

2018 Pennsylvania Child Death Review Annual Report

**Bureau of Family Health
Division of Bureau
Operations**

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DEPARTMENT OF HEALTH

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Acknowledgements

The 2018 Child Death Review (CDR) Annual Report is a publication of the Pennsylvania Department of Health (Department) under the requirements of Act 87 of 2008.

The CDR process begins when the Department of Health, Bureau of Informatics and Information Technology (BIIT), provides vital statistics information to local CDR teams on a monthly basis. Without BIIT's assistance, local teams would not receive the information as quickly, and their support is greatly appreciated.

The data collected by the local CDR teams is housed in the web-based National Child Death Review Case Reporting System (NCFRP-CRS). This data system was developed in collaboration with the National Center for Fatality Review and Prevention and state CDR programs and was supported, in part, by a grant from the Maternal and Child Health (MCH) Bureau (Title V, Social Security Act), Health Resources and Services Administration, U.S. Department of Health and Human Services. The National Center for Fatality Review and Prevention also graciously provides technical assistance to Pennsylvania and CDR teams across the nation.

This report presents information on the distribution and causes of child deaths in Pennsylvania and reflects information collected by the local teams during the CDR process. The CDR process and the data derived from it are the result of a collaboration between the Department and local CDR teams. The local teams then collaborate with their local prevention partners to develop programs, activities and education efforts aimed at preventing child deaths. Some of the efforts occurring around the commonwealth are highlighted in this report. The Department would like to thank the local prevention partners for their assistance translating data into action.

The Department would like to acknowledge the contribution of the 63 Child Death Review (CDR) local teams, without whom this data and the entire CDR program in Pennsylvania would not be possible.

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About this Report

The data provided in this report are based on the year of death and not the review year. It focuses on those child deaths occurring in 2015 and the reviews of those deaths. Primarily, the data outlined in this report were extracted from the NCFRP-CRS and supplemented by other sources where noted.

Executive Summary

The purpose of Pennsylvania's Child Death Review (CDR) Annual report is twofold. The first is to summarize the findings from the reviews of child deaths and make recommendations about how to utilize those findings to inform prevention strategies and programming. Secondly, this report highlights some of the prevention activities accomplished locally and at the state level throughout the year. Pennsylvania's CDR Program continues to explore and pursue opportunities for supporting local teams in their work. The Department recognizes the importance of evidence-based prevention strategies and the value of effective death reviews to inform those strategies. Through this program, deaths among Pennsylvania's children can be better understood, and interventions designed to prevent future deaths can be identified.

The NCFRP-CRS is the primary source of data for the Pennsylvania CDR Annual Report. This data is based entirely on information collected by and entered by local CDR teams. The report also includes child mortality rates from the Centers for Disease Control and Prevention's (CDC's) Wide-Ranging Online Data for Epidemiologic Research (CDC WONDER) for context and comparison.

An effective child death review requires participation from agencies and individuals at a state and local level. The process is initiated when information collected from death certificates, birth certificates and traffic accident reports is compiled by department staff and securely transferred to local county teams on a quarterly basis. Local teams use this information to initiate collaborative, multidisciplinary reviews. The death review process includes gathering available information related to the child's death and is not limited to only those items contained within death certificates. This includes, among other data, information derived from law enforcement reports, coroner reports, children and youth services records, emergency medical services trip sheets, hospital records, and traffic accident reports.

Currently, all 67 counties in Pennsylvania are represented by one of the 63 local review teams. As with any team, the CDR teams cycle through the various stages of development for a variety of reasons. At any given time, local CDR teams operate at varying levels of functionality. Act 87 of 2008 provides a mandate for establishment of child death review teams in each of Pennsylvania's 67 counties, and teams consist of professionals from organizations and local agencies. Local CDR teams do not have dedicated staff and operate with limited resources. Turnover of team members can mean that teams are frequently in the beginning stages of team development. The Department of Health's Bureau of Family Health, provides support and technical assistance to all of Pennsylvania's local CDR teams.

The data collected by the reviews of children's deaths occurring in 2015 are the basis for this report. As per Act 87 of 2008, a child is defined as an individual 21 years of age and under. Reviews are conducted on deaths occurring in this age group. There were more deaths of children in 2015 than in 2014. The Bureau of Health Statistics and Registries data shows that there were 2,050 deaths of children in 2015, reflecting a 17.6 percent increase from 1,743 deaths in 2014. Of the 2,050 deaths in 2015, 1,206 (58.8 percent) were reviewed and entered into the NCFRP-CRS by local CDR teams. This represents a 13.4 percentage point decrease in the number of child deaths reviewed from 2014 when 72.2 percent of deaths were reviewed.

Pennsylvania rate of death for all children 21 years of age and younger (54.5 per 100,00 population) is similar to the national rate of 55.2 per 100,000 population. The 2015 Pennsylvania and national

rates both increased from the 2014 rates, which, respectively, were 51.2 and 53.6 per 100,000 population.

In Pennsylvania, deaths of black or African-American children occur at a higher rate than those of children of other races. The previous three years have seen a decline in this rate of death, reaching a five-year low of 89.8 per 100,000 population in 2014. The rate rose in 2015 to 92.1 per 100,000 population, which is a slightly higher rate than the national mortality rate for black or African-American children, which was 90.8 per 100,000 population in 2015.

In Pennsylvania, the rate of death for white children had also seen a decline, reaching a five-year low rate of 44.4 deaths per 100,000 population in 2014. While the rate increased in 2015 to 47.9 per 100,000 population, the rate is lower than the national mortality rate for white children which is 49.1 per 100,000 population. The death rate for Asian or Pacific Islander children has increased since last year from 34.1 per 100,000 population to 37.4 per 100,000 population and is also higher than the national rate for the same population of 34.3 per 100,000 population.¹

Close to half of the deaths reviewed were deaths among infants. There were 545 total infant deaths reviewed, representing 45.2 percent of all cases reviewed. Children age 18 years through 21 years of age accounted for 30.5 percent of child deaths reviewed. Combined, these two age groups represent 75.7 percent of all child deaths reviewed in Pennsylvania.

The highest single cause of death identified among infant deaths reviewed was prematurity, wherein 254 cases were reviewed with that cause of death (46.6 percent of all infant deaths reviewed). Further examination of the infant deaths revealed that 75 cases were reviewed in which the death was determined to be related to Sudden Unexpected Infant Death (SUID). According to CDC WONDER data, black or African-American infants are disproportionately the largest race group affected by SUID. Local CDR Teams found that 30.6 percent of the SUID deaths were probably preventable. Teams are to consider a child's death to be preventable when an individual or the community could have reasonably done something that would have changed the circumstances that led to the child's death.

There were 189 cases reviewed in which weapons were involved in the child's death. Weapon-related deaths account for the largest number of external injury deaths. The majority of the deaths involving a weapon (86.7 percent) occurred among children between 15 and 21 years of age. Of the weapon-related deaths reviewed, 92 of the deaths were determined by the teams to be preventable.

Motor vehicle deaths were identified in 123 cases reviewed. The data revealed that 82.1 percent of children involved in motor vehicle deaths were between the ages of 15-21 years. Of the motor vehicle deaths reviewed, 99 deaths were determined by the teams to be preventable.

An examination of the reviewed 2015 deaths revealed that, in 103 cases, children's deaths involved a reported poisoning, overdose or acute intoxication. Of those deaths reviewed, 93.2 percent involved children between the ages of 15-21 years of age. Teams found that 85 of the poisoning, overdose or acute intoxication deaths reviewed were preventable.

According to the review data contained within the NCFRP-CRS, 376 cases (31.2 percent) were determined to have been preventable by the local CDR teams in 2015. Of these preventable deaths, 211 cases (56.1 percent) were accidental. It is important to note that the determination of preventability is a subjective measure determined by local teams based on the information available

at the time of the review. Additionally, the determination is based on what data is available in the NCFRP-CRS at the time of this report.

Recommendations

Counties should continue their focus on collaborations and partnerships at the local level. One of the benefits of Pennsylvania's CDR Program is the local team's ability to connect with community efforts to prevent child deaths, which is not possible at a statewide level. CDR teams are not expected to create prevention strategies and develop recommendations all on their own. Many counties, community-based organizations and local governments have prevention programs targeting the causes of child death. Local CDR teams and the data collected should be used for support of these efforts. Quality data helps support prevention strategies, as local leadership would be more willing to support prevention strategies and recommendations that are data driven. The CDR program should continue to develop and implement strategies that focus on data quality.

Methods

An effective review requires using the information about the set of circumstances leading up to and causing a child death to improve systems and prevent future child deaths.² The process is initiated when information collected from death certificates, birth certificates and traffic accident reports is compiled by department staff and securely transferred to local CDR teams on a quarterly basis. Local teams use this information to initiate collaborative, multidisciplinary reviews. The death review process includes gathering available information regarding the circumstances related to the child's death and is not limited to only those items contained within death certificates. This includes, among other data, information derived from law enforcement reports, coroner reports, children and youth services records, emergency medical services trip sheets, hospital records, and traffic accident reports. Cases are specifically assessed for preventability.

Currently, all 67 counties in Pennsylvania are represented by one of 63 local review teams. Local team members are comprised of community leaders who represent organizations and agencies that serve and protect children within their respective counties. Local teams' core membership includes representation from the (1) coroner's or medical examiner's office, (2) district attorney's office, (3) local law enforcement, (4) court of common pleas, (5) medical and emergency medical communities, (6) county children and youth agency, and (7) public health agency. Most teams also include representation from behavioral health services, substance misuse treatment and education.

Local CDR teams enter the data collected through the child death review process into the NCDR-CRS. Department staff as well as the local CDR teams can then export and analyze the CDR data to better understand the manner and cause of death and all the factors present that may have led to each reviewed death. Department staff analyzed the 2015 data to determine the most common causes of death by age and gender, using frequencies of death by cause and manner to determine which deaths were considered preventable and to identify factors that contributed to the deaths that can be used to inform prevention efforts both locally and statewide.

This CDR data is then supplemented with data from the CDC WONDER. This is a free online database maintained by the CDC. For the purposes of the annual report, CDC WONDER provides mortality rates by age, race/ethnicity and gender for the state that would not otherwise be available through the NCDR-CRS for context and comparison. Additionally, the annual report compares Pennsylvania mortality rates to the national rates to determine if Pennsylvania rates are analogous. Pennsylvania and national mortality rates derived from CDC WONDER were plotted over time from 2011 to 2015 to determine if rates were increasing or decreasing. The mortality rates in conjunction with the NCDR-CRS are used to identify populations most at risk for child deaths and to inform development of targeted prevention efforts/strategies.

Most deaths are reviewed six to nine months after they occur. In Pennsylvania, local CDR teams review all deaths of children who are Pennsylvania residents, from birth through age 21 years. This includes deaths due to any cause or manner. A comprehensive review of a child's death requires the sharing of information from case records from multiple sources on the wide-ranging set of circumstances leading up to and causing a child's death. As teams meet to conduct reviews, available information is compiled for each case. Each team has a designated individual or individuals who subsequently enters this information into the NCFRP-CRS. Review data downloaded from the NCFRP-CRS were used in the development of this report. The data from the NCFRP-CRS used in the creation of this report were current as of June 25, 2018.

Limitations

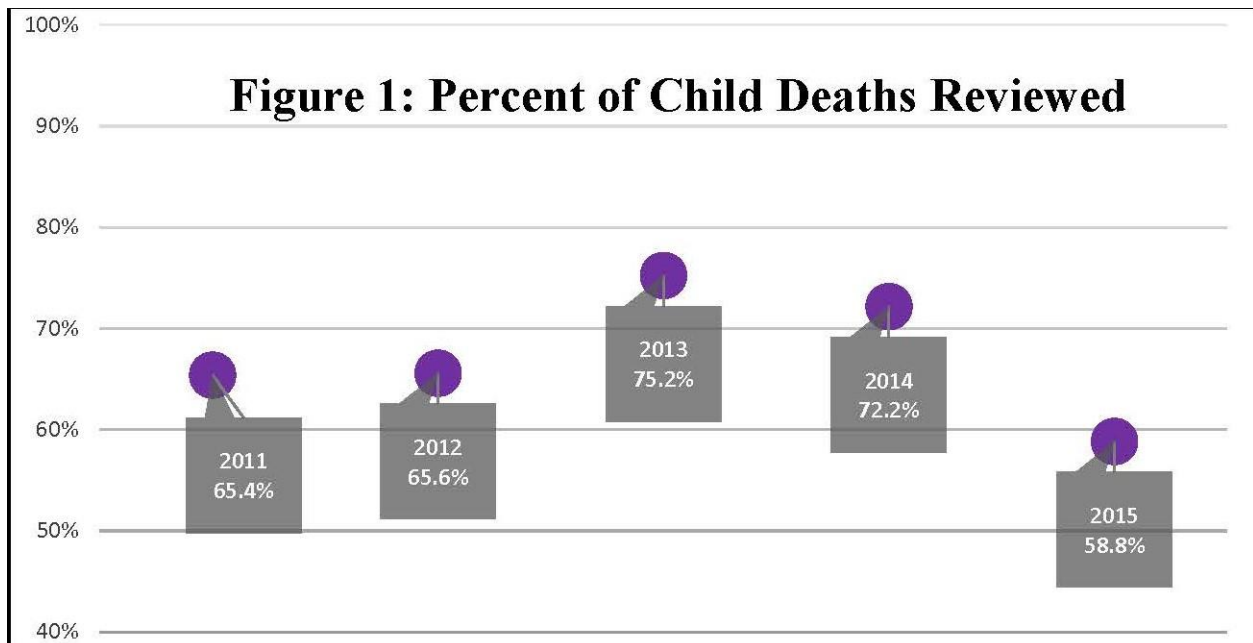
Given that reviews are triggered by the filing of death certificates, the information available on death certificates may affect the review process through any limitations associated with the accuracy and reliability of the information presented on death certificates. For example, when cause of death is pending, teams sometimes set the reviews of those cases aside temporarily or locate the information from a participating coroner before initiating the review process.

It is important to recognize that the number of deaths reviewed will not equal the total number of statewide deaths that occurred. According to vital statistics, there were 2,050 deaths in children 21 years of age and younger in 2015. Based on the review data contained within the NCFRP-CRS, 1,206 (58.8 percent) deaths were reviewed. Teams review deaths after death investigations are completed and death certificates are filed with the Pennsylvania Department of Health, Bureau of Vital Statistics. Typically, cases involving the judicial system are not reviewed until that process is concluded to avoid jeopardizing the judicial process. Cases are sometimes delayed in the review process when team members representing law enforcement or the district attorney's office determine that conducting a child death review could potentially impact an investigation or a prosecution. In other cases, core information surrounding the circumstances of the death is absent, and a complete review is not possible. This occurs for several reasons, including those cases wherein released records are not provided by an agency, county or state (if the death occurred out-of-state) or the information on the death certificate is inadequate to proceed.

The information captured by the review team can be entered and stored in the NCFRP-CRS. Data downloaded from that system were used in developing this report, and it is important to note that cases within the system are at varying levels of completeness. While some review cases are initiated, not all the fields of information, or components, are completed during the review or by the time of this report. Data entry into NCFRP-CRS is dependent upon local teams' ability to identify staff to complete modules. Discussion or findings during reviews that are not entered in NCFRP-CRS or other reports completed by local teams are not included in this report. For these reasons, it is important to recognize that frequencies and percentages based on available review data should be applied cautiously in drawing inferences on total deaths statewide.

Findings

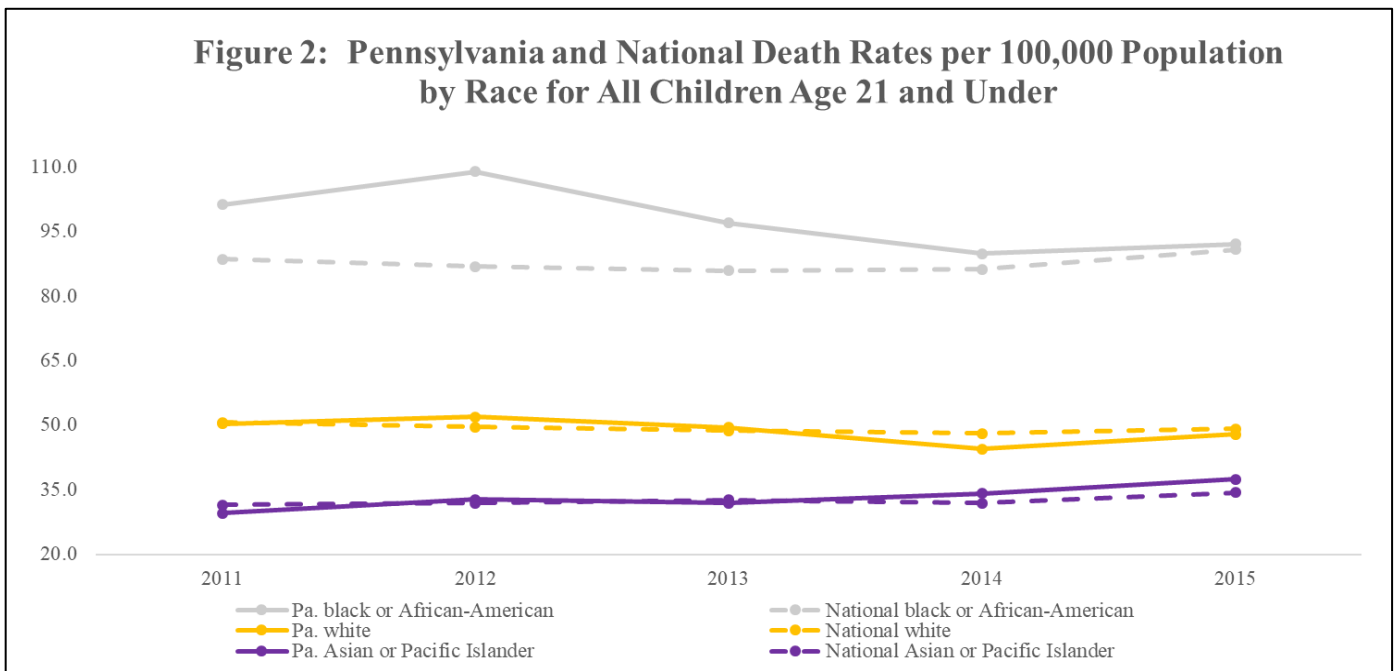
Data collected from reviews of child deaths occurring in 2015 are the basis for this report. Act 87 of 2008 defines a child as an individual 21 years of age and under. Reviews are conducted of children's deaths from birth through age 21 years. Overall, there were more deaths of children in 2015 than in 2014. There were 2,050 deaths of children in 2015, reflecting a 17.6 percent increase from 1,743 deaths in 2014. Of the 2,050 deaths in 2015, 1,206 (58.8 percent) were reviewed by local CDR teams and entered into the NCFRP-CRS. This represents a 13.4 percentage point decrease in the number of child deaths reviewed from 2014 when 72.2 percent of deaths were reviewed. The number of child deaths increased in 2015 and the number of child deaths reviewed and entered in the NCFRP-CRS decreased. Figure 1: Percent of Child Deaths Reviewed, clearly shows the percentage of Pennsylvania child deaths reviewed by local CDR teams over the past five years. While the previous two years showed an overall significant increase in the percentage of deaths reviewed over the two years prior, 2015 showed a significant decline. While primarily anecdotal, it is important to note that many teams struggled to review cases as demands of their jobs grew due to the impact of the increased caseloads resulting from statutory changes in criminal and civil laws designed to strengthen child protection. This barrier to effective reviews was compounded by the current opioid crisis.



Data Source: 2015 BIIT and NCFRP-CRS data, as well as 2014-2017 CDR annual reports
*Numbers may have changed slightly since writing the report, as death certificates are entered, and cases are reviewed after the completion and issuance of the annual reports.

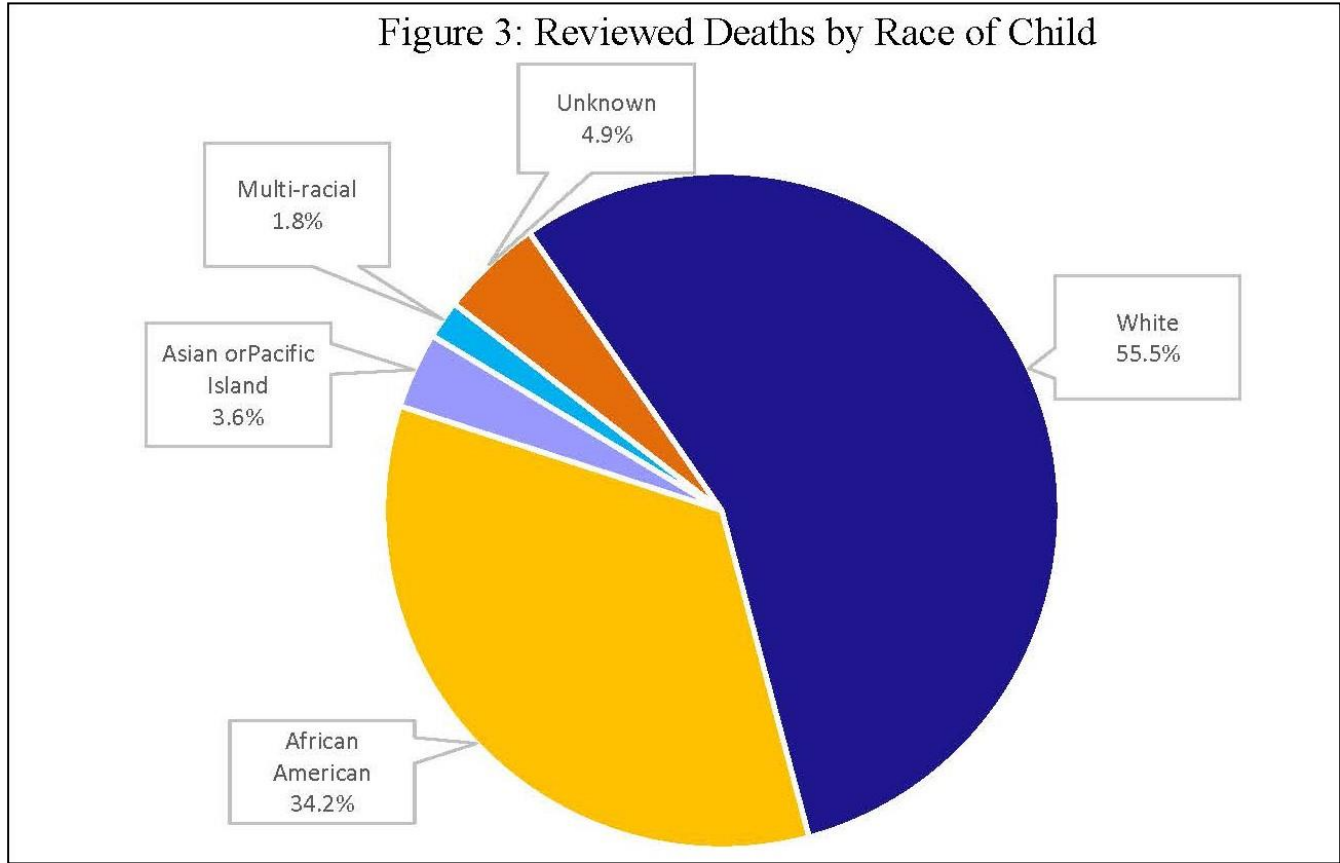
It is important to note that while most cases involve white children, there is a larger population of white individuals in Pennsylvania. Rates are used when comparing populations because they standardize population size and provide a more meaningful comparison between population groups. Figure 2, Pennsylvania and National Death Rates per 100,000 Population by Race for All Children Age 21 and Under, shows data from CDC WONDER and highlights rates of death for children in Pennsylvania and in the nation based on race. In Pennsylvania, deaths of black or African-American children occur at a higher rate than those of other races. The previous three years saw a decline in this rate of death, reaching a five-year low of 89.8 per 100,000 population in 2014. The rate rose slightly in 2015 to 92.1 in population, a higher rate than the national mortality rate for black or African-American children, which was 90.8 in 2015.

In Pennsylvania, the rate of death for white children has also seen a decline, reaching a five-year low rate of 44.4 deaths per 100,000 population in 2014. While the rate increased in 2015 to 47.9 per 100,000 population, the rate is lower than the national mortality rate for white children, which is 49.1. The rate of death for Asian or Pacific Islander children residing in Pennsylvania increased from 34.1 deaths per 100,000 population in 2014 to 37.4 deaths per 100,000 population and is also higher than the national mortality rate for Asian or Pacific Islanders of 34.3 per 100,000.



Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2016 on CDC WONDER Online Database, released December 2017. Data are from the Multiple Cause of Death Files, 1999-2016, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on July 27, 2018

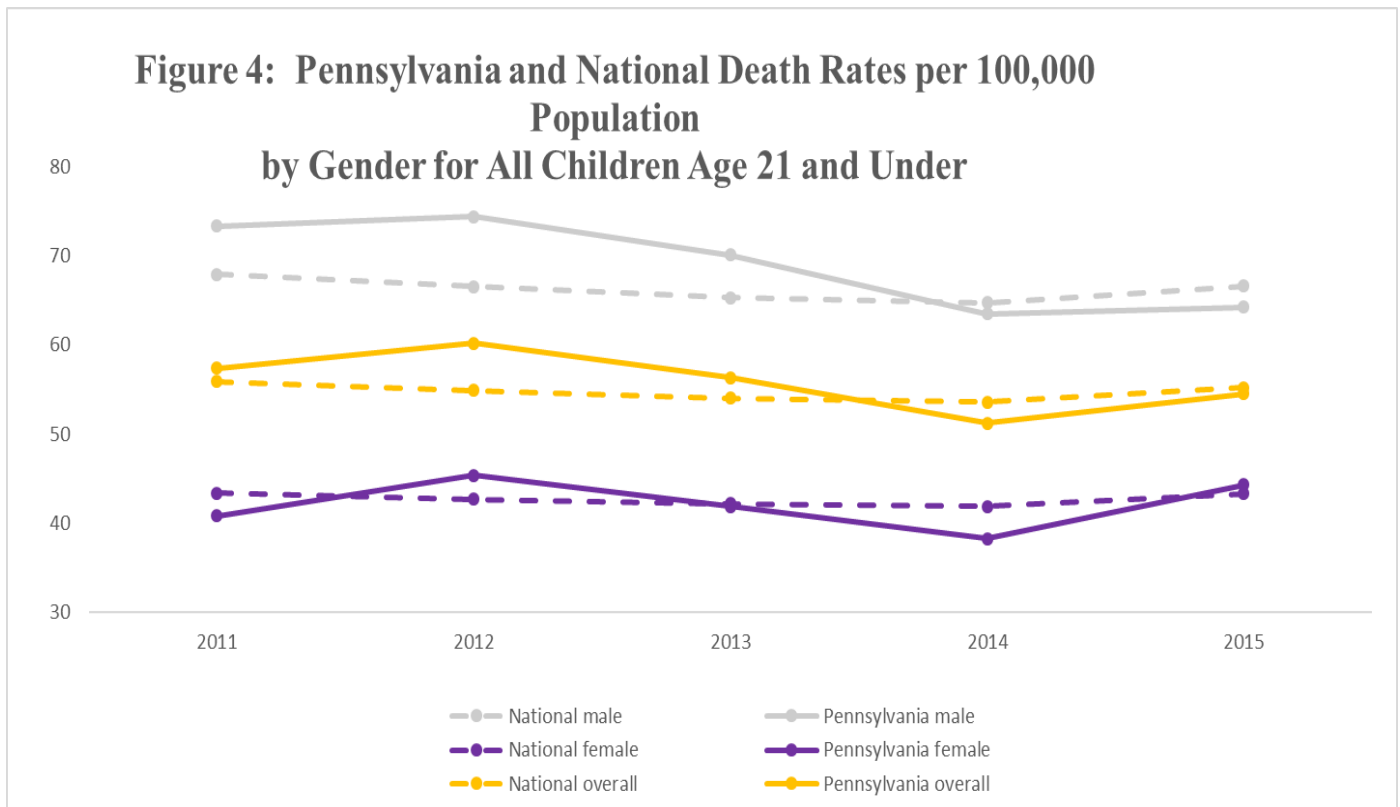
An examination of the 1,206 reviewed child death cases by race and ethnicity revealed that: 1) 55.5 percent of the children were identified as white; 2) 34.2 percent of the children were identified as black or African-American; 3) in 3.6 percent of the cases the children were identified as Asian or Pacific Islander; 4) in 1.8 percent the children were identified as multi-racial; and 5) in 4.9 percent the children's races were unknown or no response was recorded. See Figure 3: Reviewed Deaths by Race of Child. In 124 cases (10.3 percent), the children were identified as Hispanic/Latino (all races).



Data Source: NCDR-CRS, Year of Death: 2015

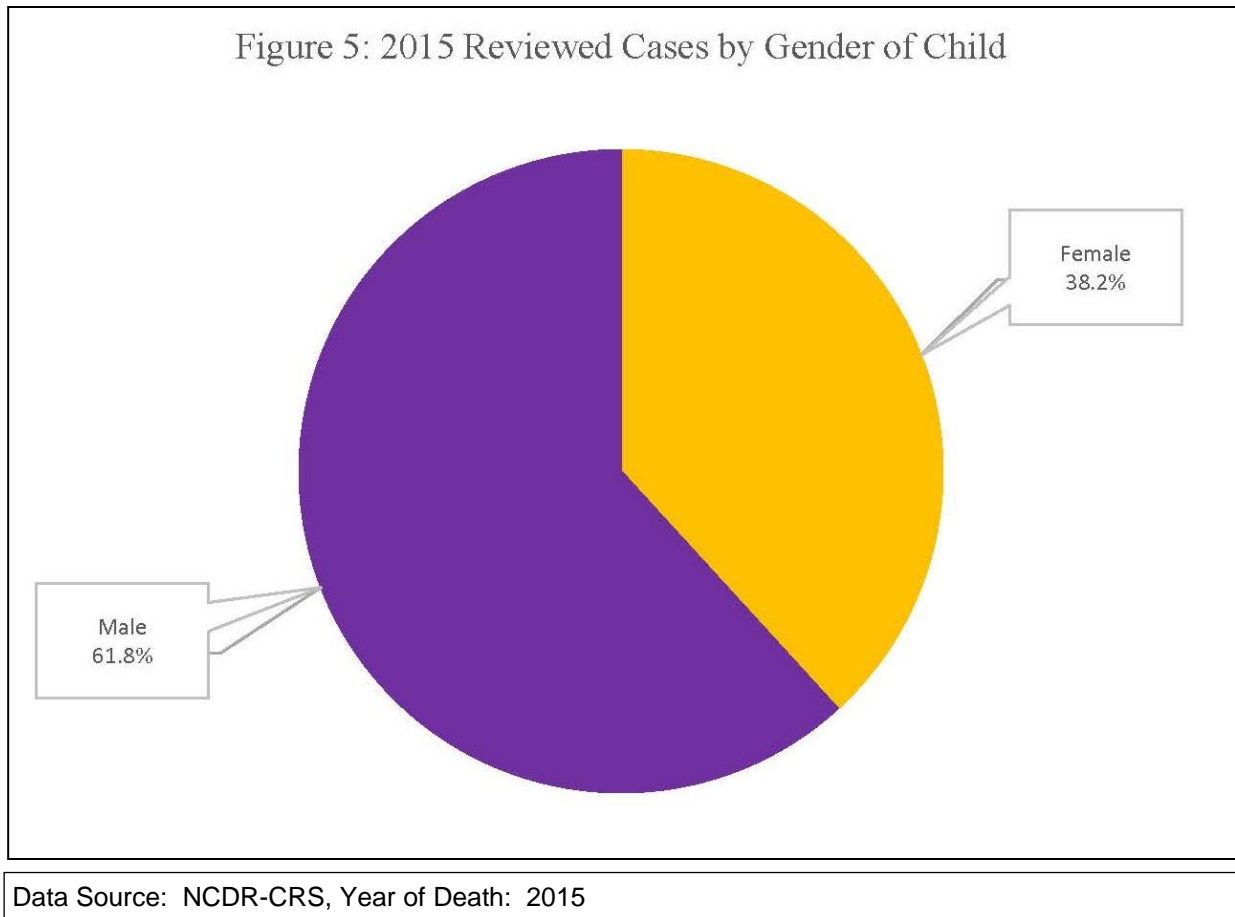
Data from CDC WONDER reveals deaths of male children age 21 years and under in Pennsylvania occur at a rate of 64.2 per 100,000 population, which is a higher than the rate of females (44.3 per 100,000 population). This is also higher than the overall rate of 54.5 per 100,000 population. This is comparable to the overall national rate of 55.2 per 100,000 population. The previous three years, Pennsylvania saw a decrease in rates of death by gender. In 2015, the rates increased by 0.7 percent for males and 6 percent for females.

The rate for Pennsylvania males is below the national rate of 66.6 per 100,000, while the rate for Pennsylvania females is above the national rate of 43.3 per 100,000. See Figure 4: Pennsylvania and National Death Rates per 100,000 Population by Gender for All Children Age 21 and Under.



Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2016 on CDC WONDER Online Database, released December 2017. Data are from the Multiple Cause of Death Files, 1999-2016, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on July 27, 2018

Figure 5: 2015 Reviewed Cases by Gender of Child



Of the 1,206 children's deaths reviewed, 745 (61.8 percent) were male and 461 (38.2 percent) were female. See Figure 5: 2015 Reviewed Cases by Gender of Child.

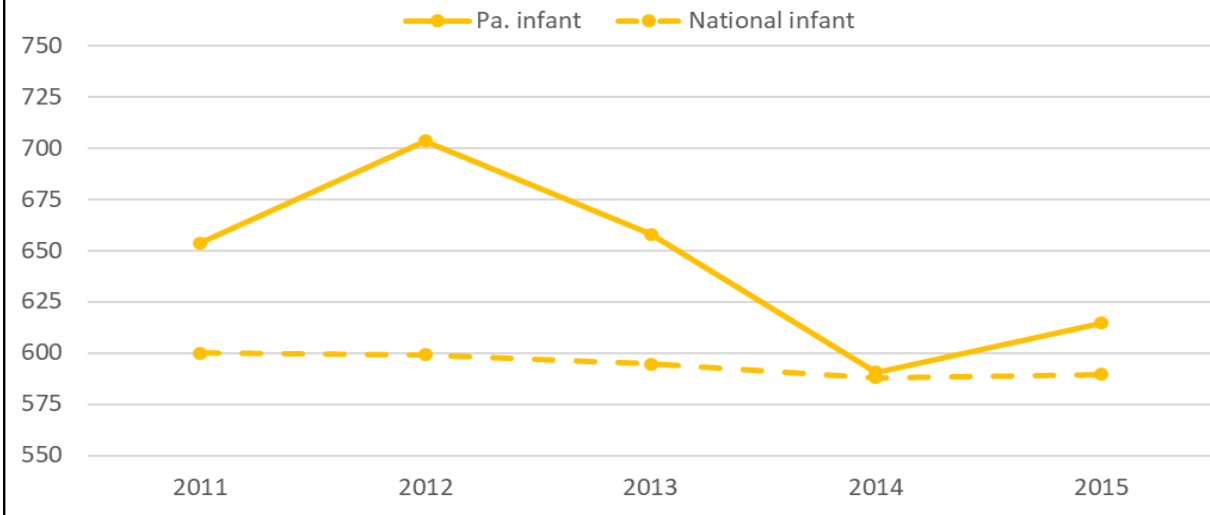
Data from CDC WONDER shows that both nationally and in Pennsylvania, the largest rate of deaths by age group is infants (children less than 1 year old). The second largest number of deaths by age group is children age 18 to 21 years. While the previous two years had shown a drop in the rate of deaths for children in these two age groups, 2015 data showed an increase for both age groups.

Based on CDC WONDER data for Pennsylvania, the death rate of infants increased from 590.6 per 100,000 in 2014 to 614.7 per 100,000 in 2015. This is not the highest rate of death for this age group over the past five years (2011-2015) but is higher than the national rate of 589.6 per 100,000 population. This is illustrated in Figure 6: Pennsylvania and National Death Rates per 100,000 Population by Infant Age Category.

In Pennsylvania, the death rate of children age 18-21 years old has increased from 67.9 per 100,000 population in 2014 to 74.2 per 100,000 population in 2015.

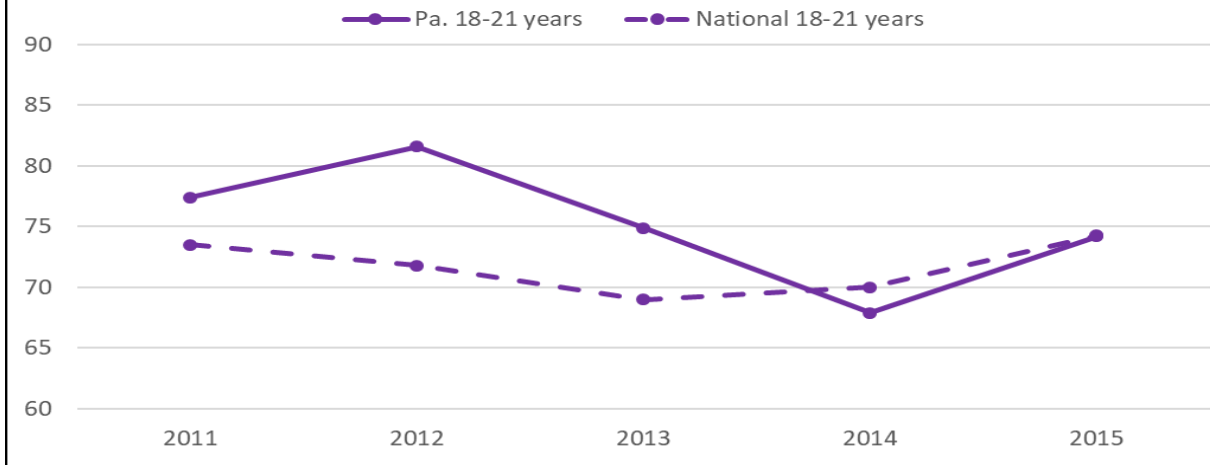
This is the second lowest rate of death for this age group over the past five years (2011-2015), and the rate is consistent with the national rate of 74.3 per 100,000. This is illustrated in Figure 7: Pennsylvania and National Death Rates per 100,000 Population by 18-21 Age Category.

Figure 6: Pennsylvania and National Death Rates per 100,000 Population by Infant Age Category



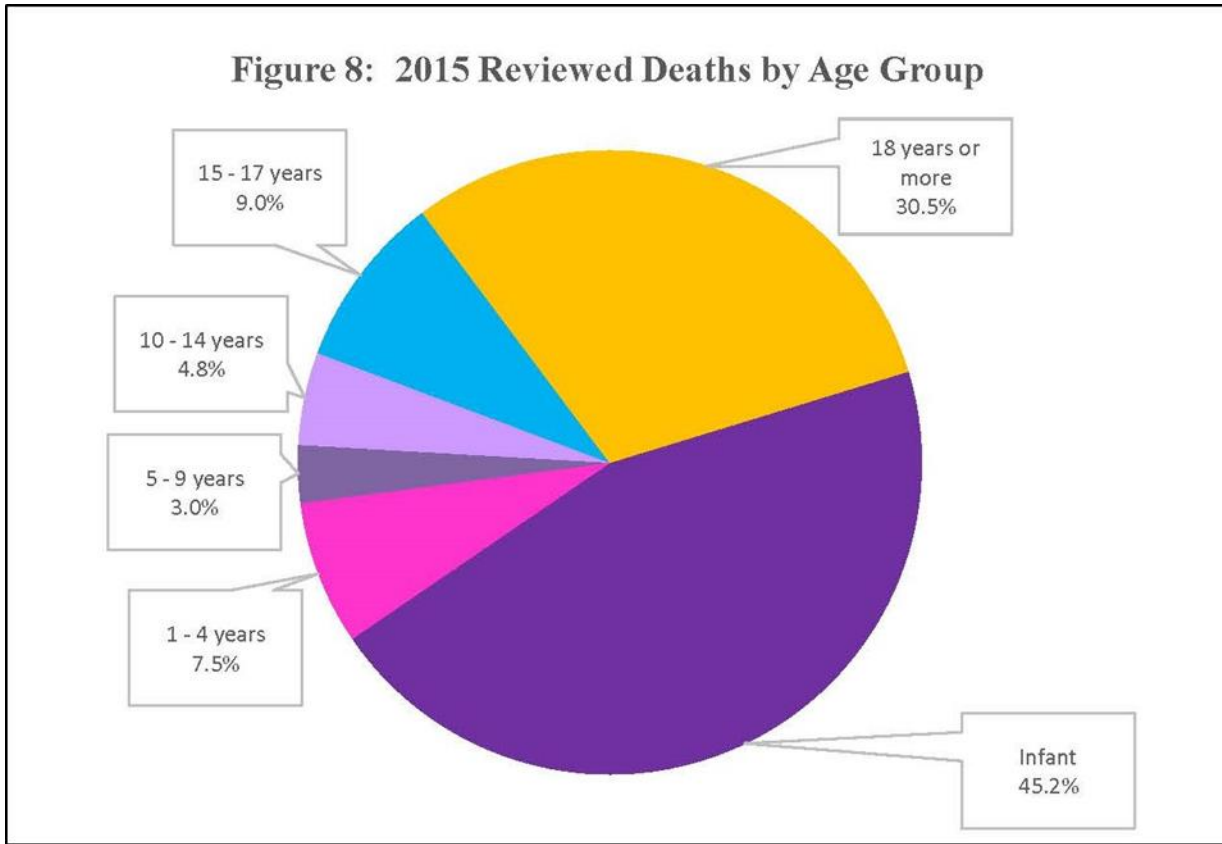
Data Source: United States Department of Health and Human Services (US DHHS), Centers of Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics (DVS). Linked Birth / Infant Death Records 2007-2015, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program, on CDC WONDER On-line Database. Accessed at <http://wonder.cdc.gov/lbd-current.html> on Aug. 6, 2018

Figure 7: Pennsylvania and National Death Rates per 100,000 Population by 18 - 21 Age Category



Data Source: United States Department of Health and Human Services (US DHHS), Centers of Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics (DVS). Linked Birth / Infant Death Records 2007-2015, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program, on CDC WONDER On-line Database. Accessed at <http://wonder.cdc.gov/lbd-current.html> on Aug. 6, 2018

An examination of the 1,206 reviewed deaths in Pennsylvania reflects what is seen in the national and state data for age categories. Figure 8: 2015 Reviewed Deaths by Age Group shows infants (children less than 1 year of age) comprised the largest single age group of cases reviewed (45.0 percent). Infants and young adults ages 18-21 years represent 75.7 percent of all child deaths reviewed in Pennsylvania.



Data Source: NCDR-CRS, Year of Death: 2015

Manner and Cause of Death

The manner and cause of death are determinations made by either the coroner or medical examiner. Pennsylvania has county government medical examiner offices in Philadelphia, Allegheny and Delaware counties and elected coroners in the other 64 counties. Conclusions are made following either an autopsy or medical review of the death. The manner of death relates to the categorization of circumstances of the death. The five categories of manner of death are natural, homicide, suicide, accident and undetermined. The cause of death is the physical condition that directly contributed to the person's death. The underlying cause of death is either the disease or injury that initiated the train of morbid events leading directly to death or the circumstances of the accident or violence that produced the fatal injury.² A cause of death on the death certificate represents a medical opinion that might vary among individual medical-legal officers.

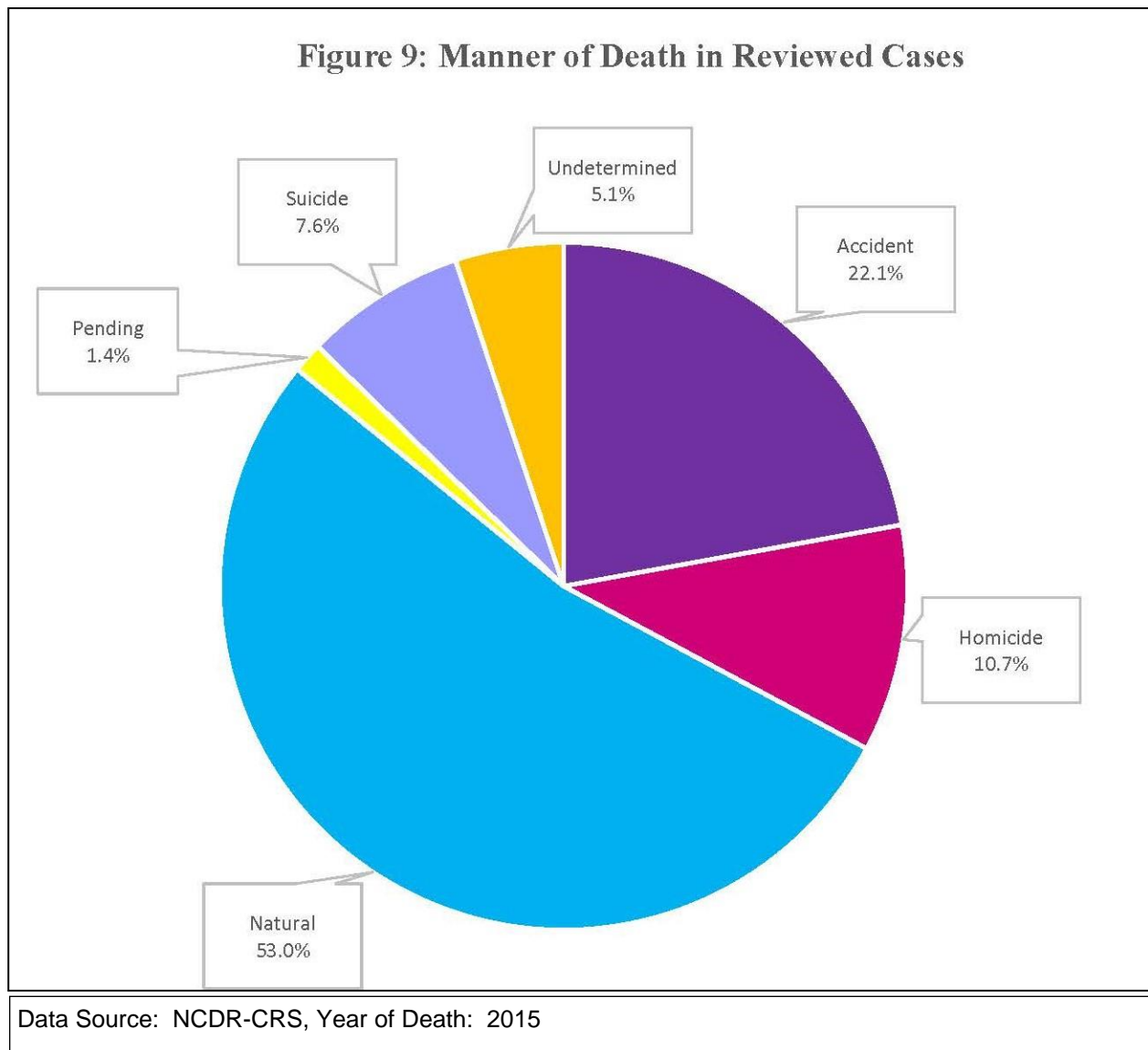
The International Classification of Diseases (ICD) codes are alphanumeric designations given to every diagnosis, description of symptoms and cause of death attributed to human beings. The classifications are developed, monitored and copyrighted by the World Health Organization (WHO). In the United States, the National Center for Health Statistics oversees all changes and modifications to the ICD codes, in cooperation with WHO. ICD codes are used to classify a cause of death. Every cause-of-death statement is coded and tabulated according to these classifications. The most current list of codes in use is ICD-10, reflecting the tenth revision.

The task of the medical examiner or coroner is to determine whether a death is an accident or the result of intent to end life. The medical examiner or coroner must use all information available to reach a determination about the death. This may include information from his or her investigation, police reports, staff investigations, and discussions with the family and friends of the decedent. Determining the manner and cause of death can be straightforward, or it may take weeks to determine.

It is important to note that within the NCFRP-CRS, manner of death is captured within seven (not five) possible categories. In addition to the five listed above, the system provides options for (1) pending, and (2) unknown.

Child death review is a mechanism to describe the manners, causes and circumstances of child deaths more accurately. Understanding these elements is important when developing strategies to prevent deaths. The information in Figure 9: Manner of Deaths in Reviewed Cases shows the percentage of reviewed deaths attributed to each of the five categories of the manner of death for all age categories. For children from birth to age 15 years, the most frequent manner of death identified is natural (77.1 percent). Whereas, for children ages 15 years and up, deaths are most often identified as accidental (41.1 percent).

Figure 9: Manner of Death in Reviewed Cases



Once the manner of death is determined, the cause or physical condition that directly contributed to the death needs to be concluded. The causes of death are broken down into three broad categories:

- Medical conditions — deaths directly attributed to some type of disease or illness as the cause of death. The manner of these deaths is typically defined as natural.
- External causes — deaths which were directly a result of some external action against the body. The manner of these deaths can be accident, homicide or suicide.
- Unknown/undetermined — deaths for which a cause cannot be immediately identified.

Of the total 1,206 cases reviewed, the category of medical conditions represented the single highest frequency with 611 cases (50.7 percent of the total deaths reviewed). The highest cause of death for these cases was prematurity (42.1 percent), followed by congenital anomaly (14.2 percent) and other medical conditions (12.8 percent). The next highest category of the cases reviewed was external causes, with 488 (40.55 percent) of the total deaths reviewed. The highest cause of death for these cases was weapons-related (38.7 percent), motor vehicle accidents (25.2 percent) and poison (22.1 percent), which includes overdose and acute intoxication.

An examination of the causes of death within the infant age group (less than 1 year old) revealed that most reviewed infant deaths were due to prematurity. Of the total 545 infant deaths reviewed, 254 (46.6 percent) were due to prematurity. Congenital anomaly was identified as the second most frequently occurring cause of infant death, identified in 69 cases (12.7 percent). Of the 126 reviews conducted on deaths occurring in children aged 1 through 9 years, the most frequent causes of death were other medical conditions and external motor vehicle, identified in 17 cases (13.5 percent) for each. In the 167 reviews conducted on deaths occurring in children aged 10 through 17 years, the most frequent cause of death was due to weapons, identified in 52 cases (31.3 percent). That was followed next in frequency by motor vehicle accidents, identified in 32 cases (19.1 percent). An examination of the 368 reviews conducted on children aged 18 through 21 years revealed the most frequently occurring cause of death was weapon-related, identified in 131 cases (35.6 percent). That was followed next by poisoning/overdose, identified in 88 cases (24.0 percent). Table 1: Causes of Death by Age Category shows child deaths as identified in the 2015 CDR reviews by cause and age category.

	Cause of Death	Infant	1 - 4 years	5 - 9 years	10 - 14 years	15 - 17 years	18 years or more	Grand Total
External causes	External-asphyxia	23	1	3	0	0	0	27
	External-drown	0	7	0	4	4	4	19
	External-fall,crush	0	1	1	1	0	6	9
	External-fire,burn,elec	2	2	3	0	0	1	8
	External-motor vehicle	0	12	5	5	27	74	123
	External-other	1	4	2	0	1	2	10
	External-poison	0	3	0	4	8	88	103
	External-weapon	2	4	0	10	42	131	189
	Subtotal external causes	28	34	14	24	82	306	488
Medical conditions	Asthma	2	0	1	3	0	1	7
	Cancer	0	5	4	6	8	10	33
	Cardiovascular	11	5	1	3	3	8	31
	Congenital anomaly	69	8	2	4	3	1	87
	Diabetes	0	0	1	0	0	2	3
	HIV,AIDS	0	0	0	1	0	0	1
	Influenza	0	0	0	1	0	1	2
	Malnutrition, dehydration	1	0	0	0	0	0	1
	Nerological, seizure	3	5	1	1	2	4	16
	Other infection	14	7	1	3	0	1	26
	Other medical	31	11	6	9	7	14	78
	Other perinatal	29	1	1	0	0	0	31
	Pneumonia	4	3	0	1	1	1	10
	Prematurity	254	2	0	0	0	1	257
	SIDS	24	1	0	0	0	0	25
	Undetermined medical	1	1	0	0	0	0	2
Unknown	0	0	0	0	0	1	1	
Subtotal medical conditions	443	49	18	32	24	45	611	
Unknown	No response	25	3	3	2	1	11	45
	Undetermined if medical or external injury	37	3	1	0	1	2	44
	Unknown	12	1	0	0	1	4	18
Subtotal unknown	74	7	4	2	3	17	107	
Grand Total	545	90	36	58	109	368	1206	

Sudden Unexpected Infant Deaths (SUID)

According to the CDC, about 3,500 infants die suddenly and unexpectedly each year in the United States³. These deaths are called sudden unexpected infant deaths. An autopsy alone cannot always explain these deaths without investigating the scene and reviewing the infant's medical history. The most common causes of SUID include the following:

- Sudden Infant Death Syndrome (SIDS) is the sudden death of an infant less than 1 year old that cannot be explained after a thorough investigation that includes a complete autopsy, examination of the death scene and a review of the medical history.
- Unknown cause is the sudden death of an infant less than 1 year old that cannot be explained. Often, a thorough investigation was not conducted, and cause of death could not be determined.
- Accidental suffocation and strangulation in bed (ASSB) includes suffocation by (1) soft bedding (for example, pillows covering an infant's nose and mouth), (2) overlays (for example, when a person rolls on top of or against an infant), (3) wedging or entrapment (for example, when an infant is wedged between two objects such as a mattress and wall, bed frame or furniture), and (4) strangulation (for example, when an infant's head and neck are caught between crib railings).

Safe Sleep

It is commonly recognized that babies placed on their stomach or sides to sleep are at greater risk for SIDS than babies who are placed on their backs to sleep.

In 1992, the American Academy of Pediatrics recommended placing babies on their backs to sleep. As a result of growing public awareness and successful intervention strategies, the rate of SIDS deaths has declined nationwide. Despite a reduction in the incidence of SIDS since 1992, the decline plateaued in recent years. Furthermore, according to the AAP, concurrently, other causes of SUID that occur during sleep (including suffocation, asphyxia and entrapment) and ill-defined or unspecified causes of death have increased in incidence.⁴

Consequently, in 2011, the AAP expanded the recommendations from focusing only on SIDS to focusing on a safe sleep environment.

What does safe sleep look like?



Safe Sleep ABC's

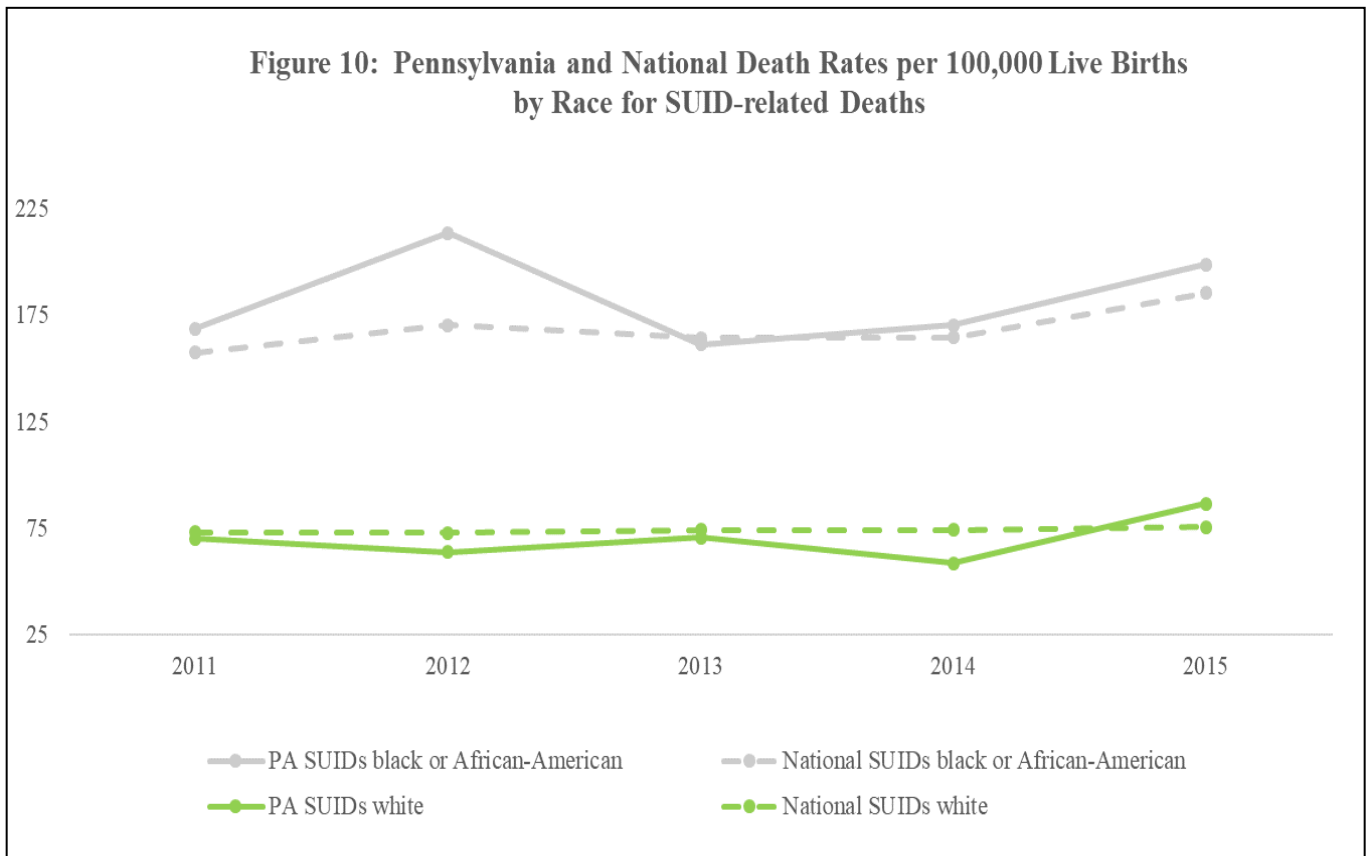


Alone -- Your baby should sleep by himself, never with another person or with anything else in the crib.

Back -- Your baby should always sleep on her back. Every time.

Crib -- Your baby should sleep in a crib in your room. The crib should have a firm mattress and a tightly fitted sheet.

An examination of Pennsylvania's reviewed infant deaths for 2015 revealed that 75 (13.8 percent) of the 545 infant deaths were SUID-related cases. This is the second highest cause of death for infants, behind only prematurity. CDC WONDERS data for Pennsylvania shows that black or African-American infants die of SUID at more than twice the rate of white infants. This is illustrated in Figure 10: Pennsylvania and National Death Rates per 100,000 Live Births by Race for SUID-Related Deaths. Although the overall rate had seen a decline over the previous five years, in 2015, the rate for black or African-American and for white infants rose slightly higher



Data Source: CDC WONDER Online Database. Accessed at <http://wonder.cdc.gov/lbd-current.html> on August

than the national rate. The rate of death per 100,000 for white infants rose above the national rate for the first time in five years.

It is also important to note that black or African-American and white children were the only population available for this comparison. Rates for American Indian or Alaskan Natives and Asian or Pacific Islanders are unavailable for Pennsylvania, as they are suppressed for low totals (number is less than nine). However, national rates for American Indian or Alaska Natives are significantly higher than white and black or African-American populations. Asian or Pacific Islander populations have the lowest rate of SUID-related deaths nationally.

The sleep locations for the 75 SUID-related deaths reviewed from the Case Reporting System varied. In 33.3 percent of these cases, the child was found in an adult bed, while 8.0 percent were found on a couch. Only 13.3 percent of the SUID cases occurred in the child's crib. Additionally, in 17.3 percent of the SUID deaths that were reviewed, the usual sleep place was the child's crib. In 16.0 percent of the SUID deaths reviewed, the usual sleep place for the child was an adult bed. Over one-third (38.7 percent) of the cases identified as SUID-related deaths involved the child sleeping on the same surface with a person or an animal.

Prevention and Recommendations

Based on the review data contained within the NCFRP-CRS, 376 cases (31.2 percent) were determined to have been preventable by the local CDR teams in 2015. Figure 11: Top Five Causes of Death by Preventability illustrates the top five causes of death that teams found to be preventable. These top five causes of death represent 83.7% of the preventable reviewed deaths. Of these preventable deaths reviewed, 211 cases (56.1 percent) were accidental. It is important to note that the determination of preventability is a subjective measure determined by local teams based on the information available at the time of the review. This analysis is based on the data available in the NCFRP-CRS at the time of this report. In 2015, weapons moved from third highest to the second highest preventable type of death for the cases that were reviewed.

Figure 11: Top Five Causes of Death by Preventability	
Cause of Death	Number of Cases
Motor vehicle	99
Weapon	92
Poison	85
Asphyxia	21
Drown	15
Data Source: NCFRP-CRS, Year of Death:2015	

Additional analysis determined that reviews of 406 cases (33.7 percent) of the 1,206 deaths resulted in recommendations.

Please see Child Death Review Team Activities on page 23 to 27 for more information on efforts resulting from CDR activities to keep kids safe.

Child Death Review Team Activities

The purpose of the reviews conducted by local CDR teams is to gather and examine data regarding the circumstances surrounding child deaths to promote safety and to reduce child fatalities through various activities. Activities are led by the CDR teams, CDR team members or through collaborations with other local entities, including, but not limited to, coroners, local health departments, hospitals, law enforcement, home visitation programs, children's advocacy centers and schools. This section highlights some of the work being done at the local and state level.

Local CDR Activities:

Safe sleep: To combat sleep-related deaths, communities across Pennsylvania have initiated safe sleep prevention efforts. Education for caregivers about safe sleep can occur in several ways. While hospitals are required by statute to provide safe sleep education information after childbirth prior to discharge, many programs provide safe sleep education and materials within the community and to the clients with children under the age of 1 year. In Lawrence County, team members have participated in training to be able to provide safe sleep education to clients of their agencies. To promote better parenting and to improve child well-being, Lawrence County has trained staff and community members on infant massage as a positive parenting technique that helps frustrated parents and benefits babies and parents.

The Allegheny County CDR team established a real-time infant unsafe sleep injury and death review in collaboration with a local children's hospital. The reviews occur within two weeks of the child's injury or death from suspected unsafe sleep. This enables the team to quickly identify trends and implement additional prevention efforts where needed. The team also provided additional SUID training to staff in the Medical Examiner's Office and educated law enforcement about CDR death scene investigations.

Motor vehicle safety: In addition, many communities partner with the Pennsylvania Department of Transportation to implement activities to reduce injury and death from motor vehicle accidents. Motor vehicle accidents are the second most frequent cause of accidental deaths among teens and the most preventable type of accidental deaths according to the data in the CRS. Through a collaboration among the local Department of Health nurses, Pennsylvania Traffic Injury Prevention Program and the Pennsylvania Department of Transportation, teens attending school districts in Venango, Crawford, Warren and Mercer counties took part in the National Teen Driver Safety Week programs that focused on impaired and distracted driving. The program included presentations, an interactive driving simulator and a driving under the influence victims' memorial trailer. Chester County collaborated with the health department and the District Attorney's Chester County Highway Safety Project to provide seat belt education and safety checks. In Crawford County, team members connected with members of the Amish community to discuss a request from the community for car seats that could be used when members of the Amish community ride in cars. Safe Kids Chester County has held several car seat checks to help parents ensure that car seats are properly installed and has donated car seats to eligible parents and caregivers.

Substance misuse: Response to the opioid epidemic included, for Chester and Venango counties, the distribution of naloxone to first responders, including emergency medical services, law enforcement, campus and school police, public transportation drivers, shelters and probation offices. The epidemic impacts children of all ages through the misuse of substance by teens and older children and through the misuse of substances by children's parents and caregivers. Drug education efforts also occur in many counties. Pike County purchased the training program entitled "The Reality Tour" with a grant from the Pennsylvania Attorney General Office's Community Drug Abuse Prevention Grant Program. The program is presented four times a year in the county. The community-based drug prevention program begins with dramatic scenes that follow the story of a teen who is addicted to heroin and includes Q and A with a member of law enforcement and an individual who is in recovery from addiction. The program is held in the evenings so that parents can attend with their children. Also in Pike County, Delaware Valley School District offers several different drug use prevention programs to students at different grade levels, including DARE, Life Skills and Too Good for Drugs and Violence.

Allegheny County surveyed colleges and universities regarding amnesty policies and access to naloxone and provided educational material regarding overdoses and naloxone to colleges and universities. Chester County collaborated with Bucks, Delaware and Philadelphia counties and two New Jersey counties to form a regional overdose prevention coalition and has held five conferences aimed at networking and information sharing.

Suicide prevention: In response to deaths reviewed due to opioid use and suicide, the Delaware County Office of Intercommunity Health Coordination (IHC) has actively partnered with the Delaware County Heroin Task Force and the Suicide Prevention Coalition. Delaware County organizes several suicide prevention efforts including an annual run/walk and forum to raise awareness of suicide prevention and increase skill sets of professionals, annual suicide prevention and awareness week, which is a joint effort between the county and the Delaware County Intermediate Unit. Evidence-based curricula, such as Youth Mental Health First Aid, Applied Suicide Intervention Skills Training, and Question, Persuade, Refer Suicide Assessment are offered throughout the week in an effort to advance the skills of those professionals working with children and adolescents. Delaware County also holds a children's mental health awareness week to raise the awareness of the importance of mental wellness and to spotlight local and regional services that support youth with mental illness, promoting recovery and resiliency. In Chester County, the Suicide Prevention Task Force offered free certification in Question, Persuade, Refer, a suicide prevention course, promoted free mental health first aid training, and held screenings of the movie "Suicide: The Ripple Effect" followed by community discussions.

Case review: Philadelphia will be purchasing qualitative analysis software through a mini-grant. The Philadelphia CDR team annually reviews about 350 cases or roughly 20-25 percent of all cases in Pennsylvania during any given year. The purchased software will enable the management of document content, multimedia content (including audio and video), and margin-area coding of all data types. This will give the team the ability to conduct narrative analysis of the meetings.

Statewide CDR Activities:

Pennsylvania applied for and was accepted into the new SUID Case Registry Grant, which provides monitoring and surveillance of SUID cases. In addition to the SUID component of the project, Pennsylvania was also awarded the Sudden Death in the Young (SDY) optional component within the jurisdiction of Philadelphia. The SDY component was created to increase the understanding of the prevalence, causes, and risk factors for infants, children and young adults who die suddenly and unexpectedly. As the largest and one of the most diverse counties in Pennsylvania, Philadelphia is in a unique position to initiate the SDY Case Registry. The five-year grant funded program will run from October 2018 to August 2023.

In 2016, the Department awarded a three-year grant to the Trustees of the University of Pennsylvania to develop and implement an evidence-informed infant safe sleep initiative in the southeastern area of the state. The focus of this approach is to move safe sleep education from discharge to arrival in the postpartum unit to allow for reinforcement of risk reduction methods for the duration of the hospital stay. In conjunction with the hospital-based programming, a social marketing plan will be developed and implemented to increase population awareness of infant accidental suffocation and strangulation and risk reduction methods in the community at large. The model safe sleep program for well newborns in the hospital setting development is complete, and implementation of the program is currently in process. The preliminary findings of the model safe sleep program include an 84 percent reduction in the incidence of unsafe items in infants' hospital cribs.

The CDR State Team will meet in November 2018. The membership of the CDR State Team mirrors that of effective local teams. While the CDR State Team does not review cases, the vision of the group is to join with key government officials to work on policy and legislative recommendations regarding reduction of preventable child deaths and injury prevention strategies. The CDR State Team will also aid the department in developing trainings and technical assistance programs that will be used to support local teams in implementing child death review processes and prevention efforts.

Safe Sleep

Allegheny County and the local Special Supplemental Nutrition Program for Women, Infants and Children (WIC) office found that, between 2010 and 2015, approximately 42 percent of the sudden unexpected infant death (SUID) cases reviewed were families that at one time were WIC clients. As a result of the finding that almost half the SUID cases reviewed in Allegheny County had been in contact with the WIC system, it was imperative to explore the PA Pregnancy Risk Assessment Monitoring System (PRAMS) data to examine bed-sharing behaviors and determine if there is a missed opportunity for safe sleep education in county WIC offices. An analysis of the 2012-14 PA PRAMS data demonstrated that 55 percent of non-WIC respondents reported never bed-sharing as compared to 45 percent of WIC respondents who reported never bed-sharing. Moreover, of those PRAMS respondents who reported never bed-sharing, WIC respondents were 30 percent less likely to report never bed-sharing as compared to non-WIC respondents.

The results of the WIC inquiry validated the data found by Allegheny County and PRAMS. The data showed that of the confirmed SUID cases in Pennsylvania, 54 percent of the mothers in those SUID cases were at one-time WIC clients. More importantly, this data provided the PRAMS, CDR and WIC staff with the county and WIC locations visited by these mothers, presenting an opportunity to focus resources on those specific locations. The results of the data analysis will lead cross training staff regarding each program. Additionally, the Department and the Philadelphia Department of Health collaborative partners determined existing safe sleep education efforts could be improved by expanding safe sleep education activities to include WIC offices. As a result, CDR and WIC staff coordinated with the Philadelphia Department of Public Health to collaborate with WIC offices serving high-risk populations to educate WIC participants about safe sleep practices. Future PRAMS data will be monitored pre- and post-intervention at WIC clinics to determine if there is an increase in safe sleep behaviors, particularly if there is an increase in WIC respondents reporting never bed-sharing. State CDR data will also be monitored for a reduction in SUID cases.

Team Data Collection and Quality Assurance

Data quality is another aspect of the CDR program that is addressed on an ongoing basis. Data found in the NCFRP-CRS is the only data of its kind, providing details regarding the circumstances of a child's death. To be effective, the quality and timeliness of this data needs to be addressed, and NCFRP-CRS fields with missing/unknown entries need to be drastically reduced or eliminated. Due to lack of complete data in the NCFRP -CRS, some data is not reportable. There is simply not enough data to make any conclusions regarding possible prevention efforts.

To improve data in the NCFRP-CRS, Pennsylvania began to participate in the National Center for Fatality Review and Prevention (NCFRP) Data Quality Initiative in 2016. The goal of the Data Quality Initiative is to improve the quality and consistency of the data entered in to the NCFRP-CRS to improve usefulness of the data at the county, state and national level. As part of this initiative, Pennsylvania continues quality assurance by monitoring priority variables and its subset of CORE variables as identified by NCFRP and the Department. By focusing on these variables, the Department hopes to improve data completeness and timeliness for future analysis and prevention strategies.

For more information on the Data Quality Initiative please access the NCFRP website at [https:// www.ncfrp.org/resources/data-quality-initiative/](https://www.ncfrp.org/resources/data-quality-initiative/).

Recommendations

The Pennsylvania CDR Program should continue to work to identify factors influencing child deaths and use the information to advise strategies targeted at reducing preventable child deaths. Teams have determined that nearly a third of the deaths reviewed were probably preventable. The data describing the factors influencing preventable deaths could provide a starting point for local collaboration and prevention strategies surrounding child death. In many cases, counties have a variety of services and programs currently under way that are already addressing prevention strategies. Training and technical assistance on the model of public health will be provided to teams to inform and enhance their definitions of preventable

deaths. It is important to note that local CDR teams are not expected to provide all the prevention efforts in a community. Instead, teams should tap into resources currently available and share information about the factors surrounding deaths with other prevention partners to aid in identifying and developing prevention strategies. One of the benefits of multi-disciplinary teams is that many entities involved with prevention activities are at the table, and the CDR team can act as the catalyst to coordinate prevention efforts. In some counties, a separate group consisting of some CDR team members and other community members develops and implements prevention strategies based the data gathered by the CDR team. This prevention model uses the expertise and resources of the local prevention partners and the data helps to ensure that resources are directed to the need. Using this community-based approach to prevention helps to ensure the success of prevention efforts.

Data quality is another aspect of the CDR program that should continue to be addressed on an ongoing basis. Data found in the NCFRP-CRS is the only data of its kind. There is nothing currently available that could provide this level of detail regarding the circumstances of a child's death. To be effective, the quality and timeliness of this data needs to be addressed, and core variable fields with missing/unknown entries need to be drastically reduced or eliminated.

Complete data entered in a timely fashion would allow local teams to:

- Focus on prevention strategies to address their specific needs;
- Provide data supported recommendations to county executive staff;
- Offer support for policy/ordinance changes; and
- Effectively allow for coordination/collaboration with local entities.

Appendix A: Public Health Child Death Review Act (Act 87 Of 2008)

PUBLIC HEALTH CHILD DEATH REVIEW ACT Act of Oct. 8, 2008, P.L. 1073, No. 87 AN ACT

Providing for child death review.

The General Assembly of the Commonwealth of Pennsylvania hereby enacts as follows:
Section 1. Short title.

This act shall be known and may be cited as the Public Health Child Death Review Act.

Section 2. Definitions.

The following words and phrases when used in this act shall have the meanings given to them in this section unless the context clearly indicates otherwise:

"Child." An individual 21 years of age and under.

"Child death review data collection system." A data collection system approved by the National MCH Center for Child Death Review or a similar national organization.

"Department." The Department of Health of the Commonwealth.

"Local public health child death review team." A team representing a county or two or more counties comprised of professionals from organizations and local agencies who review cases of child deaths in accordance with protocols established by the State public health child death review team.

"Person in interest." A person authorized to permit the release of the medical records of a deceased child.

"Program." The Public Health Child Death Review Program established in section 3.

"State public health child death review team." A State multidisciplinary team comprised of local professionals and representatives of State agencies who review data submitted by local public health child death review teams, develop protocols for child death reviews and develop child death prevention strategies.

Section 3. Public Health Child Death Review Program.

(a) Establishment.--The department shall establish the Public Health Child Death Review Program which shall facilitate State and local multiagency, multidisciplinary teams to examine the circumstances surrounding deaths in this Commonwealth for the purpose of promoting safety and reducing child fatalities.

(b) Powers and duties.--The department, in cooperation with the State public health child death review team, shall have the following powers and duties in relation to the program:

(1) Assist in the establishment and coordination of local public health child death review teams.

(2) Coordinate the collection of child death data, including the development and distribution of a form to be used by local public health child death review teams to report information and procedures for sharing the data with State and local agencies as appropriate.

(3) Develop protocols to be used in the review of child deaths. These protocols shall not conflict with requirements set forth in 23 Pa.C.S. Ch. 63 (relating to child

protective services), including, but not limited to, provisions relating to the review of child fatalities and near fatalities.

(4) Provide training and technical assistance to local public health child death review teams, local agencies and individuals relating to child deaths.

(5) Review reports from local public health child death review teams.

(6) Identify best prevention strategies and activities, including an assessment of the following:

- (i) Effectiveness.
- (ii) Ease of implementation.
- (iii) Cost.
- (iv) Sustainability.
- (v) Potential community support.
- (vi) Unintended consequences.

(7) Adopt programs, policies, recommendations and strategies based on collected data to prevent child deaths.

(8) Review statutes and regulations relating to confidentiality and access to information relating to children from agencies responsible for the health and safety of children and propose recommended changes to appropriate Commonwealth agencies and the General Assembly.

(9) Provide public information and education regarding the incidence and causes of child injury and death and the reduction of risks to children to agencies, health care professionals, child care professionals and the public.

(10) Submit an annual report to the Governor and the General Assembly by September of each year relating to the activities of the State child death review team, a summary of reports received from local child death review teams and recommendations relating to the reduction of risk of child injury or death.

Section 4. State public health child death review team.

(a) Composition.--A State public health child death review team shall be established by the department. The team shall consist of:

- (1) The following individuals or their designees:
 - (i) The Secretary of Health, who shall serve as chairman.
 - (ii) The Secretary of Public Welfare.
 - (iii) The Director of the Office of Children, Youth and Families within the Department of Public Welfare.
 - (iv) The Commissioner of the Pennsylvania State Police.
 - (v) The Attorney General.
 - (vi) The Pennsylvania State Fire Commissioner.
 - (vii) The Director of the Bureau of Emergency Medical Services of the Department of Health.

(2) The following individuals who shall be appointed by the Secretary of Health:

- (i) A physician who specializes in pediatric medicine.
- (ii) A physician who specializes in family medicine.
- (iii) A representative of local law enforcement.
- (iv) A medical examiner.
- (v) A district attorney.
- (vi) A coroner.

(3) Representatives from local public health child death review teams.

(4) Any other individual deemed appropriate by the Secretary of Health.

(b) Powers and duties of the State public health child death review team.--The State public health child death review team shall:

(1) Review data submitted by local public health child death review teams.

(2) Develop protocols for child death reviews.

(3) Develop child death prevention strategies.

(4) Assist the department in implementing the program.

(c) Initial meeting.--The initial meeting of the State public health child death review team shall be held within 90 days of the effective date of this section.

(d) Additional meetings.--The department, in conjunction with the team, shall arrange for additional meetings to fulfill the duties of the team and goals of the program.

Compiler's Note: The Department of Public Welfare, referred to in this section, was redesignated as the Department of Human Services by Act 132 of 2014.

The Secretary of Public Welfare, referred to in this section, was redesignated as the Secretary of Human Services by Act 132 of 2014.

Section 5. Local public health child death review teams.

(a) Establishment.--Each county in this Commonwealth shall establish a local public health child death review team. Two or more counties may establish a local public health child death review team to operate on a regional basis to satisfy the requirements of this section.

(b) Local public health child death review team.--Local teams shall be comprised of the following:

(1) The director of the county children and youth agency or a designee.

(2) The district attorney or a designee.

(3) A representative of local law enforcement appointed by the county commissioners.

(4) A representative of the court of common pleas appointed by the president judge.

(5) A physician who specializes in pediatric or family medicine appointed by the county commissioners.

(6) The county coroner or medical examiner.

(7) A representative of emergency medical services selected jointly by the supervisors of all emergency medical organizations in the county.

(8) The director of a local public health agency or a designee.

(9) Any other person deemed appropriate by a majority of the local public health child death review team.

(c) Chairman.--The members of the local public health child death review team shall elect a chairman annually.

Section 6. Powers and duties of local public health child death review teams.

(a) Review.--A local public health child death review team shall review all deaths of children and may review the following information:

(1) Coroner's reports or postmortem examination records.

(2) Death certificates and birth certificates.

(3) Law enforcement records and interviews with law enforcement officials as long as the release of such records will not jeopardize an ongoing criminal investigation or proceeding.

- (4) Medical records from hospitals and other health care providers.
- (5) Information and reports made available by the county children and youth agency in accordance with 23 Pa.C.S. Ch. 63 (relating to child protective services).
- (6) Information made available by firefighters or emergency services personnel.
- (7) Reports and records made available by the court to the extent permitted by law or court rule.
- (8) Reports to animal control.
- (9) EMS records.
- (10) Traffic fatality reports.
- (11) Any other records necessary to conduct the review.

(b) Data collection.--The local public health child death review team shall utilize the child death review data collection system to report its findings in accordance with protocols established by the State public health child death review team. The name and home address of the deceased child shall not be reported to the child death review data collection system.

(c) Reports.--A local public health child death review team shall submit annual reports on deaths reviewed to the State public health child death review team. The report shall include the following:

- (1) Identification of factors which cause a risk for injury and death, including modifiable risk factors.
- (2) Recommendations regarding the following:
 - (i) The improvement of health and safety policies in this Commonwealth.
 - (ii) The coordination of services and investigations by child welfare agencies, medical officials, law enforcement and other agencies.
- (3) Any other information required by the department.

(d) Recommendations.--A local public health child death review team shall make recommendations to local agencies relating to the procedures and other actions to reduce injury and death of children.

Section 7. Access to records.

(a) Juvenile records.--When deemed necessary for its review, a State or local public health child death review team may review and inspect all files and records of the court relating to a child pursuant to a proceeding under 42 Pa.C.S. Ch. 63 (relating to juvenile matters) in accordance with 42 Pa.C.S. § 6307 (relating to inspection of court files and records). However, this subsection shall not apply to files and records of the court subject to a child fatality or near fatality review pursuant to 23 Pa.C.S. Ch. 63 (relating to child protective services).

(b) Medical records.--Notwithstanding any other provision of law and consistent with the Health Insurance Portability and Accountability Act of 1996 (Public Law 104-191, 110 Stat. 1936), health care facilities and health care providers shall provide medical records of a child under review without the authorization of a person in interest to the State public health child death review team and to a local public health child death review team for purposes of review under this act.

(c) Other records.--Other records pertaining to the child under review for the purposes of this act shall be open to inspection as permitted by law.

Section 8. Confidentiality.

(a) Maintenance.--State and local public health child death review teams shall maintain the confidentiality of any identifying information obtained relating to the death of a child,

including the name of the child, guardians, family members, caretakers or alleged or suspected perpetrators of abuse, neglect or a criminal act.

(b) Agreement.--Each member of the State and local public health child death review team and any person appearing before the team shall sign a confidentiality agreement applicable to all proceedings and reviews conducted by the State or local public health child death review team.

(c) Liability.--An individual or agency that in good faith provides information or records to a State or local public health child death review team shall not be subject to civil or criminal liability as a result of providing the information or record.

(d) Discovery.--The proceedings, deliberations and records of a State or local public health child death review team are privileged and confidential and shall not be subject to discovery, subpoena or introduction into evidence in any civil or criminal action.

(e) Meetings.--Meetings of the State or local public health child death review team at which a specific child death is discussed shall be closed to the public and shall not be subject to the provisions of 65 Pa.C.S. Ch. 7 (relating to open meetings).

(f) Attendance.--Nothing in this act shall prevent a State or local public health child death review team from allowing the attendance of a person, including a parent, with information relevant to a review, at a child death review meeting.

(g) Penalty.--A person who violates the provisions of this section commits a misdemeanor of the third degree.

Section 20. Regulations.

The department shall promulgate regulations as necessary to carry out the purposes of this act.

Section 21. Effective date.

This act shall take effect in 90 days.

Appendix B: Definitions

Act 87 of 2008: Pennsylvania's Public Health Child Death Review Act of Oct. 8, 2008 (see Appendix A)

Child: According to the Pennsylvania Public Health Child Death Review Act, a child is defined as an individual 21 years of age and under. Reviews are conducted on deaths occurring in this age group.

Child death rate: Number of child deaths per 100,000 population in a specified group

Sudden Unexpected Infant Death (SUID): SUID is the death of an infant less than 1 year of age that occurs suddenly and unexpectedly, and whose cause of death is not immediately obvious before investigation. Most SUIDs are reported as one of three types: Sudden Infant Death Syndrome (SIDS); unknown cause; or accidental suffocation and strangulation in bed.

SUID death rate: Number of SUID-related deaths per 100,00 live births

Child death review (CDR): A multi-agency, multi-disciplinary process that routinely and systematically examines the circumstances surrounding child deaths in a given geographical area and a given age group

Pennsylvania Child Death Review Program: The Pennsylvania CDR Program is designed to promote the safety and well-being of children and reduce preventable child fatalities through timely reviews of child deaths.

Pennsylvania State Child Death Review Team: The Pennsylvania CDR Team is comprised of representatives from agencies and organizations that focus on children in Pennsylvania. Aggregated information is shared with legislators and state policy makers to concentrate funding and program priorities on appropriate prevention strategies.

Pennsylvania's Child Death Review local teams: Local teams are comprised of community participants representing organizations and agencies that serve and protect children within their respective counties. CDR team members review child deaths and analyze data to develop prevention strategies. There are currently 63 local review teams covering all 67 counties statewide.

Appendix C: Technical Notes

Definitions of Terminology

The following are definitions of terminology that appear in this report:

Terminology:

Infant death – Death of an infant under 1 year of age

Cause of Death International Classification of Diseases (ICD) Codes:

The International Classification of Diseases codes for the selected causes of death shown in this report are as follows:

Cause of Death	ICD-10 Code
Accidental Poisoning and Exposure to Noxious Substances	X40-X49
Aircraft Accident	V95-V97
All Terrain and Off-Road Vehicle Rider	V86
Assault (Homicide)	U01-U02, X85-Y09, Y87.1
Assault (Homicide) by Firearm	U01.4, X93-X95
Assault (Homicide) by Other Means	U01.0-U01.3, U01.5-U02.9, X85-X92, X96-Y09, Y87.1
Cause of Death	ICD-10 Code
Driver of Vehicle (car, truck, van)	V40.5, V41.5, V42.5, V43.5, V44.5, V45.5, V46.5, V47.5, V48.5, V49.5, V50.5, V51.5, V52.5, V53.5, V54.5, V55.5, V56.5, V57.5, V58.5, V59.5
Drowning and Submersion	W65-W74
Falls	W00-W19
Intentional Self-harm (Suicide)	X60-X84, Y87.0, U03
Intentional Self-harm (Suicide) by Firearm	X72-X74
Intentional Self-harm (Suicide) by Other Means	X60-X71, X75-X84, Y87.0, U03
Legal Intervention	Y35, Y89.0
Motorcyclist	V20-V29

Motor Vehicle Accidents	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2
Other Non-Transport Accidents	W20-W64, W75-W99, X10-X39, X50-X59, Y86
Passenger of Vehicle (car, truck, van)	V40.6, V41.6, V42.6, V43.6, V44.6, V45.6, V46.6, V47.6, V48.6, V49.6, V50.6, V51.6, V52.6, V53.6, V54.6, V55.6, V56.6, V57.6, V58.6, V59.6
Pedal Cyclist	V10-V19
Pedestrian (collision with car, truck, van)	V03
Pedestrian (collision with train)	V05
Smoke, Fire and Flames	X00-X09
Sudden Infant Death Syndrome (SIDS)	R95
Sudden Unexplained Infant Deaths (SUID)	R95, R99, W75
Undetermined Intent	Y10-Y34, Y87.2, Y89.9
Unspecified Transport Accident	V98-V99
Watercraft Accident	V90-V94

End Notes

¹ CDC WONDER online database, <https://wonder.cdc.gov/>, accessed July 27, 2018.

² Underlying Cause of Death: The underlying cause of death is either the disease or injury that initiated the train of morbid events leading directly to death or the circumstances of the accident or violence that produced the fatal injury. The underlying cause of death is the one to be adopted as the cause for tabulation or mortality statistics. Source: Handbook of Vital Statistics Systems and Methods, Volume 1: Legal Organizational and Technical Aspects, United Nations Studies in Methods, Glossary, Series F, No. 35, United Nations, New York 1991

³ CDC - Sudden Infant Death Syndrome (SIDS). <https://www.cdc.gov/sids/AboutSUIDandSIDS.htm>. August 13, 2018. Content Source: National Center for Chronic Disease Prevention and Health Promotion, Division of Reproductive Health

⁴ American Academy of Pediatrics Announces New Safe Sleep Recommendations to Protect Against SIDS, Sleep-Related Infant Deaths. From American Academy of Pediatrics website: <https://www.aap.org/en-us/about-the-aap/aap-press-room/pages/american-academy-of-pediatrics-announces-new-safe-sleep-recommendations-to-protect-against-sids.aspx> . September 3, 2017