



DATA BRIEF

2022–2023 Child Fatality/Near-Fatality (CFNF) Ingestion Analysis

May 2024

The 2008 Act 33 Amendment to the Pennsylvania Child Protective Services law requires state and local reviews of all child fatalities and near fatalities that result from suspected child abuse. In response, the Allegheny County Department of Human Services (DHS) conducts a comprehensive and multidisciplinary review of child fatalities and near fatalities in cases where there is suspicion of child abuse or neglect. These reviews are a component of DHS’s continuous quality improvement process.

This report covers child fatalities and near fatalities (critical incidents) in Allegheny County reviewed in 2022 and 2023 with a focus on drug ingestions, which have been a growing cause of these critical incidents. The increase in child ingestions and fatalities has been a nationwide trend in recent years and has worsened amidst the nation’s opioid epidemic.^{1,2} The County seeks to understand how these incidents happen and the circumstances surrounding them so that it can develop strategies to minimize them.

The prevention of child fatalities and near fatalities, regardless of cause, is a child welfare priority. In Allegheny County, these critical incidents, while severe, happen to a small percentage of children. Since 2020, an average of 23 Allegheny County children experience a critical incident per year; this represents 0.01% of the County’s 225,510 children under 18.³ This is comparable to the 0.01% statewide percentage of such incidents in 2022, which impacted 215 of the 2.6 million children in the Commonwealth.^{3,4}

OVERVIEW

DHS reviewed 50 critical incidents that occurred during 2022 and 2023: 26 in 2022 (6 fatalities, 20 near fatalities) and 24 in 2023 (10 fatalities, 14 near fatalities). The leading cause—accounting for 20 (40%) of these incidents—was unintentional drug ingestion. Unintentional ingestion comprised one-third of the 2022 incidents, rising to nearly one-half in 2023. The number of ingestion-related incidents has been rising year-over-year since 2019 and has been the primary cause of the County’s fatalities and near fatalities since 2022, surpassing blunt force or penetrating trauma and abusive head trauma.⁵ **Figure 1** shows the annual trend in critical incidents, ingestion or other, since 2009.

1 https://www.cpsc.gov/s3fs-public/Pediatric_Poisoning_Fatalities_Injuries_Report_2023_Final.pdf

2 <https://publications.aap.org/pediatrics/article/151/4/e2022059016/190819>

3 From the 2022 American Community Survey (ACS) population estimates.

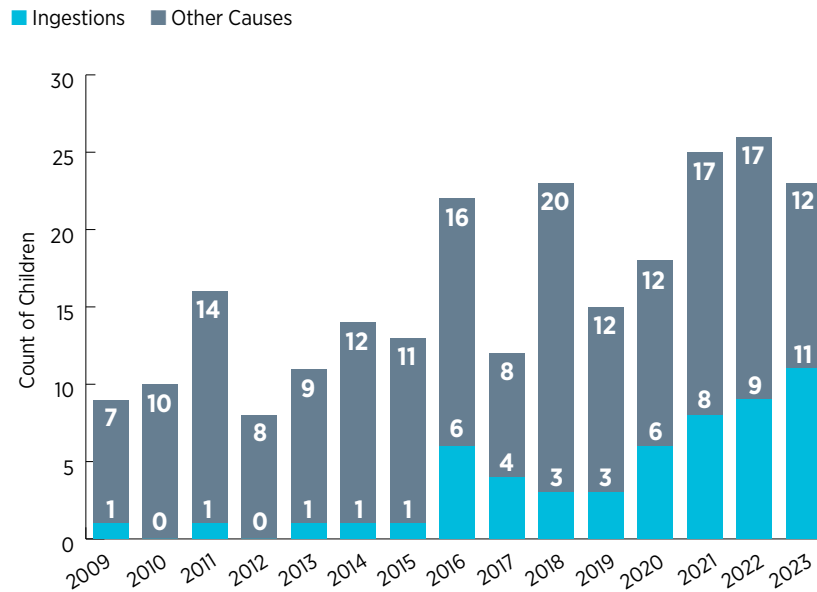
4 The 215 Pennsylvania critical incidents cited include child fatalities and near fatalities that were substantiated

(“indicated” or “founded”) or have an investigation disposition that is pending criminal or juvenile court action to parallel the County criteria of critical incidents included in this report. https://www.dhs.pa.gov/docs/OCYF/Documents/2022-PA-CHILD-PROTECTIVE-SERVICES-REPORT_8-10-2023_FINAL.pdf

5 On the county’s Child Fatality and Near Fatality dashboard, blunt force or penetrating trauma (BFT/PT) and abusive head trauma (AHT) are two separate

categories, while in this report, we have grouped the two together. This is because the type of injury is consistent between the two, but while AHT is a result of intentionally inflicted physical injuries, BFT/PT may also be a result of neglect. This nuance can often be important when discussing the characteristics of these incidents. When looking at the yearly trends with these two causes treated separately, ingestions have been the leading cause of Act 33 child fatalities and near fatalities since 2020.

FIGURE 1. Act 33 Fatalities and Near Fatalities Caused by Ingestions Compared to Other Causes, 2009 through 2023*



*Note: Other leading causes include abusive head trauma, blunt force or penetrating trauma, and gunshots.

This trend parallels a notable increase in child ingestions at the state level. The Pennsylvania Department of Human Services reported that 34% of the Act 33 fatalities and near fatalities reviewed in 2022 by all counties in the state were caused by ingestion or poisoning. This is commensurate with Allegheny County’s findings (i.e., 35% of the 2022 critical incidents caused by ingestions).

INGESTIONS AND OPIOIDS

The prevalence and lethality of opioids is reflected in the County’s ingestion cases. In 18 of the 20 ingestion cases, at least one of the substances ingested was an opioid. Eighty-six percent of the near fatal and 100% of the fatal ingestions involved opioids. And of the County’s opioid ingestion cases, 89% involved fentanyl—a potent synthetic opioid that can be lethal in small doses (i.e., two milligrams) and that is frequently mixed with other drugs, often without the user’s awareness. Street fentanyl and its analogs (drugs that are similar in chemical structure or pharmacologic effect to fentanyl but are not identical⁶) are not legally prescribed drugs.⁷

6 https://www.cdc.gov/overdose-prevention/glossary/?CDC_AAref_Val=https://www.cdc.gov/opioids/basics/terms.html

7 https://www.cdc.gov/overdose-prevention/about/fentanyl.html?CDC_AAref_Val=https://www.cdc.gov/opioids/basics/fentanyl.html

Most (67%) drug screens for opioid-related ingestions were only positive for opioids, although 28% of the opioid-positive results also indicated the presence of a stimulant such as cocaine or methamphetamine and 17% indicated the presence of xylazine (**Table 1**). Xylazine is a non-opioid veterinary tranquilizer and sedative that is often added to opioids. Xylazine is not approved or legally prescribed for human use, and taking it in combination with opioids increases the likelihood of overdose—as has been observed in nationwide data on fatal overdoses from opioids paired with xylazine.^{8,9}

TABLE 1. Substances Involved in Ingestion-Related Critical Incidents

SUBSTANCE	# OF INCIDENTS	% OF OPIOIDS	% OF ALL SUBSTANCES
Any opioid	18	100%	90%
Fentanyl and analogs	16	89%	80%
Stimulants (cocaine and methamphetamine)	5	28%	25%
Xylazine	3	17%	15%
Methadone*	1	6%	5%
Only opioids	12	67%	60%
Opioids and stimulants	5	28%	25%
Opioids and xylazine	3	17%	15%

*Medication for opioid use disorder (MOUD)

The pervasiveness of opioids in ingestion-related cases extends statewide. In 2022, all of the State's ingestion or poisoning fatalities and most (79%) of the near fatalities included opioids.

Of the Act 33 ingestions reviewed, most (70%) were near fatalities. The number of fatalities caused by ingestions decreased from three in 2020 to one in 2022 despite the overall number of ingestion incidents rising. In 2023, the number rose to five fatalities (45% of 2023 ingestions).

Naloxone (commonly known as Narcan) is a medication that can rapidly reverse the effects of an opioid overdose. It is a critical component of survival in cases of opioid ingestions—contributing to the higher ratio of near fatalities compared to fatalities of the ingestion incidents. It is safe to use on people of all ages and does not cause harm if administered, even if the person is not experiencing an opioid overdose.¹⁰

Naloxone was used by hospital staff and EMS personnel in 13 of the 18 opioid-related ingestion incidents in 2022 and 2023. In many cases, multiple doses were required. Only one of these incidents resulted in a fatality. Our data underscore the imperative function of Naloxone in saving lives and the importance of first responders and the public alike to have Naloxone readily available.

8 [Xylazine | National Institute on Drug Abuse \(NIDA\) \(nih.gov\)](https://www.nida.nih.gov/publications/xylazine)

9 https://www.cdc.gov/ore/pdf/CDC_Xylazine-Clinician-Fact-Sheet_508.pdf

10 https://www.cdc.gov/overdose-prevention/reversing-overdose/about-naloxone.html?CDC_AAref_Val=https://www.cdc.gov/drugoverdose/featured-topics/naloxone.html

INDIVIDUALS INVOLVED IN INGESTIONS¹¹

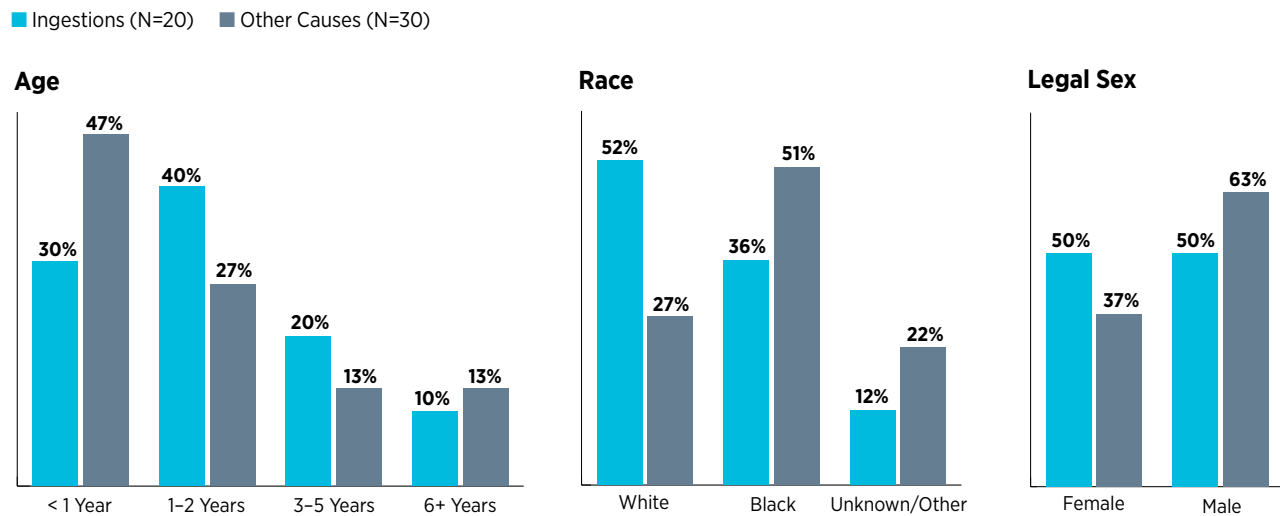
Victims

The majority (70%) of ingestions occurred in children below the age of three. Notably, 40% of victims of ingestions were between one and two years of age, which is higher than the 27% of victims of non-ingestion fatalities and near fatalities in that age range. Children around this age are especially at risk for unintentional ingestion as they begin to gain mobility, which increases the likelihood of coming into contact with substances.²

Victims of ingestion were evenly split between males and females. Non-ingestion critical incidents involved more males (63%) than females (37%).

There was also a difference in the racial composition of ingestion victims compared to non-ingestion victims. Over half (55%) of the ingestion victims were White, 35% were Black and 10% were of another or an unknown race. Non-ingestion critical incidents primarily involved Black children (60%), while 23% of victims were White and 16% were of another or an unknown race. The racial distribution of ingestion victims is closer than those of non-ingestion victims to the County’s child population, which consists of 64% White children, 16% Black children and 19% children of another race, but it is still disproportionate.¹²

FIGURE 2. Age, Race and Legal Sex of Victims of Ingestion Incidents Compared to Those of Other Critical Incident Causes



¹¹ The small numbers in the Victims and Alleged Perpetrators cohorts should be considered when drawing conclusions.

¹² [2022 American Community Survey estimates](#)

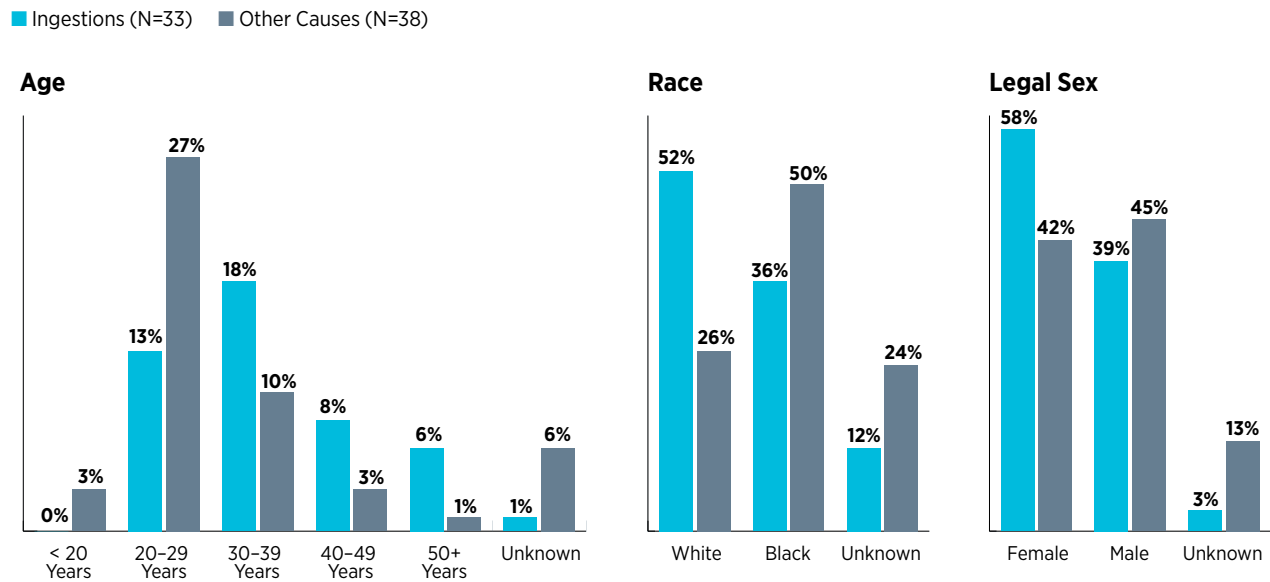
Alleged Perpetrators

There were 33 different alleged perpetrators across the 20 ingestion-related critical incidents. Most alleged perpetrators were relatives of the child. The majority (25, 76%) were the child’s parent, followed by relatives or kin (5, 15%), other caregivers (2, 6%) and unknown perpetrators (1, 3%). This relationship distribution is similar to alleged perpetrators of non-ingestion fatalities and near fatalities.

Most (13, 39%) of the alleged perpetrators in ingestion cases were between the ages of 30-39, while most (21, 30%) alleged perpetrators of non-ingestion incidents were 29 and younger. Alleged perpetrators of ingestions were predominantly (19, 58%) female, unlike non-ingestion incidents which had a similar proportion of male (17, 45%) and female (16, 42%) alleged perpetrators.

The alleged perpetrators of ingestions were predominantly White (17, 52%) and included 12 (36%) alleged perpetrators that were Black and 4 (12%) of another or an unknown race. Non-ingestion alleged perpetrators were mostly Black (19, 50%) followed by White individuals (10, 26%) and individuals of an unknown race (9, 24%).

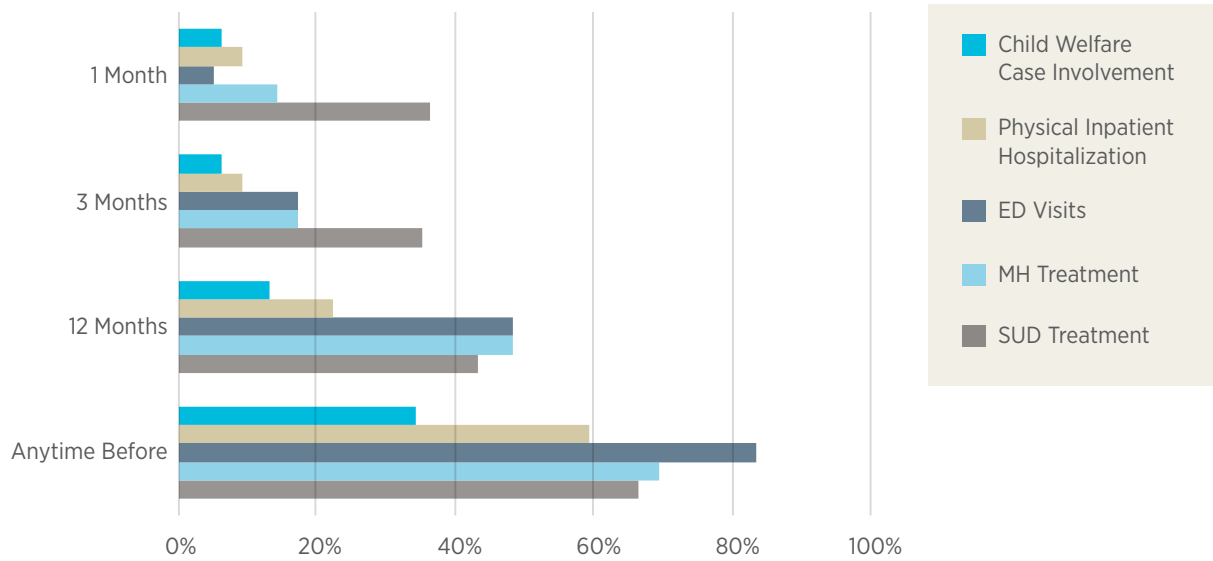
FIGURE 3. Age, Race and Legal Sex of Alleged Perpetrators of Ingestion Incidents, Compared to Those of Other Critical Incident Causes



SYSTEM INVOLVEMENT

Examining the involvement that alleged perpetrators have had with the physical health, behavioral health and child welfare systems prior to a critical incident can be useful in developing and improving interventions aimed at preventing their occurrence and may serve as touchpoints that provide opportunities to offer services and resources to address circumstances and unmet needs that may be contributing factors to future adverse events. Additionally, analyzing trends in system involvement may provide clues to identifying individuals at higher risk of negative outcomes.

FIGURE 4. Physical and Behavioral Health Service Involvement and Child Welfare Case Involvement¹³ of Alleged Perpetrators Prior to Act 33 Incidents Caused by Ingestion



Child Welfare

Four (20%) families of ingestion-related critical incidents had active child welfare involvement at the time of the incident; two of these were families had an open child welfare case and two were families with an active child welfare investigation.¹⁴ Fifteen families (75%) had a history of child welfare involvement prior to the ingestion incident, including 10 that had a prior child welfare case and five that been the focus of a child welfare referral or investigation that did not lead to an open case. Of the families with prior child welfare involvement, three (15%) had been the subject of a referral or investigation that concluded within 90 days prior to the incident. The proportion of child welfare involvement among families with critical incidents resulting from ingestion is similar to those with critical incidents resulting from other causes, although families of ingestion incidents had a somewhat lower proportion of recent prior involvement and slightly higher proportion of active involvement at the time of the critical incident (Table 2).

13 This includes individuals with parental rights of children and youth associated with an open Child Welfare case in Allegheny County. Percentages are calculated out of the known alleged perpetrators of ingestions.

14 When CYF receives a report alleging abuse or neglect, they may conduct an investigation depending on the severity of the allegations. The purpose of an investigation is to determine the credibility of those allegations. The investigation process involves risk and safety assessments and interviews with the children, parents, and others who have knowledge of the family. A Child Welfare

case is opened when an investigation determined that the family needs monitoring and/or services to ensure the safety and wellbeing of the children in the home. This may include receiving home and community-based services, having a child in an out-of-home placement, or otherwise being supported by an assigned CYF caseworker.

TABLE 2. Child Welfare Involvement Prior to and During Critical Incidents of Families with Incidents Caused by Ingestions, Compared to Those with Other Causes*

CHILD WELFARE INVOLVEMENT	HISTORY	RECENT HISTORY	ACTIVE
Ingestion Incidents	75%	15%	20%
Other Incidents	80%	23%	13%

*Note: Recent history is defined by a child welfare referral, investigation, or case that concluded within 90 days prior to the incident. Percentages are calculated out of the number of critical incidents caused by ingestion and incidents with a different cause, respectively.

Behavioral Health

Engaging in substance use disorder (SUD) treatment is a key element in the prevention of unintentional child ingestions. There are a variety of treatment options available that can help parents, caregivers and others to create a safer environment for their children. While a majority (66%) of alleged perpetrators in ingestion cases had received publicly funded SUD services¹⁵ prior to the critical incident, there was a reduction in engagement with these services within a year (43%) and within a month (36%) prior to the critical incident.

Medication for opioid use disorder (MOUD) is an evidence-based treatment approach for individuals with an opioid use disorder. These medications—primarily methadone, buprenorphine and naltrexone—serve to reduce cravings and withdrawal symptoms. MOUD can be used alongside counseling and behavioral therapies as part of an integrated treatment plan referred to as medication—assisted treatment (MAT). Of the known alleged perpetrators in ingestion cases, 41% had utilized MOUD¹⁶ at some point before the critical incident. There was a steady decrease in MOUD use leading up to the critical incident with 31% using MOUD within the year and 13% within the month prior to the critical incident.

TABLE 3. Use of MOUD by Alleged Perpetrators of Ingestion-Related Critical Incidents, 1 Month, 3 Months, 12 Months and Ever Before the Critical Incident*

MOUD USE	#	%
Ever Before	13	41%
12 Months	10	31%
3 Months	6	19%
1 Month	4	13%

*Data are from MOUD providers. Percentages are calculated out of the number of known alleged perpetrators of ingestion incidents.

15 This includes individuals receiving any substance use disorder (i.e. drug and alcohol) services that are paid for by HealthChoices (i.e. Medicaid managed care), excluding level of care assessments. Includes both clinical services, such as individual and group therapy and non-clinical services, such

as case management and peer recovery support. Percentages are calculated out of the number of known alleged perpetrators of ingestions that were HealthChoices members and met the age criteria of the services.

16 This includes individuals that have filled prescriptions for MOUD. Figures are calculated based on MOUD episodes, which are defined as any period of time where there is no more than 30 days with a gap in continuous coverage of treatment. Percentages are calculated out of the number of known alleged perpetrators of ingestions.

Mental health (MH) service involvement followed a similar trend to SUD service involvement, but with a steeper decline in services in the time leading up to the critical incident. Sixty-nine percent had received MH treatment¹⁷ at some time before the critical incident, declining to 48% within a year and 14% within a month of the unintentional ingestion.

TABLE 4. Mental Health and Substance Use Disorder Service Involvement by Alleged Perpetrators of Ingestion-Related Critical Incidents, 1 Month, 3 Months, 12 Months and Ever Before the Critical Incident*

SERVICE TYPE	EVER BEFORE		12 MONTHS		3 MONTHS		1 MONTH	
	#	%	#	%	#	%	#	%
Substance Use Disorder Services	45		13		7		4	
- Outpatient	19	66%	7	30%	3	13%	2	9%
- Non-Hospital Rehabilitation	10	34%	3	13%	3	13%	2	9%
- Intensive Outpatient	8	28%	1	4%	0	0%	0	0%
- Non-Hospital Detoxification	8	28%	2	9%	1	4%	0	0%
Mental Health Services	53		12		4		1	
- Outpatient	18	62%	7	30%	2	9%	1	5%
- Medication Check	10	34%	0	0%	0	0%	0	0%
- Crisis	8	28%	3	13%	1	4%	0	0%
- Transitional & Community Integration	7	24%	0	0%	0	0%	0	0%
- Inpatient Mental Health	6	21%	2	9%	1	4%	0	0%
- Behavioral Health Rehabilitation/ Intensive Behavioral Health	4	14%	0	0%	0	0%	0	0%
Dual Diagnosis	15		15		1		0	
- Substance Use and Mental Health Disorders	15	63%	15	13%	1	4%	0	0%

*Data are from claims for services paid for by HealthChoices or the County. Percentages are calculated out of the number of known alleged perpetrators of ingestion cases eligible for HealthChoices or County funded services.

17 This includes individuals receiving a mental health service paid for by HealthChoices (Medicaid-managed care). Includes both clinical services, such as individual and group therapy, and non-clinical services such as case management and peer support. Percentages are calculated out of the number of known alleged perpetrators of ingestions that were HealthChoices members and met the age criteria of the services.

TABLE 5. Primary Diagnoses of Alleged Perpetrators of Ingestion-Related Critical Incidents at Any Point Prior to the Critical Incident*

PRIMARY DIAGNOSIS	#	%
Substance Use Disorders		
Opioid Abuse or Dependence	15	63%
Cannabis Abuse or Dependence	5	21%
Cocaine Abuse or Dependence	5	21%
Other Psychoactive Substance Abuse or Dependence	4	17%
Hypnotic, Sedative, or Anxiolytic Abuse or Dependence	3	13%
Mental Health Disorders		
Depressive Disorder	12	50%
Anxiety Disorder	7	29%
Post-Traumatic Stress Disorder or Acute Stress	6	25%
Bipolar Disorder	6	25%
ADHD	4	17%
Adjustment Disorder	4	17%
Oppositional Defiant Disorder	4	17%

*Data are from claims for services paid for by HealthChoices or the County. Percentages are calculated out of the number of alleged perpetrators of ingestion cases that had received substance use or mental health services.

Physical Health

A high rate (83%) of alleged perpetrators had a Medicaid-funded emergency department (ED) visit¹⁸ before the critical incident. Nearly half (48%) had an ED visit in the prior year and 14% had one in the prior month.

Almost 60% of the alleged perpetrators had received Medicaid-funded inpatient hospitalization services, which can include ED visits.¹⁹ This proportion drops down to 22% and 9% of alleged perpetrators with an inpatient stay in the year and month, respectively, before the critical incident.

18 This includes individuals receiving Medicaid-funded emergency room services in Allegheny County. Percentages are calculated out of the number of known alleged perpetrators of ingestions that were HealthChoices members.

19 This includes individuals receiving Medicaid-funded inpatient hospital services. Percentages are calculated out of the number of known alleged perpetrators of ingestions that were HealthChoices members.

PREVENTION AND INTERVENTION

Allegheny County is taking an active role in addressing the ramifications of the opioid epidemic and the rising trend of unintentional ingestions. Child welfare staff are educated on harm reduction, addressing stigma, and prevention and intervention services for individuals with a substance use disorder. Each office has naloxone, lockboxes and fentanyl test strips available for caseworkers to provide to clients. The County, through its opioid settlement funds, has expanded convenient access to MOUD and evidence-based treatment (e.g., mobile medication, telemedicine prescribing, and incentives for abstinence from stimulants and opioids) and will launch a Countywide marketing campaign in April 2024 warning about the dangers of opioid ingestions and the safety of administering naloxone to children. Additionally, all Pittsburgh EMS personnel are equipped with and trained to administer Naloxone to individuals of all ages.

DHS's child welfare office has a partnership with the PA Organization for Women in Early Recovery (POWER).²⁰ POWER representatives are available to conduct assessments and educate staff on SUD, opioids, relapse and the intersection with child welfare case planning. The office is also connected to the Auberle Family Healing Center²¹ and can refer clients to this residential treatment facility for families affected by a SUD. The center provides individual, family and group counseling, as well as psychiatric care, medical services, case management and parent education. The center allows families to reside together during a person's recovery process.

Additionally, in September 2020, DHS launched Hello Baby,²² a collaborative effort between child-serving organizations in Allegheny County including Healthy Start Pittsburgh, University of Pittsburgh's Family Check-Up, Family Centers, Nurture PA and others. As of December 31, 2023, 7,572 families had been referred to Hello Baby, leading to 3,293 families enrolling with a Hello Baby provider since its launch. Hello Baby, a family-strengthening, voluntary initiative for parents with newborns, is designed to improve family outcomes and maximize child and family well-being, safety and security. Hello Baby offers resources to parents with newborns through a network of support to meet each family's individual needs. All families can access the Hello Baby website to learn about resources and services in Allegheny County or connect to one of the 27 Family Centers located throughout Allegheny County; they offer family-focused activities, programs and resources to meet families' basic needs. Based on an assessment of need, some families are offered more intensive care coordination services by social workers and family coaches.

20 <https://power-recovery.com/>

21 <https://www.auberle.org/files/content/fhc-one-pager-v.6-5.pdf>

22 <https://hellobabypgh.org/>

RESOURCES

General Drug and Alcohol Treatment Resources

- Allegheny Connect has a resource page for immediate, ongoing and preventative [substance use services](#).
- DHS's behavioral health office has a comprehensive [Where to Call directory](#) of mental health and drug & alcohol services.
- [POWER](#) offers a wide range of services including screening and assessment, a detox and rehab program, residential treatment, outpatient therapy and peer mentoring.

Naloxone

Naloxone is safe to administer to children, even if you are not sure they are having an opioid overdose.

- Allegheny County has request forms for free Naloxone for [individuals](#) and [organizations](#).
- [Prevention Point Pittsburgh](#) (PPP) is an independent non-profit organization that offers Naloxone and several safe drug use and disposal products for free. PPP can be reached by phone or in-person and provides anonymous and confidential services.

MOUD Providers

- The Allegheny County Health Department offers a list of local [MOUD providers](#) and other harm reduction services.

Safe Storage

Safe Storage options such as lockboxes can help parents make their home environments safer as their younger children gain mobility.

- Allegheny County has information about [keeping children safe from ingestible items](#).
- The PA Department of Human Services offers [tips for keeping children safe](#) from medications.
- The [Up and Away](#) initiative offers extensive information, tips and resources.

Prescription Drug Take-Back Locations

- Pennsylvania has a [prescription drug takeback program](#) at [several locations](#) across the state.

Auberle Family Healing Center

- The [Auberle website](#) has information on the [Auberle Family Healing Center](#).

Hello Baby

- The [Hello Baby website](#) offers resources and services from its network of supports.