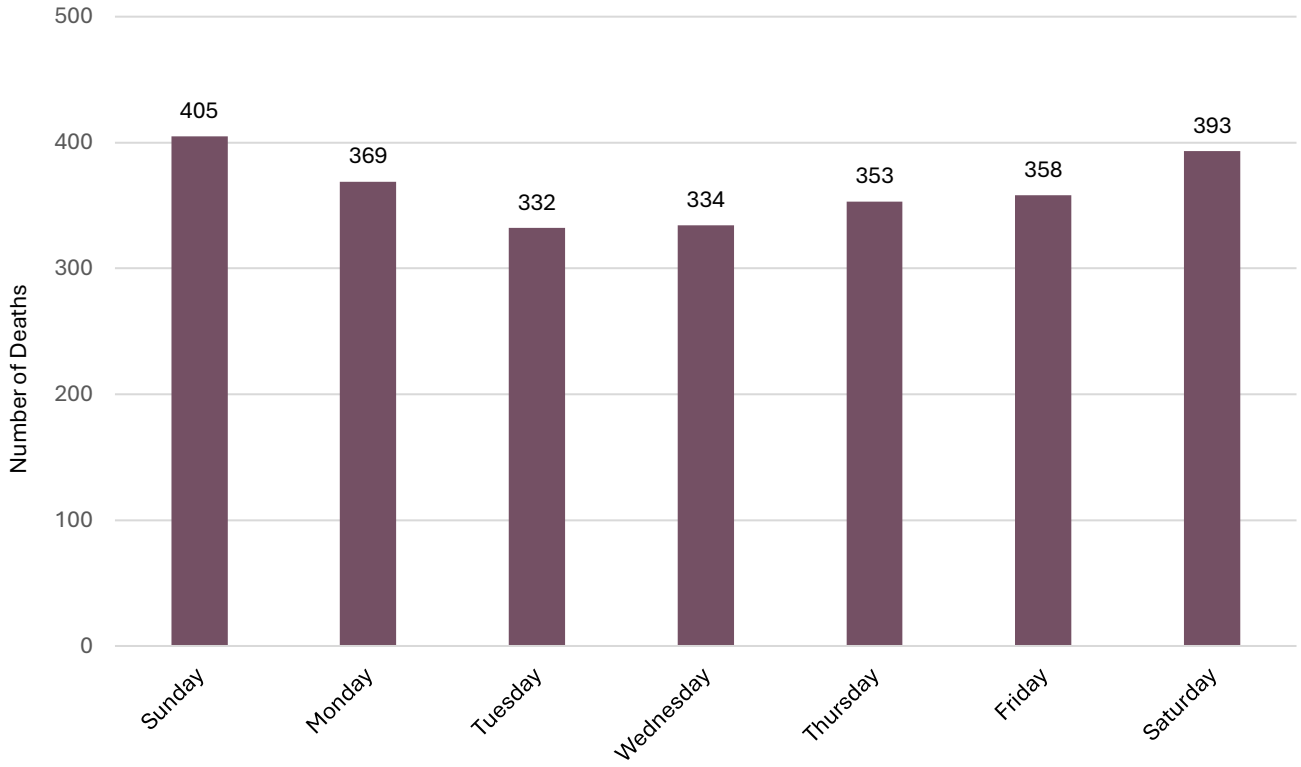


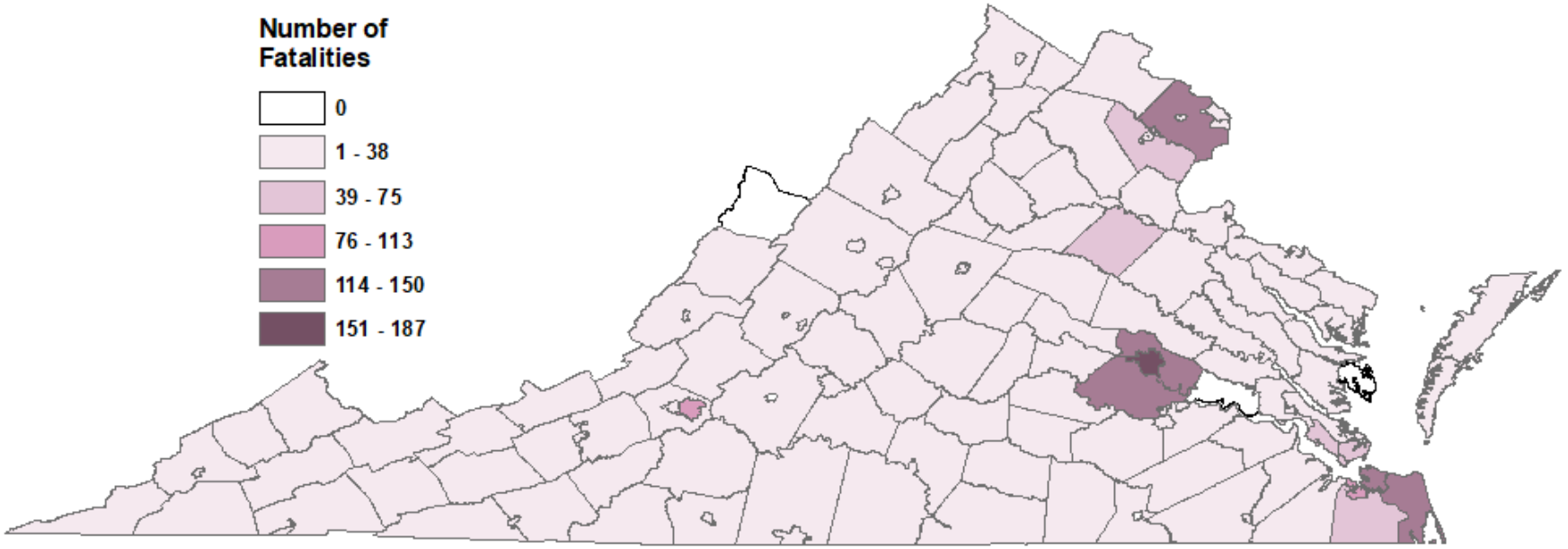
Table 5.3 Number and Rate of Fatal Drug/Poison Overdoses by Locality of Residence, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

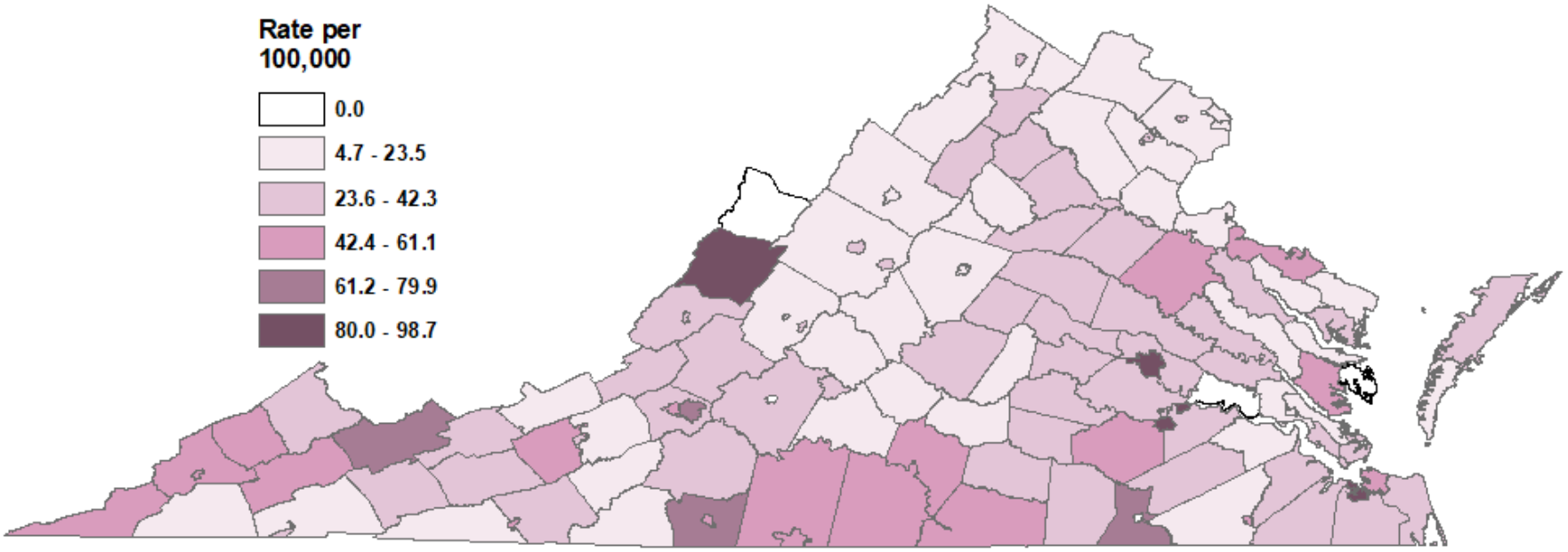
Table 5.4 Number and Rate of Fatal Drug/Poison Overdoses by Locality of Injury, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

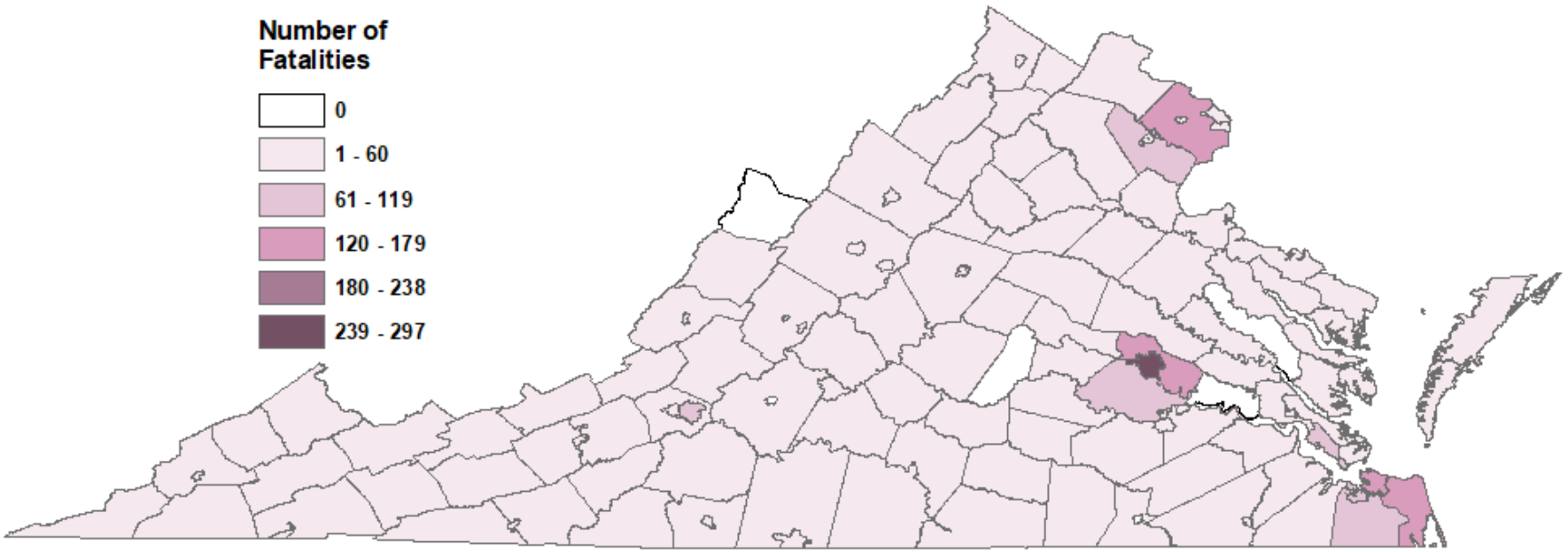
Map 5.1 Number of Fatal Drug/Poison Overdoses by Locality of Residence, 2023



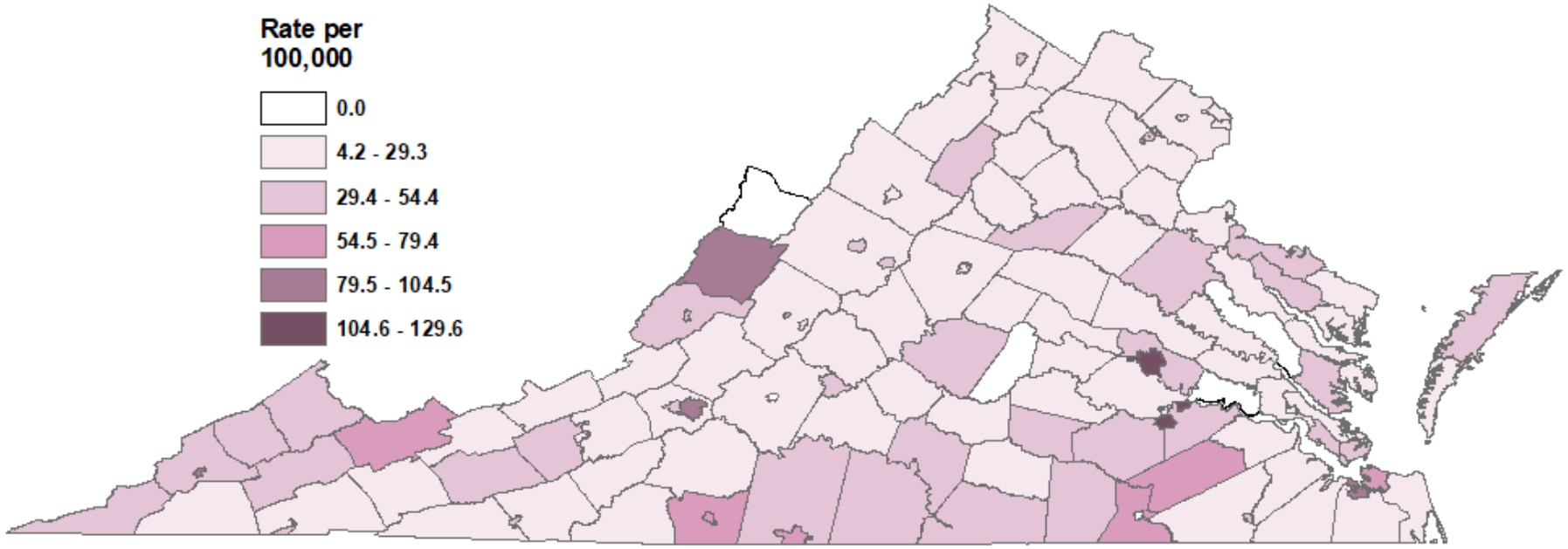
Map 5.2 Rates of Fatal Drug/Poison Overdoses by Locality of Residence, 2023



Map 5.3 Number of Fatal Drug/Poison Overdoses by Locality of Injury, 2023



Map 5.4 Rates of Fatal Drug/Poison Overdoses by Locality of Injury, 2023

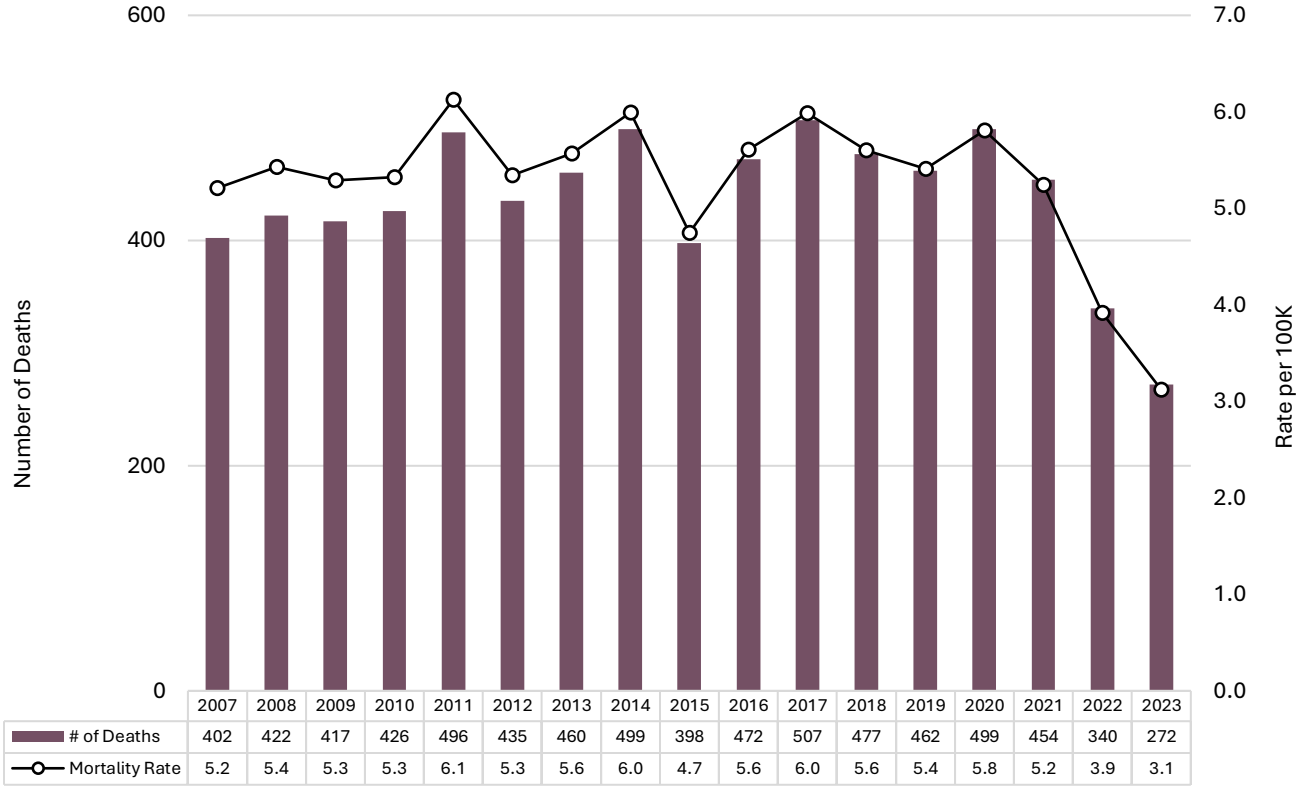


PRESCRIPTION OPIOID DEATHS (N = 272)

Prior to 2015, the largest number of fatal drug overdoses were attributed to prescription opioids. Although heroin and/or fentanyl deaths surpassed prescription opioid deaths in 2015, one or more prescription opioids (excluding fentanyl) were involved in 10.7% of all fatal drug overdoses in 2023.

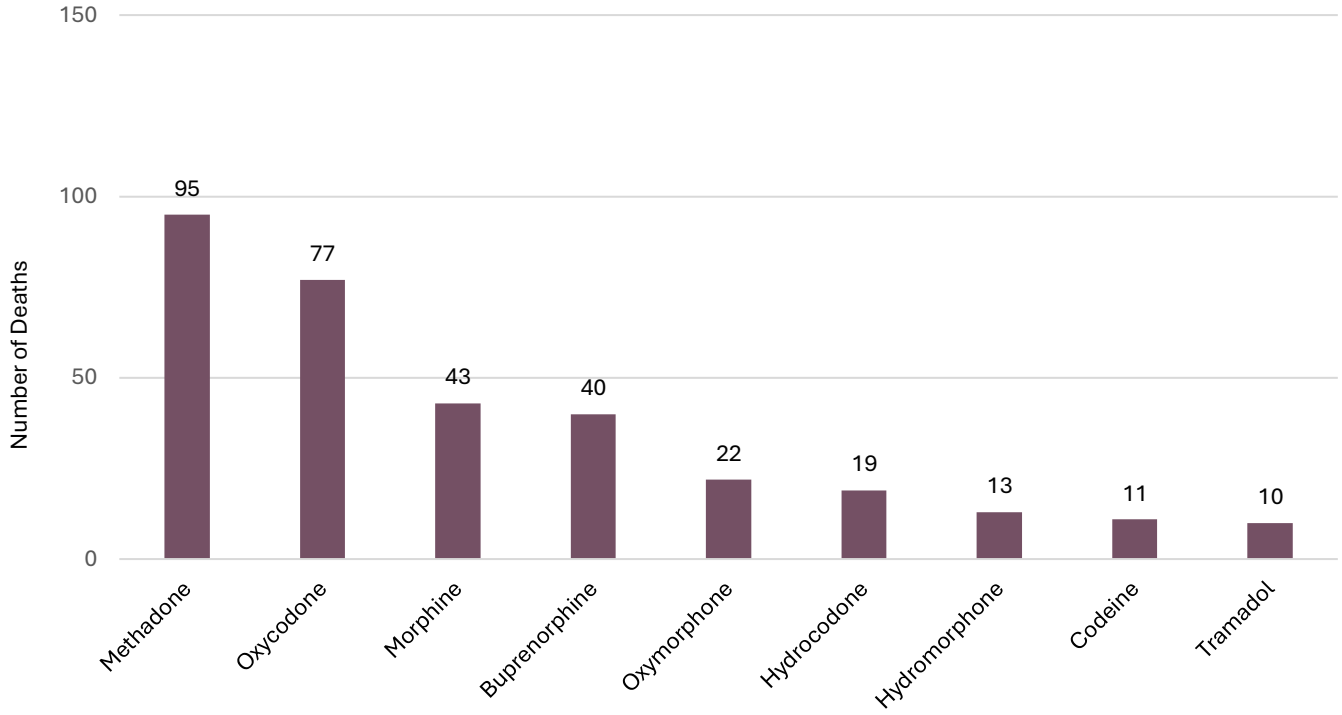
- Methadone was the most common prescription opioid causing or contributing to death in 2023
- White persons made up 80.5% of the fatal prescription opioid (excluding fentanyl) overdoses in 2023
- Males aged 45-54 years had the highest rates of fatal prescription opioid (excluding fentanyl) overdose in 2023 (7.9 deaths per 100,00 persons)

Figure 5.8 Number of All Fatal Drug Overdoses Compared to All Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Year of Death, 2007-2023



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	402	422	417	426	496	435	460	499	398	472	507	477	462	499	454	340	272
Mortality Rate	5.2	5.4	5.3	5.3	6.1	5.3	5.6	6.0	4.7	5.6	6.0	5.6	5.4	5.8	5.2	3.9	3.1

Figure 5.9 Number of Prescription Opioids (Excluding Fentanyl) Causing or Contributing to Death in Fatal Drug Overdoses, 2023



Note: Summing the subtotals will surpass the total since the groups are not mutually exclusive because often, more than one drug causes death

Figure 5.10 Percentage of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Manner of Death, 2023

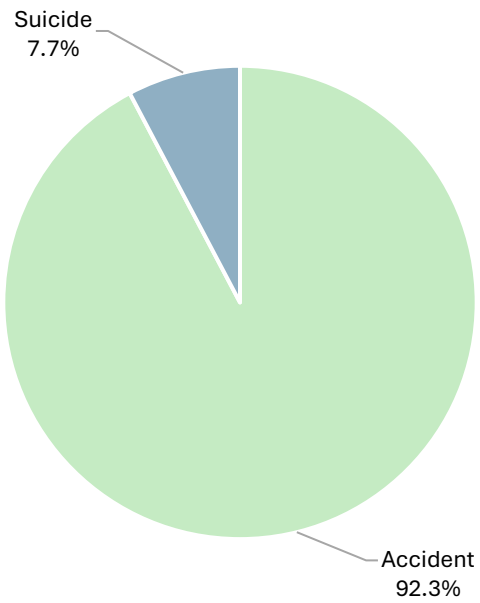
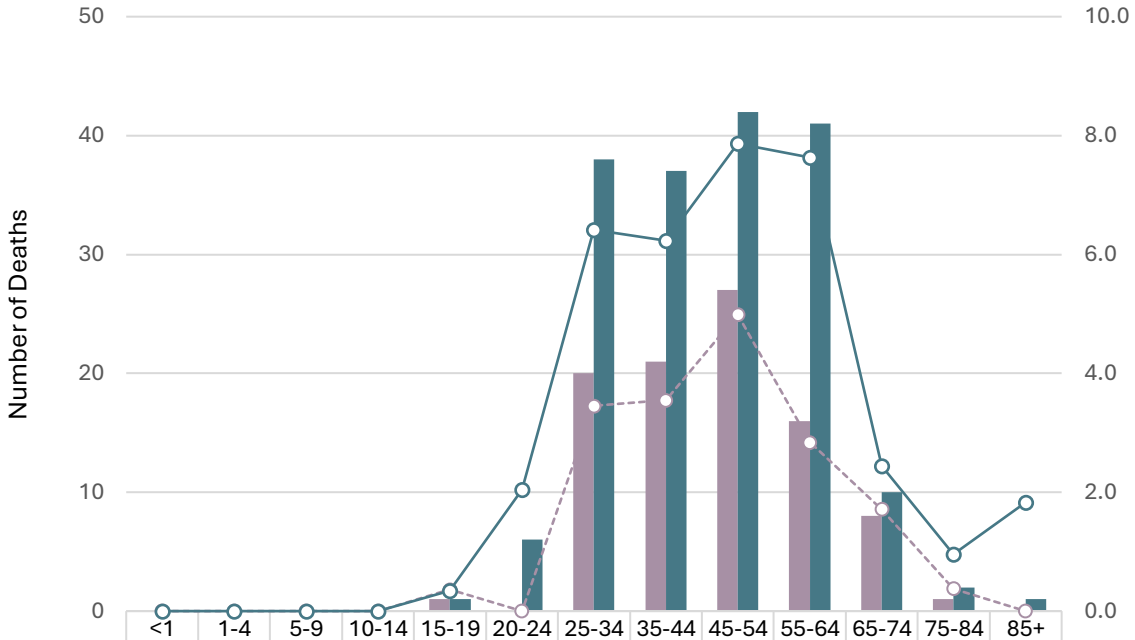


Table 5.10 Number of Prescription Opioids (Excluding Fentanyl) Detected in Fatal Drug Overdoses by OCME District, 2023

Prescription Opioid	Central	Northern	Tidewater	Western	Total
Methadone	38	15	25	17	95
Oxycodone	16	24	16	21	77
Morphine	8	11	11	13	43
Buprenorphine	7	18	1	14	40
Oxymorphone	5	6	9	2	22
Hydrocodone	3	2	4	10	19
Hydromorphone	5	0	4	4	13
Codeine	0	2	7	2	11
Tramadol	1	7	0	2	10
Total	**83**	**85**	**77**	**85**	**330**

Note: Summing the subtotals will surpass the total since the groups are not mutually exclusive because often, more than one drug causes death

Figure 5.11 Number and Rate of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Age Group and Sex, 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Female	0	0	0	0	1	0	20	21	27	16	8	1	0
Male	0	0	0	0	1	6	38	37	42	41	10	2	1
Female Rate	0.0	0.0	0.0	0.0	0.4	0.0	3.5	3.5	5.0	2.8	1.7	0.4	0.0
Male Rate	0.0	0.0	0.0	0.0	0.3	2.0	6.4	6.2	7.9	7.6	2.4	1.0	1.8

Figure 5.12 Percentage of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Race/Ethnicity, 2023

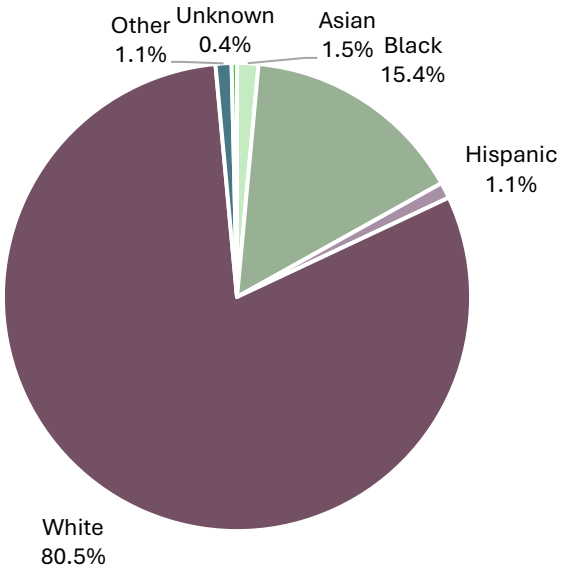
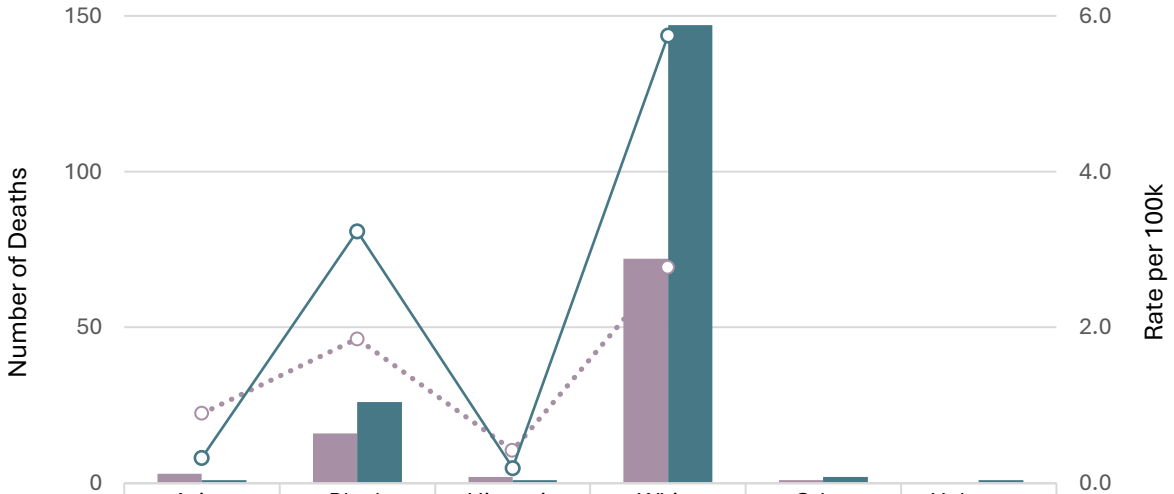


Figure 5.13 Number and Rate of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Race/Ethnicity and Sex, 2023



	Asian	Black	Hispanic	White	Other	Unknown
Female	3	16	2	72	1	0
Male	1	26	1	147	2	1
Female Rate	0.9	1.9	0.4	2.8	*	*
Male Rate	0.3	3.2	0.2	5.7	*	*

Note: Rates cannot be calculated for 'other' and 'unknown' categories due to unknown population denominators

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution

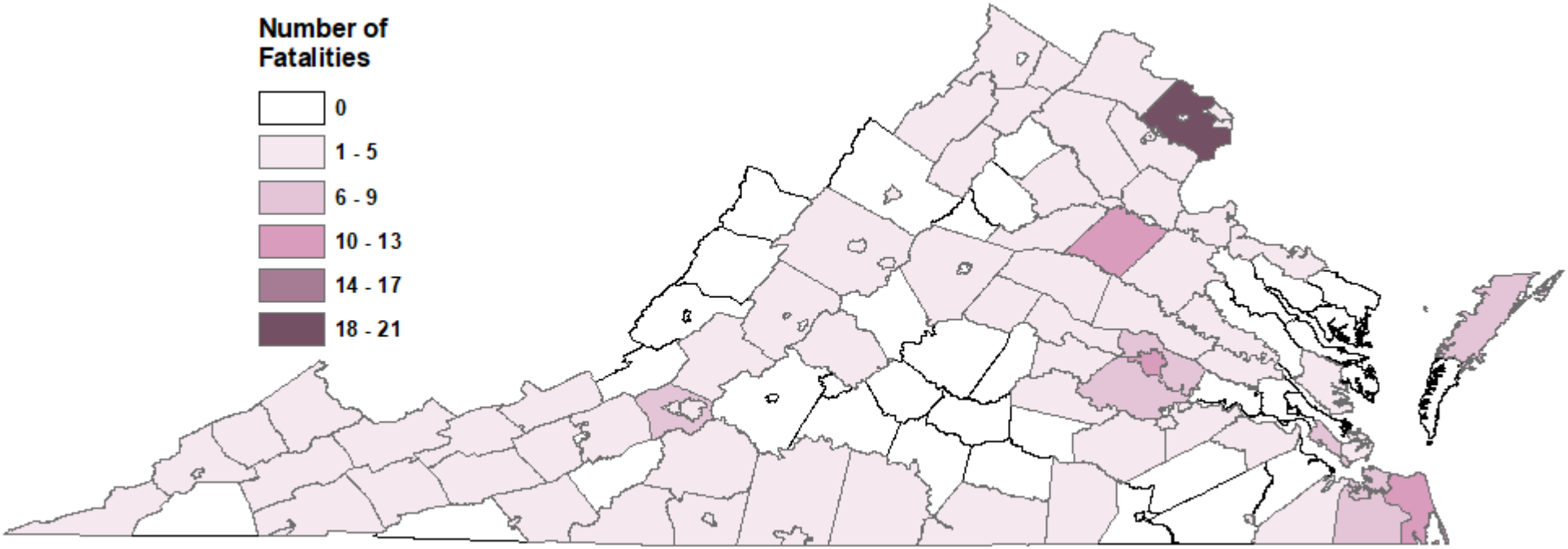
Table 5.6 Number and Rate of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Locality of Residence, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

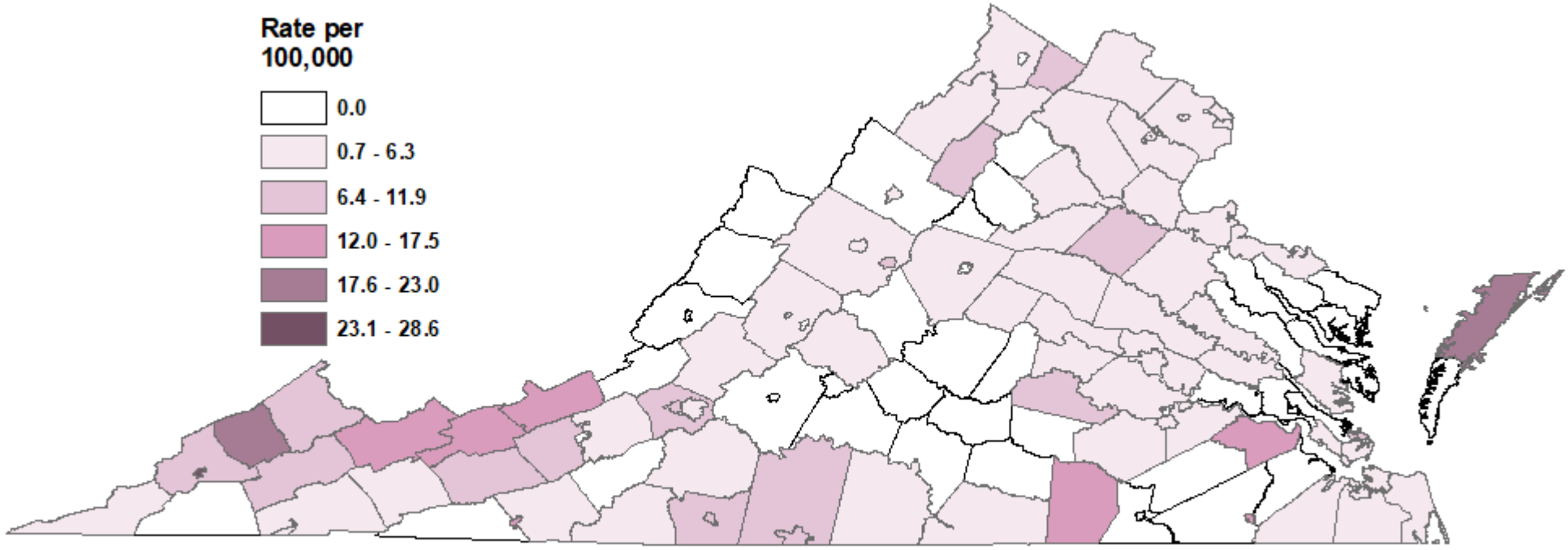
Table 5.7 Number and Rate of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Locality of Injury, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

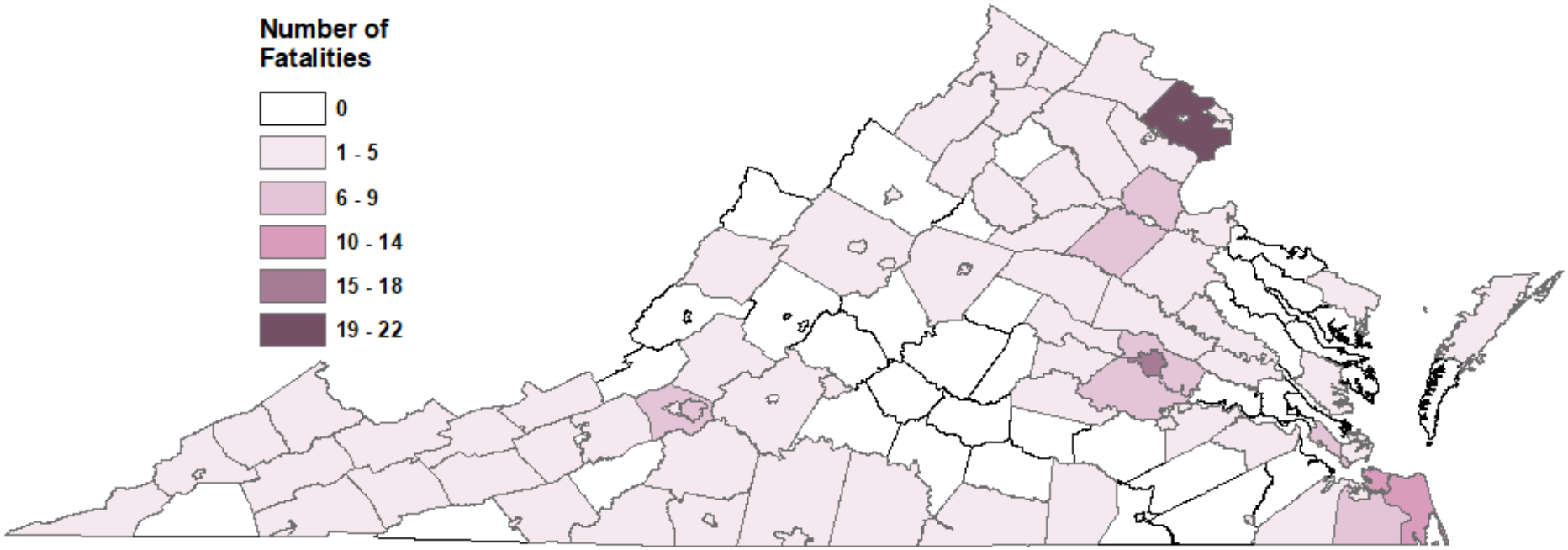
Map 5.5 Number of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Locality of Residence, 2023



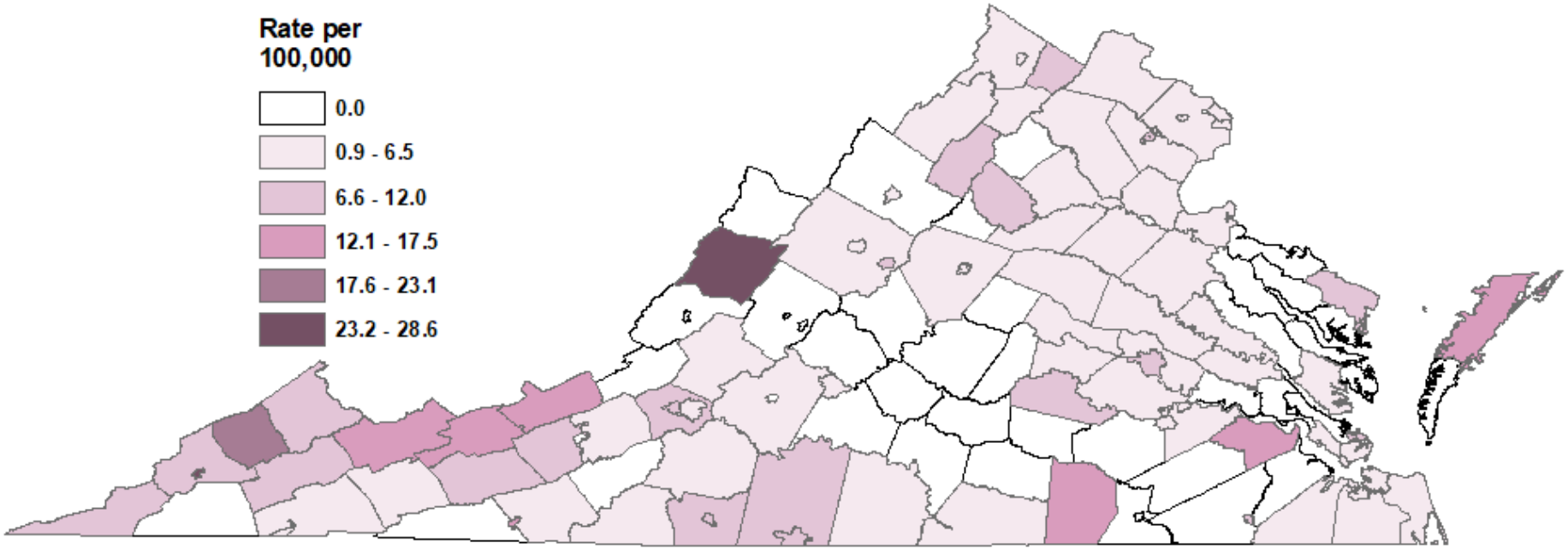
Map 5.6 Rates of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Locality of Residence, 2023



Map 5.7 Number of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Locality of Injury, 2023



Map 5.8 Rates of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Locality of Injury, 2023

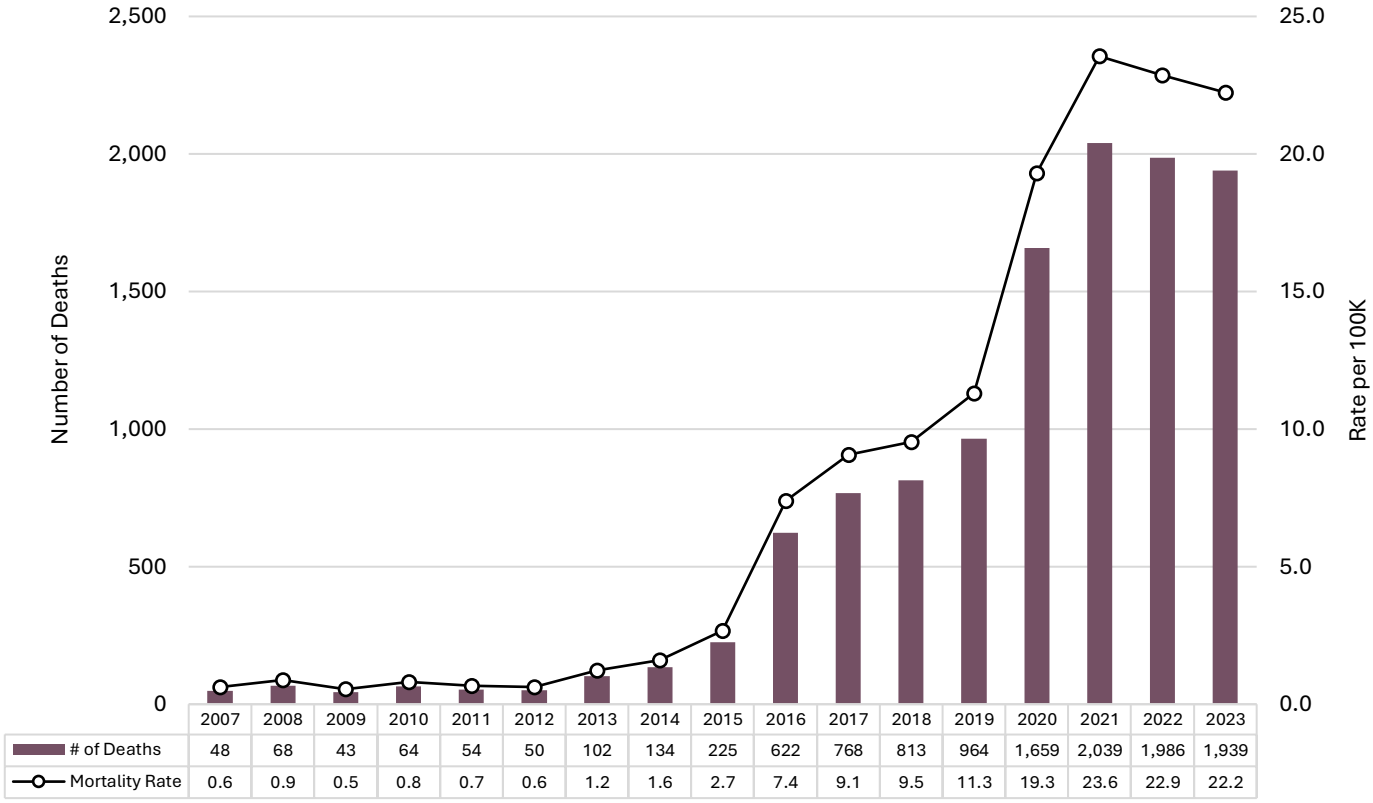


FENTANYL DEATHS (N = 1,939)

Illicitly produced fentanyl began appearing in Virginia in 2013/2014 and was often mixed in with heroin or sold disguised as heroin, often unbeknownst to the user. In 2016, Virginia began seeing in fentanyl analogs; drugs similar to fentanyl, but slightly different in their chemical structure which alters potency. Illicitly produced fentanyl, but not the various fentanyl analogs, is indistinguishable from pharmaceutical fentanyl in toxicology.

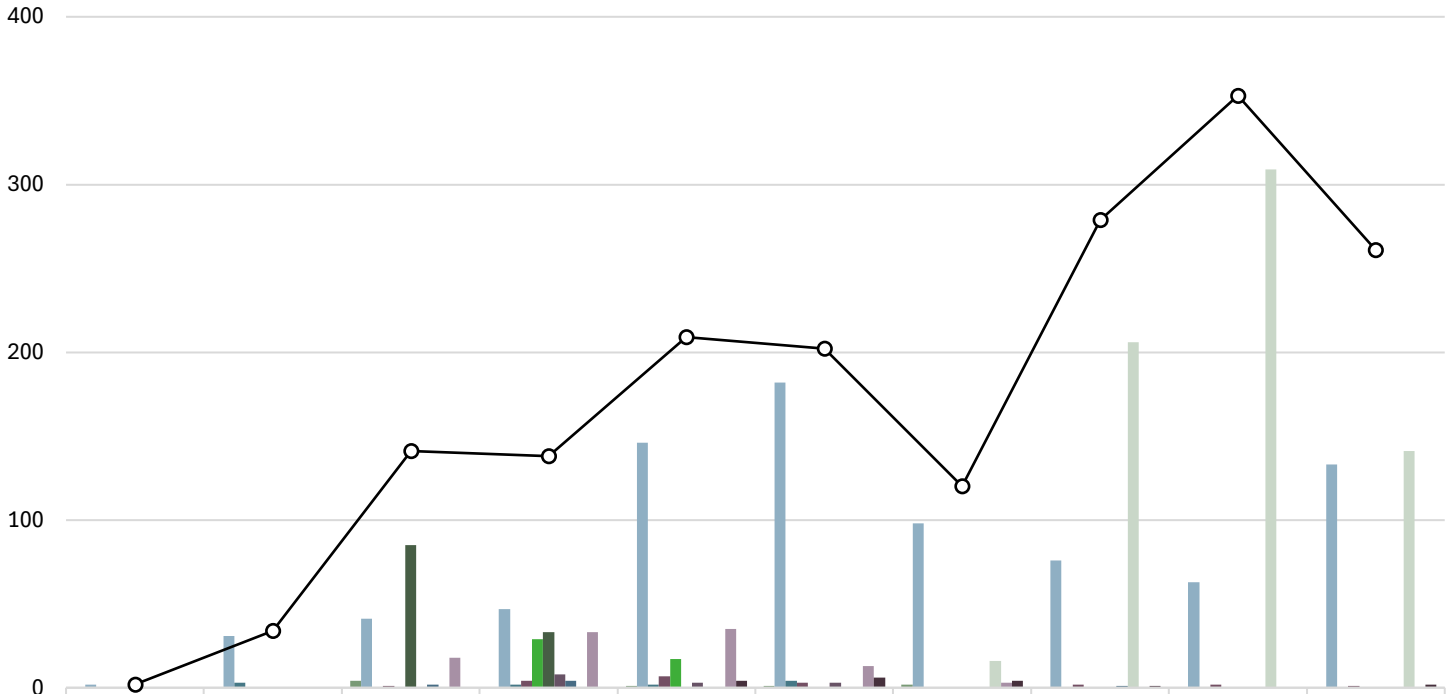
- Fatal fentanyl overdoses in 2023 decreased by 2.4% when compared to 2022
- Over 99% of fatal fentanyl and/or heroin overdoses in 2023 were accidents
- In 2023, males 35-44 years of age had the highest rate of death (64.7 deaths per 100,000 persons)
- Fentanyl was involved in 76.2% of all drug/poison cases in Virginia in 2023

Figure 5.14 Number and Rate of Fatal Fentanyl Overdoses by Year of Death, 2007-2023



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	48	68	43	64	54	50	102	134	225	622	768	813	964	1,659	2,039	1,986	1,939
Mortality Rate	0.6	0.9	0.5	0.8	0.7	0.6	1.2	1.6	2.7	7.4	9.1	9.5	11.3	19.3	23.6	22.9	22.2

Figure 5.15 Number of Fatal Fentanyl Analog Overdoses by Year of Death, 2014-2023



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
3-Methyl Fentanyl	0	0	4	0	1	1	2	0	0	0
Acetyl Fentanyl	2	31	41	47	146	182	98	76	63	133
Butyryl Fentanyl	0	3	0	2	2	4	0	0	0	0
Carfentanil	0	0	1	4	7	3	0	2	2	1
Cyclopropyl Fentanyl	0	0	0	29	17	0	0	0	0	0
Furanyl Fentanyl	0	0	85	33	0	0	0	0	0	0
Methoxyacetyl Fentanyl	0	0	0	8	3	3	0	0	0	0
Para/Meta-fluorobutyrylfentanyl	0	0	2	4	0	0	0	1	0	0
Para/Meta-fluorofentanyl	0	0	0	0	0	0	16	206	309	141
Para/Meta-fluoroisobutyrylfentanyl	0	0	18	33	35	13	3	0	0	0
Valerylfentanyl	0	0	0	0	4	6	4	1	0	2
Total Fentanyl Analog Fatalities	2	34	141	138	209	202	120	279	353	261

Note: Each fentanyl analog is tallied by each time it caused or contributed to death (analyzed from either toxicology or the cause of death statement) and therefore the total number of analogs will exceed the actual number of fatalities

Figure 5.16 Percentage of Fatal Fentanyl Overdoses by Manner of Death, 2023

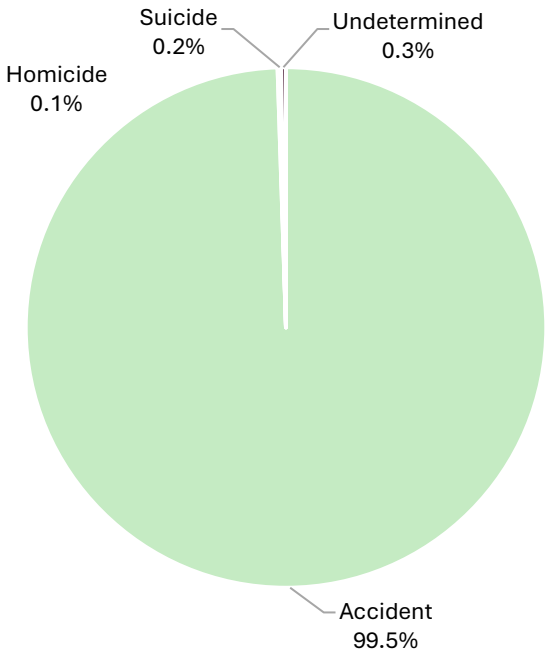
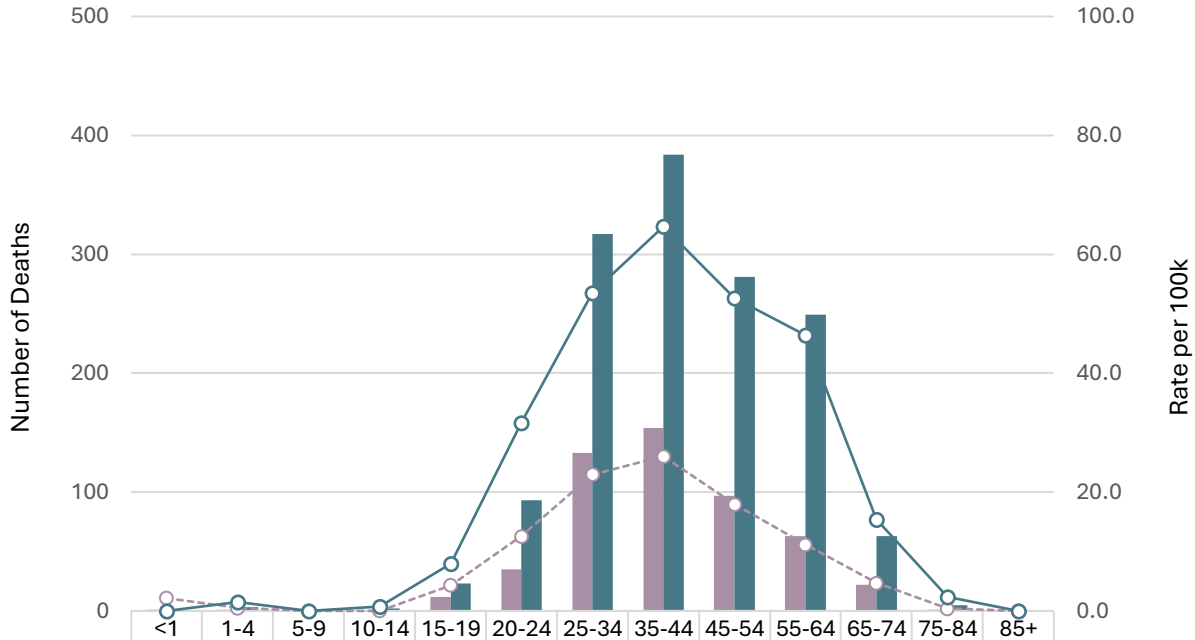


Figure 5.17 Number and Rate of Fatal Fentanyl Overdoses by Age Group and Sex, 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Female	1	1	0	0	12	35	133	154	97	63	22	1	0
Male	0	3	0	2	23	93	317	384	281	249	63	5	0
Female Rate	2.2	0.5	0.0	0.0	4.3	12.6	23.0	26.0	17.9	11.2	4.7	0.4	0.0
Male Rate	0.0	1.5	0.0	0.7	7.9	31.6	53.5	64.7	52.6	46.3	15.4	2.4	0.0

Figure 5.18 Percentage of Fatal Fentanyl Overdoses by Race/Ethnicity, 2023

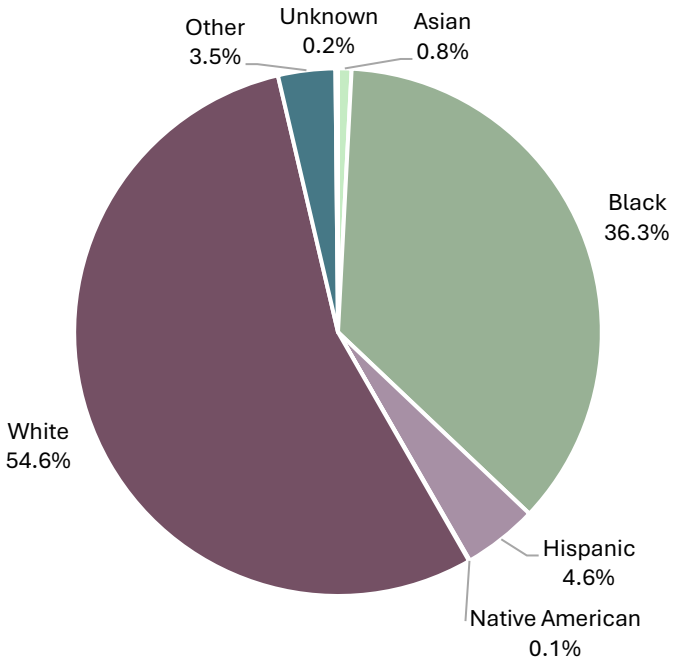
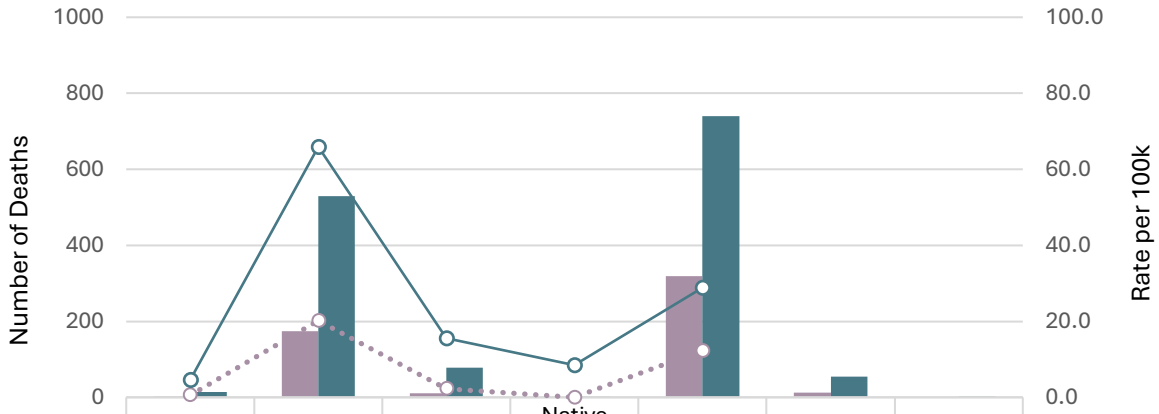


Figure 5.19 Number and Rate of Fatal Fentanyl Overdoses by Race/Ethnicity and Sex, 2023



	Asian	Black	Hispanic	Native American	White	Other	Unknown
Female	2	174	11	0	319	13	0
Male	14	529	78	1	740	55	3
Female Rate	0.6	20.2	2.3	0.0	12.3	*	*
Male Rate	4.6	65.9	15.6	8.6	28.9	*	*

Note: Rates cannot be calculated for 'other' and 'unknown' categories due to unknown population denominators

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution

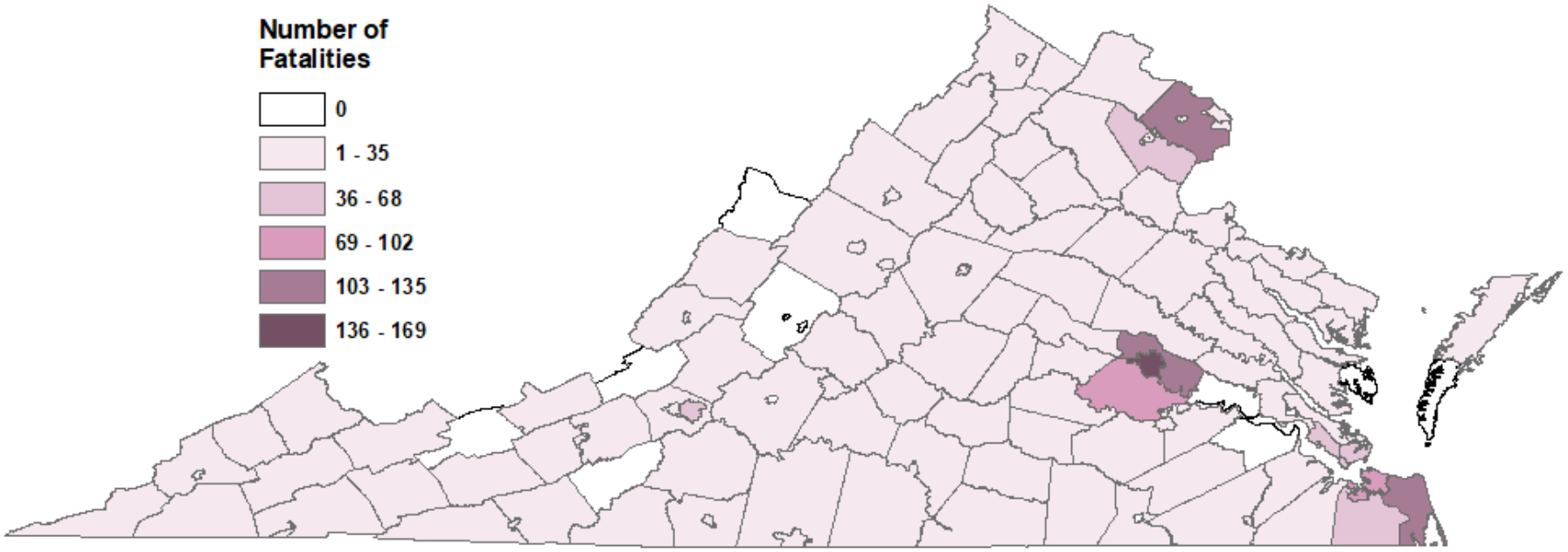
Table 5.8 Number and Rate of Fatal Fentanyl Overdoses by Locality of Residence, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

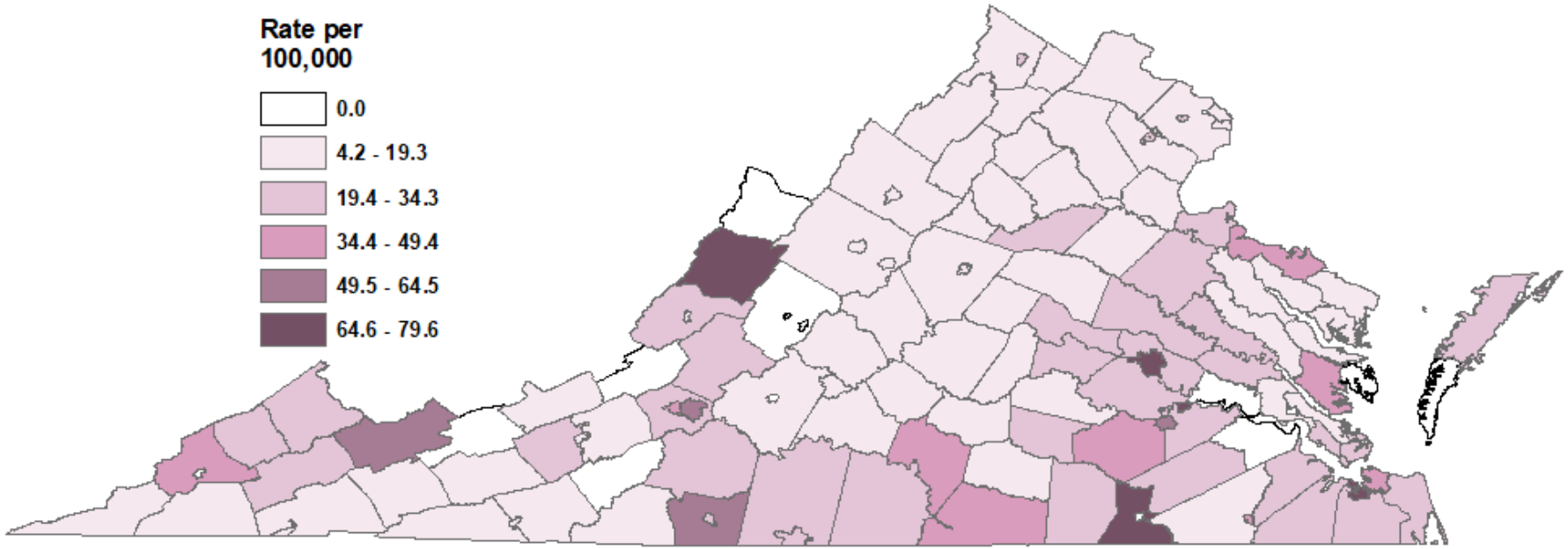
Table 5.9 Number and Rate of Fatal Fentanyl Overdoses by Locality of Injury, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

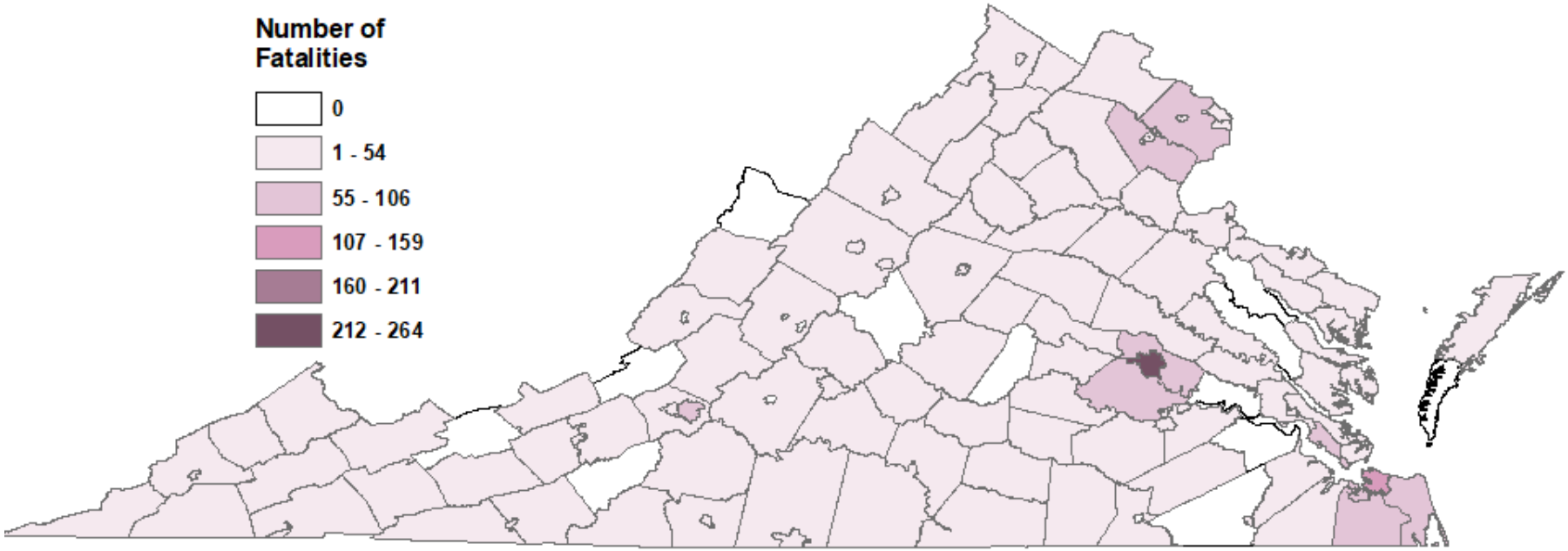
Map 5.9 Number of Fatal Fentanyl Overdoses by Locality of Residence, 2023



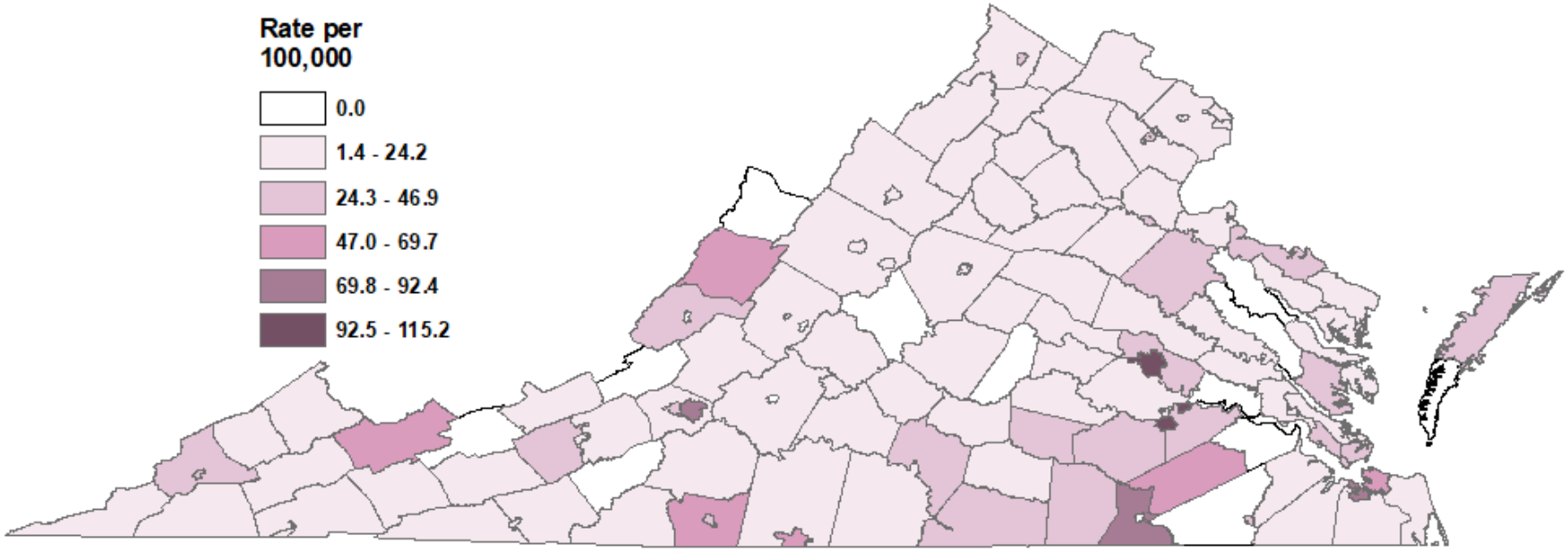
Map 5.10 Rates of Fatal Fentanyl Overdoses by Locality of Residence, 2023



Map 5.11 Number of Fatal Fentanyl Overdoses by Locality of Injury, 2023



Map 5.12 Rates of Fatal Fentanyl Overdoses by Locality of Injury, 2023

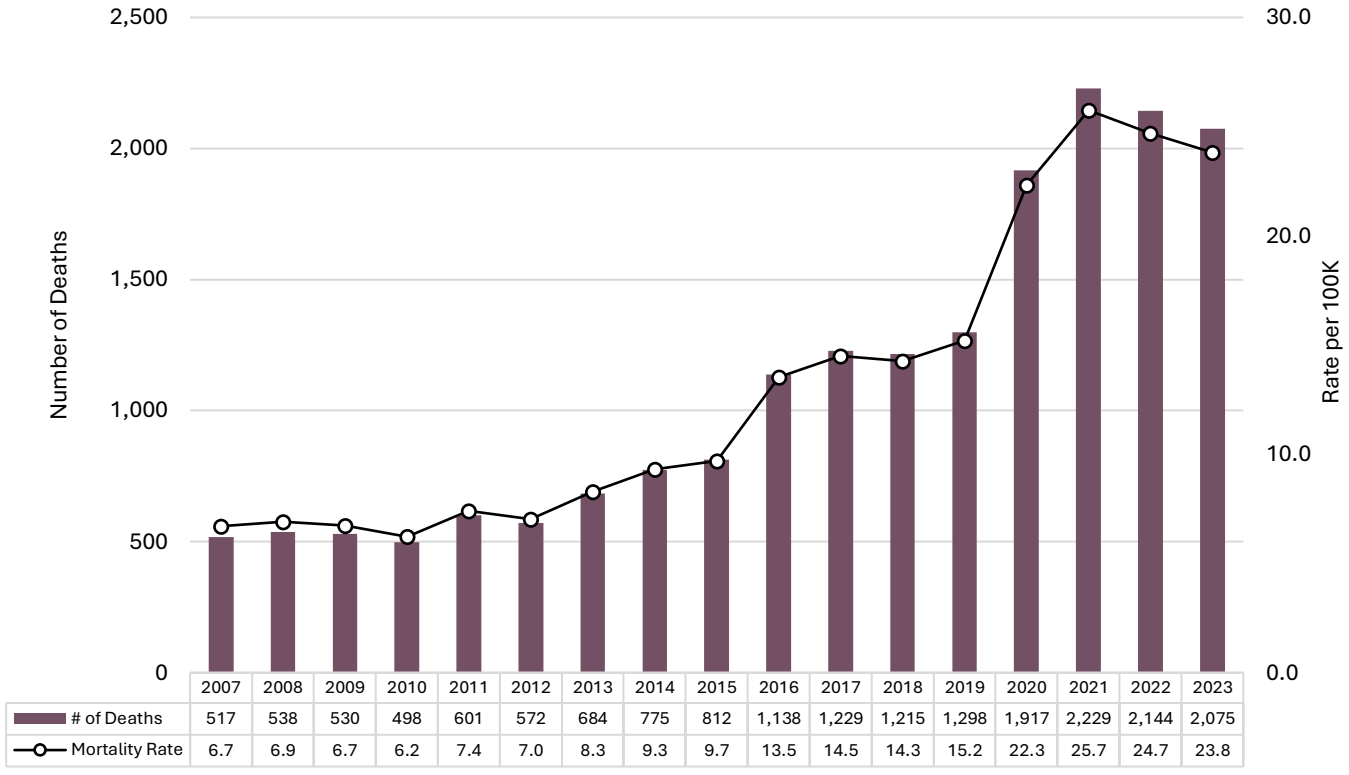


ALL OPIOID DEATHS (N = 2,075)

All fatal opioid overdoses include fatal overdoses that included at least fentanyl, heroin, and/or one or more prescription opioids. Fatal opioid overdoses decreased in 2023 when compared to 2022 (3.2%) and represented 81.6% of all fatal drug overdose cases in 2023.

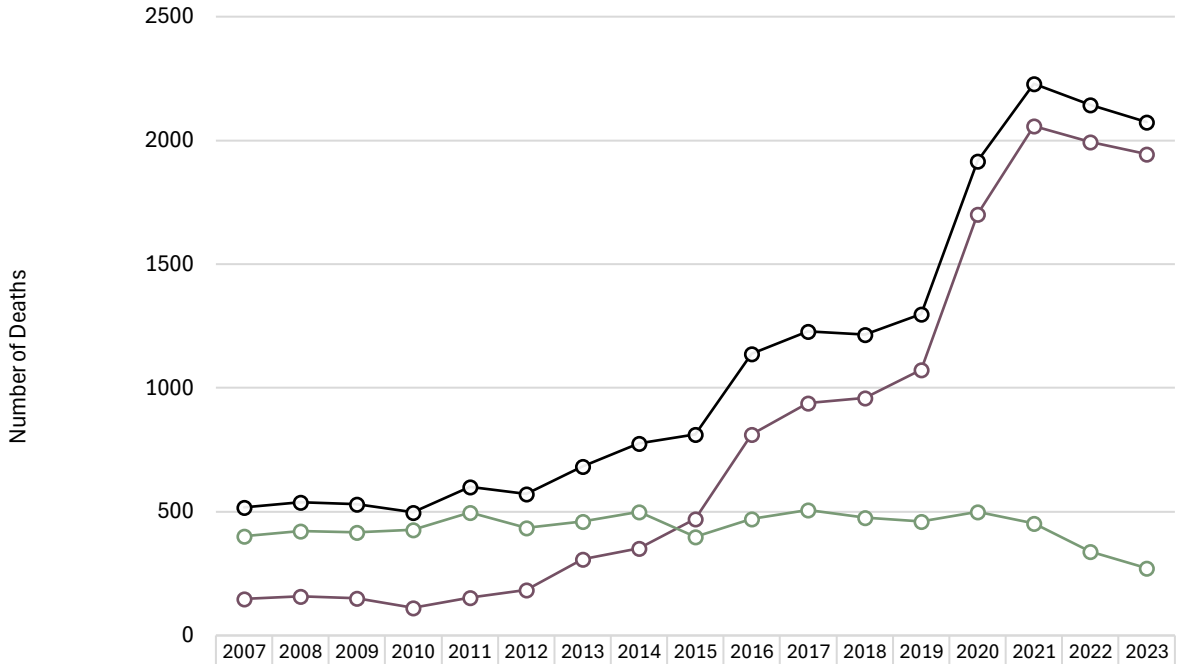
- Black males and males aged 35-44 years had the highest mortality rates compared to other demographic groups (67.5 and 67.5 deaths per 100,000 persons, respectively)
- Over 98% of all fatal opioid overdoses in 2023 were accidents
- Out of all opioids in 2023, fentanyl (Rx, illicit, and analogs) was responsible for the largest number of opioid deaths (93.4%))

Figure 5.20 Number and Rate of All Fatal Opioid Overdoses Year of Death, 2007-2023



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	517	538	530	498	601	572	684	775	812	1,138	1,229	1,215	1,298	1,917	2,229	2,144	2,075
Mortality Rate	6.7	6.9	6.7	6.2	7.4	7.0	8.3	9.3	9.7	13.5	14.5	14.3	15.2	22.3	25.7	24.7	23.8

Figure 5.21 Percentage of All Fatal Opioid Overdoses by Fentanyl and/ Heroin vs. Prescription Opioids (Excluding Fentanyl) and Year of Death, 2023



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Fentanyl and/or Heroin	148	157	150	112	153	185	309	353	471	813	938	961	1073	1702	2058	1995	1944
Rx Opioid (Excluding Fentanyl)	402	422	417	426	496	435	460	499	398	472	507	477	462	499	454	340	272
All Opioids	517	538	530	498	601	572	684	775	812	1138	1229	1215	1298	1917	2229	2144	2075

Note: 'Fentanyl and/or heroin' and 'Rx opioid (excluding fentanyl)' are not mutually exclusive categories as deaths may have drugs from both groupings causing death

Figure 5.22 Percentage of All Fatal Opioid Overdoses by Manner of Death, 2023

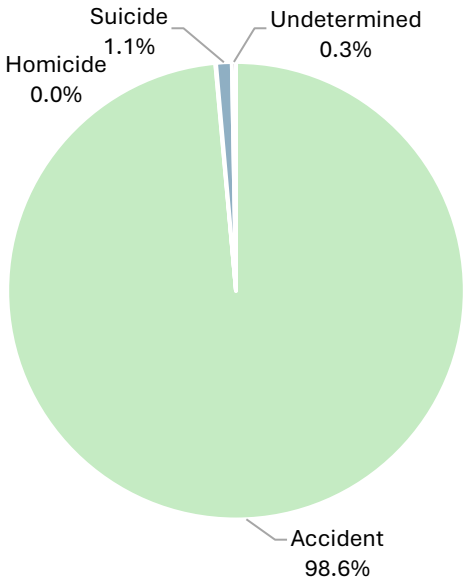
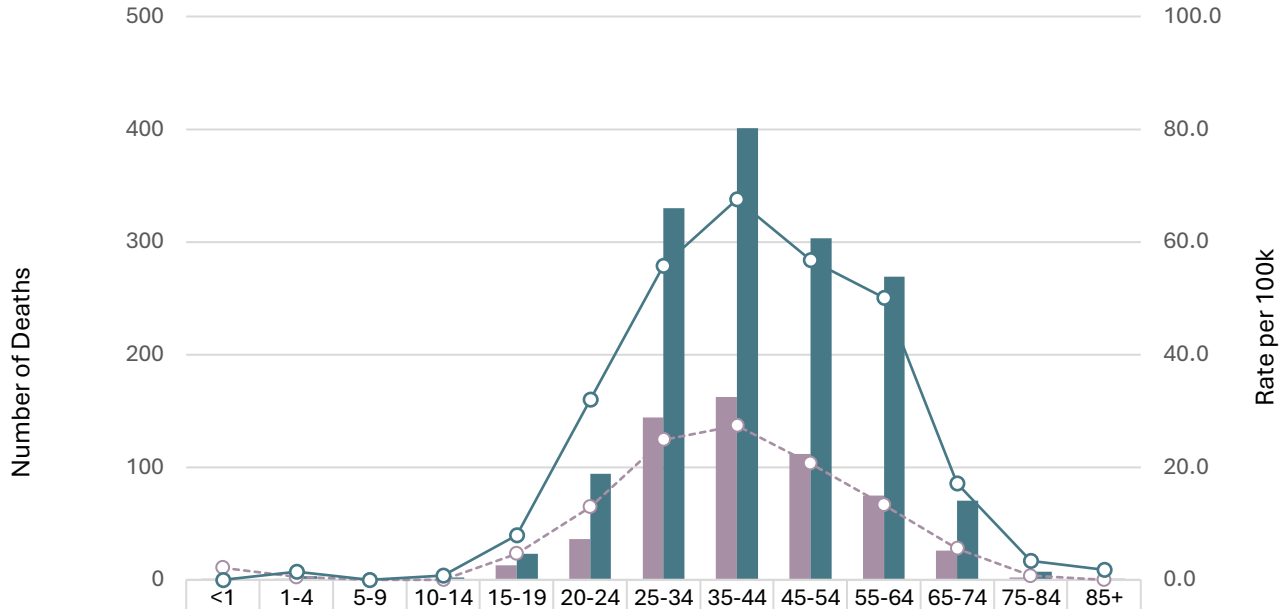


Figure 5.23 Number and Rate of All Fatal Opioid Overdoses by Age Group and Sex, 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Female	1	1	0	0	13	36	144	162	112	75	26	2	0
Male	0	3	0	2	23	94	330	401	303	269	70	7	1
Female Rate	2.2	0.5	0.0	0.0	4.7	12.9	24.9	27.4	20.7	13.3	5.6	0.8	0.0
Male Rate	0.0	1.5	0.0	0.7	7.9	32.0	55.7	67.5	56.7	50.1	17.1	3.4	1.8

Figure 5.24 Percentage of All Fatal Opioid Overdoses by Race/Ethnicity, 2023

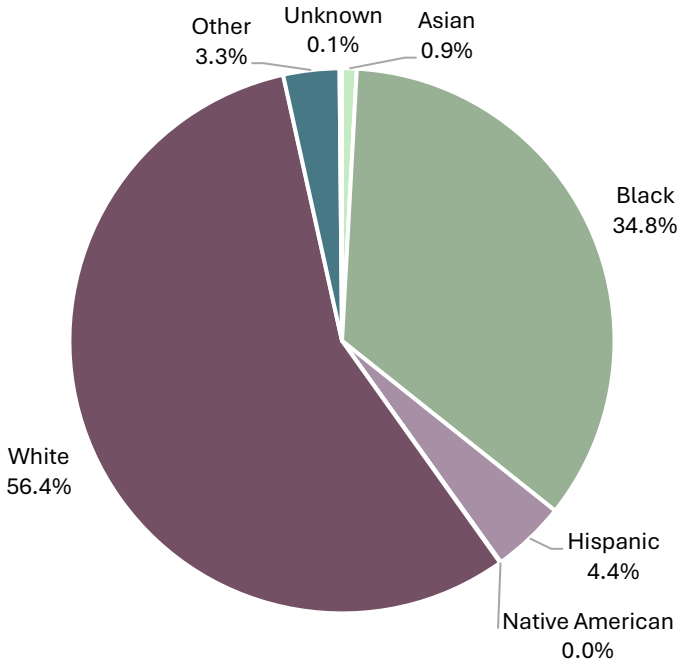
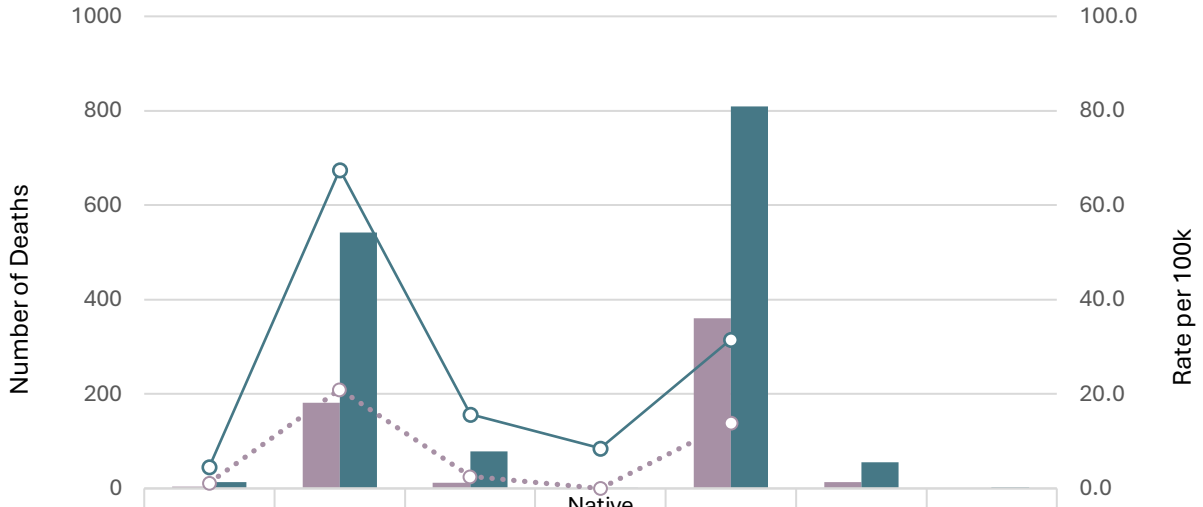


Figure 5.25 Number and Rate of All Fatal Opioid Overdoses by Race/Ethnicity and Sex, 2023

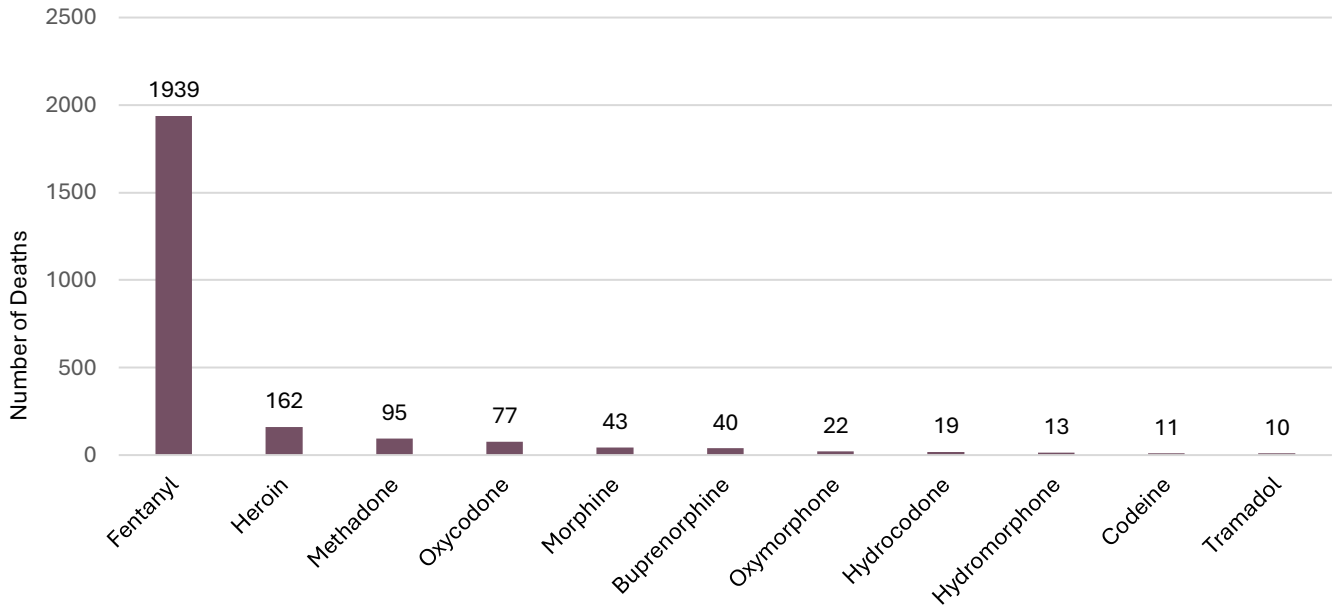


	Asian	Black	Hispanic	Native American	White	Other	Unknown
Female	4	181	12	0	361	14	0
Male	14	542	79	1	809	55	3
Female Rate	1.2	21.0	2.5	0.0	13.9	*	*
Male Rate	4.6	67.5	15.8	8.6	31.6	*	*

Note: Rates cannot be calculated for 'other' categories due to unknown population denominators

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution

Figure 5.26 Number of Opioids Causing or Contributing to Fatal Opioid Overdoses, 2023



Note: Summing the subtotals will surpass the total since the groups are not mutually exclusive because often, more than one drug causes death

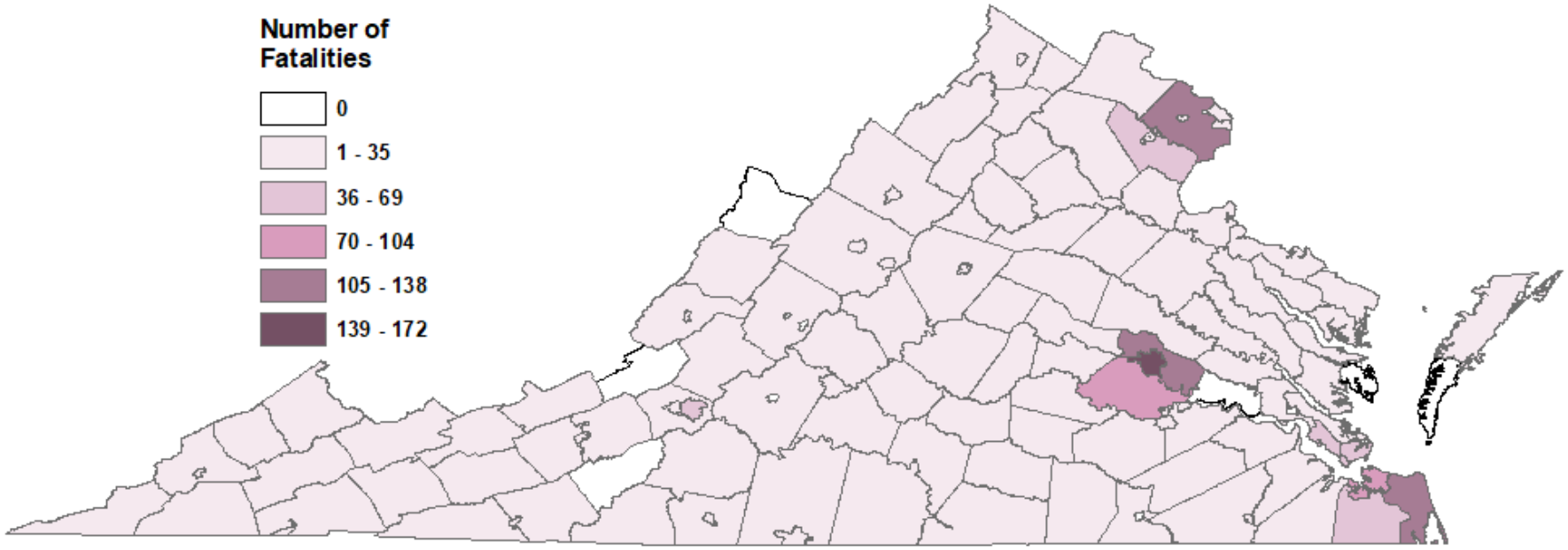
Table 5.10 Number of All Fatal Opioid Overdoses by Locality of Residence, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

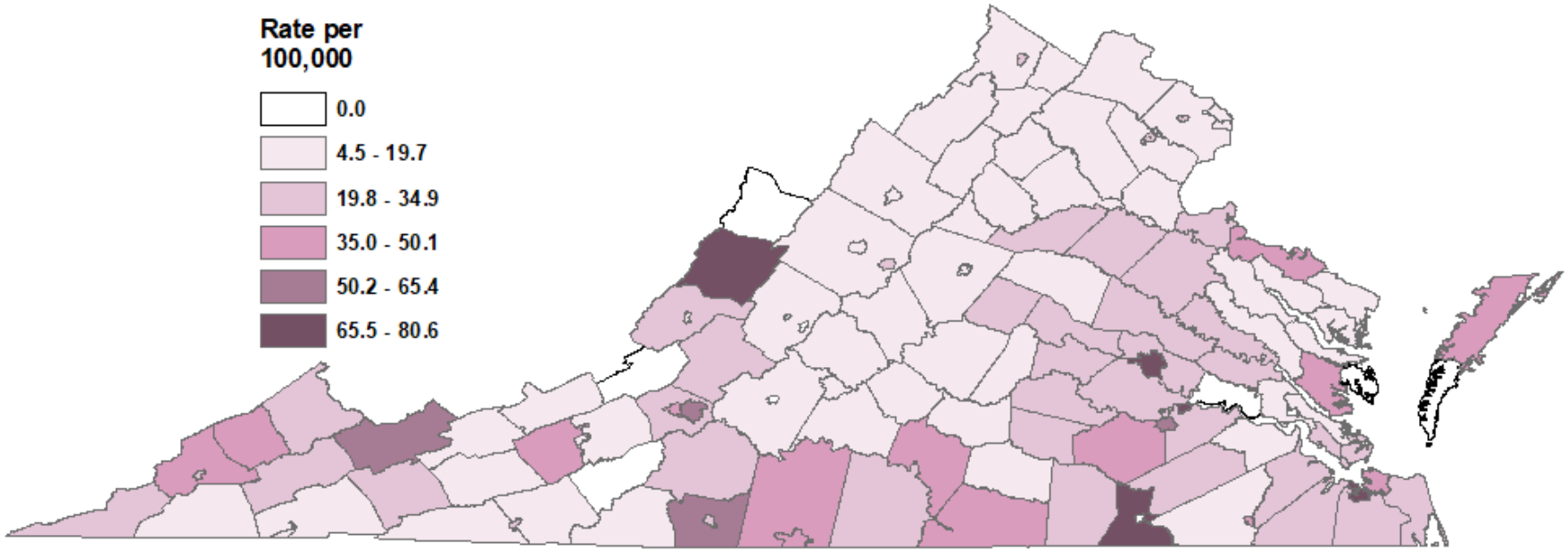
Table 5.11 Number and Rate of All Fatal Opioid Overdoses by Locality of Injury, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

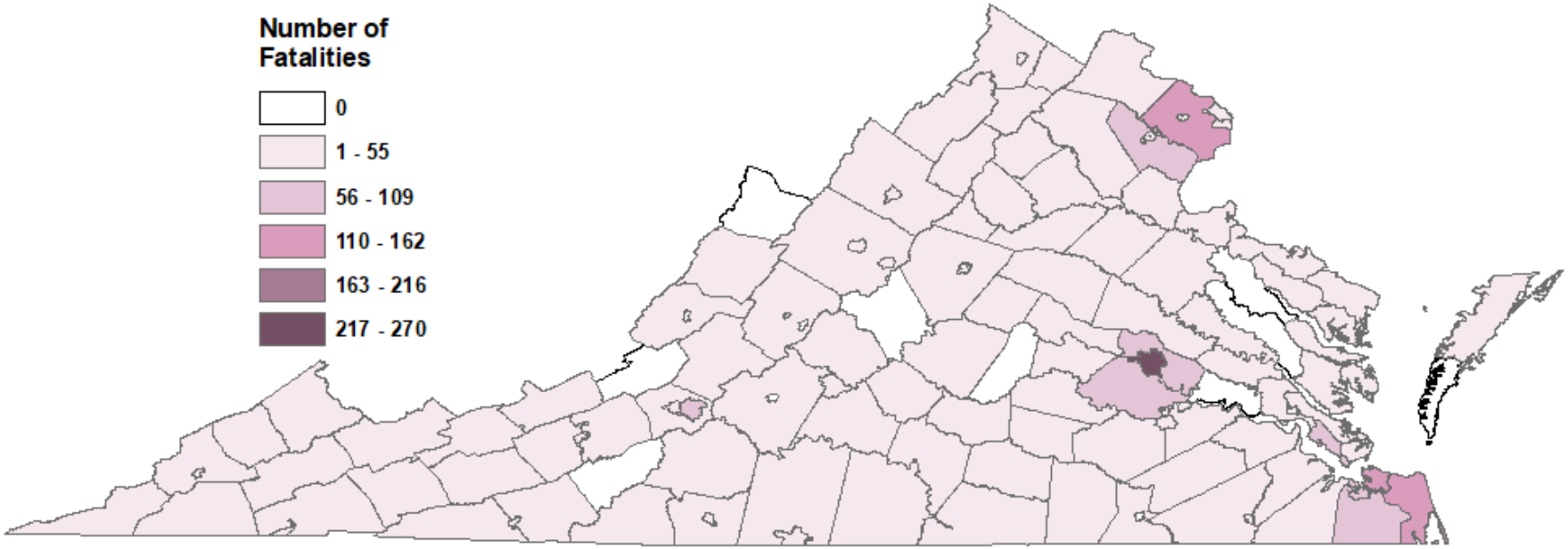
Map 5.13 Number of All Fatal Opioid Overdoses by Locality of Residence, 2023



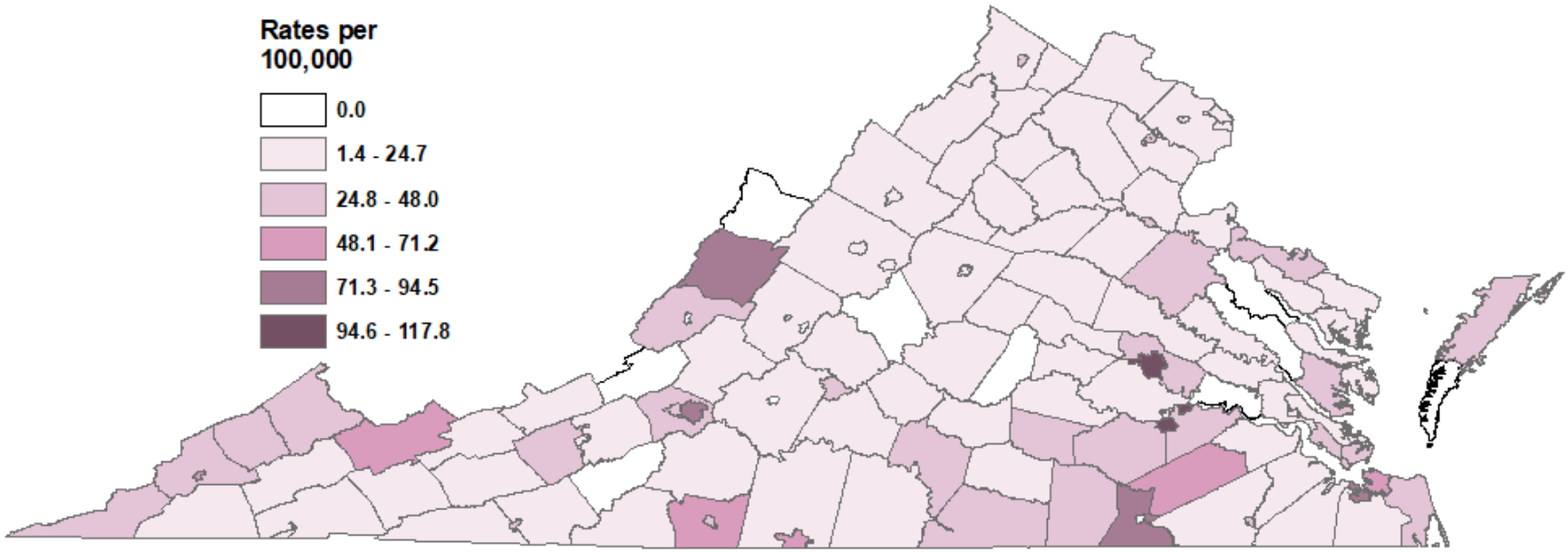
Map 5.14 Rates of All Fatal Opioid Overdoses by Locality of Residence, 2023



Map 5.15 Number of All Fatal Opioid Overdoses by Locality of Injury, 2023



Map 5.16 Rates of All Fatal Opioid Overdoses by Locality of Injury, 2023

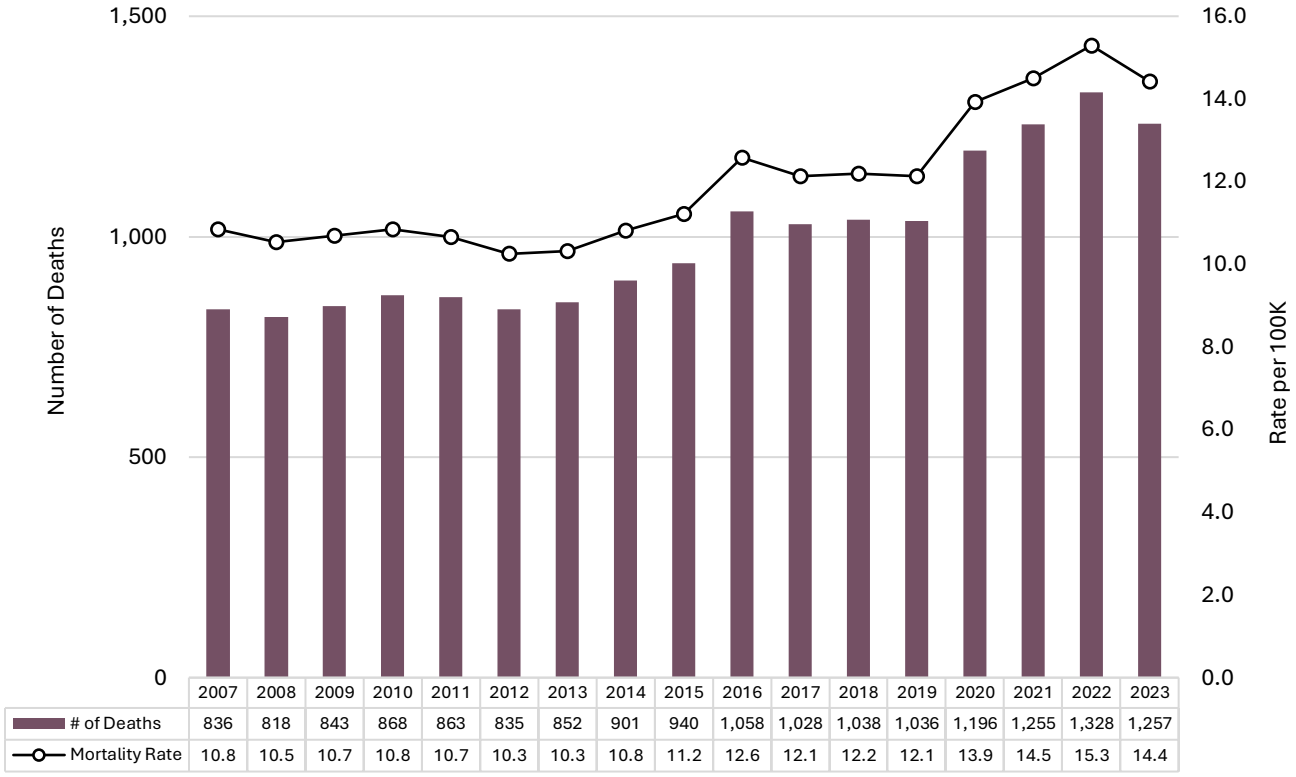


Section 6: Gun-Related Deaths (N = 1,257)

Gun-related fatalities continue to be one of the top three methods of unnatural death in Virginia. Generally, the number of gun-related suicides have slowly increased each year. Similarly, gun-related homicides have mainly increased each year since 2012. In 2023, gun-related deaths of all manners decreased 5.3% compared to 2022.

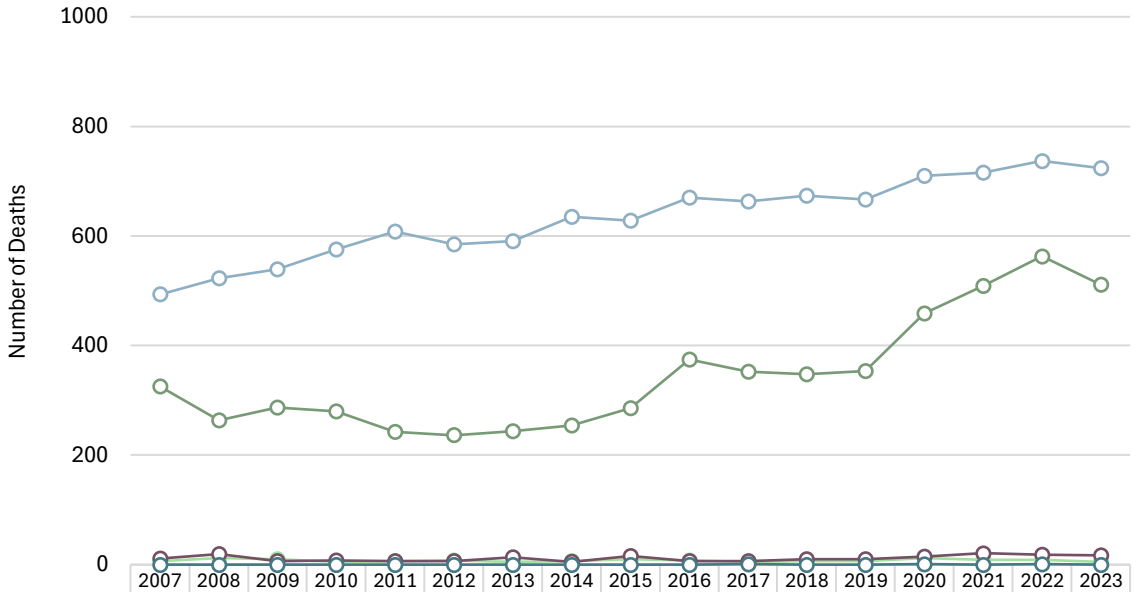
- The majority (57.6%) of gun related deaths were due to suicide
- The Western OCME region had the lowest number of gun-related deaths, all manners, whereas the Northern OCME region had the lowest rate of gun-related death of all manners (252 deaths and 7.8 deaths per 100,000 persons, respectively)
- Males (86.4%), 25-34 year olds (19.3%), and Whites (54.7%) had the largest number of gun-related deaths; however, males aged 85+ years of age and Black males had the highest rate of gun-related death (62.2 and 52.5 deaths per 100,000 persons, respectively)

Figure 6.1 Number and Rate of Gun-Related Deaths by Year of Death, 2007-2023



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# of Deaths	836	818	843	868	863	835	852	901	940	1,058	1,028	1,038	1,036	1,196	1,255	1,328	1,257
Mortality Rate	10.8	10.5	10.7	10.8	10.7	10.3	10.3	10.8	11.2	12.6	12.1	12.2	12.1	13.9	14.5	15.3	14.4

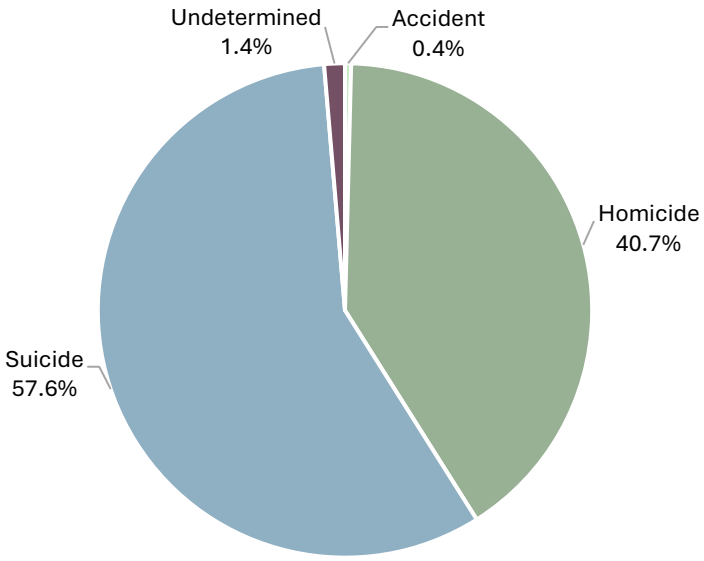
Figure 6.2 Number of Gun-Related Deaths by Year and Manner of Death, 2007-2023



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Accident	7	12	10	5	7	8	5	7	10	8	5	6	6	12	9	9	5
Homicide	325	264	287	280	242	236	244	254	286	374	352	348	353	458	509	563	511
Suicide	493	523	539	575	608	585	590	635	628	670	663	674	667	710	716	737	724
Undetermined	11	19	7	8	6	6	13	5	16	6	7	10	10	15	21	18	17
Undefined for Fetal Deaths	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0

Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Figure 6.3 Percentage of Gun-Related Deaths by Manner of Death, 2023



Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Table 6.1 Number and Rate of Gun-Related Deaths by OCME District and Manner of Death, 2023

Manner of Death	Central		Northern		Tidewater		Western		Total	
	n	rate	n	rate	n	rate	n	rate	n	rate
Accident	0	0.0	0	0.0	2	0.1	3	0.2	5	0.1
Homicide	177	8.3	59	1.7	202	11.2	73	5.4	511	5.9
Suicide	194	9.1	203	5.9	155	8.6	172	12.7	724	8.3
Undetermined	4	0.2	6	0.2	3	0.2	4	0.3	17	0.2
Total	**375**	**17.6**	**268**	**7.8**	**362**	**20.1**	**252**	**18.6**	**1257**	**14.4**

Note: Rates are per 100,000 population

Table 6.2 Number of Gun-Related Deaths by Gun Type and Manner of Death, 2023

Manner of Death	Handgun	Multiple*	Rifle	Shotgun	Unknown	Total
Accident	3	0	1	1	0	5
Homicide	290	13	19	5	184	511
Suicide	613	1	44	54	12	724
Undetermined	15	0	0	1	1	17
Total	**921**	**14**	**64**	**61**	**197**	**1257**

* 'Multiple' indicates the decedent died of more than one gun; either more than one gun type (e.g. a handgun and a shotgun) or same gun type but multiple weapons (e.g. two handguns)

Figure 6.4 Percentage of Gun-Related Deaths by Sex, 2023

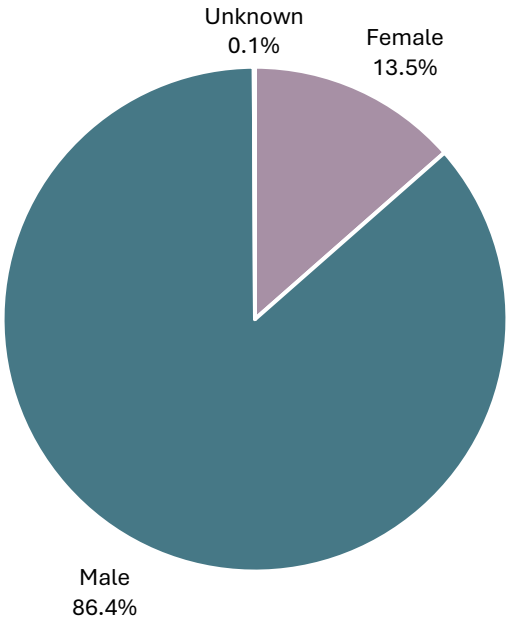
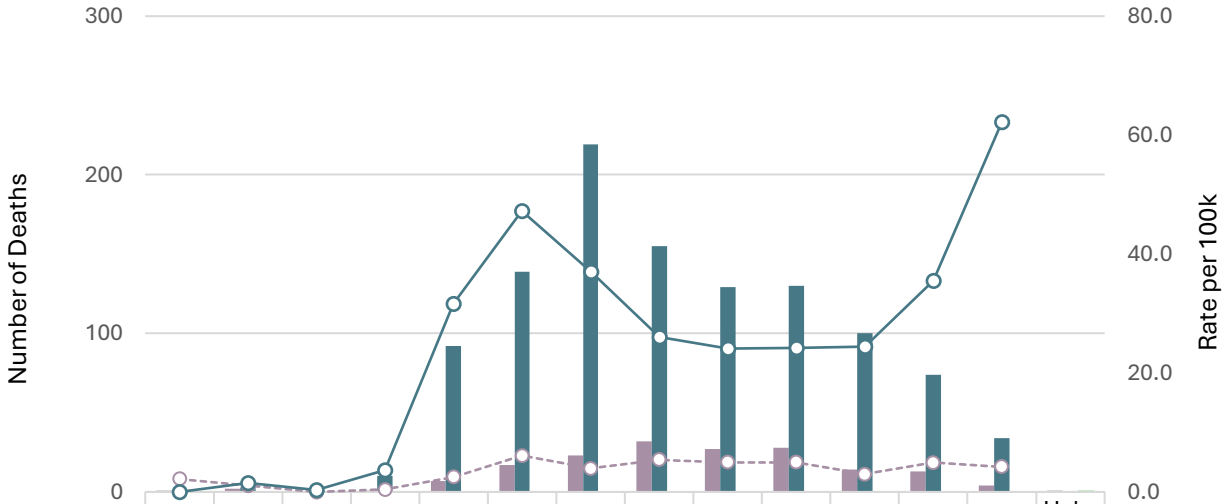


Figure 6.5 Number and Rate of Gun-Related Deaths by Age Group and Sex, 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unknown
Female	1	2	0	1	7	17	23	32	27	28	14	13	4	1
Male	0	3	1	10	92	139	219	155	129	130	100	74	34	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Female Rate	2.2	1.1	0.0	0.4	2.5	6.1	4.0	5.4	5.0	5.0	3.0	4.9	4.2	*
Male Rate	0.0	1.5	0.4	3.7	31.7	47.3	37.0	26.1	24.2	24.2	24.4	35.5	62.2	*

Note: Rates cannot be calculated for 'unknown' categories due to unknown population denominators

Figure 6.6 Percentage of Gun-Related Deaths by Race/Ethnicity, 2023

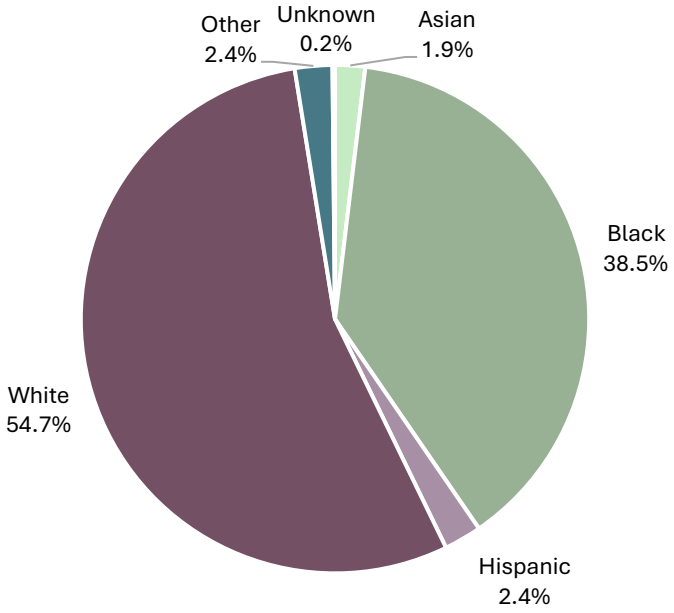
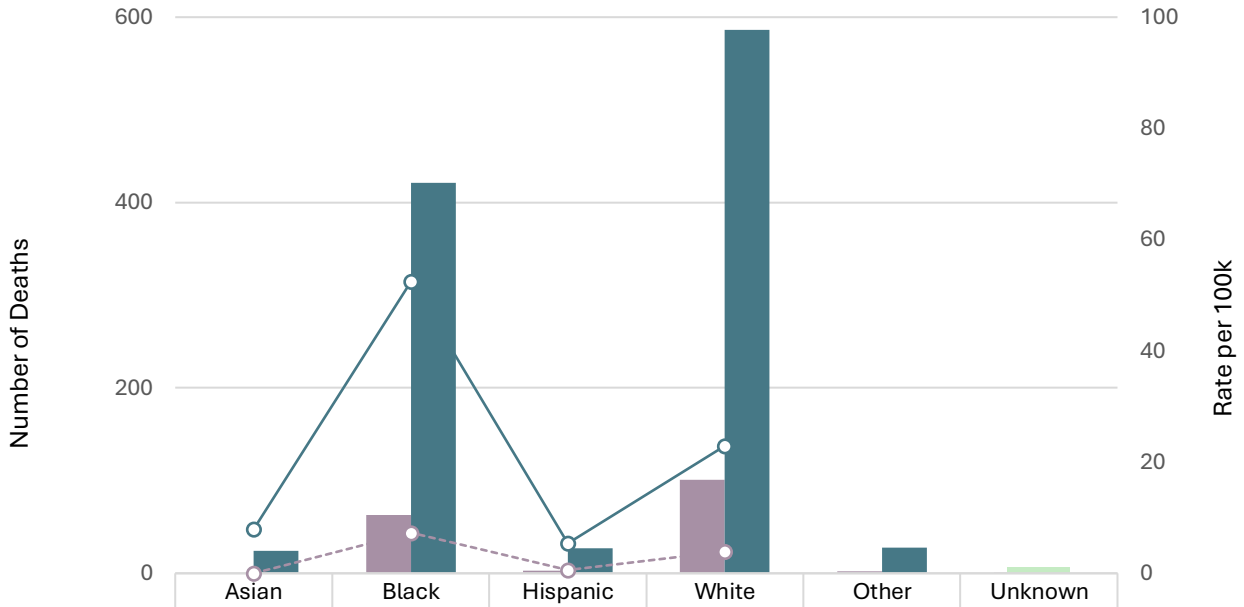


Figure 6.7 Number and Rate of Gun-Related Deaths by Race/Ethnicity and Sex, 2023

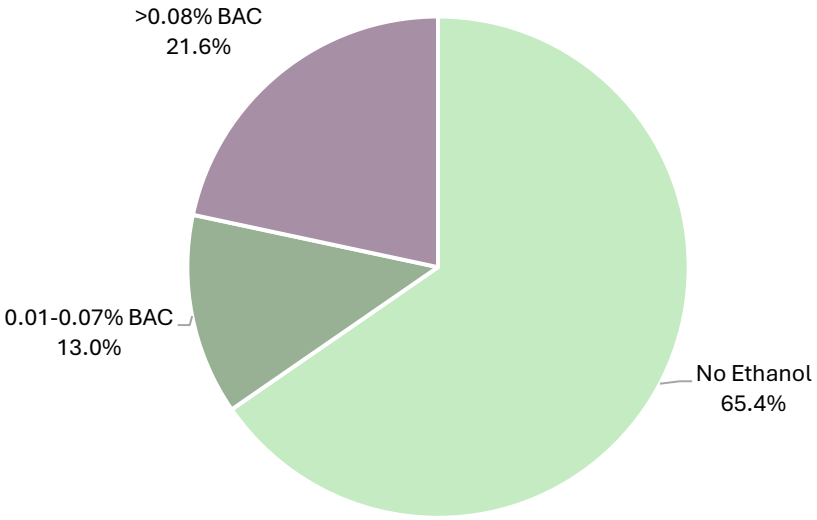


	Asian	Black	Hispanic	White	Other	Unknown
Female	0	63	3	101	2	1
Male	24	421	27	586	28	0
Unknown	0	0	0	0	0	1
Female Rate	0.0	7.3	0.6	3.9	*	*
Male Rate	7.9	52.5	5.4	22.9	*	*

Note: Rates cannot be calculated for 'other' or 'unknown' categories due to unknown population denominators

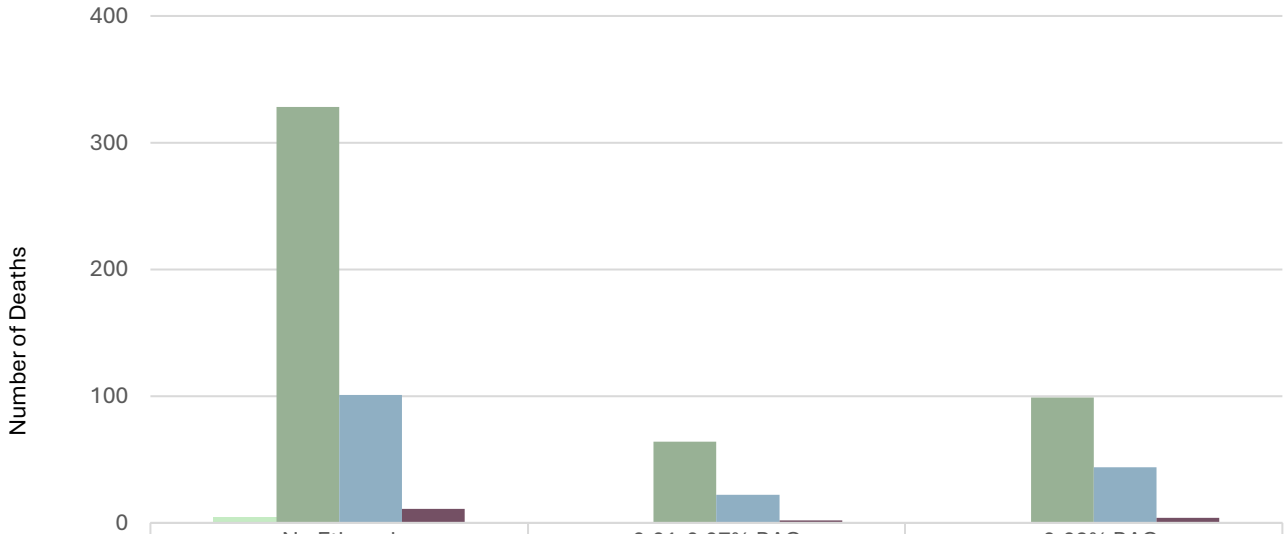
Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution

Figure 6.8 Percentage of Gun-Related Deaths by Ethanol Level (N=679), 2023



Note: Of the 1,257 gun-related deaths, 54.0% (n=679) received toxicology testing

Figure 6.9 Number of Gun-Related Deaths by Alcohol Level and Manner of Death (N=679), 2023



	No Ethanol	0.01-0.07% BAC	>0.08% BAC
Accident	4	0	0
Homicide	328	64	99
Suicide	101	22	44
Undetermined	11	2	4

Note: Of the 1,257 gun-related deaths, 54.0% (n=679) received toxicology testing

Figure 6.10 Number of Gun-Related Deaths by Month of Death, 2023

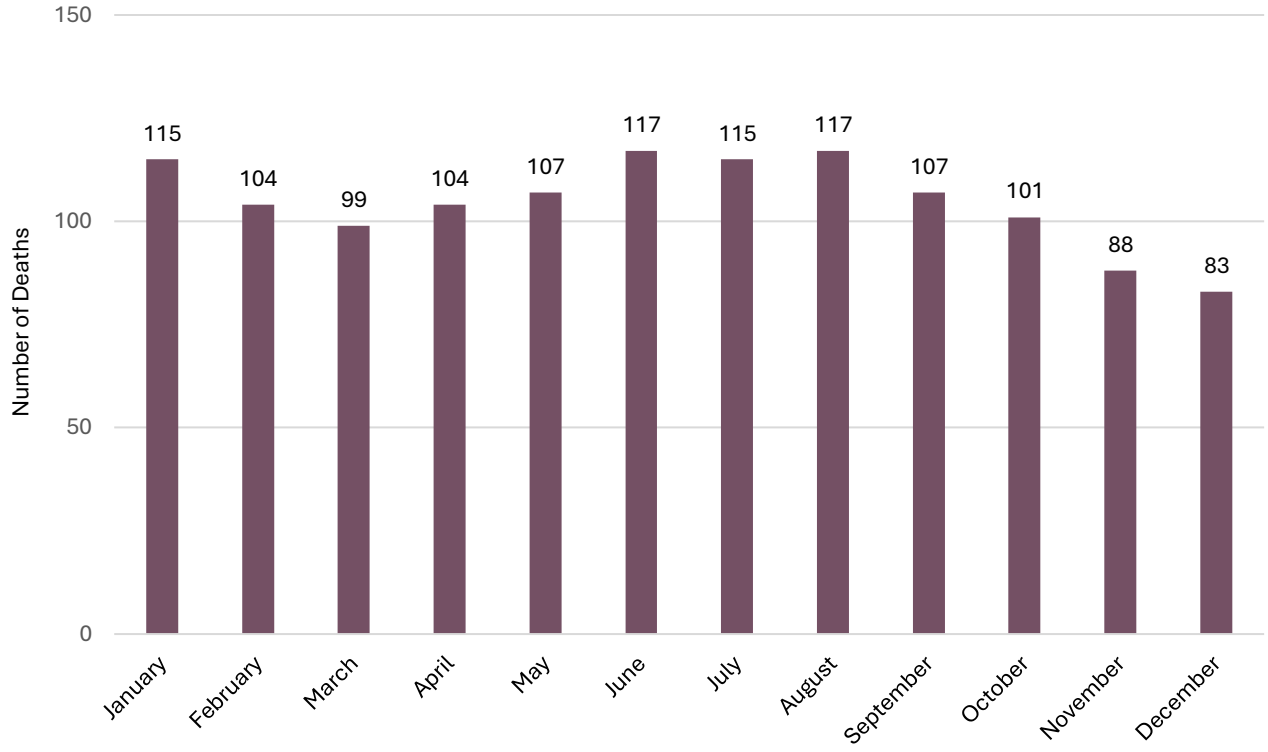


Figure 6.11 Number of Gun-Related Deaths by Day of Week, 2023

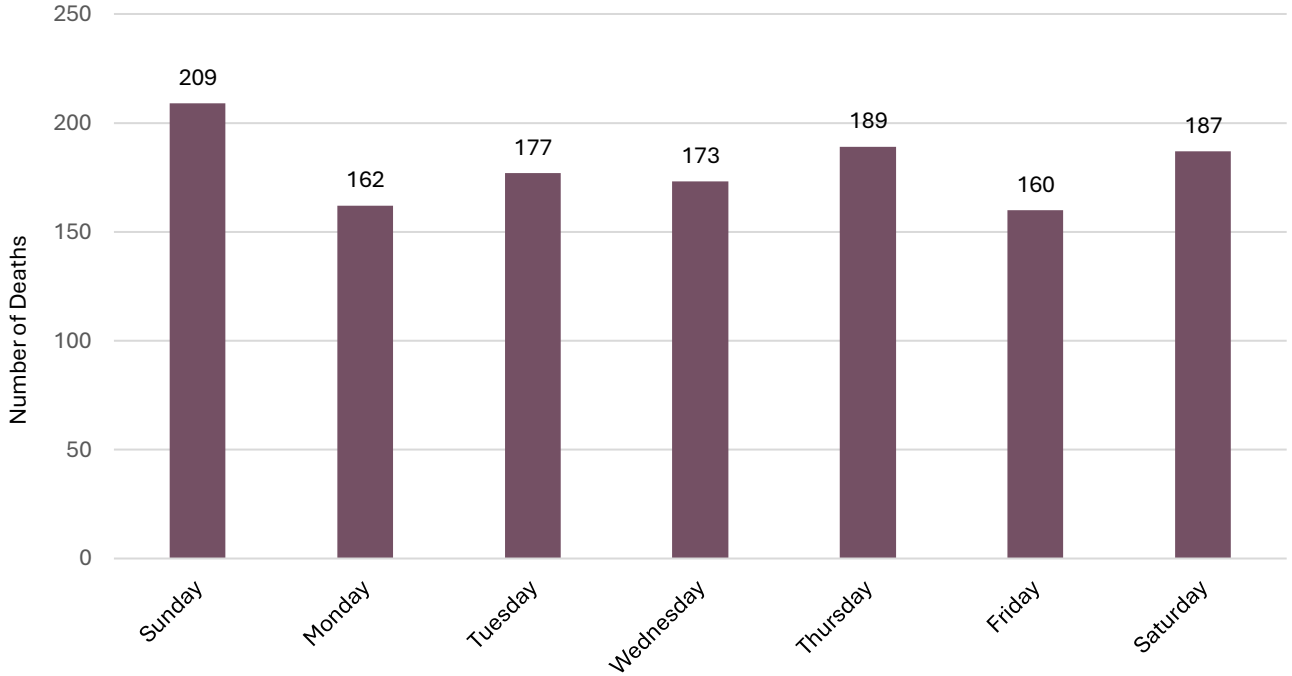


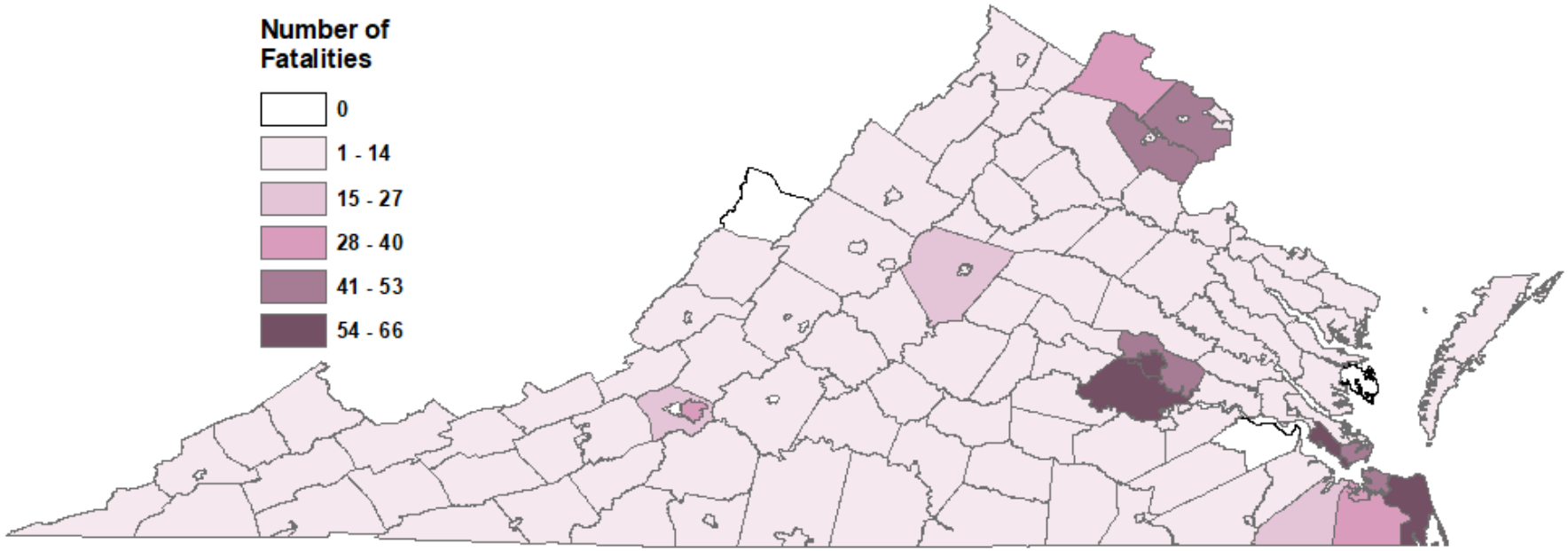
Table 6.3 Number and Rate of Gun-Related Deaths by Locality of Residence, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

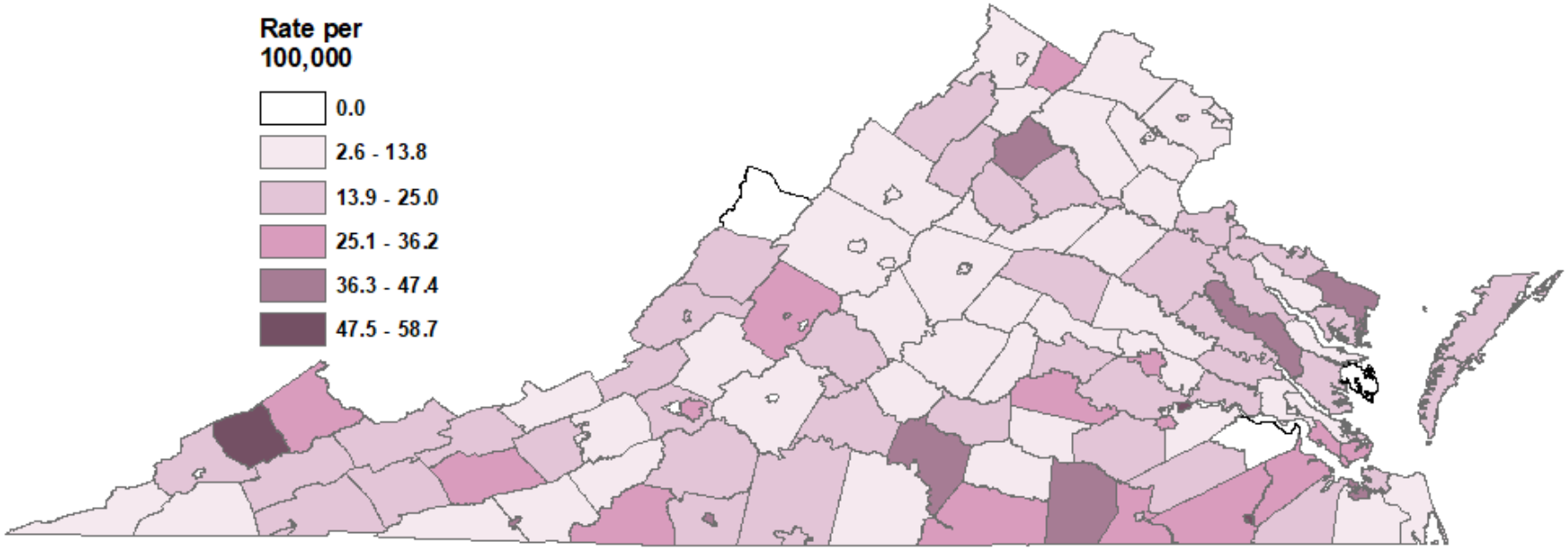
Table 6.4 Number and Rate of Gun-Related Deaths by Locality of Injury, 2023

Please see Excel workbook associated with this report for tables of deaths by locality. (https://www.vdh.virginia.gov/content/uploads/sites/18/2025/07/Tables-for-Addendum-2023.xlsx)

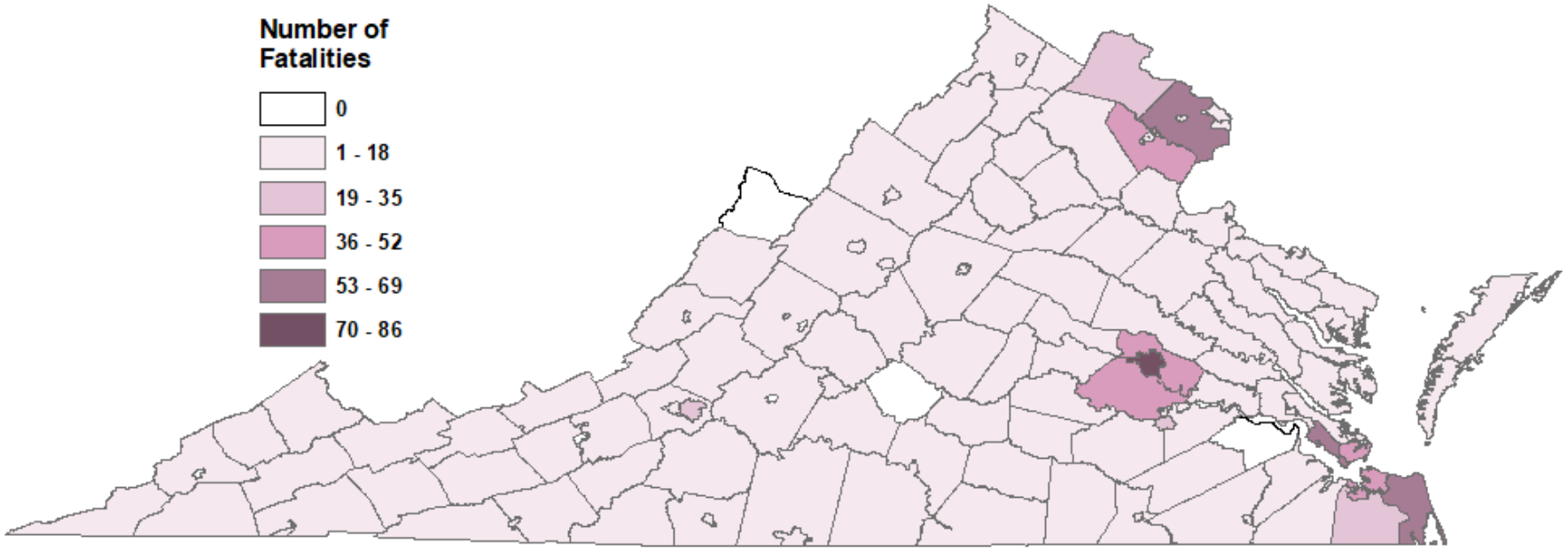
Map 6.1 Number of Gun-Related Deaths by Locality of Residence, 2023



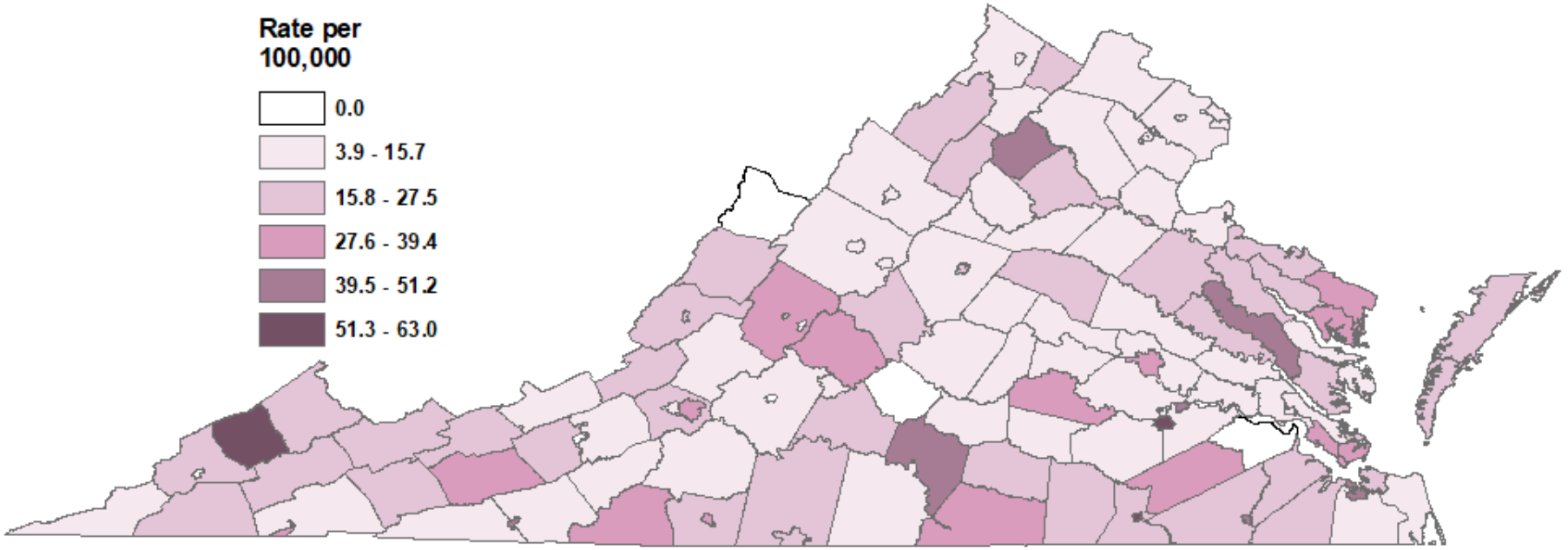
Map 6.2 Rates of Gun-Related Death by Locality of Residence, 2023



Map 6.3 Number of Gun-Related Deaths by Locality of Injury, 2023



Map 6.4 Rate of Gun-Related Deaths by Locality of Injury, 2023

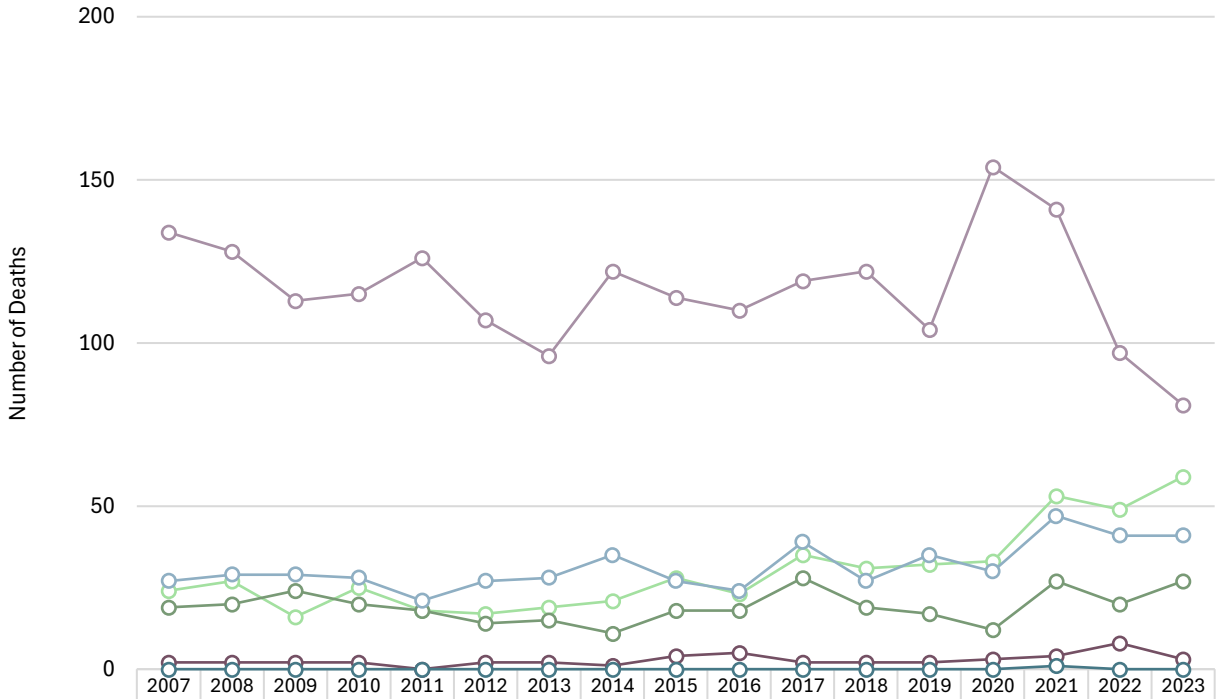


Section 7: In-Custody Deaths (N = 211)

Pursuant to § 32.1-283 of the Code of Virginia, the OCME investigates deaths of all persons in jail, prison, or other correctional institution, or in police custody. The OCME took jurisdiction of 211 in-custody deaths in 2023.

- The majority (38.4%) of in-custody deaths were natural deaths
- The majority of deaths were male (90.0%) and White (52.1%)

Figure 7.1 Number of In-Custody Deaths by Manner and Year of Death, 2007-2023



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Accident	24	27	16	25	18	17	19	21	28	23	35	31	32	33	53	49	59
Homicide	19	20	24	20	18	14	15	11	18	18	28	19	17	12	27	20	27
Natural	134	128	113	115	126	107	96	122	114	110	119	122	104	154	141	97	81
Suicide	27	29	29	28	21	27	28	35	27	24	39	27	35	30	47	41	41
Undetermined	2	2	2	2	0	2	2	1	4	5	2	2	2	3	4	8	3
Undefined for Fetal Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0

Note: Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2023, the OCME accepted seven fetal deaths under OCME jurisdiction of the 3,335 total fetal deaths reported to Vital Records

Figure 7.2 Percentage of In-Custody Deaths by Manner of Death, 2023

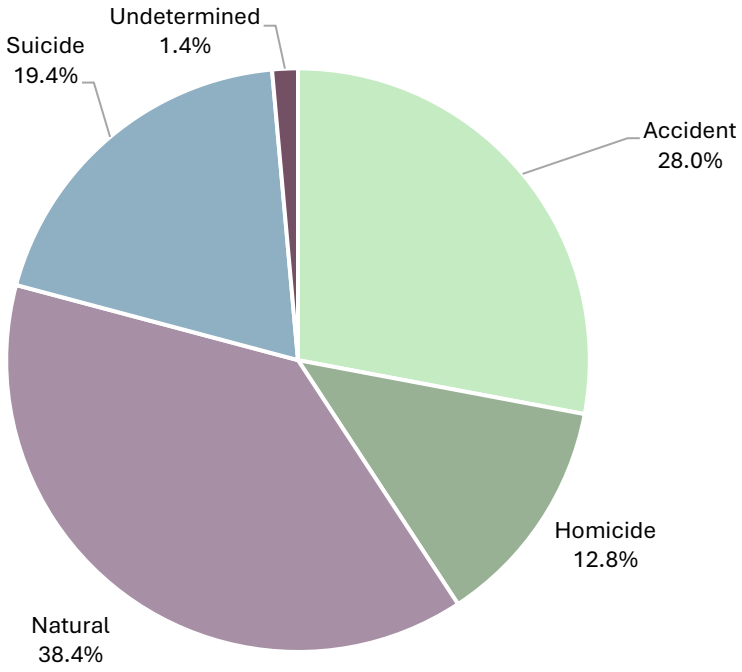


Figure 7.3 Percentage of In-Custody Deaths by Race/Ethnicity, 2023

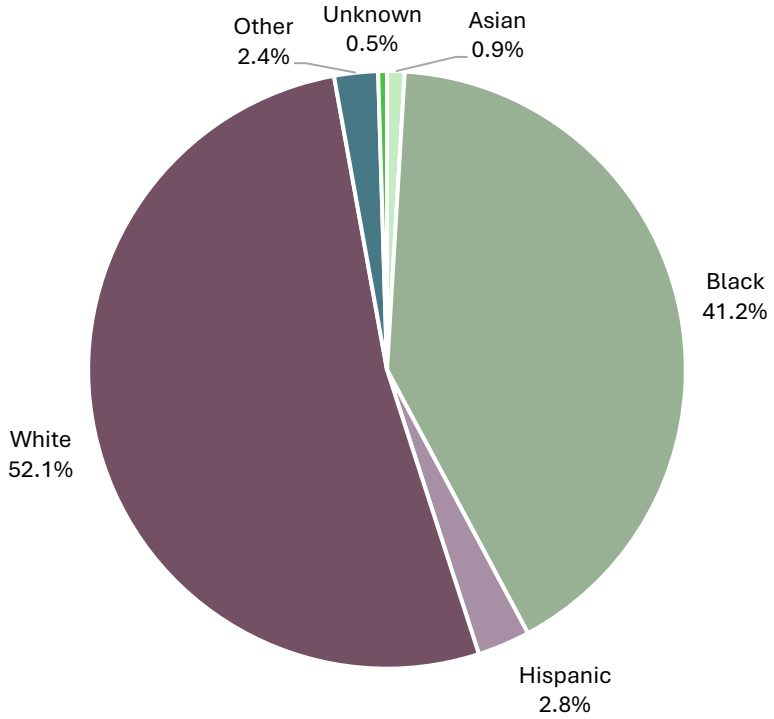
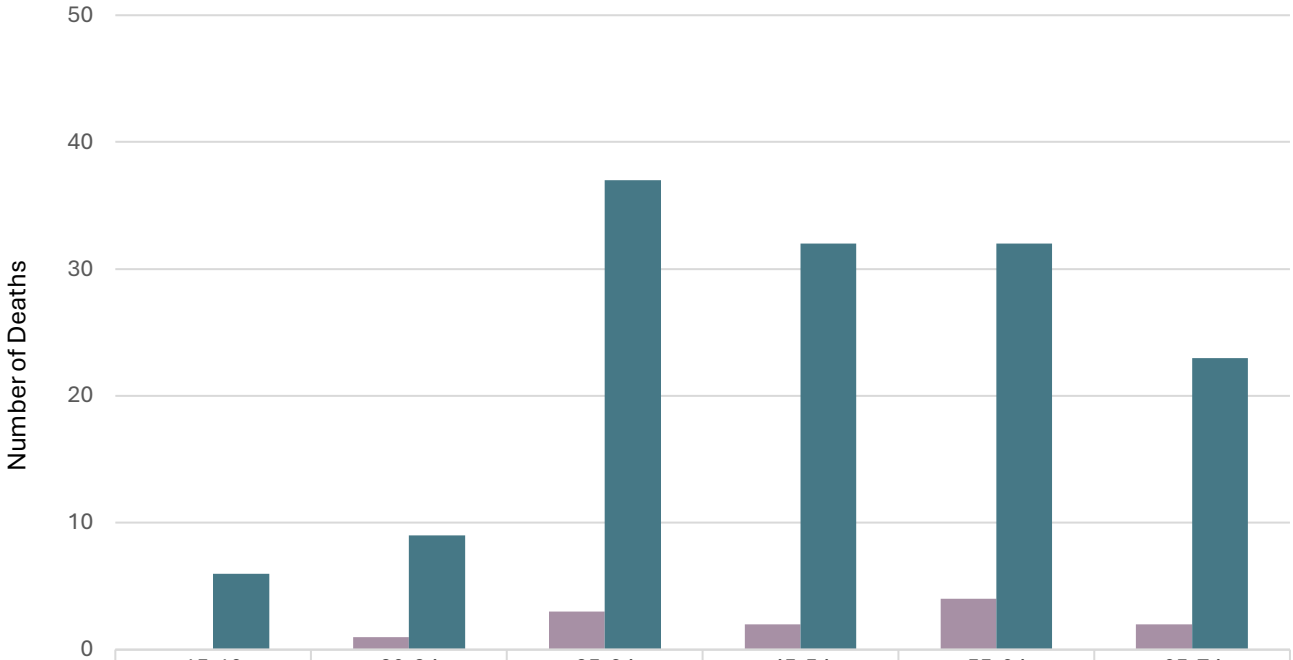
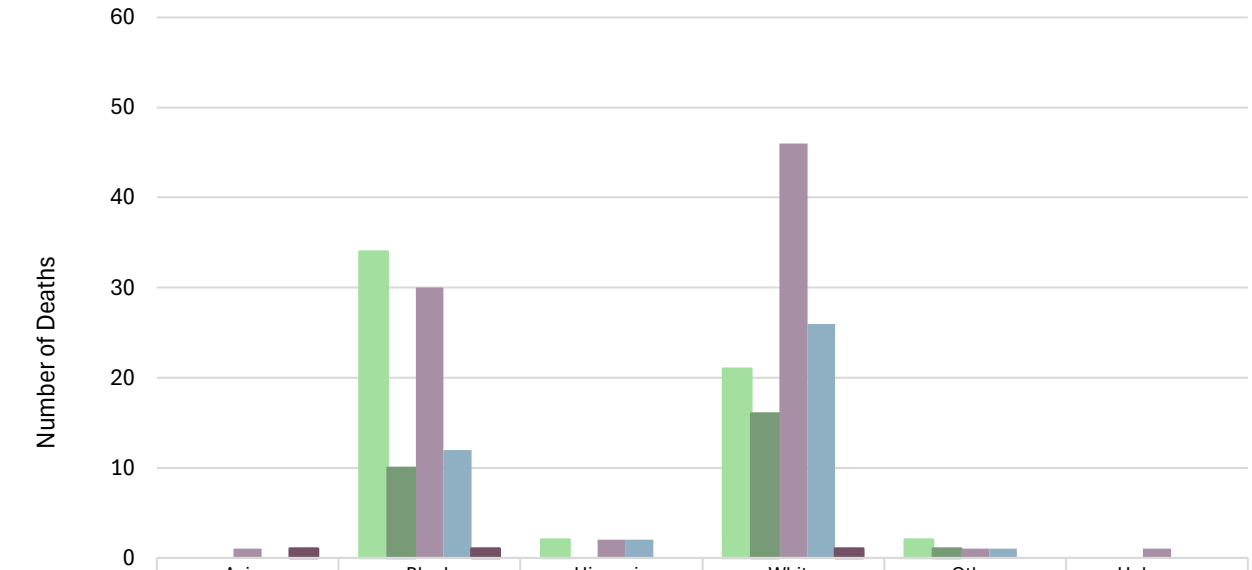


Figure 7.4 Number of In-Custody Deaths by Age Group and Sex, 2023



	15-19	20-24	25-34	45-54	55-64	65-74
Female	0	1	3	2	4	2
Male	6	9	37	32	32	23

Figure 7.5 Number of In-Custody Deaths by Manner and Race/Ethnicity, 2023



	Asian	Black	Hispanic	White	Other	Unknown
Accident	0	34	2	21	2	0
Homicide	0	10	0	16	1	0
Natural	1	30	2	46	1	1
Suicide	0	12	2	26	1	0
Undetermined	1	1	0	1	0	0

Table 7.1 Number of In-Custody Deaths by Cause and Method of Death, 2023

Method of Death	Autopsied	Total Cases
Natural Deaths		
Cardiovascular Diseases/Disorders		
Atherosclerosis	1	3
Acute Coronary Insufficiency	0	1
Atherosclerosis and Hypertension	8	11
Hypertension	5	7
Valvular	1	1
Other Cardiac Disease/Disorder	1	2
Central Nervous System Diseases/Disorders		
CNS Malignancy	1	1
Seizure Disorder	2	2
Vascular Disease	1	3
Gastrointestinal Diseases/Disorders		
Cirrhosis	0	1
GI Hemorrhage	0	1
GI Malignancy	6	10
Hepatitis	1	1
Other GI Disease/Disorder	3	4
Genitourinal Diseases/Disorders		
Genitourinal Malignancy	4	9
Other Genitourinal Disease/Disorder	1	1
Pulmonary Disease/Disorders		
COPD	1	3
Emboli	3	4
Pulmonary Malignancy	5	8
Systemic Diseases/Disorders		
Blood Disorder	0	1
Chronic Alcoholism	0	2
Chronic Drug Abuse	0	1
Diabetes	1	1
Sepsis	1	3
Unnatural Deaths		
Asphyxia		
Hanged	19	19
Mechanical/Positional Asphyxia	1	1
Strangled/Neck Compression	4	4
Plastic Bag Asphyxia	1	1
Drug Use		
Ingested and/or Injected Illicit, Prescription, and/or Other Type of Drug	33	34
Fire		

Thermal and/or Inhalation Injuries	1	1
Jump/Fall		
Jumped/Fell from Height	3	3
Motor Vehicle Collision		
All-Terrain Vehicle	1	
Bicycle	1	1
Car	7	1
Motorcycle	7	8
Pickup Truck	1	8
Sport Utility Vehicle	4	1
Traumatic Injury		4
Cut/Stab Wound	1	1
Gunshot Wound		
Handgun	27	28
Multiple	3	3
Rifle	2	2
Shotgun	0	1
Unknown	8	8
Other Traumatic Injury	1	1
Total In-Custody Deaths	**171**	**211**

Section 8: State Mental Health Deaths (N = 47)

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 47 state mental health resident deaths in 2023.

- The majority of state mental health deaths were natural (85.1%), White (61.7%) and male (66.0%)

Figure 8.1 Percentage of State Mental Health Deaths by Manner, 2023

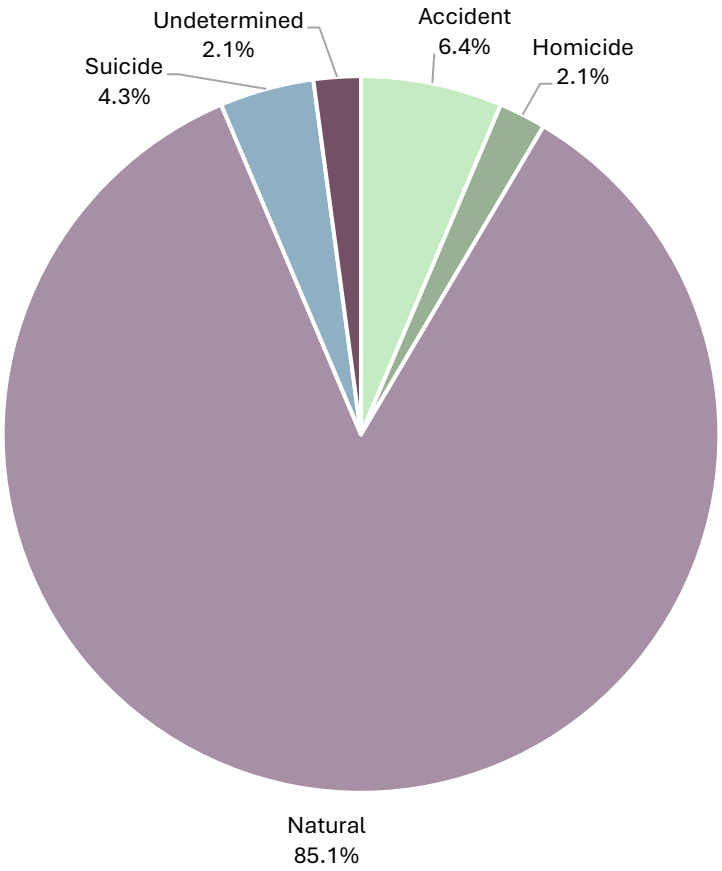


Figure 8.2 Percentage of State Mental Health Deaths by Sex, 2023

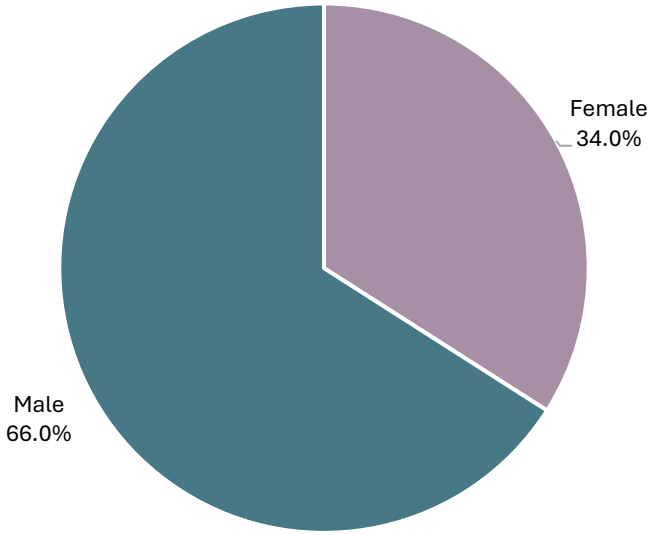
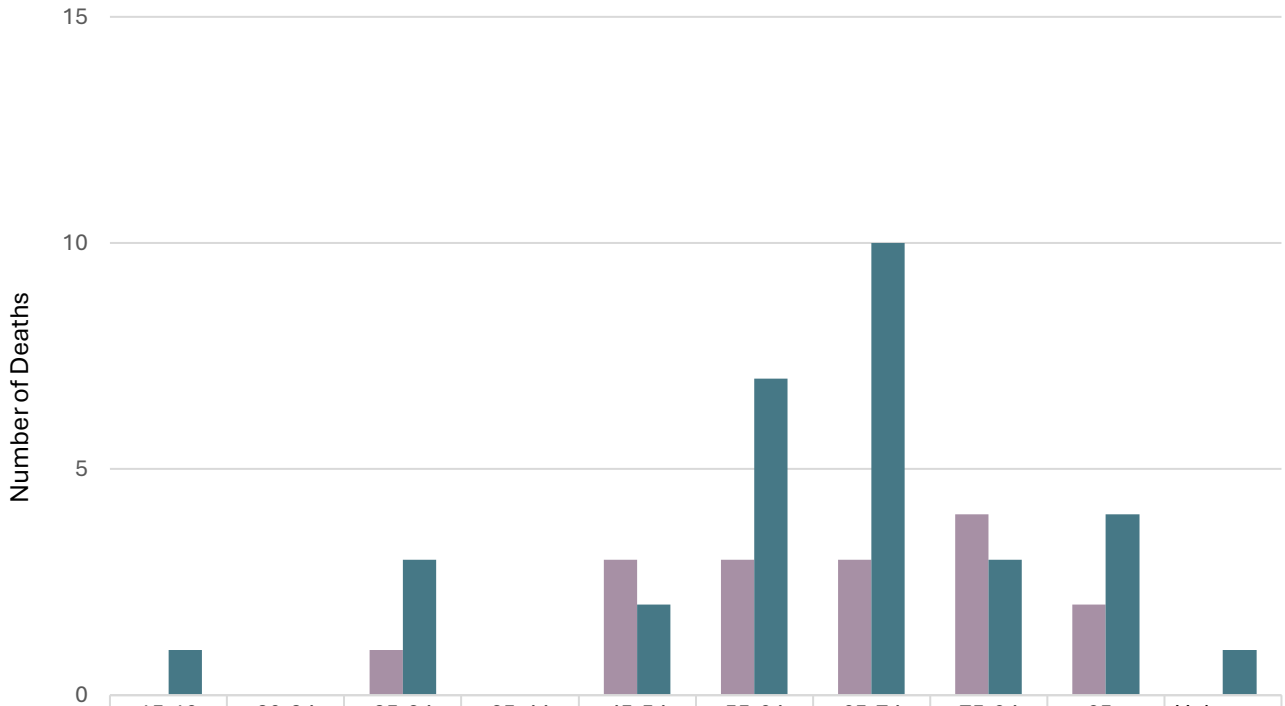


Figure 8.3 Number of State Mental Health Deaths by Age Group and Sex, 2023



	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unknown
Female	0	0	1	0	3	3	3	4	2	0
Male	1	0	3	0	2	7	10	3	4	1

Figure 8.4 Percentage of State Mental Health Deaths Race/Ethnicity, 2023

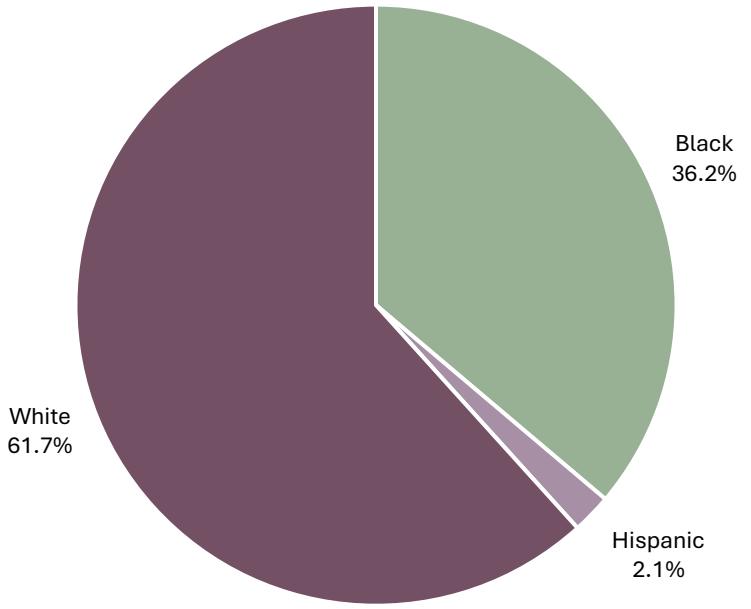


Table 8.1 Number of State Mental Health Deaths by Cause and Method of Death, 2023

Method of Death	Autopsied	Total Cases
Natural Deaths		
Cardiovascular Diseases/Disorders		
Atherosclerosis	0	1
Acute Coronary Insufficiency	0	3
Atherosclerosis and Hypertension	3	5
Cardiac Arrhythmia Not Specified	1	1
Hypertension	1	1
Central Nervous System Diseases/Disorders		
Degenerative Disease	3	4
Gastrointestinal Diseases/Disorders		
GI Malignancy	1	2
Genitourinal Diseases/Disorders		
Genitourinal Malignancy	2	3
Pulmonary Disease/Disorders		
Pneumonia	1	3
Pulmonary Malignancy	0	4
Systemic Diseases/Disorders		
Complications of Dementia (Including Inanition)	2	3
Diabetes	1	1
Metastatic Malignancy Unknown Primary	1	2
Other Infectious Disease	0	5
Other Systemic Disease/Disorder	1	1
Other Natural Disease/Disorder		
Other Natural Disease/Disorder	1	2
Unnatural Deaths		
Asphyxia		
Choked on Food or Foreign Object	0	1
Drowned	0	1
Hanged	1	1
Mechanical/Positional Asphyxia	1	1
Fire		
Thermal and/or Inhalation Injuries	1	1
Jump/Fall		
Jumped/Fell from Height	0	1
Total State Mental Health Deaths	**21**	**47**

Section 9: Retrospective Cases (N = 72)

Retrospective cases are deaths that are unreported to the OCME at the time of death but are discovered upon later review and are therefore investigated by the OCME 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 the Virginia Department of Health's Division of Vital Records, funeral homes, or local medical examiners.

Some of these 72 retrospective deaths may have been deaths that occurred in prior years, but the OCME investigation began in 2023.

- The majority of the OCME's retrospective deaths were accidents (72.2%)
- Falls were the most common unreported type of death (40.3%), nearly all occurring among elder persons

Figure 9.1 Percentage of Retrospective Deaths by Manner of Death, 2023

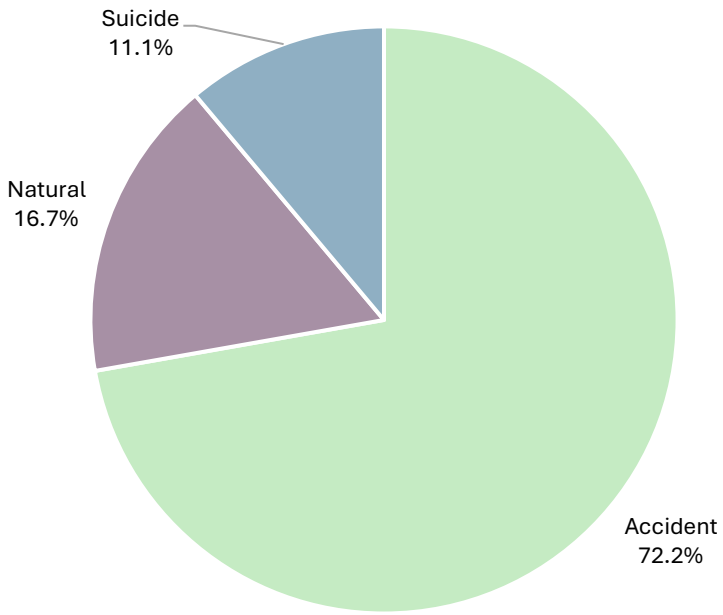


Table 9.1 Number and Percentage of Retrospective Deaths by OCME District, 2023

OCME District	Number	Percent
Central	17	23.6%
Northern	16	22.2%
Tidewater	22	30.6%
Western	17	23.6%
Total	**72**	**100.0%**

Figure 9.2 Percentage of Retrospective Deaths by Race/Ethnicity, 2023

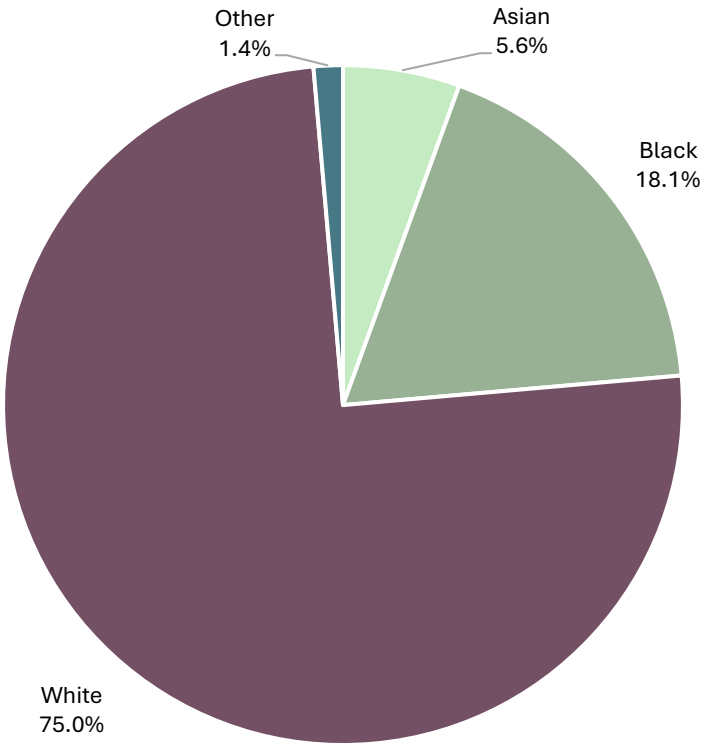
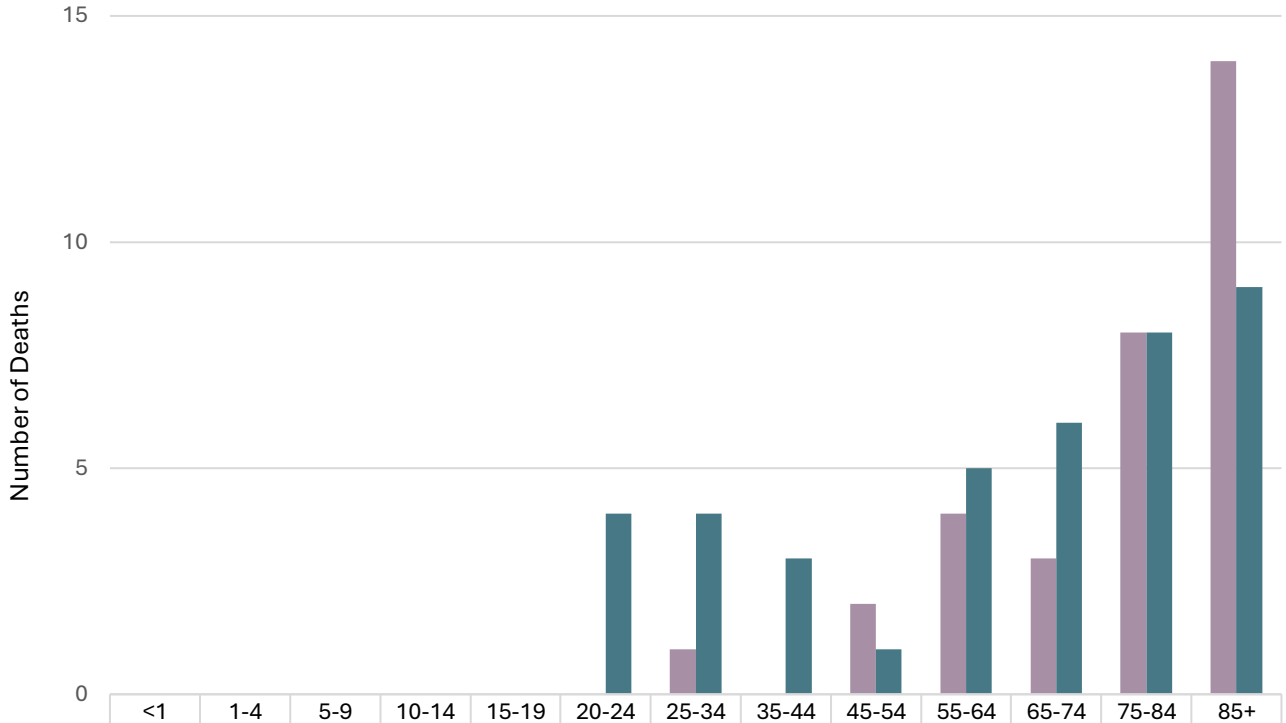


Figure 9.3 Number of Retrospective Deaths by Age Group and Sex, 2023



	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Female	0	0	0	0	0	0	1	0	2	4	3	8	14
Male	0	0	0	0	0	4	4	3	1	5	6	8	9

Table 9.2 Number of Retrospective Deaths by Cause and Method of Death, 2023

Method of Death	Total Cases
Natural Deaths	
Cardiovascular Diseases/Disorders	
Atherosclerosis	5
Acute Coronary Insufficiency	2
Atherosclerosis and Hypertension	2
Cardiomyopathy	1
Hypertension	4
Valvular	1
Central Nervous System Diseases/Disorders	
Degenerative Disease	1
Pulmonary Disease/Disorders	
Emboli	1
Pneumonia	1
Systemic Diseases/Disorders	
Chronic Alcoholism	2
Diabetes	1
Sepsis	1
Unnatural Deaths	
Asphyxia	
Choked on Food or Foreign Object	3
Hanged	3
Drug Use	
Ingested and/or Injected Illicit, Prescription, and/or Other Type of Drug	7
Environmental Exposure	
Exposure to Cold	1
Gunshot Wound	
Gunshot Wound	
Handgun	3
Jump/Fall	
Jumped/Fell from Height	29
Motor Vehicle Collision	
Sport Utility Vehicle	2
Unknown	2
Total State Mental Health Deaths	**72**

Note: the OCME cannot perform an autopsy on retrospective cases because the remains have already been processed, and the final disposition has already been completed

Glossary

Accident – The manner of death used when there is no evidence of intent; an unintentional, 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 and manner of death, collect evidence, and 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 Chief Medical Examiners who are forensic pathologists and Local Medical Examiners.

Children – Individuals 17 years of age and younger.

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% BAC) is legally intoxicated in Virginia.

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

Jurisdiction – Pursuant to the Code of Virginia § 32.1-283, the code details the extent of the Office of the Chief Medical Examiner's authority over deaths:

> *'Upon the death of any person from trauma, injury, violence, poisoning, accident, suicide or homicide, or suddenly when in apparent good health, or when unattended by a physician, or in jail, prison, other correctional institution or in police custody, or who is an individual receiving services in a state hospital or training center operated by the Department of Behavioral Health and Developmental Services, or suddenly as an apparent result of fire, or in any suspicious, unusual or*

unnatural manner, or the sudden death of any infant less than 18 months of age whose death is suspected to be attributable to Sudden Infant Death Syndrome (SIDS), the medical examiner of the county or city in which death occurs shall be notified by the physician in attendance, hospital, law-enforcement officer, funeral director or any other person having knowledge of such death.'

Local Medical Examiner – A physician, nurse practitioner, or physician assistant appointed by the Chief Medical Examiner for a city or county to assist in the investigation of deaths and determine jurisdiction and disposition of cases reported; additionally, to perform external examinations when required. There is a local medical examiner in most counties in Virginia.

Locality 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.

Locality of Injury/Event – The county/city where a person sustained the injury eventually resulting in death.

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

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

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

Motor Vehicle Collision Death – A death involving any motor vehicle. Motor vehicles include automobiles, vans, motorcycles, trucks, aircraft, trains, and many others. 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 a disease alone 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 of the Chief Medical Examiner (OCME) lies within the Virginia Department of Health and is responsible for the investigation of sudden, violent, or unexpected death.

Opiate and Opioid – A class of drugs derived from the opium poppy plant (Papaver somniferum). "Opioid" is often used interchangeably with opiates, and describes chemical/pharmaceutical narcotics that bind to the opiate receptors of the brain and work very similarly to opiates.

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

Sudden Unexpected Infant Death – A diagnosis designated for infants (children 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.

Sudden Infant Death Syndrome –Sudden Infant Death Syndrome (SIDS) is defined as the sudden death of an infant 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 and an unknown manner, an undetermined cause of death and a known manner, or a determined cause of death and an unknown manner.

View - A detailed postmortem external examination of the decedent's body, clothing, and injuries that may have caused or contributed to their death.

Medical Examiner Districts

CENTRAL

Counties of Albemarle, Amelia, Appomattox, Brunswick, Buckingham, Caroline, Charles City, Charlotte, Chesterfield, Cumberland, Dinwiddie, Essex, Fluvanna, Goochland, Greene, Greensville, Halifax, Hanover, Henrico, King and Queen, King George, King William, Lancaster, Louisa, Lunenburg, Mecklenburg, Middlesex, Nelson, New Kent, Northumberland, Nottoway, Powhatan, Prince Edward, Prince George, Richmond, Spotsylvania, Surry, Sussex, and Westmoreland.

Cities of Charlottesville, Colonial Heights, Emporia, Fredericksburg, Hopewell, Petersburg, and Richmond.

NORTHERN

Counties of Arlington, Augusta, Clarke, Culpeper, Fairfax, Fauquier, Frederick, Loudoun, Madison, Orange, Page, Prince William, Rappahannock, Rockingham, Shenandoah, Stafford, and Warren.

Cities of Alexandria, Fairfax, Falls Church, Harrisonburg, Manassas, Manassas Park, Staunton, Waynesboro, and Winchester.

TIDEWATER

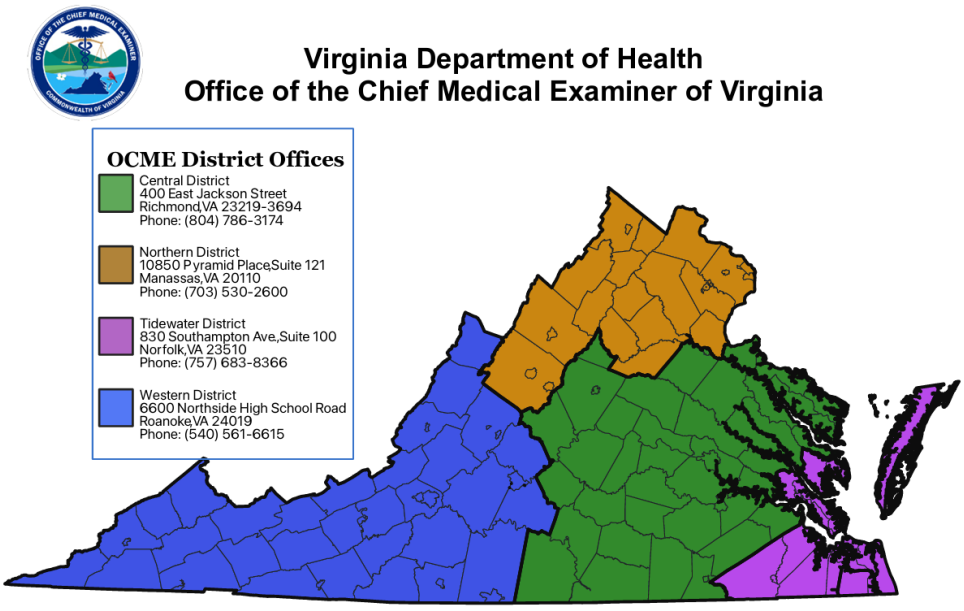
Counties of Accomack, Gloucester, Isle of Wight, James City, Mathews, Northampton, Southampton, and York.

Cities of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg.

WESTERN

Counties of Alleghany, Amherst, Bath, Bedford, Bland, Botetourt, Buchanan, Campbell, Carroll, Craig, Dickenson, Floyd, Franklin, Giles, Grayson, Henry, Highland, Lee, Montgomery, Patrick, Pittsylvania, Pulaski, Roanoke, Rockbridge, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe.

Cities of Bristol, Buena Vista, Covington, Danville, Galax, Lexington, Lynchburg, Martinsville, Norton, Radford, Roanoke, and Salem.



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