Office of the Coroner County of Chester Commonwealth of Pennsylvania



Christina VandePol, M.D. Coroner

2021 Annual Report

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Dedication

To all those who have struggled or are struggling , physically or mentally, because of the ${
m COVID\text{-}19}$ pandemic

Acknowledgments

The work ethic, compassion, and professionalism demonstrated by the staff of the Coroner's Office continued to exemplify the meaning of "essential worker" as they served our community during a second year of an ongoing infectious disease pandemic.

A special thank you to the health care providers of Chester County's hospitals, medical offices, clinics, nursing homes, and home health care and hospice agencies who diligently and graciously provided support to this office so we could carry out our mission despite the stresses of pandemic conditions and staffing shortages.

Coroner's Office Mission Statement

The Chester County Coroner's Office is an independent agency serving the residents and honoring the deceased of the county by investigating the facts and circumstances concerning jurisdictional deaths which have occurred within Chester County in order to determine the cause and manner of death, the identity of the decedent, and to provide notification to the legal next of kin, while exhibiting the highest degree of compassion, professionalism, and integrity.

To achieve this mission, the Coroner's Office will:

- Treat decedents and their personal effects with dignity and respect, and without discrimination.
- Coordinate investigative efforts with law enforcement, hospitals, and other agencies in a professional and courteous manner.
- Conduct investigations and autopsies professionally, scientifically, and conscientiously.
- Complete reports expeditiously with regard for the concerns of family members, the criminal justice system, and public health and safety.
- Provide honest information to family members compassionately and courteously, with sensitivity for cultural differences.
- Collect, compile, and disseminate information regarding deaths in a manner consistent with the laws of the Commonwealth of Pennsylvania.
- Provide medical and scientific testimony as required in court and in deposition.
- Promote and advance through education the science and practice of death investigation.
- Promote and maintain an emotionally and physically healthy and safe working environment for the Coroner's employees, following applicable public health and government policies.
- Expand communication throughout the community at large regarding the functions of the Coroner's Office of the County of Chester.

Letter from the Coroner

As I was preparing this report of my fourth and final year as Chester County Coroner, it struck me how little of the day to day experience of the office can be communicated by statistics. Anyone who's had the privilege of working in the Chester County Coroner's Office knows that every day and night is different and unpredictable. We like to say "this job isn't for everyone" and are proud that we have the skills and temperament to do it professionally and compassionately, to the benefit of every community and every person in Chester County.

We are perhaps the only County row office that works directly with and for people in all walks of life, from the least to the most fortunate, during the most stressful of times. We are proud of our status as an independent agency charged by state law with determining the truth about someone's death, regardless of whether they died homeless, in prison, on a highway, in a nursing home, or in a mansion.

During this second year of the COVID-19 pandemic, the Coroner's Office dealt with two surges, the end of the 2020-2021 winter surge, and the beginning of the 2021-2022 winter surge. New variants of the SARS-CoV-2 virus, inadequate or waning vaccination immunity, and other factors translated into continued high death rates from COVID-19 and its complications.

The year 2021 also saw a resurgence of deaths due to substance abuse, suicide, accidents, and sudden natural deaths. I believe many of these are related in part to anxiety, depression, and lack of access to preventive and behavioral health services during the pandemic.

Data remained an important public service of our office in 2021. Our website https://chesco.org/209/Coroner provided summarized data on a monthly basis for both COVID-19 and other kinds of deaths. The Coroner's Office Facebook page (@ChesCoCoroner) and press releases continued to keep the public informed about COVID-19, deaths in prison, deaths due to weather conditions, and other high-profile cases.

A continued disappointment to this Coroner was the Chester County Commissioners' lack of action concerning the longstanding and well-documented infrastructure needs of the Coroner's Office. Indeed, Chester County Coroners have been advocating for this for several decades now. As of the end of 2021, no concrete action had been taken on proposals or needs assessments performed during my four years in office. Funds for a coroner forensic facility were included in

the 2022 budget but seem intended for more site evaluation. * A related unmet need is for at least one full-time forensic pathologist and additional autopsy technicians. It is my hope that our County will one day recognize the key role the Coroner's Office plays in the public health, public safety, and criminal justice systems and take real action to ensure the Coroner's Office has the resources needed to meet national accreditation standards.

The Coroner's Office continued its biennial practice of organizing a ceremony for our unclaimed veterans at Washington Crossing National Cemetery. On October 28, 2021, nine veterans were laid to rest in a moving ceremony attended by our staff and many veterans' groups. We also had the honor of accompanying the body of Montgomery County Firefighter Tom Royds after his tragic Line of Duty death on July 24, 2021.

As a final note, I would like to offer a few thank yous. It has been an honor to work with the many emergency responders and law enforcement agencies that protect and care for Chester County. I also would like to recognize the health care workers who have taken our calls at all hours to provide information concerning sudden or unexpected deaths. The funeral directors of Chester County have been a stalwart support, particularly during the pandemic, as has the Chester County Medical Society which facilitated communication and preparedness during the pandemic and the imminent closure of two of Chester County's hospitals.

Christina VandePol, M.D., F-ABMDI

Coroner of the County of Chester (2018-2021)

*In May 2022, a County spokesperson provided the following update: "The County has approved a budget of \$14.9 million over three years for the new Coroner's Office facility, and locations for the new premises are currently being evaluated. The County Coroner is apprised of current location options and County facilities staff will continue to work with her office as the project moves forward."

Executive Summary

- A total of 4,466 cases were investigated, including 1,625 death investigations and 2,841 cremation reviews and authorizations.
- For the second year in a row, COVID-19 was the most common cause of death reported to the Coroner's Office.
- Excluding 408 COVID-19 deaths, the number of reported deaths in 2021 still exceeded that of pre-pandemic year 2019 by approximately 9%.
- Jurisdictional deaths included 11 homicides, 260 accidental deaths, and 55 suicides. In 11 cases, the manner of death could not be determined.
- Accidental deaths included 109 drug overdoses, 92 falls, and 30 motor vehicle accidents.
- Full autopsies were performed in 267 jurisdictional deaths. COVID-19 cases were not autopsied unless otherwise suspicious.
- Transports of decedents increased by more than 60% over 2020 because the current temporary morgue and the autopsy sites are in different locations.
- Dr. Christina VandePol chose not to run for re-election in 2021. Chief Deputy Coroner Sophia Garcia-Jackson was elected in November to be the next Chester County Coroner.
- Coroner VandePol achieved national certification as a Fellow of the American Board of Medicolegal Death Investigators, a qualification held by only 10 other persons in Pennsylvania.
- A Forensic Facility Needs Assessment performed by Crime Lab Design in 2020 was updated in early 2021. In late 2021, the 2022 budget included \$2 million in funding for facility planning.
- Continuing a practice of transparency, the Coroner issued 12 press releases, maintained a
 Facebook Page, and provided monthly statistical data and past Annual Reports on the
 Coroner's Office website.
- The cremains of 9 unclaimed veterans were interred with full military honors at the Washington Crossing National Cemetery in October 2021.
- The Coroner approved more than 100 decedent organ and tissue donations to Gift of Life.

Introduction

Description of Chester County and Its Population

The 2020 US Census Bureau count of the population of Chester County was 534,413, a 7.1% increase from 2010. As determined by that Census, Chester County's population was 77.3% White, 8.1% Hispanic or Latino, 5.5% Black or African American, and 6.6% Asian peoples in 2020. Another 6.7% identified as two or more races, or as American Indian/Alaska native (0.3%) or Native Hawaiian/Pacific Islander (0.0%).

According to the US Census Bureau's American Community Survey 5-Year Estimates for 2015-2020, which are the most recent available, 22.7% of residents are under the age of 18, 60.9% are between the ages of 18 and 64, and 16.4% are 65 or older. Females make up 50.7% of the population in Chester County. US Census Bureau actual 2020 numbers for female/male distribution or older adults (65 years or older) were not available at the time of this report.

The Coroner's Office serves the 760 square miles that comprise the geographic area of Chester County. It is bounded by 4 other Pennsylvania counties and 2 other states: Lancaster County to the west, Berks County to the north, Montgomery County to the northeast, Delaware County to the east, New Castle County in the state of Delaware to the southeast and Cecil County in the state of Maryland to the south.

Included within the County of Chester are 57 townships, 15 boroughs, one city (Coatesville), three airports and several colleges and universities.

There were 13,647 persons residing in institutionalized settings in 2020, including 3,072 in skilled nursing/nursing homes, 7,275 in student housing, 554 in adult correctional facilities and 212 in juvenile facilities.

Chester County had five acute care hospitals at the beginning of 2021: Brandywine Hospital, Chester County Hospital, Jennersville Hospital, Paoli Memorial Hospital, and Phoenixville Hospital, with one level-2 trauma center at Paoli Memorial Hospital. There are two veterans' facilities, the Coatesville Veterans Affairs Medical Center (federal) and the Southeast Veterans Center (state facility). Jennersville Hospital closed on 12/31/2021, and Brandywine Hospital closed January 31, 2022. Also located in the County of Chester are multiple hospice

agencies, 75 long term care facilities (nursing homes, assisted living, and congregate living), and over 56 home health care and hospice agencies.

Jurisdiction and State Statutes

The Coroner's Office has jurisdiction for certain categories of deaths which occur in the County of Chester, regardless of whether the decedent was a County resident or non-resident. County residents who die in other counties do not fall under the Coroner's Office jurisdiction, even if the precipitating event for the death occurred in Chester County. Only the Coroner can certify a death that occurred by other than a natural manner.

According to Pennsylvania Statute (16 P.S. § 1218-B "Coroner's Investigation"), the categories of deaths that fall under the Coroner's purview are:

- Sudden death not related to a known medical condition or not certified by a licensed physician
- 2. Deaths occurring under suspicious circumstances including if alcohol, drugs or other toxic compounds may have had a direct bearing on the outcome
- 3. Deaths occurring as a result of violence or trauma, whether apparently homicidal, suicidal or accidental
- 4. Any case where trauma, chemical injury, drug overdose or therapy, or medical treatment directly or indirectly contributed to, aggravated, or precipitated the death
- 5. A perioperative death in which the death is not readily explainable on the basis of prior disease
- 6. Deaths where the body is unidentified or unclaimed
- 7. <u>Deaths known or suspected to be due to a contagious disease and constituting a public hazard</u> (Note: Due to this statute, all known or suspected COVID-19 deaths are required to be reported to the Coroner's Office)
- 8. Deaths occurring in prison or a penal institution or while in custody of police
- 9. A death of an individual whose body is to be cremated, buried at sea, or otherwise disposed of so as to be thereafter unavailable for examination
- 10. Sudden unexplained infant deaths
- 11. A stillbirth (fetal death over 16 weeks' gestation per Pennsylvania law)

The role of the Coroner is to investigate the facts and circumstances concerning such deaths for the purpose of determining the cause and manner of death and whether there is sufficient reason for the Coroner to believe that the death may have resulted from a criminal act or criminal neglect of a person other than the deceased. If the investigation does not provide the necessary information, the coroner may perform an autopsy and/or conduct an inquest.

As part of their investigation, the Coroner must determine the identity of the deceased and notify the next of kin of the death. Per coroner and medical examiner standards and our office policy, a scientific method of identification is required for all homicides and whenever a visual identification is not able possible or is not confirmatory. Currently acceptable scientific methods are fingerprint comparison, dental comparison, and DNA comparison. Occasionally circumstantial data such as tattoos or serial numbers on implanted medical devices are used to determine identity.

Coroner's Office Staff and Facilities

The Coroner's Office staff at the end of 2021 consisted of the Coroner, a Chief Deputy Coroner, a First Deputy Coroner, an Office Manager, nine Deputy Coroners (five full-time and four part-time), four part-time Transporters, one Autopsy Technician, and two temporary part time positions, one administrative and one transporter. All are County employees except the Coroner, who is an elected official. At the end of 2021, the Coroner and four investigative staff members were nationally certified by the American Board of Medicolegal Death Investigators (ABMDI). Under routine circumstances, one or two Deputy Coroners, a Transporter, and a senior investigator were on duty to respond to dispatches 24/7/365 in 2021.

Autopsies, which are ordered by the Coroner, are performed by contracted physicians who are board-certified forensic pathologists.

The Office has two administrative/investigator vehicles used by investigators for scene responses throughout the County, and three transport vehicles, two vans and a Ford F250 truck. No new vehicles were put into service in 2021.

Administrative offices are in the Government Services Building (GSC) at 601 Westtown Road in West Chester (West Goshen Township). In May of 2020, a temporary morgue area (refrigerated body storage), funded by CARES dollars, was constructed in a maintenance

building at the GSC. This was the first-ever County morgue space and continued to be used as such in 2021. The cooler holds up to 12 bodies and an adjacent freezer holds up to three bodies. This body storage space reached capacity on several occasions in 2021.

In 2021 we continued to use an antiquated basement room at Chester County Hospital (CCH) for autopsies, but had to make increasing use of a contract pathology service in Lehigh County because the CCH space cannot accommodate many kinds of cases (bariatric, decomposed, fire deaths, infectious disease cases, multiple fatalities, hazardous substances).

In the first half of 2021, at the request of the County, Crime Labs Design returned to update their 2020 Needs Assessment for a Coroner Office Forensic Facility by assessing two sites. No further action was taken until late 2021, when the 2022 proposed County budget (subsequently approved in early 2022 by the Commissioners) included a \$2 million line item for a Forensic Facility. According to a County spokesperson, the funds are intended to "explore the options of purchasing a dedicated facility, or partnering with an organization that can accommodate and support the required resources" (Rellahan, Daily Local News, 12/12/2021).

Coroner and Staff Functions

The staff members of the Coroner's Office are involved in a wide variety of activities commensurate with the mission of the office. Major activities include responding to and investigating deaths, performing postmortem examinations, certifying the cause and manner of death, and providing information and assistance to families. Investigators, who are familiar with the emotional trauma of an unexpected death, communicate directly with the family as do the Coroner and Chief Deputy Coroner, who are available to review findings with families in order to answer the many questions that accompany a sudden or traumatic loss of life.

In all cases investigated by the Coroner, it is essential that the decedent's identity is established and the next-of-kin is located and notified regarding the death. In certain cases, identification requires additional effort in locating pre-mortem dental, medical, or police records. Another function of the Coroner's Office is identifying the legal next-of-kin and informing them of a death. Some individuals may have died leaving no next-of-kin or next-of-kin cannot be located. The Coroner's Office is frequently assisted by law enforcement in identifying bodies or next of kin. Ensuring that all leads have been exhausted in pursuit of next-of-kin can be a time-

consuming but ultimately rewarding effort. When there is no next-of-kin, the CCCO authorizes cremation to be performed at the expense of the County of Chester, unless the office has been able to arrange a whole body donation. Commonwealth law requires Humanity Gifts Registry (formerly the Anatomic Board) to be notified within 36 hours of any unclaimed body.

Autopsies are performed only at the direction of the Coroner and no other agency or individual can demand or refuse such autopsies. All autopsies are performed by a physician who is a board-certified forensic pathologist. If a postmortem examination is required, various body fluids and tissues for microscopic and toxicological analysis may be examined in addition to the anatomic examination. Photographs are taken during an autopsy. Photographic documentation is essential evidence in those cases where the pathologist or CCCO staff must provide court testimony. The forensic pathologists, Coroner, and investigators may provide testimony in court and at depositions.

Autopsy reports and related data from individual investigations are provided to law enforcement, attorneys, and other agencies including Occupational Safety and Health Administration (OSHA), Federal Aviation Administration, National Transportation Safety Board, the Consumer Product Safety Commission and the Drug Enforcement Agency as required by law and if they have any jurisdictional or legal duties with regard to the death.

Funeral homes that plan on cremating an individual who died in Chester County are required to complete a cremation authorization request and submit a copy of the death certificate to our office. An investigator reviews these documents and if there are no medicolegal questions relating to the death of the individual, the office will issue a cremation authorization. If there are questions relating to the death, a case is opened and the Coroner's staff will investigate the death before issuing a cremation authorization. If the CCCO determines a death was not due to natural causes, a new death certificate is issued after completion of an investigation.

All investigative staff, including the Coroner, Chief Deputy Coroner, Forensic Pathologists, and Deputy Coroners participate in a variety of continuing education activities in accordance with licensing, statutory, and certification requirements. Information is provided to law enforcement, medical personnel, and students on a regular basis on various aspects regarding the role and function of the Coroner's Office. The Coroner's Office supports a well-established

internship program and usually has one or two college or graduate student interns. A description of the program and an application are available on the Coroner website.

The Coroner's Office staff analyzes its data to better understand local mortality, including infant and child deaths, suicide, falls, drug overdoses, alcohol-related deaths, and in 2020-21, COVID-19 deaths.

The public was kept informed about public health and safety issues as well as the activities of the Coroner's Office in 2021 by press releases, up-to-date statistics on the agency website, a social media presence (Facebook @ChesCoCoronerPA), and presentations to schools, senior communities, and other organizations.

Strategic Goals and Objectives

Chester County government developed a new 5-year plan in 2018 to cover the period from 2019 through 2023. The baseline year is 2019. The Coroner's Office identified the following strategic goals and related objectives necessary for the Coroner's Office to continue to provide timely and legally defensible death investigations over that time period:

- Planning for Future Needs
 - The majority of investigators will be certified by the American Board of Medicolegal Death Investigators (ABMDI)
 - o Shifts will be adequately staffed to handle daily caseload without overtime
 - o 100% of bodies will be able to be stored in a modern refrigerated County morgue
 - o The Mass Fatality Plan will be updated and reviewed annually
 - Death certificates will be processed by the Electronic Death Reporting System (EDRS)
- Achieving Accreditation by the International Association of Coroners and Medical Examiners
 - Meet Administrative Standards
 - Meet Investigation Standards
 - o Meet Morgue, Autopsy, and Laboratory Standards
- Improving Communication
 - o Monthly death statistics available on the website within 30 days

- o Annual Report available on the website within 90 days
- 100% increase from 2019 to 2023 in number of public communications and presentations to hospitals, schools, health care providers, criminal justice agencies, seniors, and other community organizations

Death Investigations

Overview

Death investigations are classified, counted, and reported in three different categories: non-jurisdictional, jurisdictional, and cremation authorization. Non-jurisdictional cases are natural deaths which are reported to the Coroner's Office and a decision is made that further investigation by this office is not needed. The decedent's health care provider must be willing and able to certify the death, otherwise it becomes jurisdictional. Jurisdictional cases are deaths that meet the statutory requirements for reporting to the Coroner a decision is made that further investigation by this office is needed to determine the cause and manner of death, and/or the manner of death is not natural.

Pennsylvania's death certificates allow for five manners of death: natural, accidental, suicide, homicide, and undetermined. The manner of death for jurisdictional cases can be natural (e.g. pneumonia due to COVID-19) or non-natural (homicide, suicide, accident, undetermined). Only a Coroner or Medical Examiner can certify a death if the manner is not natural.

In 2021, a total of 1,625 deaths were reported to the Chester County Coroner's Office. The Office also authorized 2,841 cremations (Table 1). Because not all deaths in Chester County are reported to the Coroner, the data in this report cannot be used to calculate overall mortality rates or natural death mortality rates.

COVID-19 deaths continued to comprise a significant proportion of total reported cases (Table 1). Excluding 408 COVID-19 deaths, the number of reported deaths in 2021 exceeded that of pre-pandemic year 2019 by approximately 9% (Figure 1). Excess deaths in the United States during the pandemic have been variously attributed to failure to recognize COVID-19 cases and/or increased mortality from other disease processes. Data from Chester County alone are too small to draw such conclusions.

Full autopsies were once again able to be performed in 2021 due to vaccination of autopsy personnel, improved access to safety equipment, and increased utilization of a private autopsy service in Lehigh County that has a facility meeting CDC standards for infectious disease, bariatric, and decomposed case autopsies. A total of 267 autopsies were performed,

constituting 43.2% of jurisdictional cases (excluding COVID-19 deaths). This was a rebound from 2020 when full autopsies were able to be performed in only 26% of non-COVID jurisdictional cases. Toxicology-only investigations accordingly decreased from 122 in 2020 to 105 in 2021.

Accidental deaths decreased from 267 cases in 2020 to 260 cases in 2021. Suicide deaths increased from 53 in 2020 to 55 in 2021. Homicides increased for a second year in a row, accounting for 11 deaths compared to four in 2020 and two in 2019. The manner of death remained undetermined in 11 cases after full investigation including autopsy. No inquests have yet been conducted on those cases.

Table 1. 2021 Statistical Summary

Reported Cases	1625
Non-jurisdictional Cases	599
Jurisdictional Cases	1026
Natural Causes	1,286
COVID-19	408
Accidental	260
Suicide	55
Homicide	11
Undetermined	11
Non-Human Remains	2
Full Autopsies	267
External Examination Only	24
Toxicology Only	105
Inquests	0
Transports (total)	920
Unidentified Bodies	0
Exhumations	0
Cremation permits issued	2841

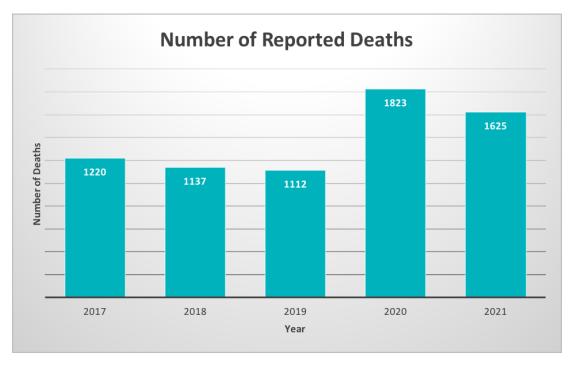


Figure 1 Total Annual Deaths Reported to Coroner's Office 2017-2021

Manner of Death: Natural

Not all natural deaths are reported to this Office, so data in this section reflects only a portion of natural deaths in Chester County. Natural deaths reported to the Office usually involve one or more factors: sudden and unexpected death, lack of a physician able or willing to certify the death, no next of kin, or suspicious circumstances.

In 2021, 1,286 reported deaths were attributed to a natural manner of death. This was a 13.1% decrease from 2020, but high by pre-pandemic standards. The **most common cause of reported natural deaths was COVID-19**, accounting for **408 (31.7%) of natural manner deaths**. Cardiac events accounted for 395 (30.7%) of the reported natural deaths in 2021. Males comprised 239 (60.5%) of reported cardiac deaths. Many natural cardiac deaths are not required to be reported to the Coroner's Office.

Natural deaths included 47 fetal demises and 13 infant deaths, discussed in the Infant and Child Fatalities section below.

Figure 2 shows the age distribution of reported natural deaths for the three-year period from 2019 through 2021. An increased number of natural deaths were reported to the Coroner for adults ages 25-64 over these three years. By contrast, reported deaths due to natural causes in older adults showed a large increase in 2020 followed by a decrease in 2021. The increase in elder deaths in 2020 was largely due to COVID-19. The decrease in 2021 may be due at least in part to availability of COVID-19 vaccines and increased COVID-19 precautions in Chester County's older adults.

Since not all natural deaths are reported to the Coroner's Office, overall mortality rates are not calculated, nor are data adjusted for age, sex, or race.

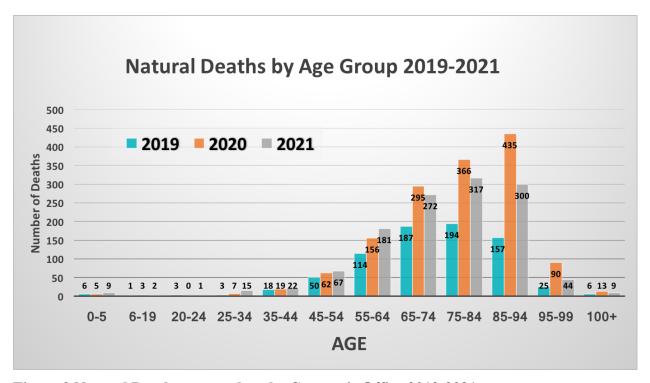


Figure 2 Natural Deaths reported to the Coroner's Office 2019-2021

COVID-19 Deaths

COVID-19 due to infection with the novel coronavirus, SARS-CoV-2, was the most common cause of death reported to the Chester County Coroner for the second year in a row. The COVID-19 mortality rate (deaths per 100,000 population per year) was 97 in 2020 and 66 in 2021. The cumulative COVID-19 mortality rate in Chester County was 222 as of May 21, 2022. For comparison, the cumulative U.S. COVID-19 mortality rate as of May 21, 2022 was 304.13.

(https://coronavirus.jhu.edu/mortality). (2020 US Census Bureau population used for overall Chester County mortality rate calculations.)

COVID-19, SARS-CoV-2, or coronavirus was listed in Part 1 of the death certificate (underlying cause of death) in more than 90% of COVID-19-related deaths, and in Part 2 (contributing condition) in the remaining cases. The Coroner's Office obtained evidence of a positive COVID test in 407/408 cases. In one case, the patient's physician reported the patient had COVID-19 a month earlier and recorded the condition in Part 2 of the death certificate.

COVID-19 Deaths by Year and Month

In 2021, the highest number of deaths occurred in the first few months of the year due to the continuing winter of 2020-2021 surge. After a spring plateau, deaths decreased over the summer months, then gradually increased in September through December (Figure 3).

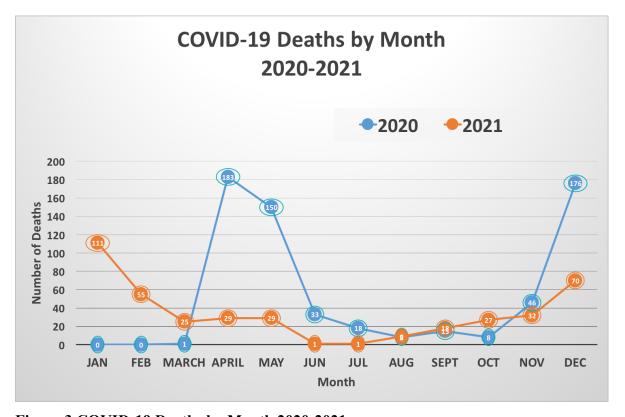


Figure 3 COVID-19 Deaths by Month 2020-2021

COVID-19 Deaths by Age and Sex

As in 2020, most COVID-19 deaths were in persons 65 and older, but the number of deaths in this age group declined compared to 2020. By contrast, **COVID-19 deaths increased** in persons aged 45-64 years (Figure 4).

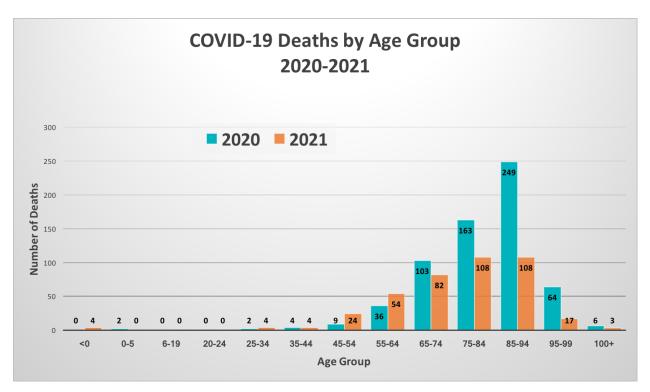


Figure 4 COVID-19 Deaths by Age Group 2020-2021

For both 2020 and 2021, the mortality rate (deaths per 100,000 population) was higher for older males than older females (Table 2).

Table 2 COVID-19 Mortality 65+

Sex	Population*	Deaths 2020	MR	Deaths 2021	MR
Females 65+	48,683	302	59.8	157	32.2
Males 65+	39,668	316	70.0	161	40.6

MR = Estimated Mortality Rate (Deaths per 100,000 Population); *Population data from PA Vital Statistics for 2019 as 2020 US Census Bureau Data not yet available by age and sex.

COVID-19 Deaths by Race and Ethnicity

In 2021, 355/408 (87.0%) persons who died due to COVID-19 were white, 29/408 (7.1%) percent were Black or African-American, 6/408 (1.5%) were Asian (all ethnicities), 17/408 (4.2%) percent were of Hispanic/LatinX ethnicity, and 1/408 (0.25%) were of other race or ethnicity.

Figure 5 shows the mortality rate (number of COVID-19 deaths per 100,000 population) in Chester County by year for White, Black, Asian, and Hispanic/LatinX race or ethnicity. These data are not age-standardized. **Black or African-American residents had a higher mortality rate than other racial or ethnic groups in both years,** but especially in 2020. The COVID-19 mortality rate declined for White, Black, and Asian populations in 2021, but increased slightly in the Hispanic/LatinX population.

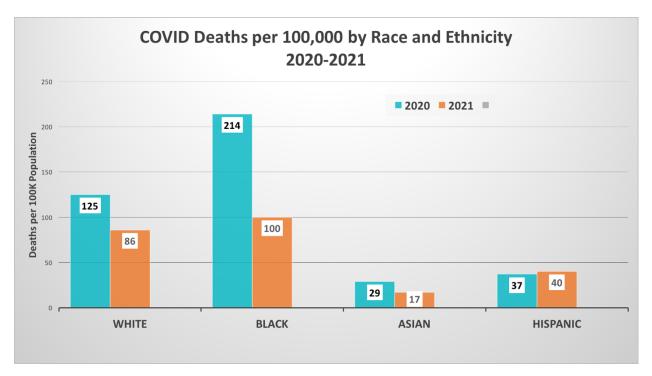


Figure 5 COVID-19 Mortality Rate by Race/Ethnicity

COVID-19 Mortality by Vaccination Status

COVID-19 vaccines became available in late 2020, and boosters (a 3rd vaccine for Moderna and Pfizer vaccine recipients and a 2nd vaccine for Johnson & Johnson vaccine recipients) became available in September 2021. As of December 27, 2021, the Chester County

Health Department (CCHD) reported that 293,842 (75%) persons in the adult (>19 years) population had been fully vaccinated (https://www.chesco.org/4376/Coronavirus-COVID-19). Using that population data, mortality was calculated for fully vaccinated and non-vaccinated adults for December 2021 (Figure 6). The number of deaths used in the calculation was that reported to the CCCO for each week. Combining the 4 weeks of data yielded average mortality rates for December 2021 of 14.5 and 39.0 for the fully-vaccinated and unvaccinated populations, respectively. These data are not age-adjusted.

In Figure 6, "Fully Vaxed" are persons who had received two shots of Moderna or Pfizer or one shot of Johnson & Johnson anytime during 2021, with or without booster shots (2021 CDC Definition). "No Vax" are persons who did not meet the definition of "Fully Vaxed."

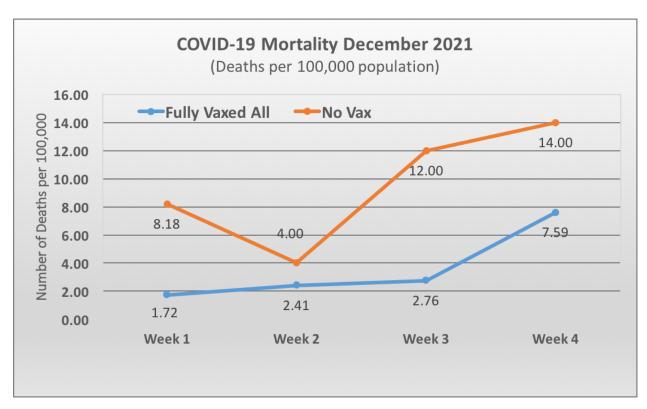


Figure 6 COVID-19 Mortality by Vaccination Status - December 2021

The mortality rate was higher each week and for the entire month of December for the unvaccinated population. These data are consistent with national data from the Center for Disease Control and Prevention (Johnson, 2022:

DOI:http://dx.doi.org/10.15585/mmwr.mm7104e2)

Manner of Death: Homicide

The Coroner classifies a death as a homicide if the death results from injuries inflicted by another person. In this context, the word homicide does not necessarily indicate criminal intent. The prosecuting attorney determines whether and what kind of charges will be filed against the person inflicting the death. Coroners are responsible for death investigation when a homicide victim dies in their county, regardless of where the injury originally occurred.

In 2021, the Coroner classified 11 deaths as homicides. This was an increase from 2019 (two homicides) and 2020 (four homicides) but the same as in 2018 (11 homicides). Note that some deaths classified as undetermined manner in 2021 may have been homicides; they are not included here.

The 11 homicide victims ranged in age from 8 to 53. Seven were male and four were female. Six were African-American, three Southeast Asian, one Hispanic (Brazilian), and one Caucasian. All but two of the homicides were by firearm. Ten of the victims sustained their fatal injury or injuries in Chester County and one in Montgomery County. Because the latter died in a Chester County hospital, the death investigation fell within the jurisdiction of the Chester County Coroner.

All four females were victims of domestic violence. Two died of gunshot wounds, one of sharp force injuries (stabbing), and one of other injuries. All seven males died of gunshot wounds. Two were children (ages 8 and 15) killed by their father before his death by suicide.

Information about each of the 11 homicides has been published in the media. The following names, ages, and causes of death are therefore already in the public domain.

Rahatt Diamond, 23, gunshot wound to head

Adya Kulkarni, (aka Arti Madhusudan), 47, gunshot wound to head

Shubham Deepak Kulkarni, 15, gunshot wound to head

Sharvil Deepak Kulkarni, 8, gunshot wound to head

Deborah Evangelista Brandao, 33, sharp force injuries

Darryl Anthony Perry Jr, 18, gunshot wound to head

Tariq Dupree Scott, 22, multiple gunshot wounds

Kimberly Hope Harris, 53, multiple gunshot wounds of the head Jordan Lonnie Foster, 22, multiple gunshot wounds to head De'Jar L. Jones Sr, 27, gunshot wound to chest Annabel Rose Meenan, 21, other

Manner of Death: Accidental

The Coroner certified 260 deaths as accidental in 2021 (Figure 7). As in previous years, the most common cause was accidental drug overdose. Falls, primarily in the elderly, were the next most common cause of accidental death, but decreased from 107 in 2020 to 92 in 2021. Motor vehicle collision was the third most common cause of accidental death (11.5%).

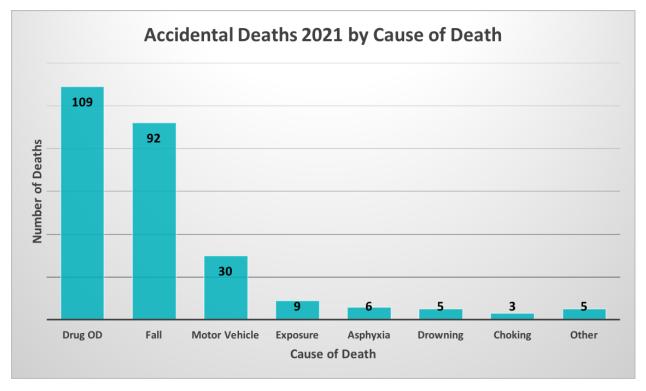


Figure 7 Accidental Deaths in Chester County in 2021

Accidental Drug Overdose Deaths

The number of accidental drug overdose deaths was 109, almost unchanged from the 108 accidental drug overdoses in 2020.

As in past years, males (70.6% of cases) were disproportionately represented in drug overdose death statistics and the majority (72.5%) of deaths were in Whites.

The age distribution continued to shift to older age groups in 2021 (Figure 8.) There were fewer deaths in those ages 25-54 and more deaths in the 55-64 and 65+ age groups. There was also an increase in the 18-24 age group. The Coroner's Office does not have adequate data to analyze the reason for these shifts. Possible contributing factors include aging of the population with substance abuse disorder and factors related to the COVID-19 pandemic.

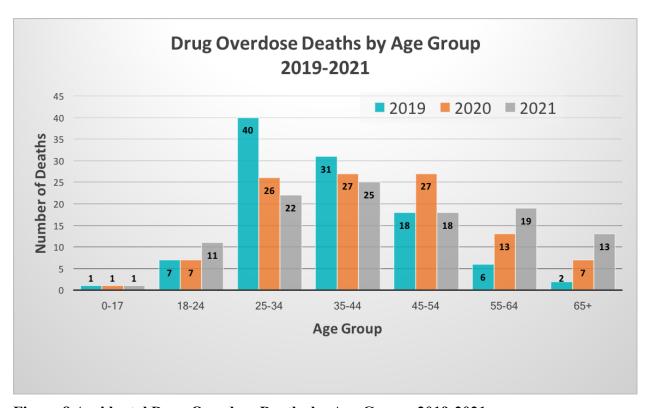


Figure 8 Accidental Drug Overdose Deaths by Age Group: 2019-2021

Extensive forensic toxicological testing is performed on all suspected drug overdose deaths. This allows confirmation of the cause of death as well as identification of trends in illicit and prescription drug abuse. Figure 9 shows the top ten drugs found on toxicological testing in 2021. In most fatal drug deaths, multiple drugs were present. **Fentanyl remained the most common drug and was present in 66 (60.6%) of accidental drug overdose deaths** compared to 74% in 2020. Cocaine was found in 26 (23.9%) of overdose deaths, followed closely by methamphetamine (21.1%) and xylazine (20.2%). Xylazine, a large animal sedative, continued to

be a common finding in Chester County. Alcohol was present in 12 (11.0%) cases, in combination with other drugs in nine deaths, and on its own (acute alcohol poisoning or intoxication) in three deaths. Prescription drugs including oxymorphone and alprazolam were in the top ten drugs. Benzodiazepines as a category (including alprazolam) were found in 15.9% of deaths, always in combination with other drugs (data not shown).

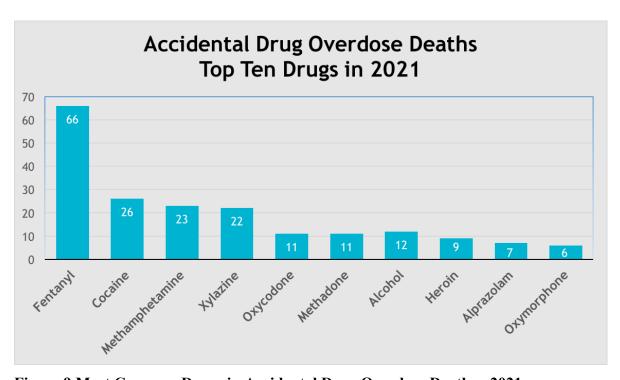


Figure 9 Most Common Drugs in Accidental Drug Overdose Deaths - 2021

The Chester County Coroner's Office shares its data and insights regarding overdose deaths with a number of agencies, including the District Attorney's office, the Chester County Overdose Prevention Task Force, the Pennsylvania Department of Health, and Overdosefreepa.pitt.edu. The latter organization aggregates and analyzes data for most Pennsylvania counties, although data may lag behind that on the CCCO website.

Deaths due to Falls

There were 92 fall-related deaths in 2021 accounting for 35.4% of accidental deaths. This was a **decrease of 14.0%** from the 107 fall-related deaths that occurred in 2020. Most (92.4%) of these deaths were in those age 65 years or older. Falls were sometimes a direct cause of death,

such as when they resulted in head injuries. Falls were also often an indirect cause of death. For example, a fall may have resulted in a fracture that required surgery with the subsequent hospital course including complications such as pneumonia or sepsis.

Fall-related deaths are almost certainly underreported. Very often the role of a fracture in the death of an elderly person is not reported to the Coroner's Office by medical personnel who may attribute the death entirely to natural causes. Review of death certificates during cremation authorizations identifies some of these cases, but only if a fall or fracture has been entered in the cause of death section. Occasionally the Pennsylvania Vital Statistics division of the PA Department of Health contacts the Coroner's Office and requests a recertification for non-natural deaths that were not cremations.

Contacting the Coroner's Office to report a death involves extra time and effort on the part of medical personnel and impacts ratings for long-term care facilities. Some county coroners in Pennsylvania require long-term care facilities to report all deaths. Such a policy should be considered in Chester County in order to provide independent oversight of institutional deaths and minimize underreporting of non-natural deaths.

Motor Vehicle Collisions

Motor vehicle collisions accounted for the third largest number of accidental deaths, 30/260 (11.5%), similar to 2020. Decedents were driver/operators in the majority of cases (22/30).

Seventeen of the 22 deceased drivers had toxicological testing performed. Testing was not performed in the four other drivers due to time elapsed since the accident. Seven (41.2%) of the 17 tested drivers were positive for blood alcohol. All but one were above the legal limit of 0.08. Four drivers tested positive for marijuana and/or other drugs, some in combination with alcohol.

Other Causes of Accidental Death

Exposure (hypothermia) was a cause of death in nine persons, while asphyxia, drowning, and choking were a cause of death in six, five, and three persons, respectively (Figure 7).

Accidental death was due to other causes in five persons.

Manner of Death: Suicide

Suicides are those deaths caused by self-inflicted injuries with evidence of intent to end one's life. Evidence of intent can include explicit expression such as a suicide note or verbal threat, or an act constituting implicit intent, such as deliberately placing a gun to one's head or rigging a vehicle's exhaust.

In 2021, there were 55 suicide deaths, compared with 53 in 2020 and 57 in 2019 (Figure 10). Individuals who died by suicide ranged in age from 14 to 88 years old. The majority (84%) were male. Two were known to be veterans.

Suicide deaths are among the most difficult and traumatic cases investigated by the Coroner's Office. The occurrence of suicides in teens and young adults was a particular cause for concern in 2021. While variously attributed to the stress of the pandemic and lack of adequate mental health care, in most instances a particular precipitating event cannot be identified in individual cases.

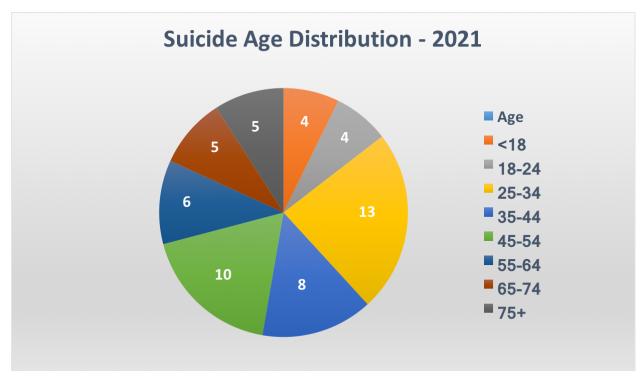


Figure 10 Suicide Age Distribution 2021

The cause of death is shown in Figure 11. As in previous years, firearms were the most common and hanging the second most common category of suicide.

Public health studies indicate that suicide deaths are greatly underestimated because of high evidentiary standards for suicide, lack of investigational resources in coroner and medical examiner offices, and stigma. It is particularly difficult to determine manner in some drug overdose deaths. Of the 117 Chester County drug overdose deaths in 2021, convincing evidence of suicidal intent was present in 8 (7%). All others were classified as accidental in manner, as is the default practice by most coroners and medical examiners at the current time.

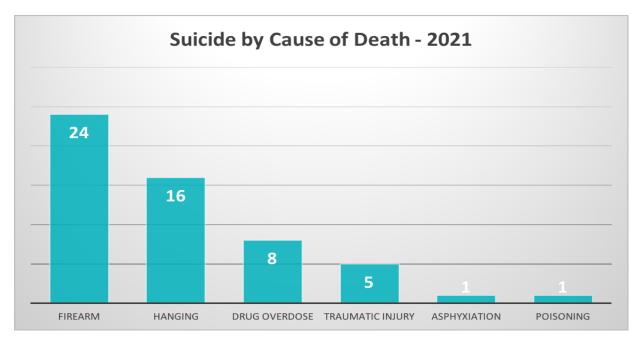


Figure 11 Suicide by Cause of Death 2021

More accurate and complete classification of suicide deaths would better inform prevention efforts. A psychological autopsy is a possible tool to better assess context and triggers for suicide deaths. In 2021 the Chester County Coroner's Office held its **first-ever staff training seminar with a licensed professional counselor** with extensive experience with suicide education and prevention.

Manner of Death: Undetermined

When extensive investigation, autopsy, and additional testing do not provide enough evidence for the Coroner to consider one manner of death more likely than any of the others, the manner is certified as undetermined. In 2021, the manner of death was certified as undetermined

in 11 cases (compared with 16 in 2020). The <u>cause</u> of death was determined in all but two cases where only decomposed or skeletal remains could be examined.

The possibility of homicide could not be eliminated in six of the 11 cases. In 2021, the Coroner proposed to conduct Coroner's Inquests for three such cases that involved sudden deaths due to drugs or trauma. Inquests were ultimately not conducted on these cases in 2021 due to COVID-19-related court delays and the District Attorney Office's objection to conducting inquests on these deaths. As of the end of 2021, the Coroner's Office was unaware of charges being filed or planned in any of these deaths.

Undetermined cases are periodically reviewed and reclassified if new information or analysis of existing evidence becomes available. Inquests, as provided for in state law, should be employed when the manner of death remains undetermined and law enforcement investigations remain open with no charges filed for a year or more after the death.

Infant and Child Fatalities

The Coroner is a member of the Chester County Child Fatality Review Committee and the Coroner or Chief Deputy Coroner regularly participates on the Committee. We report on child deaths that occur within the County, regardless of residence of the decedent. Information on these deaths goes to the Center for Disease Control and Prevention (CDC), and contributes to national mortality statistics.

The Commonwealth of Pennsylvania categorizes anyone age 21 and under as a "child" for purposes of inclusion in Child Fatality Reviews. Deaths of live-born children under one year of age are classified as infant deaths.

Fetal demises (also known as stillbirths) in Pennsylvania are reportable for fetuses 16 weeks' gestation or older. A fetal death certificate (special form for reportable stillbirths) is completed for each case. A total of 47 fetal demise reports was received in 2021, compared to 40 in 2019 and 31 in 2020. Fetal demise as a proportion of total pregnancies was 0.65% in 2019, and estimated at 0.47% in 2020 and 0.77% in 2021. Estimates for 2020 and 2021 are based on preliminary statistical data from the PA Department of Health. In 2021, four fetal deaths were associated with COVID-19 infection in the mother. Maternal vaccination information was not

readily available for most fetal demise reports. One fetal demise occurred in the context of maternal drug use and one after a motor vehicle accident.

A total of 13 infant deaths (birth to one year of age) were reported to the Coroner in 2021. All but two were neonatal deaths occurring minutes to a few days after birth and were due to natural causes, primarily extreme prematurity. Two non-neonatal infant deaths were investigated, one accidental and one of undetermined manner. Unsafe sleeping conditions were the only positive investigational findings in both cases.

No toddler/preschool-aged child death was reported to the Coroner in 2021. No child death (any age) due to COVID-19 was reported in 2021. There were 19 deaths reported among children and young people age 8-21 years. The manner of death was accidental in seven, suicide in five, homicide in four, natural (cardiac) in two, and undetermined in one case.

Firearms (gunshot and shotgun wounds) and drug overdoses were the two most common causes of death in the 1-21 years' age group, accounting for five (26.3%) and four (21.1%) of these deaths, respectively. A summary of the number of child deaths (age 1-21) in Chester County over the past 5 years is shown in Figure 12. "Other" causes in 2021 included hangings (2), falls (2), and natural disease processes (2).

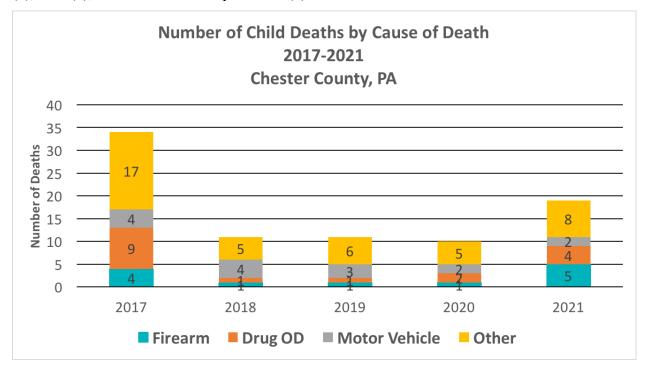


Figure 12 Five-Year Child Mortality (Age 1-21) by Cause of Death

County findings for child firearm deaths reflect national data from CDC showing that firearms became the leading cause of death for the 1-19-year age group in 2020 (Goldstick JE, Cunningham RM, Carter PM. Engl J Med 386;20 nejm.org May 19, 2022). National data for 2021 is not yet available.

Maternal Mortality

Pennsylvania's Maternal Mortality Review Committee (MMRC) defines maternal deaths as deaths occurring in women who are pregnant at the time of death or were pregnant at any time in the year prior to death. One such death was reported to the Chester County Coroner in 2021. Reliable information on previous pregnancy is usually not available at the time of death, so it is possible other maternal deaths occurred.

The MMRC, of which Coroner Christina VandePol was a member for the past 3 years, issued its first report at the end of 2021

(https://www.health.pa.gov/topics/healthy/Pages/Maternal-Mortality.aspx).

In-Custody Deaths

Per Pennsylvania law (16 P.S. §1218-B), the coroner must investigate "a death occurring in prison or a penal institution or while in the custody of the police."

Consistent with the Right-to-Know law and the Coroner statutes, the Chester County Coroner's Office provides the following information for four prisoner deaths investigated in 2021.

Dimitrios Moscharis, 34, 06/18/2021, Sudden Cardiac Arrhythmia due to Cardiomegaly, Natural (Chester County Prison)

Kenneth John Pettit, 45, 10/06/2021, Asphyxiation due to Hanging, Suicide (Chester County Prison)

Thomas Matthew Pizzollo, 42, 10/17/2021; Intra-abdominal Hemorrhage, Contributory Factors Methamphetamine Abuse, Atherosclerotic Cardiovascular Disease, and Obesity (George

E. Hill Prison, Delaware County, 6A Release in Paoli Memorial Hospital, Chester County); Accidental

Melvin James Anderson, IV, 52, 12/07/2021; Acute Respiratory Illness due to SARS-CoV-2 Infection (COVID-19), Contributory Factors Hypertensive Cardiovascular Disease, Obesity; Natural (Chester County Prison).

Natural Disasters

The Centers for Disease Control and Prevention (CDC) has increased its emphasis on accurate death certificate reporting for deaths associated with natural disasters. Natural disaster events are to be identified on the death certificate. Deaths associated with adverse conditions such as heat or cold exposure are included in this category.

Hypothermia due to exposure was a cause or contributory factor in the deaths of nine persons in 2021. Seven died during adverse weather conditions in the first two months of the year, and one died in November. One person drowned due to flooding from the remnants of Hurricane Ida which swept through Chester County on September 1-2, 2021. All 10 deaths were ruled accidental in manner.

Unclaimed Individuals

In some circumstances the County of Chester becomes responsible for the disposition of an individual's body after death:

- 1) No family members are known to exist
- 2) Legal next of kin cannot be located after an exhaustive search
- 3) Family (or guardian) refuses to make final arrangements for financial or other reasons Unclaimed bodies are reported to the Humanity Gifts Registry (HGR) after 36 hours, as required by state law. If the body is not eligible or acceptable for HGR donation, another body donation organization may be contacted. If donation is not an option, the body is cremated at the expense of the County. The cremains of unclaimed individuals are kept by the Coroner's office for a minimum of one year, after which time they are interred in a crypt donated to the county

unless family or another interested party comes forward to claim them during that time. Unclaimed (also called unattended) veterans are interred at a National Cemetery after confirmation of eligibility by the Veterans' Administration. Claiming cremains after the County has taken responsibility for disposition requires a fee of up to \$3500.

In 2020 and again in 2021, there was an increase in unclaimed bodies, resulting in a jump in the number of county cremations overseen by the Coroner's Office (Figure 13). Thirty bodies were unclaimed in 2021. Next of kin were unable to be located for 10 (33%) despite extensive investigation. The next of kin or a guardian relinquished rights to the other 20 deceased individuals because they could not or did not want to claim the body and make final arrangements. Seven of these 20 cases were fetal demises and 13 were adults.

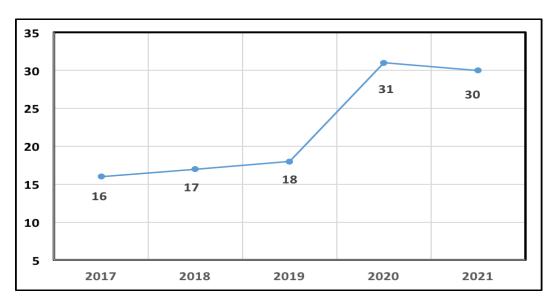


Figure 13 Number of County Cremations 2017-2021

The Coroner's Office inters cremated remains of veterans and non-veterans in alternate years. On October 28, 2021, the Coroner's Office interred the cremains of the following 9 veterans at the Washington Crossing National Cemetery in Newtown, PA.

Joseph H. Jones, Army
Jeffrey Fenstermacher, Army
John Marsh, Air Force
Joan Marsh, wife of John Marsh
William Deignan, Navy

Marcellus Brown, Navy Oliver Ford, Marine Corps Hollis Ross, Naval Reserves Gregory Jones, Navy

Organ Donation

The Chester County Coroner's Office is proud of its cooperation with Gift of Life, the regional Organ Procurement Organization (OPO). Our office is contacted by Gift of Life on all hospital deaths of potential donors. If a death is a Coroner's case, the Coroner's Office determines what organs or tissue may be donated if permission is granted by the family.

Table 3 summarizes organ and tissue donations from cases reported to the Chester County Coroner's Office by Gift of Life in 2021. Forty-one organs from 12 donors were transplanted and 154 tissues from 67 donors were recovered.

Table 3 Organ and Tissue Donation 2021

Organ Donors	12
Organs Transplanted	41
Kidneys	22
Livers	7
Lungs	6
Heart	4
Pancreas	2
Tissue Donors	67
Tissues Recovered	154
Tissues Recovered Corneas	154 46
Corneas	46
Corneas Bone	46 45

In the News

External News Reports

The Chester County Coroner and the Coroner's Office were mentioned in a number of news publications in 2021. Available links are provided here.

- 1. https://www.nbcphiladelphia.com/news/local/family-of-4-found-dead-following-suspected-murder-suicide/2678504/
- 2. https://www.dailylocal.com/2021/02/27/hypothermia-contributes-to-6-deaths-in-chester-county-coroner-says/
- 3. https://www.inquirer.com/news/dimitrios-moscharis-julieanne-lewis-cause-of-death-20211001.html
- 4. https://www.pottsmerc.com/2021/09/28/chester-county-coroner-philadelphia-teen-died-of-cardiovascular-disease-while-playing-football/
- 5. https://www.pennlive.com/news/2021/11/pa-man-killed-after-collision-with-gubernatorial-candidates-car-had-alcohol-drugs-in-system.html
- 6. https://www.dailylocal.com/2021/10/03/coroner-floats-then-sinks-inquest-into-inmates-death/
- 7. https://www.unionvilletimes.com/?p=49613
- 8. https://patch.com/pennsylvania/westchester/chesco-coroner-ends-prisoner-death-inquest-gives-new-info
- 9. https://www.inquirer.com/news/chester-county-jail-covid-outbreak-20211215.html
- 10. https://www.dailylocal.com/2021/12/24/chester-county-coroner-on-her-way-out-worries-about-rising-covid-19-deaths/
- 11. https://www.dailylocal.com/2021/12/12/chester-county-budget-includes-no-new-taxes-but-funds-for-a-morgue/

2021 Press Releases

January 25, 2021

The Chester County Coroner's Office is releasing the identities of the four persons who died in a suspected murder-suicide discovered on January 24, 2021.

The deceased are Deepak Prabakhar Kulkarni, 50, Arti Madhusudan Ayda, 47, Shubham Deepak Kulkarni, 15, and Sharvil Deepak Kulkarni, 8, all of West Whiteland Township.

Preliminary investigation indicated that all four decedents sustained gunshot wounds. Final cause and manner of death are pending autopsies and further investigation by the Coroner's Office, the West Whiteland Township Police Department, and County Detectives. As previously stated by the West Whiteland Township Police Department, there is no concern for a threat to the community at large.

"This terrible tragedy has annihilated a family," said Chester County Coroner Christina VandePol. "We extend our deepest sympathy to their extended family, friends, and neighbors. We know there are many questions about what happened. Further information on the cause and manner of death will be released when we have completed our investigations."

February 24, 2021

The Chester County Coroner's Office has completed its investigation of the January 24, 2021 deaths of four members of the Kulkarni family in their home in West Whiteland Township, Chester County.

Deepak Prabhakar Kulkarni, 50, died of a gunshot wound to the head, manner suicide. Adya Kulkarni (Arti Madhudusan), 47, Shubha Deepak Kulkarni, 15, and Sharvil Deepak Kulkarni, 8, died of gunshot wounds to the head, with the manner of death homicide for all three.

February 26, 2021

The Chester County Coroner's Office has investigated seven winter weather-related fatalities so far this year. Hypothermia caused or contributed to the deaths of six Chester County residents. Four persons were found outdoors and two died inside homes with inadequate or no heat. Ages of these decedents ranged from 59 to 87, and all but one were male. Alcohol

intoxication played a role in one death, while pre-existing conditions such as heart disease or dementia were present in others.

As previously reported, Gordon Owen, 81, of West Grove, was found deceased outdoors after a 2-day missing person search. His cause of death was coronary artery disease with contributing factors of cold exposure and dementia, manner accidental.

Carbon monoxide poisoning was the cause of death in a seventh weather-related fatality. Jorge Luis Vilella, 19, of Kennett Township, was found deceased in his vehicle on January 11, 2021, after being reported missing several days earlier. The manner of death was ruled accidental with no indication of suicide. Vilella appeared to have been running his car to keep warm, but modifications made to the car allowed carbon monoxide to get into the vehicle. After toxicological testing determined carbon monoxide poisoning as the cause of death, Kennett Township Police Department and the Chester County Hazardous Materials Response Team tested the vehicle. Replicating the conditions under which the decedent had been found, fatal levels of carbon monoxide accumulated within 30 minutes.

"The past weeks have seen more weather-related deaths than usual across the country, and Chester County has not been spared," said Chester County Coroner Dr. Christina VandePol. "Sadly, these are preventable deaths, but hypothermia can set in very quickly in the kind of weather we've had this winter, especially in the elderly. We also urge people to avoid using risky ways to keep warm as they can result in fatal outcomes from fire or carbon monoxide poisoning."

July 1, 2021

The Chester County Coroner's Office is confirming the death of Dimitrios Moscharis, 34, in the Chester County Prison on June 18, 2021.

The death of Moscharis is under active investigation by the Coroner's Office at this time. Under Pennsylvania law, a County Coroner is required to "investigate the facts and circumstances" of any death in their county that occurs in prison or while in custody of the police. The purpose of an investigation is to determine whether or not an autopsy or inquest should be conducted. An autopsy has been performed. Once all results and relevant information are available, the cause and manner of death will be determined by the Coroner.

"It usually takes at least 6 weeks after an autopsy, and possibly longer, before the final cause and manner of death can be determined," said Coroner Christina VandePol. "I want to emphasize that, as always, my goal is an accurate and truthful finding based on all the information available to us. No further comment will be made until our investigation is complete."

July 14, 2021

The Chester County Coroner's Office is confirming the sudden death of Ivan James Hicks, Jr., 16, of Philadelphia during a football 7 v 7 voluntary activity in Coatesville on July 13, 2021.

Hicks, a student at West Catholic Preparatory High School in Philadelphia, was taken to Brandywine Hospital after collapsing while taking a water break at approximately 5:45 pm. Resuscitative efforts were immediately initiated at the scene by coaching staff, then taken over by Washington Hose EMS who transported Hicks to Brandywine Hospital Emergency Department. Hicks was pronounced dead at the hospital at 6:43 pm. The Chester County Coroner's Office was then contacted and responded to the hospital.

The Coroner's Office is conducting a full medicolegal death investigation, including an autopsy scheduled for Friday, July 16, 2021.

"We are committed to getting answers for Ivan's family, friends, and community. His parents have been notified and our hearts go out to them," said Chester County Coroner Dr. Christina VandePol. "There was no sign of external injury in this tragic unexpected death. We will be looking closely at possible cardiac causes, given what is known about sudden death in young athletes, but it's too early to draw any conclusions. Cause and manner of death are pending during our open investigation."

Anyone with information concerning the death is asked to contact the Chester County Coroner's Office at 610-344-6165 or coroneroffice@chesco.org.

July 23, 2021

The Chester County Coroner Office has identified the victim of a fatal accident on the Pennsylvania Turnpike on July 22, 2021 as Logan Carl Abbott, 30, of Bradford County, PA. The

decedent was operating a motorcycle which was involved in a collision with another vehicle near mile marker 320.5 in Chester County. Pennsylvania State Police Troop T in King of Prussia is investigating the crash.

September 27, 2021

The Chester County Coroner's Office has determined the cause of death for Ivan James Hicks, Jr, 16, of Philadelphia, to be hypertensive cardiovascular disease. Contributing factors were cardiomegaly with fibrous scar and remodeling, obesity, and probable exposure to excessive environmental heat.

Hicks died suddenly on July 13, 2021 while at a 7 on 7 football activity in Coatesville, Chester County, PA. Immediate efforts by those present at the scene and subsequently by emergency services personnel were unsuccessful in resuscitating Hicks.

Specialized cardiac pathology was performed by the Jesse E. Edwards Registry of Cardiovascular Disease, an international center for cardiovascular research, education, and training. Their report concluded that while there were features of hypertrophic cardiomyopathy, a condition frequently associated with sudden death in young athletes, the diagnosis could not be definitively made or ruled out in this case.

"This tragic unexpected death of a young athlete was intensively investigated," said Chester County Coroner Dr. Christina VandePol. "Testing included autopsy, toxicology, specialized cardiac pathology and neuropathology, and genetic testing. Key findings were an enlarged heart and a thickened heart muscle that showed scarring. Although the findings did not meet the criteria for hypertrophic cardiomyopathy, they are associated with sudden cardiac death. Toxicology was negative. Genetic testing for 168 variants associated with cardiomyopathy and arrhythmias was also negative. Finally, the hot, humid weather conditions may have played a role, but we found no evidence of dehydration."

At the time of his death Hicks tested positive for SARS-CoV-2, the virus that causes COVID-19. He had received his second Pfizer-BioNTech COVID-19 vaccine on July 7, 2021. No evidence of COVID-19 respiratory disease was found, and cardiac examination showed no inflammation or myocarditis. The role, if any, that COVID-19 played in this death is therefore unknown, but in the opinion of the pathologists and the coroner it was not a contributing factor.

September 30, 2021

Chester County Coroner Dr. Christina VandePol will be conducting an inquest into the death of Dimitrios Moscharis on October 21, 2021. Moscharis, 34, died in the Chester County Prison on June 18, 2021.

"In-custody deaths demand transparency," said Dr. VandePol. "The inquest is uniquely suited to that purpose. The decedent was only 34 and had no significant past medical history. We found no evidence of any traumatic injury. The inquest will allow us to take a comprehensive look at all the evidence and have a jury weigh in on this case before we conclude our investigation and issue a death certificate."

A Coroner's Inquest in Pennsylvania is a process authorized by Commonwealth law (16 P.S. § 1219-B). An inquest is a fact-finding hearing conducted by the Coroner as part of a death investigation. An inquest is not a trial, and no one is found guilty or not guilty. Representatives of the media have the right to attend inquests unless personally involved with the inquest or part of the inquest. Members of the public may be admitted or excluded at the discretion of the Coroner.

Coroner's Inquests will be posted under Special Events on the Chester County Court of Common Pleas Judicial Schedule.

October 1, 2021

The Chester County Coroner's Office is releasing information on the death of Dimitrios Moscharis. Moscharis, 34, died June 18, 2021 in the Chester County Prison. The cause of death is sudden cardiac arrhythmia due to cardiomegaly (enlarged heart), manner natural. Results from two autopsies, one performed by a forensic pathologist for the Coroner's Office and the other a private autopsy performed at the request of the family, were consistent. Microscopic examination showed abnormal and damaged heart muscle. Neither autopsy found any traumatic injury contributory to the death.

A sudden cardiac death pathology consultation by Mayo Clinic Laboratories also found "mild" cardiomegaly and left ventricular hypertrophy (enlarged heart) as well as "focal fatty replacement in the left and right ventricles." Genetic testing for cardiomyopathy and cardiac

arrhythmia disorders was done by Invitae through the Detect Cardiomyopathy and Arrhythmia program.

Extensive toxicological testing at both autopsies found no illicit substances or poisons. Caffeine and a non-toxic level of arsenic (12 mcg/L) consistent with dietary exposure were present.

"The death of a previously healthy 34-year-old man while in custody demanded extensive investigation on our part and that is what was done," said Chester County Coroner Dr. Christina VandePol. "An inquest was planned, but during the pre-inquest process additional discussions were held with potential witnesses and we obtained the private autopsy report. As a result, I have no concern at this time for other than a natural death, the case is closed, and I will not be conducting an inquest."

October 8, 2021

Photo caption (Photo credit, Christina VandePol): 2019 Unattended Veterans Service at Washington Crossing National Cemetery organized by the Chester County Coroner's Office



The community is invited to join the Chester County Coroner's Office at the Unattended Veterans Service at Washington Crossing National Cemetery. The ceremony will be held at 830 Highland Road, Newtown PA, 18940 on Thursday, October 28th at 2:00pm. The

Coroner's Office will be interring nine unclaimed veterans who were residents of Chester County with full military honors.

- Marcellus Brown, U.S. Navy (Petty Officer First Class), (*Post-World War II Era*), Tredyffrin Township
- William P. Deignan, U.S. Navy (Seaman), (Post-Vietnam Era), Valley Township
- Jeffrey A. Fenstermacher, U.S. Army (Private), (Post-Vietnam Era), Parkesburg Boro
- Oliver C. Ford, U.S. Marine Corp. (Unknown Rank), (Vietnam Era), Coatesville City
- Gregory D. Jones, U.S. Navy (Seaman Recruit), (Persian Gulf War Era), Coatesville City
- Joseph H. Jones, U.S. Army (Private First Class), (Korean War Era), West Chester Boro

- John W. Marsh, U.S. Air Force (Airman), (Vietnam Era), Honey Brook Township
- Joan M. Marsh, Veteran Spouse, Wife of John W. Marsh (above), Honey Brook Township
- Hollis Ross, U.S. Naval Reserve (Seaman Apprentice), (Vietnam Era), Caln Township

During the ceremony, the veterans' names will be read and the Pennsylvania Military Honors team will present the flag on the behalf of the veterans. A rifle salute and live Taps will be provided. After the ceremony, the veterans will each be placed in their own niche in the columbarium which will be engraved with "Proudly Served."

November 3, 2021

The Chester County Coroner's Office has completed its investigation into the death of Logan Carl Abbott, 30, of Bradford County, PA. The cause of death is multiple blunt impact and crush injuries. Manner of death is accidental. Toxicological analysis was positive for ethanol, amphetamine, methamphetamine, fentanyl, norfentanyl, and acetyl fentanyl.

December 21, 2021

The Chester County Coroner's Office is reporting a sharp rise in COVID-19 deaths in recent weeks. In November, 31 deaths, or an average of about one/day, were reported. In December, 36 deaths have already been reported, with 3-4 deaths now being reported daily. Two-thirds of the December deaths have been in unvaccinated individuals. The median age of unvaccinated persons who died of COVID -19 was 69 years. Vaccinated individuals who succumbed to the virus were immunocompromised, many months past their last vaccination, or both. The median age for this group was 83.5 years. No COVID-19 deaths have been reported to date in someone who received a booster vaccination.

"This is different than last year," said Dr. Christina VandePol, Chester County Coroner. "We are not seeing many nursing home deaths. Most nursing home residents and staff are now vaccinated and stronger infectious disease controls have been put in place. This time around people are being admitted to our hospitals directly from home. Thanksgiving travel and gatherings probably played a role in what we're now seeing, and that makes me fearful of what January will bring.

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Chester County's COVID-19 website shows Chester County currently has a high transmission rate, with a test positivity rate of more than 10% in the past week. Data is not available to the Coroner's Office on which variant of the virus is circulating in the community.

"I sympathize with our hospital staff who are once again overwhelmed with COVID over the holidays. With 2 hospitals closing, the burden will be even greater. I urge everyone, no matter how tired you are of all things COVID, to consider our health care workers and take every precaution available, including getting vaccinated or boosted. Think of it as a holiday gift for those who do so much for us every day," said VandePol.

END of 2021 Chester County Coroner Office Annual Report