

**Office of the Coroner
County of Chester
Commonwealth of Pennsylvania**



**Christina VandePol, M.D.
Coroner**

2019 Annual Report

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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

This 2019 Annual Report of the Coroner's Office is being written while we are in the grip of the 2020 coronavirus (COVID-19) pandemic. In retrospect, while there were challenges and changes in 2019, the Coroner's Office operated efficiently, with integrity, and with a focus on developing a strong medicolegal death investigation team.

Chester County continued to experience deaths due to substance abuse, suicide, falls in the elder population, and sudden "natural" deaths due to undiagnosed or untreated diseases and conditions. All are discussed in more detail in this report.

The Coroner's Office has an important public health role in bringing causes and manners of deaths to the attention of the public and many involved agencies. Data generated from coroner and medical examiner offices filter up through the state Vital Statistics system, eventually reaching organizations like the Center for Disease Control and Prevention (CDC). These data then become the basis for setting policies and allocating research funds.

Data, in fact, is one of the main visible outputs of any coroner's office. Our Coroner's Office website <https://chesco.org/209/Coroner> provides summarized data on a monthly basis, a task made easier by use of an electronic case management system (aptly named QuincyTech). In 2019, the number of overdose deaths was the most common information request. We provide drug death data as well as all violent death data to the Pennsylvania Department of Health and other agencies as required by law.

Accreditation of the Coroner's Office remains an elusive goal. In June of 2019 the International Association of Coroners and Medical Examiners performed an on-site accreditation audit. Thanks to months of preparation, our administrative and investigative functions all met or exceeded required standards. The lack of a County morgue and autopsy laboratory and multiple issues with the existing borrowed facilities at a local hospital resulted in this Office failing to achieve accreditation. Meanwhile, the Chester County Board of Commissioners established a Committee in April 2019 to explore options for the design of a future facility. A number of bids were received in September, but in late November the Commissioners decided not to move forward with any of them. A needs assessment is now planned for 2020.

In 2019, the Commonwealth of Pennsylvania established a Maternal Mortality Review Committee for the first time. This Coroner was honored to be appointed a member of that Committee by Governor Wolf. By the end of the year, the Committee began reviewing cases with the goal of preventing maternal deaths associated with pregnancy.

A highlight of 2019 was the well-attended and moving Ceremony held for our unclaimed veterans at the Washington Crossing National Cemetery. Nine Chester County veterans were honored on a beautiful day in late August.

Christina VandePol, M.D.
Coroner of the County of Chester

Executive Summary

Some of the Coroner's Office accomplishments, events, and activities in 2019 are summarized here:

- A total of 3,770 cases were investigated, including 1,112 death investigations and 2658 cremation reviews and authorizations. This was similar to the 2018 caseload.
- The Coroner's Office took jurisdiction in 561 deaths, a decrease of 16% from 2018. This decrease was due to a change in Coroner Office policy after review of State statutes defining which deaths require Coroner investigation.
- Full autopsies were performed in 286 (51%) jurisdictional deaths.
- Jurisdictional deaths included 2 homicides, 225 accidental deaths, and 57 suicides.
- Accidental deaths included 104 drug overdoses, 76 falls, and 33 motor vehicle accidents.
- The number of drug overdose deaths declined by 7% from 2018.
- A total of 273 transports of decedents from a scene to a hospital morgue took place. Due to frequent space limitations, transfers between hospitals or from hospitals to a private funeral home morgue were also necessary.
- A new First Deputy Coroner with extensive death investigation experience was hired; this resulted in strengthened staff training, improved quality control oversight of investigations, and a highly efficient transport service.
- Resilience and teamwork ensured that essential services to Chester County residents, hospitals, law enforcement, and funeral homes were uninterrupted during the prolonged February "malware incident."
- By the end of 2019, 4 Coroner Office staff were certified by the American Board of Medicolegal Death Investigators (ABMDI), up from 1 (one) at the end of 2018.
- The First Deputy and a full-time Deputy Coroner completed the Pennsylvania Coroner's Basic Education Course in Harrisburg.
- The Coroner led an interdisciplinary Forensic Facility Advisory Committee and contributed to the Request for Proposals, Pre-Bid Meeting, and review of the 7 design firm bids from April through December. This initiative was canceled in late November by the Board of Commissioners.
- The Coroner published a review of the History of the Coroner's Office in the Chester County Medical Society bulletin.
- The first-ever Coroner's Public Information Session was held at the Henrietta Hankin Branch Library on November 10, 2019.
- Nine Chester County veterans received full honors at a Memorial Ceremony and interment at Washington Crossing National Cemetery on August 29, 2019.
- Nineteen organ donations and 49 tissue donations to Gift of Life were approved by Chester County Coroner's Office in 2019.

Introduction

Description of Chester County and Its Population

The United States Census Bureau estimate for the population of Chester County as of July 1, 2018 was 524,989, a slight increase from 2018. The 2020 census will determine more accurately the makeup of Chester County's population, but recent estimates are that it is 79.1% Caucasian, 7.6% Hispanic or Latino, 6.3% African American, and 5.8% Asian peoples, with 2% identifying with two or more races, or as American Indian/Alaska native (0.3%) or Native Hawaiian or other Pacific Islander (0.1%).

Approximately 22.6% of the residents are under the age of 18, 61.1% are between the ages of 18 and 64, and 16.3% are 65 or older. Females make up 50.7% of the population in Chester County.

The Coroner's Office serves the geographic area that includes 760 square miles of Chester County. It is bounded by 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, three airports and several colleges and universities.

Chester County has five acute care hospitals: 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 center, Coatesville Veterans Center (federal) and Southeast Veterans Center (state facility). Also located in the County of Chester are multiple hospice agencies, 24 nursing homes, 24 assisted living facilities, and over 56 home health care and hospice agencies.

Jurisdiction and State Statutes

The Coroner's Office assumes jurisdiction on 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:

1. 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, a 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. Deaths known or suspected to be due to a contagious disease and constituting a public hazard
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 in such deaths is to investigate the facts and circumstances concerning the death 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 his/her investigation, the Coroner shall 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 also whenever a visual identification is not able to be performed or is not confirmatory. Currently acceptable scientific methods are fingerprint comparison, dental comparison, and DNA comparison.

Coroner's Office Staff and Facilities

The Coroner's Office professional staff at the end of 2019 included the Coroner, a Chief Deputy Coroner, a First Deputy Coroner, an Office Manager, 8 Deputy Coroners (4 full-time and 4 part-time), 4 Transporters, 3 part-time Forensic Pathologists, and an Autopsy Technician. All are County employees except the Coroner, who is an elected official, and the Forensic Pathologists, who are independent contractors. Under routine circumstances, one or two Deputy Coroners, a Transporter, and a Supervisor were on duty to respond to dispatches 24/7/365 in 2019.

The Office has two administrative/investigator vehicles used by investigators for scene responses throughout the County, and two transport vehicles, a van and a Ford F250 truck. A third transport vehicle was retired in December 2019 due to poor condition.

Administrative offices are in the Government Services Building at 601 Westtown Road in West Chester, while morgue facilities are in various hospitals in the County, as detailed below. In 2019, autopsies were performed in two locations, Brandywine Hospital and Chester County Hospital and bodies were stored at one of 4 hospitals, space permitting.

In the absence of a county morgue, the Coroner's Office shares the morgue facilities of four of the hospitals located within Chester County. When not needed for those who have died in the hospital (non-Coroner's cases), the Coroner's Office had use of up to the following number of morgue spaces in 2019:

Brandywine Hospital - 2
Chester County Hospital – 4
Paoli Memorial Hospital - 2
Phoenixville Hospital – 3

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. These include responding to and investigating deaths falling under the Coroner's purview, 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 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 very time-consuming but ultimately rewarding effort.

All autopsies are performed by a board-certified forensic pathologist at the direction of the Coroner. If a postmortem examination (autopsy, toxicology, other tests) is required in order to determine cause and manner of death, 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 and are available for review at a later date if needed. Photographic documentation is also an essential item in those cases where the pathologist must provide court testimony. The forensic pathologists, Coroner, and investigators provide testimony in court and at depositions. Staff also participates in meetings with police, medical professionals, and attorneys.

Autopsy reports and related data from individual investigations are provided to law enforcement agencies, prosecuting 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 if they are involved with the case.

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 medical questions relating to the death of the individual, the office will issue a cremation authorization. If there are medical questions relating to the death, a case is opened and the Coroner's staff will investigate the death before issuing a cremation authorization.

The Coroner, Chief Deputy Coroner, and Forensic Pathologists participate in a variety of medical conferences, and provide information on a regular basis to law enforcement and to medical personnel on various aspects regarding the role and function of the Coroner's Office.

The Coroner's Office staff analyzes its data to better understand trends in mortality, including infant and child deaths, suicide, falls, drug overdoses, and alcohol-related deaths. For example, during a summer 2019 internship with our office, intern Dana Dirnberger analyzed all 1137 deaths from 2018 and found that approximately 19% of natural deaths were alcohol-related in some way.

The public is kept informed about public health and safety issues as well as the activities of the Coroner's Office by press releases, up-to-date statistics on the agency website, a social media presence (on Facebook @ChesCoCoronerPA), and presentations to schools, senior communities, and other organizations. The first-ever Public Information Session was held on November 10, 2019 and included presentations on sudden deaths due to natural causes, drug overdose deaths, the history of unclaimed persons in Chester County, and a display on identification of non-skeletal remains.

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 will be 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)
 - Shifts will be adequately staffed to handle daily caseload without overtime

- 100 % of bodies will be able to be stored in a modern refrigerated County morgue
- 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
 - Meet Morgue, Autopsy, and Laboratory Standards
- **Improving Communication**
 - Monthly death statistics available on the website within 30 days
 - 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 deaths which are reported to the Coroner's Office where a physician with knowledge and awareness of the decedent's state of health certifies the death certificate. These are natural deaths, with a predominance of individuals in nursing homes and hospitals. Jurisdictional cases, which can be natural or non-natural cases, are deaths where the Coroner certifies the cause and manner of an individual's death. All non-natural deaths (homicide, suicide, accident, undetermined or pending) can only be certified by the Coroner.

For the year 2019, the Chester County Coroner's Office conducted 1,112 death investigations and authorized 2,658 cremations for a total of 3,770 cases (Table 1). Cause and manner of death as well as interpretations of what is a jurisdictional or non-jurisdictional case are often a matter of judgment and therefore strict comparisons across years are not valid. Nevertheless, there appears to be a gradual increase in both death investigations and cremation reviews over the past 5 years. This is not unexpected given the increase in the County's total population, the rapid increase in the number of persons over age 65, and the trend towards cremation rather than burial over that time period.

The percentage of jurisdictional cases that had a full autopsy performed in 2019 was almost 51%, a percentage increase from 2018 which reflected new operational policies that reduced the number of jurisdictional cases. Twenty years ago (1999), autopsies in Chester County were performed on as many as 72% of death investigation cases (1999 Annual Report), with the percentage dwindling to a low of 28% by 2017. One likely reason autopsies are less frequently performed than 20 years ago is the increasing sophistication of medical diagnostics. Often the cause of death can be determined to a reasonable degree of medical certainty during life, so that an autopsy is not necessary. The advent of electronic medical records and efficient access to such records by coroners and medical examiners has also streamlined investigation into a decedent's medical history.

The Chester County Coroner's Office sends reports on all violent deaths to the PA Violent Death Reporting System (PA-VDRS). This includes all deaths where the manner of death was homicide, suicide, or accidental. Accidents are the second most common manner of death after natural deaths and include all drug overdoses, falls, and motor vehicle accidents. Separate sections in this report provide greater insight into each of these categories.

Table 1. 2019 Statistical Summary

Reported Cases	1,112
Non-jurisdictional Cases	551
Jurisdictional Cases	561
Natural Causes	811
Accidental	225
Suicide	57
Homicide	2
Undetermined	9
Non-Human Remains	5
Full Autopsies	286
Partial Autopsies	50
External Examination Only	16
Toxicology Only	37
Transports (total)	273
Unidentified Bodies	0
Exhumations	0
Cremation permits issued	2,658

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 imply the existence of criminal intent behind the action of the other person. This is reflected in the fact that the prosecuting attorney may either charge the person responsible for the injuries with murder or manslaughter, or decline to file charges. In 2019, the Coroner classified two deaths as homicides.

The two homicide victims were 27 and 64 years old, one male and one female respectively. One was African-American and one was Caucasian. Both deaths were from firearms. One was killed by a domestic partner and one remains under investigation.

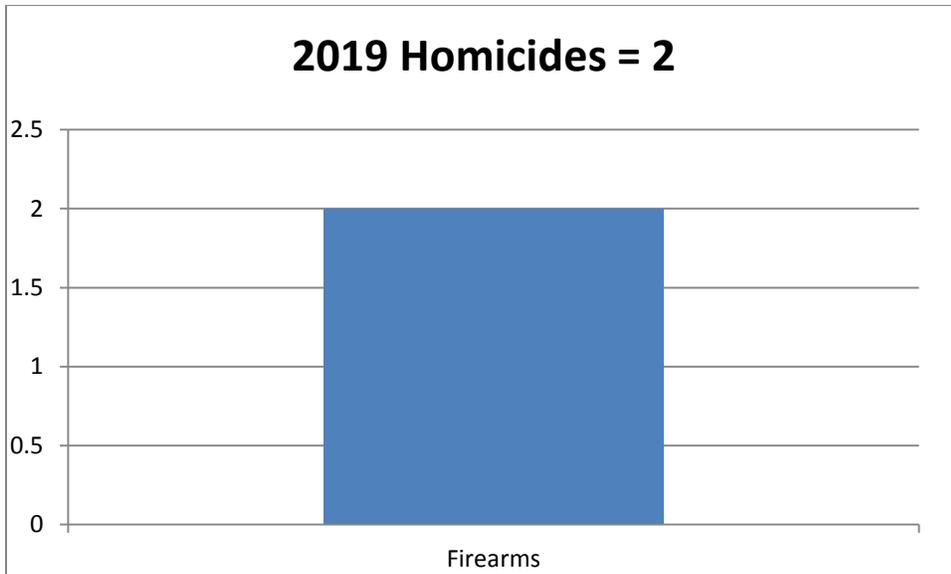


Figure 1. 2019 Homicides

Manner of Death: Accidental

The Coroner certified 225 deaths as accidental in 2019. A large percentage (46%) were due to a drug overdose, while falls (34%) were the second most common cause of accidental death. Individuals who died as a result of a motor vehicle accident comprised the third most common type of accidental death (15%). Drug overdoses and motor vehicle accident deaths have decreased slightly since last year, while falls have increased. Since all accidental deaths are theoretically preventable, each such death is carefully investigated for public health purposes.

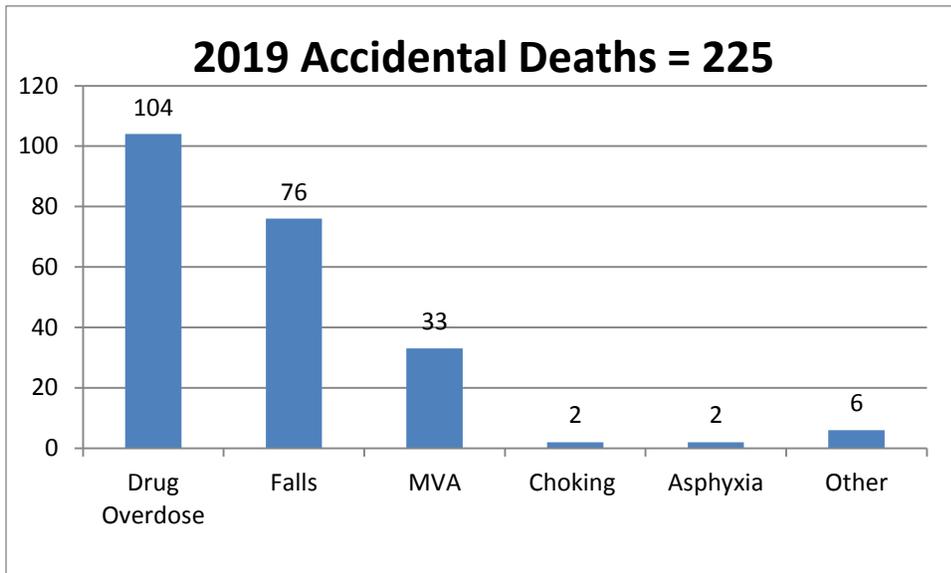


Figure 2. 2019 Accidental Deaths

Drug Overdose

The number of drug overdose deaths classified as accidental in Chester County in 2019 was 104. This was a 7% decrease from the 112 accidental drug overdoses in 2018. Possible reasons for the decrease include the more aggressive treatment and prevention efforts by addiction treatment programs throughout the county and more widespread use and distribution of naloxone.

As in past years, demographic analysis showed males (75% of cases) and Caucasians (79% of cases) to be disproportionately represented in drug overdose death statistics. The age distribution continued to be broad, with all ages represented. As in previous years, however, the 25-34 years age group had the highest number of drug overdose deaths (Figure 3).

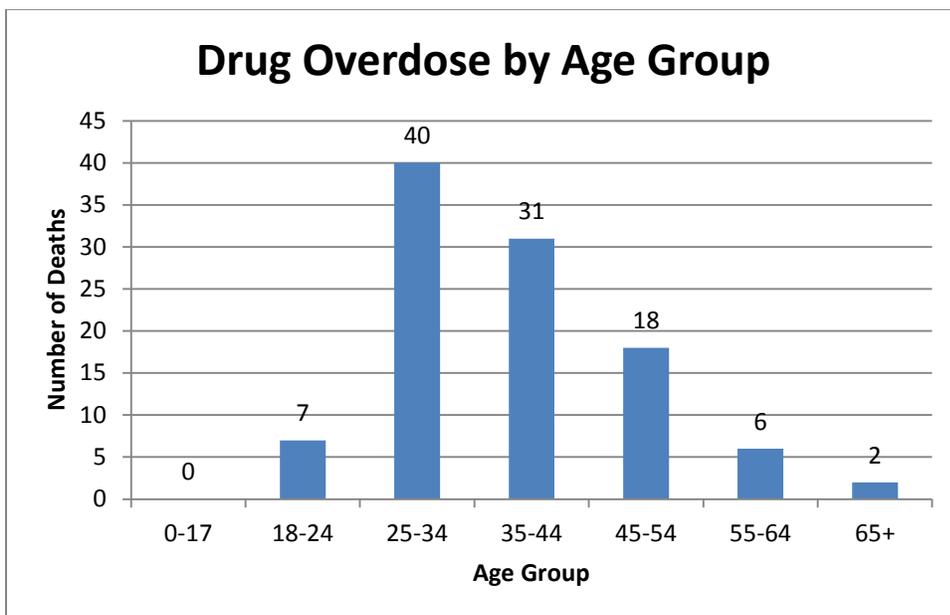


Figure 3. 2019 Drug Overdose Deaths by Age Group

Expanded forensic toxicological testing was performed on suspected drug overdose deaths, allowing confirmation of the cause of death and identification of trends in both illicit and prescription drug abuse. Opioids remained the most common category of drugs found on such testing, with fentanyl present in almost 78% of drug overdose deaths (Figure 4).

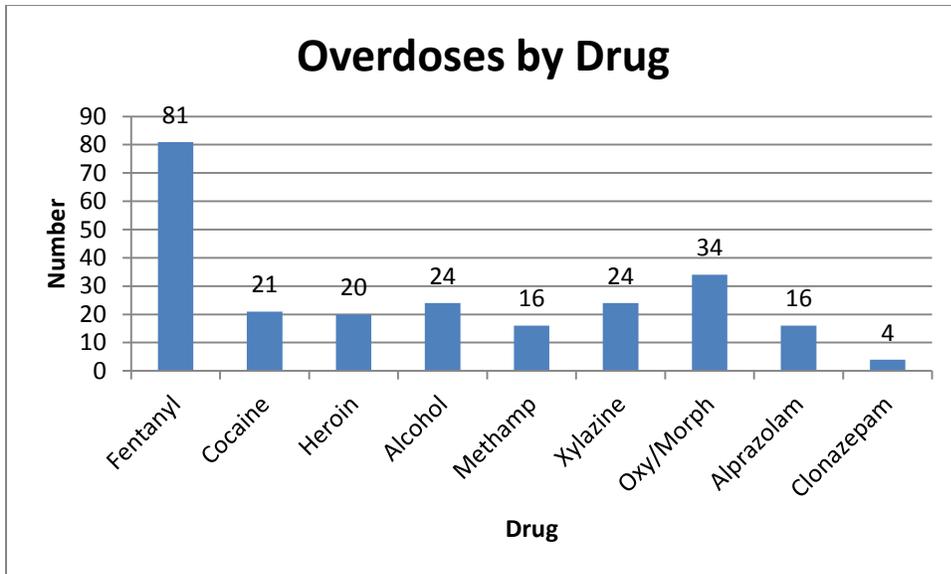


Figure 4. Drugs found in Drug Overdose Deaths - 2019

The Chester County Coroner’s Office shares its data and insights regarding overdose deaths. Coroner VandePol is a member of the Chester County Overdose Prevention Task Force, participates in the Regional Overdose Prevention Coalition, and is on the Advisory Board of the West Chester Mayor’s Opioid Action Task Force.

Falls

There were 76 fall-related deaths in 2019 accounting for about 34% of accidental deaths. The majority (94%) 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, especially in the elderly. For example, a fall may result in a fracture which requires surgery with the subsequent hospital course including complications such as pneumonia or sepsis.

Motor Vehicle Collisions

Motor vehicle collisions accounted for the third largest number of accidental deaths, 33/225 (15%). Decedents were driver/operators in the majority of cases (18/33), while 8 were passengers, and 7 were pedestrians. In six cases, drivers were motorcycle drivers.

Thirteen drivers had toxicological testing performed. Testing was not performed in other drivers due to time elapsed since the accident. Two drivers had blood alcohol levels above 0.08, while four tested positive for marijuana, and one also tested positive for methamphetamine. Four of the pedestrians were tested, with one positive for alcohol and fentanyl, another for marijuana and methamphetamine, and a third for marijuana only.

Other Causes

Eleven accidental deaths were due to a variety of other causes. Two accidental deaths were due to choking, 2 due to mechanical asphyxia, 2 due to cold exposure, and 2 to poisoning (alcohol and difluoroethane, respectively.) Co-sleeping, medical device malfunction, and trauma due to train collision were reported in one decedent each.

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 2019, there were 57 suicides (Figure 5), accounting for 5.1 % of the total deaths reported to the Coroner's office. This is a slight decrease from 2018 when there were 63 suicides, accounting for 5.5% of deaths that year. Individuals who committed suicide were from 15 to 94 years old; more than half of those who died were from 45-64 years of age. Forty (70.1%) of the decedents were male. These demographics were similar to those observed in 2017 and 2018.

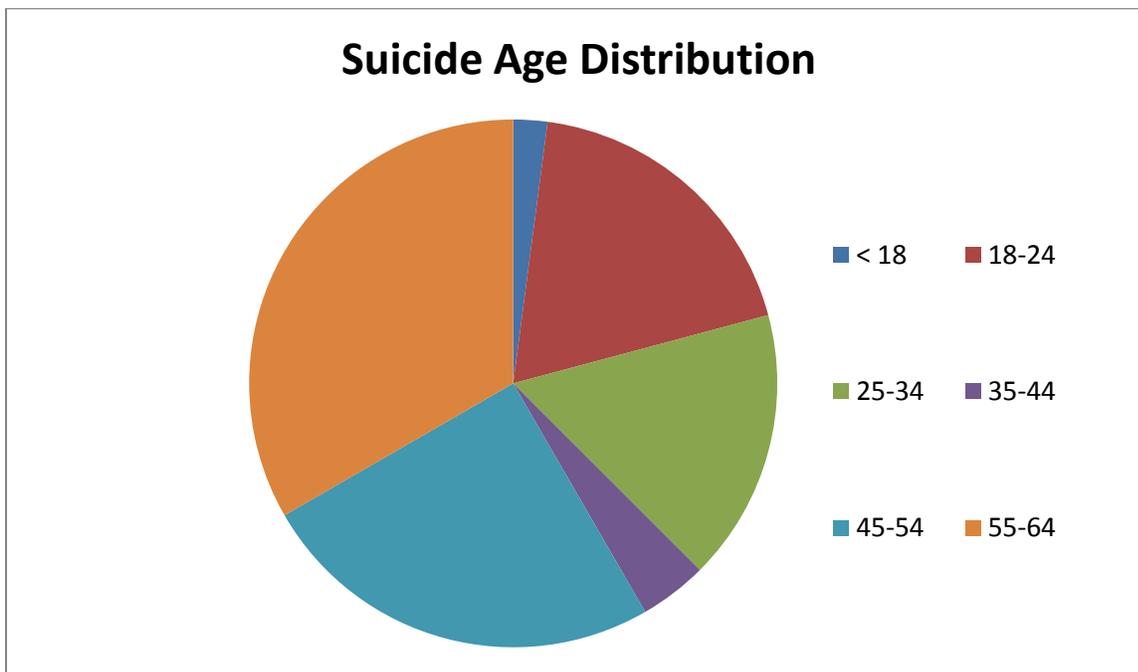


Figure 5. 2019 Chester County Suicides - Age

The proportion of suicide deaths involving firearms decreased from 38% in 2017 and 55.6% in 2018 to 35% in 2019. By way of contrast, hanging as a cause of death increased from 22.2% in 2018 to 31.6% in 2019. Drug overdoses as a cause increased from 9.5% in 2018 to 14% in 2019. Traumatic injuries (5 deaths), asphyxia (4 deaths), and other causes (2 deaths) accounted for the remaining mechanisms of suicide.

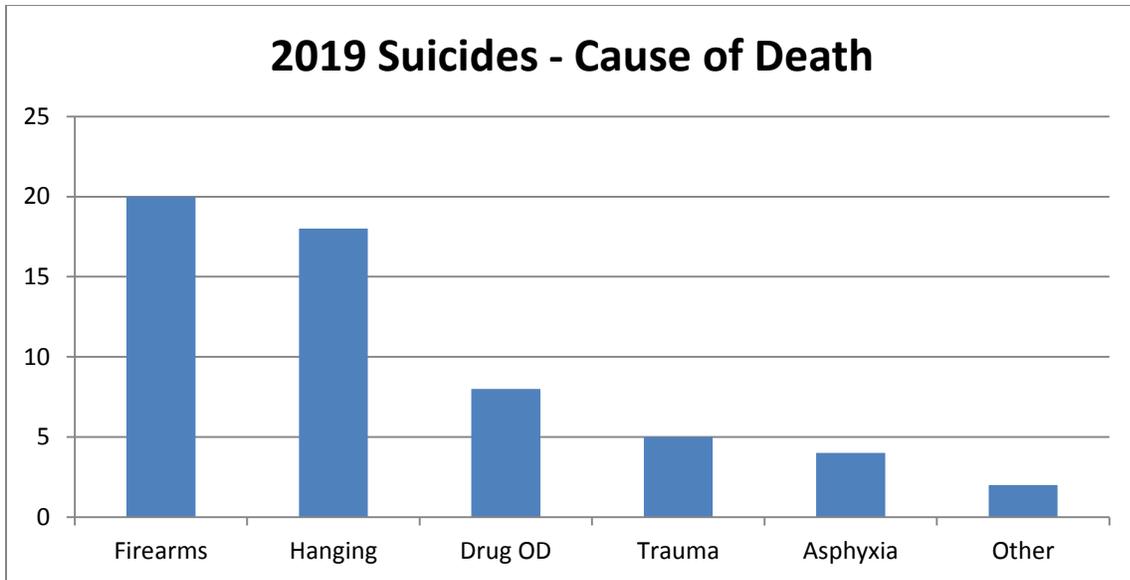


Figure 6. 2019 Suicides – Cause of Death

Manner of Death: Natural

The Coroner may certify natural deaths under many circumstances. They include a sudden and unexpected death in an apparently healthy individual, when there is no physician able or willing to certify the death, when there is no next of kin, or when there are suspicious circumstances surrounding the death.

In 2019, 811 deaths due to natural causes were investigated by the Coroner’s Office. This included 39 fetal demises (age ≤ 0), discussed in the Child Fatalities section below. As shown in Figure 6, the majority of the remaining natural deaths occurred in the older age groups.

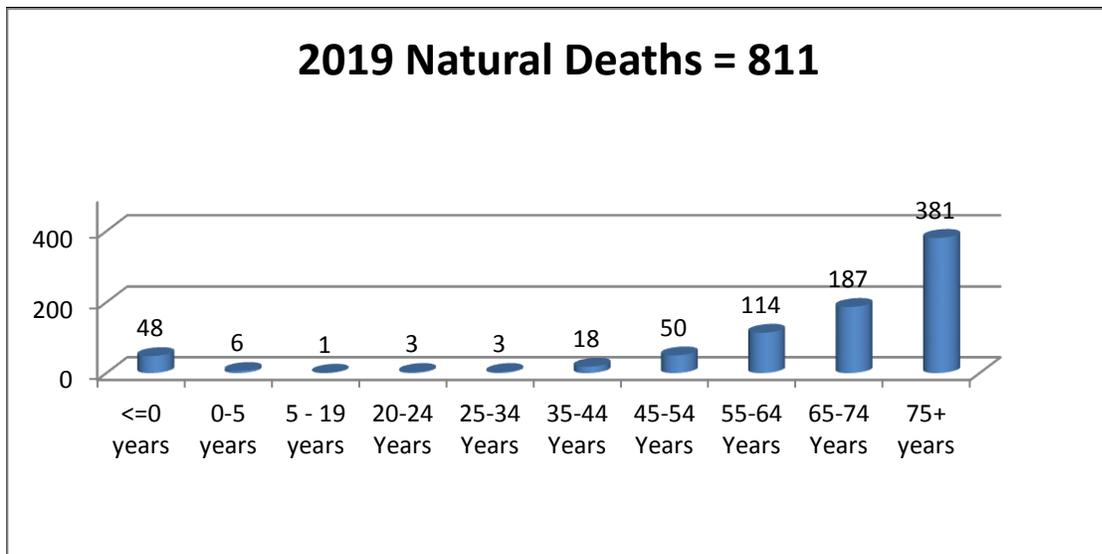


Figure 7. 2019 Chester County Natural Deaths

Manner of death: Undetermined

The Coroner's Office certifies the manner of death as undetermined when available information regarding the circumstances of death is insufficient to classify the death into one of the four specific manners of death: natural, accident, homicide or suicide.

In some cases, serious doubt exists as to whether an injury occurred with intent or as a result of an accident. Information concerning the circumstances may be lacking due to the absence of background information or witnesses, or because of a lengthy delay between death and discovery of the body. Moreover, it may be difficult to assess street drug or medication overdose deaths as showing enough features to reasonably determine the manner of death. If an extensive investigation and autopsy cannot clarify the circumstances, the death is classified undetermined.

There were 11 cases in 2019 where the Coroner's Office certified the manner of death as undetermined. In 3 cases, the cause of death was drug intoxication and in 3 others the cause of death could not be determined, usually because of advanced decomposition.

Child Fatalities

The Commonwealth of Pennsylvania categorizes anyone under 21 as a "child" for purposes of inclusion in Child Fatality Review Committees. Excluding fetal demises, deaths of 25 persons under age 21 were reported to the Coroner's Office in 2019. Seven were 18-20 years of age at the time of death, while 18 individuals were less than 18 years of age.

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 those child deaths that occurred within the County, regardless of residence of the decedent.

The manner of death for the 25 child deaths in Chester County was natural in 12 (48%), accidental in 6 (24%), undetermined in 4 (16%), and suicide in 3 (12%).

In the seven decedents aged 18, 19, or 20 years of age, the manner of death was accident in 4 cases, suicide in 2 cases, and natural in 1 case.

There were 15 deaths in children 3 years or younger in 2018. The revised Pennsylvania Coroner statute of 2018 requires Coroners to investigate deaths of children 3 years of age or less and specifies procedures to be carried out during the investigation. The Chester County Coroner's Office was already conducting full investigations into such deaths. Ten of the 15 deaths were natural in manner, 1 was accidental, and in 4 the manner of death was undetermined. Eight of the 10 natural deaths occurred in newborn infants in a hospital setting soon after birth, usually due to prematurity. Fetal demises (also known as stillbirths) are reported for fetuses 16 weeks gestation or older (per Pennsylvania law). A total of 39 such reports were made in 2019.

Unclaimed Individuals

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

- 1) No other family members are known to exist.
- 2) The legal next of kin cannot be located after an exhaustive search.
- 3) The family refuses to provide for the final arrangements for financial or other reasons.

In recent years, there has been an increase in the number of next of kin who relinquish rights to the deceased individual to the Coroner's office because they cannot or do not want to incur the expense associated with the final arrangements for their relative. The Coroner's office will cremate individuals who have been turned over to the county in this way as long as they have been identified.

There were 24 County cremations in 2019. The cremains of unclaimed individuals are kept by the Coroner's office for a minimum of one year, after which time the cremains are interred in a crypt donated to the county unless family or an interested party comes forward to claim them. Claiming cremains after the County has taken responsibility for disposition requires a fee of up to \$3500 in order to compensate the County.

Coroner Office volunteer and 2017 intern Justine Newman organized the burial of nine unclaimed veterans at Washington Crossing National Cemetery in Newtown, PA, in 2019. Burial eligibility was determined with the assistance of the National Cemetery Scheduling Office. Of the dozens of unclaimed individuals submitted, nine were determined to be veterans eligible for burial in a national cemetery. In order to carry on this tradition, Newman developed a standard operating procedure outlining the instructions for repeating the process.

The cremated remains of the nine veterans were interred on August 29th, 2019. Of the nine, six were members of the Army, one was a member of the Air Force, one was a member of the Navy, and one was a member of the Marine Corps.

The ceremony was attended by hundreds, including a police escort, a veterans' motorcycle group, members from local VFW posts, representatives from numerous media outlets, and more. The veterans' names, branches, and ranks were read aloud. Taps were played and an American flag was folded and presented to the Coroner's Office in honor of the deceased. Upon the completion of the ceremony, each individual was placed in their own niche of the Cemetery's columbarium.

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 to confirm whether a death is a Coroner case and if so, what organs or tissue may be able to be donated if permission is granted by the family.

Table 2 summarizes donations from cases reported to the Chester County Coroner's Office by Gift of Life in 2019. Forty-two organs from 12 donors were transplanted and 128 tissues from 49 donors were recovered.

Table 2. 2019 Organ and Tissue Donation

Organ Donation	
Referrals of organ donors from hospitals	969
Potential Organ Donors	19
Actual Organ Donors	12 (9 were coroner cases)
Family Declined	3
Patient Arrested	4
Coroner Declines	0
Organs Transplanted	42
Kidneys	22
Livers	7
Lungs	7
Heart	4
Pancreas	2
Tissue Donation	
Referrals of tissue donors from hospitals	969
Referrals from coroner	
Actual Tissue Donors	49
Tissues Recovered per donor	
Corneas	49
Bone	38
Skin	32
Heart Valve	5
Vein	4

In the News

2019 Press Releases

January 3, 2019

Anna Johnson Homicide

The Chester County Coroner's Office has completed its investigation of the December 30, 2018 death of Anna Johnson, 56, of Oxford, PA. An autopsy revealed that Anna Johnson died from asphyxia by strangulation, with the manner of death being homicide. The case is under the jurisdiction of the Pennsylvania State Police Avondale Barracks.

February 8, 2019

New Drug - Xylazine

The Chester County Coroner's Office has identified a new substance, xylazine, during investigation of two overdose deaths in Chester County in January 2019. Bradley Bailey, 26, of Bradford County, died January 1, 2019, of combined drug intoxication with xylazine, fentanyl, acetyl fentanyl, and mitragynine. The death is being investigated by the West Goshen Police Department. Ian Stahl, 27, of East Marlborough Township, died January 6, 2019, of acute multiple drug intoxication with cocaine, fentanyl, xylazine, and acetyl fentanyl. His death is being investigated by the Pennsylvania State Police, Avondale. In both cases, the Coroner's Office certified the manner of death as accidental.

Xylazine is a non-opioid sedative, analgesic, and anesthetic agent approved for veterinary use in horses and some other large animals. It causes central nervous system depression which can result in slowing of the respiratory rate and partial heart block. Brand names include Anased® and Rompun®. Rose Nolen-Walston, DVM, Associate Professor, Large Animal Internal Medicine, at the New Bolton Center in Chester County confirmed that xylazine is used "all the time" in large animals and that it is not a controlled substance. Dr. Nolen-Walston identified a 2014 review in the journal *Forensic Science International* which characterized xylazine as "an emerging adulterant in abused drugs."

Xylazine has never before been identified in toxicological tests in drug overdose deaths in Chester County. It has previously been reported as a drug of abuse in Puerto Rico in 2012, where it had the nickname "anestecia de caballo" or horse anesthetic. In November 2018, a large quantity of xylazine was found in an illicit drug seizure in Anne Arundel County, Maryland.

Chester County Coroner Christina VandePol, M.D., said, "This readily available large animal sedative represents a new threat on the streets. If you're using illicit drugs or treating someone with a possible overdose, you really have no idea what you're dealing with. I urge those who use xylazine in a veterinary practice or on a horse farm to be aware of its potential diversion and abuse and to monitor any supply they may have on hand."

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

May 10, 2019

Caroline Ellison Motor Vehicle Collision

The Chester County Coroner's Office has released information about the motor vehicle collision that occurred May 7, 2019 on Route 113 in Uwchlan Township. The collision involved a car and a school bus. Killed in the collision was Caroline Ellison, age 18, of Exton, PA, a passenger in the car. The cause of death was determined to be blunt impact trauma to the head and neck due to the collision, with manner of death ruled as accidental. Uwchlan Township police are continuing their investigation into the collision.

July 10, 2019

Train Death

The Chester County Coroner's Office is investigating the death of Marvin Ray Young, 62, of Chambersburg, PA. The decedent was fatally struck by a westbound Amtrak Train in Atglen, Chester County, PA at 07:20 on July 10, 2019. The cause and manner of death are pending further investigation by the Coroner's Office, but this is not considered a suspicious death. Lancaster and Philadelphia Amtrak Police were on scene and are also conducting further investigations at this time.

August 2, 2019

Mid-Year Drug Overdose Update

The Chester County Coroner’s Office is releasing data on drug overdose deaths in Chester County from January 1, 2019 through June 30, 2019. A total of 65 people have been confirmed to have died of a drug overdose during this period, with 62 deaths determined to be accidental and 3 due to suicide. While this is slightly more than the 57 overdose deaths reported mid-way through 2018, the Coroner’s Office cautions that it is not possible to accurately predict a total for all of 2019.

In 2018, Pennsylvania had the third highest rate of drug overdose deaths in the country, but overall overdose deaths decreased last year. According to the Center for Disease Control and Prevention (CDC) data, Pennsylvania saw an 18.8% decrease in overdose deaths in 2018. Chester County was one of many counties contributing to that welcome decrease. The Coroner’s Office reported 112 accidental overdose deaths in 2018, a 22% drop from 2017.

The demographic profile of those who have died of an accidental drug overdose so far in 2019 is similar to that of previous years, with the affected population remaining predominantly male (77%), white (80%), and in the 25-44 year age range.

Toxicological tests show that fentanyl, a synthetic opioid found in almost 76% of our cases, continues to be the predominant drug responsible for overdose deaths in Chester County. No other substance comes close but most fatalities involve multiple drugs, both illicit and prescription. Heroin, the next most common drug, was present in 22.6% of Chester County cases. Acetyl fentanyl, another synthetic opioid, and xylazine, a large animal anesthetic, were both found in 19.4% of cases, always in combination with fentanyl. The Coroner’s Office issued a statement about xylazine when it first appeared in Chester County overdose deaths early this year. Ethanol (alcohol) and prescription benzodiazepines like alprazolam were found in 17.7% and 16.1% of cases, respectively. So far this year cocaine, amphetamine, and methamphetamine have been detected in less than 15% of drug deaths.

Drug	2019 YTD (N=62)
Fentanyl	75.8%
Heroin	22.6%
Acetyl fentanyl	19.4%
Xylazine	19.4%
Ethanol	17.7%
Benzodiazepines	16.1%

Chester County Coroner Dr. Christina VandePol stated “People in Chester County continue to die from drug overdoses largely due to the super-strong opioid fentanyl. This is not your prescription painkiller, it’s an illegal street drug often substituted for heroin. The 2018 drop in deaths is encouraging, but the recent up-tick shows we can’t relax prevention, law enforcement, or treatment approaches in an effort to bring an end to this epidemic.”

VandePol also noted, “The number of drug deaths continues to challenge the resources of many coroner and medical examiner offices, including ours. Nevertheless, we remain committed to supporting law enforcement efforts, providing answers for families, and reporting accurate and current data by performing an autopsy and toxicology testing in suspected drug overdose deaths. We communicate information on these and other deaths on our website, and to many other agencies, including Chester County Drug and Alcohol Services, The District Attorney’s Office, the Chester County and PA Departments of Health, and <http://www.overdosefreepa.org>.”

August 29, 2019

Unattended Veterans’ Interment

Chester County Coroner Office volunteer Justine Newman organized the burial of nine unclaimed veterans at Washington Crossing National Cemetery in Newtown, PA. Burial eligibility was determined by providing decedent information to the National Cemetery Scheduling Office. Of the dozens of unclaimed individuals submitted, nine were determined to be veterans eligible for burial in a national cemetery. The cremated remains of those nine veterans were interred on August 29th, 2019. Of the nine, six were members of the Army, one was a member of the Air Force, one was a member of the navy, and one was a member of the Marine Corps.

The ceremony was very well-attended. Present at the ceremony were a police escort, a veteran motorcycle group, members from the local VFW posts, representatives from numerous media outlets, and more. The veterans’ names, branches, and ranks were read aloud. Taps were played and an American flag was folded and presented to the Coroner’s Office in honor of the deceased. Upon the completion of the ceremony, each individual was placed in their own niche of the Washington Crossing National Cemetery columbarium.

In order to carry on this tradition, Justine Newman developed a standard operating procedure outlining the instructions for repeating the process in future years.

October 16, 2019

Firearm Fatalities

The Chester County Coroner's Office was called to the scene of six firearm fatalities, one homicide and five suicides, in the past week.

A dispatch was received on the night of October 10, 2019 for two fatalities at a residence in London Britain Township. After scene investigation, autopsy, and confirmation of identification, the death of Barbara Palladino, 64, in her residence, has been ruled a homicide by multiple shotgun wounds to the head. Dario Capriotti, 62, of Montgomery County, died of a self-inflicted shotgun wound to the head at the same address. The case is under investigation by the Pennsylvania State Police – Avondale.

On October 13, 2019, the Coroner's Office received two separate dispatches to firearm fatalities. The cause of death for Terri Garbutt, a 47 year old female of West Chester Borough, was a self-inflicted gunshot wound to the head at her residence. The cause of death for Daniel E. Watson, 60, of Caln Township, was a self-inflicted gunshot wound to the head, also at his residence. Watson was transported to Paoli Memorial Hospital where he succumbed to the injury.

On October 14, 2019, the Coroner's Office was again called to two unrelated firearm fatalities. Gerard R. Williams, 94, of West Chester Borough, died at his residence of a self-inflicted shotgun wound to the head. Lester W. Briel, 55, of East Coventry Township, also died at his residence of a self-inflicted gunshot wound to the head.

Coroner Christina VandePol said, "This has been a week of tragedy for too many in our community. So many violent deaths in such a short period of time is an unusual and traumatic occurrence in Chester County. Except for the London Britain Township murder-suicide, we know of no connection between any of the other deaths. At this time we have been in contact with next of kin for each decedent and have completed our investigations."

October 30, 2019

Skeletal Remains

Human remains were discovered 10/29/2019 in a wooded area of Valley Township. The Chester County Coroner's Office was called to the scene to recover the skeletal remains for purposes of identification and determination of the cause and manner of death. This is an ongoing investigation by the Coroner's Office, Chester County detectives, and Valley Township Police.