

Children and Young Adults in Allegheny County Who Lost a Parent to an Overdose, 2016–2023



August 2025



The Allegheny County
Department of Human Services
One Smithfield Street
Pittsburgh, Pennsylvania 15222

<https://analytics.alleghenycounty.us/>

EXECUTIVE SUMMARY

From 2016 through 2023, more than 3,500 Allegheny County children and youth lost a parent to an overdose—an average of 447 children and youth per year. Compared to their peers, these children and youth are at increased risk for depression, anxiety, post-traumatic stress disorder and suicide.¹ Whereas profound grief is likely to accompany any parental death, children and youth who face the unexpected death of a parent to an overdose may face even more serious mental health risks (e.g., prolonged complicated grief, major depression, substance use disorder, functional impairments that affect daily living).² Adding to this trauma is the fact that many parents who die of overdoses had struggled with addiction for years prior to their death. Evidence suggests the impact of living with a parent with active addiction may increase mental health issues and may also result in maltreatment, neglect and/or housing instability.

Despite the profound upheaval that a parent's unexpected death can have on a child's life, there are no ongoing federal or state data systems that link parental overdoses to their children. Allegheny County's integrated data system allows us to link those data and to observe service involvement over time for both parent and child. The Allegheny County Department of Human Services (DHS) undertook this descriptive analysis of children whose parent died by overdose to help better understand these children and parents—their demographics and the types of public services accessed before and after the parent's death—to identify potential opportunities to better support impacted families and to inform future prevention strategies.

KEY FINDINGS: PARENTS

- **We identified 1,694 parents who died of an overdose from 2016 through 2023.**
- Although 73% (1,229) of parents who died were White, **Black parents were disproportionately impacted;** Black parents accounted for 27% of those who died of overdose even though only 13% of the total adult population in Allegheny County is Black.
- **Most of the parents had prior (and recent) engagement with behavioral health services;** more than half received substance abuse treatment services in the 12 months prior to their death; 42% received mental health services. Of parents with an opioid use disorder (OUD), more than 70% were receiving Medication for Opioid Use Disorder (MOUD) in the year prior to their death—2/3 used suboxone and 1/3 used methadone.
- **Though most were not engaged with child welfare at the time of their death, there were high rates of prior child welfare involvement for this population. Most first encountered the child welfare system more than 4 years prior to the fatal overdose.** More than half of the parents had a prior child welfare referral, 43% had a prior open case and 27% had a prior removal. For these parents, over 70% had their first referral and/or first active child welfare case more than 4 years before their deaths. Ten percent were active with child welfare at the time of their death (6% had a child removed). This suggests that child welfare involvement is a sign of

¹ See, for example, Melhem et al 2008 and Kaplow et al 2010 in the references section of the report.

² See Brent et al 2009 and Burke and Neimeyer 2013 in the references section of the report.

broader vulnerability but is not necessarily directly correlated to a fatal overdose. It also suggests that there is a long history of vulnerability for many of these parents.

- Sixty-four children (13%) were removed from their homes after their parents' death — 93% were removed from the remaining parent. Of the 41 parents who were under the age of 25 at the time of their death, 46% had been involved in child welfare as a child, 24% with a prior child welfare removal.
- **There were high rates of involvement in other systems, particularly interaction with the physical health and criminal justice systems.** Over 70% visited an emergency department room in the year prior to their death. Seventy percent had a prior jail booking, with more than quarter booked in the year prior to their death. Almost 40% had a criminal filing in the 12 months before their fatal overdose. One in five had used an emergency homeless shelter or been involved in street outreach (a proxy for unsheltered homelessness). The county has used recent opioid settlement funds to target interventions to connect (or reconnect) people in jail and in emergency departments with substance use treatment and, where appropriate, with MOUD.

Key Findings: Children

- **During the study period, 3,512 children and youth lost a parent to an overdose;** 74% (2,596) were under 18 at the time of their parent's death. Fifty-one percent lost a father, 46% lost a mother and 3% (96) lost both parents (not necessarily at the same time).
- **The most common age group at the time of parental overdose was 13-17 (25%), but half were under 13 at the time of their parent's death and 14% (503) were under five.** As with the parents, although most of the children (63%, 2,223) were White, Black children disproportionately lost their parents.
- **Most children were not connected to human services in the year before or after their parent's death. The most common service connection was in mental health outpatient services (21% of the population). This is a higher rate of involvement than other children and youth enrolled in Medicaid.**
- **There was an increase in connection to mental health outpatient services for this population in the nine months after their parent's death, suggesting that children and youth received increased support in the immediate aftermath of their parent's death. After nine months, treatment rates returned to 'pre-death' levels. We did not observe any substantive changes** during the three years pre- and post-parental overdose in rates of involvement in other behavioral health services (e.g., mental health crisis, mental health inpatient hospitalization or substance use disorder treatment).
- **These youth have a high rate of involvement in juvenile justice than other Medicaid enrolled youth.** Eight percent of youth (10 through 21) were involved with juvenile justice at the time of their parent's death compared to 2% of Medicaid enrollees aged 10 through 21. This rate did not increase in the years following a parental death. For the youth who are now adults (765), 8% had a criminal filing and 4% have been booked into ACJ; this rate also did not increase over time.
- **Over a third of these children had an open child welfare case and 30% had a prior child welfare removal — 7% were in a placement at the time of their parents' death.** Twelve percent of children were in a child welfare placement at some point in the three years after their parent's death. Half of these had a new removal after their parents' death; 93% of these children were removed from the surviving parent.

- **Children under five are an especially vulnerable population.** Four percent (503) of the children were under five at the time of their parent's death. **More than 80% were not connected to early childhood services in the year prior to or after their parent's death.** This group had higher rates of active cases and placements than older children. One in five had a placement in the year prior to parental death and thirteen were in placement at the time of the death.
 - Eleven percent (8 of 75) of children under one who were infants at the time of their parent's death were the victim of a referral alleging a substance-exposed newborn prior to the parent's death. More than a third of all children under one had an open case prior to their parent's death and one in five were in placement at the time of the death.

METHODOLOGY

We used autopsy records from the Allegheny County Office of the Medical Examiner, which are integrated into the County's data warehouse,³ to identify the cohort of people who died from an overdose in the County from 2016 through 2023. The Medical examiner is responsible for determining the cause and manner of death in all cases that include suspected overdoses. The OME reports on both manner of death (e.g., overdose) and results of toxicology reports (to determine the substances that contributed to the death).

We linked parents to children using birth records, the child welfare database and the housing and homelessness services system. Seventy-five percent of the children were identified through birth records, with the remaining 25% identified through the other systems (see the Appendix for more details).

Using the integrated data warehouse, we analyzed the size and demographic composition of the children and parents as well as their involvement in services pre- and post-death (see the Appendix for descriptions of the programs that were included in the analysis). If both parents died, we used the date of the first parent to identify the child's involvement in public services.

Limitations

Birth certificates are available for any child born in Allegheny County since 1999. As such, we are only able to observe birth certificate data for anyone aged 24 or younger born in Allegheny County. Any child who was born outside of the county to a parent who died of an overdose in Allegheny County would not be included. Only 67% of those birth certificates listed a father, so we are likely under-counting children who lost fathers to an overdose. Using additional data sources (child welfare and housing systems) to identify parents, we were able to identify an additional 416 parents (25%) (see the Appendix for more information). Children affected by the death of a stepparent or other caregiving adult were not included in this analysis due to unavailability of data. Thus, we know that the estimates in this report represent an undercount of the children impacted by a parent's or caregiver's death from overdose.

³ For a full list of data sources as well as additional information about the Allegheny County data warehouse, see [Allegheny County Data Warehouse](https://analytics.alleghenycounty.us).

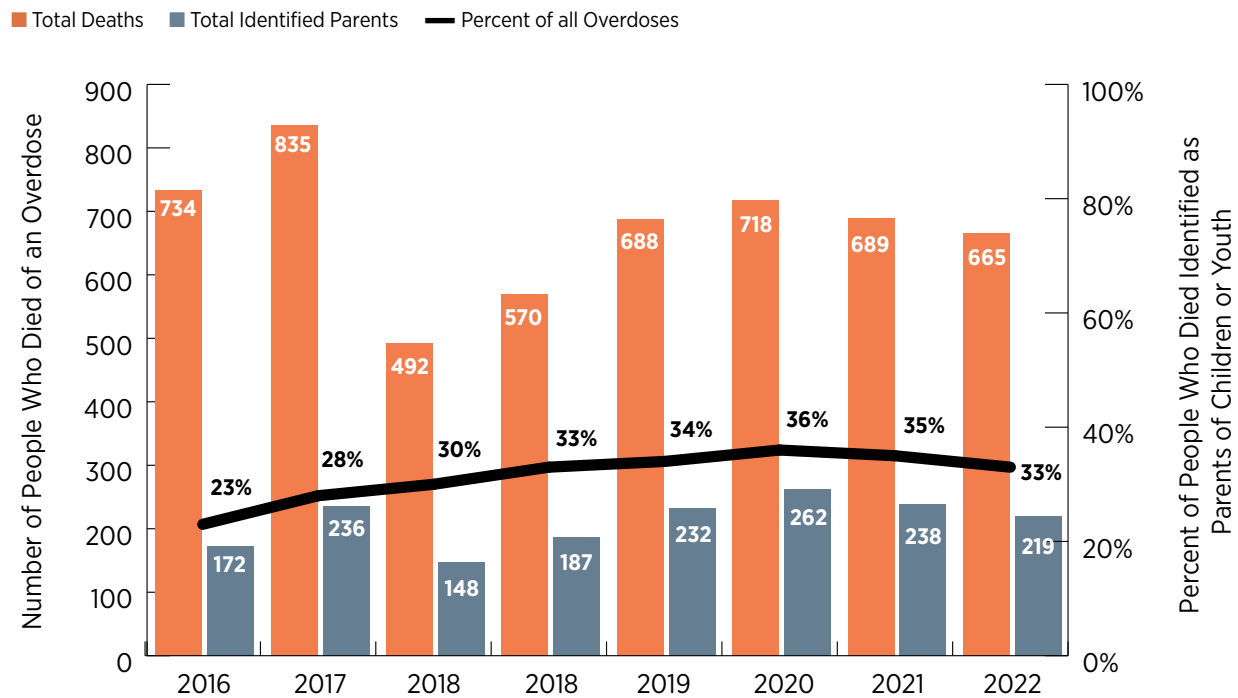
We were only able to observe behavioral health involvement for individuals enrolled in HealthChoices, Pennsylvania’s managed care program for Medicaid/Medical Assistance. Eighty-nine percent (1,505) of parents who died of an overdose were ever enrolled in HealthChoices; 76% (1,294) were enrolled in the year prior to their death. Sixty percent (2,111) of the children and youth were enrolled in HealthChoices during the period of observation.

FINDINGS

Parents who died of an overdose, 2016 through 2023

We identified 1,694 parents who died of an overdose (average of 212 per year); these parents had a total of 3,512 children. About one-third of all who died of an overdose during this period were identified as parents of a child or youth at the time of their death (see Figure 1).

FIGURE 1: Number of identified parents who died of an overdose, 2016 through 2023



Demographics of parents who died

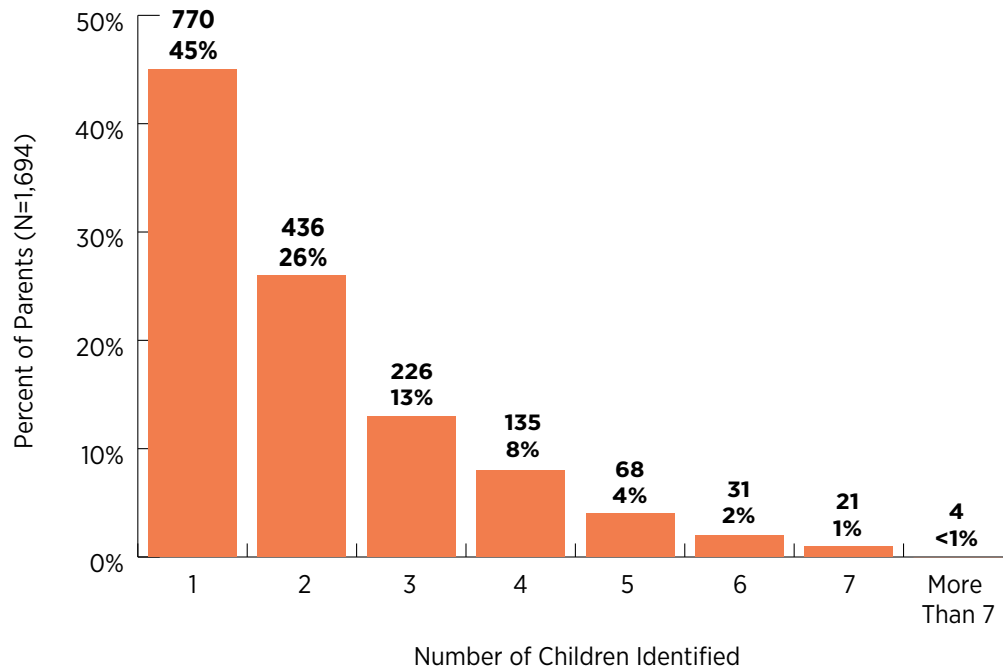
Sixty-four percent (1,078) of parents were 25–44 at the time of their death. An additional 24% (402) were 45–54 and 10% (161) were 55–64. The majority (58%) of those who died of an overdose were men/fathers. Although 73% (1,229) of parents who died were White, Black parents disproportionately died of an overdose (Black people account for only 13% of the total adult population in Allegheny County) (see **Table 1**). See **Appendix** for demographics of all people who died of an overdose during this time.

TABLE 1: Demographics of parents who died of an overdose (2016 through 2023)

	NUMBER OF PARENTS	% OF PARENTS
Race		
White	1229	73%
Black	462	27%
Other	3	0%
Gender		
Male	984	58%
Female	709	42%
Unknown	1	0%
Age at time of death		
Under 18	1	<1%
18–24	40	2%
25–34	417	25%
35–44	661	39%
45–54	402	24%
55–64	161	10%
65 and older	12	1%
Total	1694	100%

Most parents left behind two or more children (55%, 1,258). Seven percent (170) left behind five or more children (Figure 2).

FIGURE 2: Number of children per parent who died of an overdose, 2016 through 2023

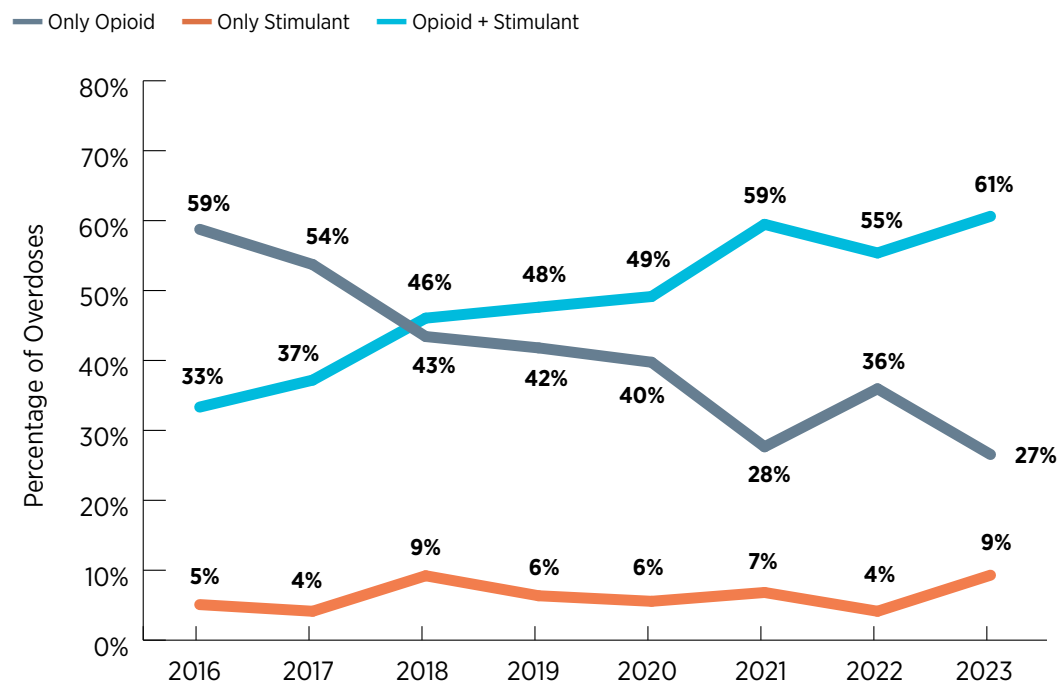


Type of drugs in system at time of overdose

For suspected overdose deaths, the Allegheny County Medical Examiner conducts a toxicology analysis to determine which substances contributed to the death. When issuing a death certificate for an overdose death, they list these substances. Most overdose deaths involve multiple substances, so it is possible and likely that an individual death could be included in multiple substance categories.

In 2023, 27% of parents who died of an overdose had only opioids listed as their cause of death. Sixty-three percent had a combination of opioids and stimulants listed and 10% listed only stimulants.⁴ Over the last seven years, the rate of opioids as the single cause of fatal overdose for parents declined by over 50%, while the rate of stimulants involved doubled (see **Figure 3**). This trend mirrors the trend for all fatal overdoses.

Figure 3: Percentage of parental overdoses by drugs identified at time of death



⁴ The stimulant class of drugs includes: Prescription drugs such as amphetamines [Adder- all® and Dexedrine®], methylphenidate [Concerta® and Ritalin®], diet aids [such as Didrex®, Bontril®, Preludin®, Fastin®,

Adipex P®, Ionomin® and Meridia®] and other illicitly-used drugs such as methamphetamine, cocaine, methcathinone and other synthetic cathinones that are commonly sold under the guise of “bath salts.” (DEA)

Service system interactions

Almost all parents had DHS involvement prior to their death, with the highest rates of interaction in mental health outpatient services (76%).⁵ Most (73%) parents also used emergency departments in the year prior to their death (see **Table 2**). Almost 80% had a prior criminal filing and 70% had previously been booked into ACJ. Almost one in five had a prior interaction with emergency shelter, street outreach or transitional housing (Housing Services).

TABLE 2: Prior interactions for parents who died of an overdose, ever and within 12 months prior to their death, 2016 through 2023

	EVER INVOLVED		INVOLVED IN YEAR PRIOR TO DEATH	
	#	%	#	%
Behavioral Health Services				
Mental Health Outpatient Services*	1144	76%	543	42%
Mental Health Crisis Services	686	40%	176	10%
Mental Health Inpatient Services*	573	38%	138	11%
Involuntary Commitment	188	11%	71	4%
Drug and Alcohol Services*	1161	77%	668	52%
Physical Health Emergency Department Visit*	1261	84%	944	73%
Physical Health Inpatient Stay*	758	50%	406	31%
Justice System				
Criminal Filing	1333	79%	628	37%
Allegheny County Jail	1189	70%	459	27%
Child welfare services				
Child in an out-of-home placement	464	27%	47	3%
Homeless and housing supports				
Homeless Services	322	19%	82	5%
Homeless Prevention & Other Support	237	14%	91	5%
Permanent Housing for Formerly Homeless	134	8%	73	4%
Family Support Centers				
	38	2%	27	2%
Assisted housing				
	247	15%	101	6%

*Of individuals enrolled in HealthChoices, 89% (1,505) of these parents were ever enrolled in HealthChoices and 76% (1,294) were enrolled in the year prior to their death.

⁵ All behavioral health and physical health data are limited to those with HealthChoices enrollment. 89% of parents had ever had an enrollment and 76% were enrolled in the year prior to their death.

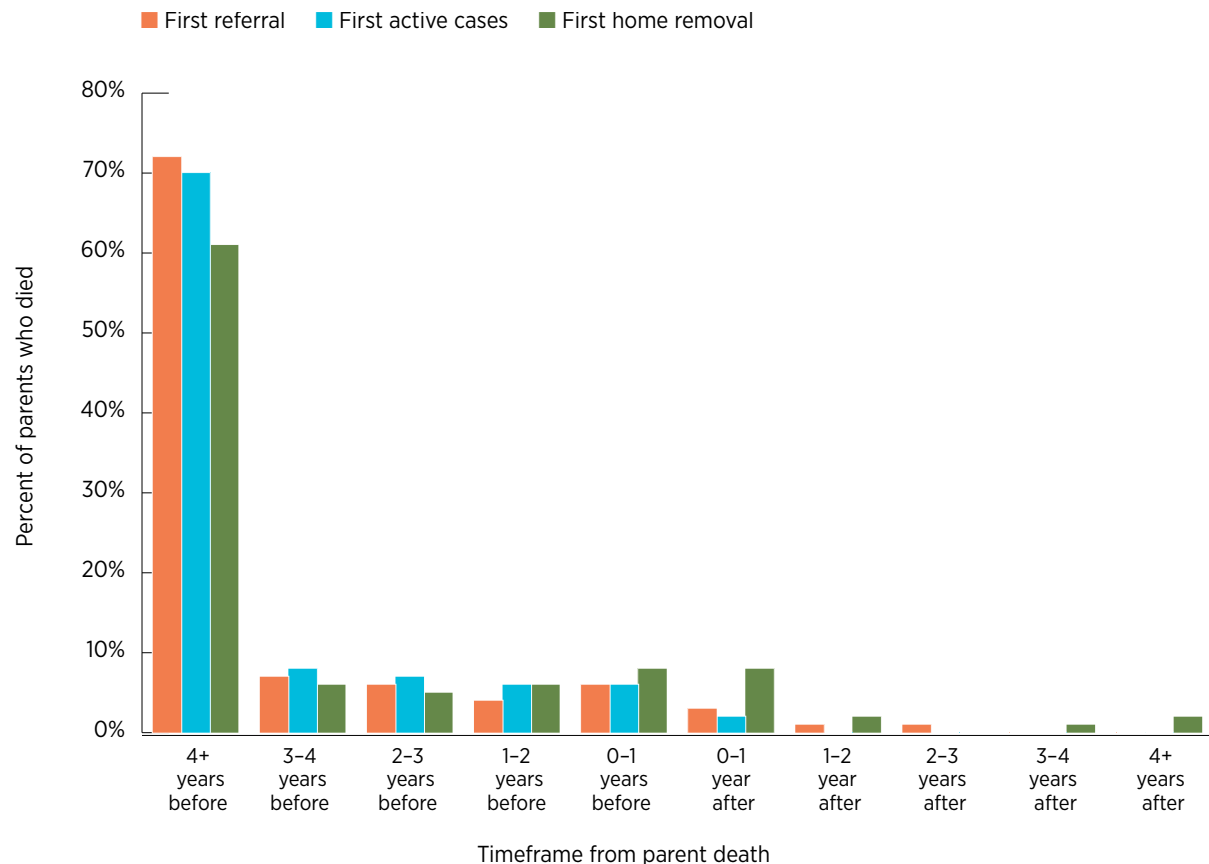
Child welfare

Forty-three percent (725) of parents who died of an overdose had prior child welfare involvement as a parent as some point; 27% (464) had a child removed from their care during that time. Seventeen percent (288) had an active child welfare case in the year prior to their death. Of the 41 parents who were under 25 at the time of their death, 46% had been involved in child welfare as a child and 24% had a prior child welfare removal.

The majority of the parents involved with child welfare were involved more than 4 years before their death. For those with involvement, 72% of parent's first had a referral 4 years before their death, 70% had a first open child welfare case and 61% of those with a child removed from their care experienced that removal more than four years prior to their death (see **Figure 4** and **Appendix** for more details). Sixty families had the child removed after the parental death—of these children, 93% were removed from the remaining parent, 5% from an adoptive parent or legal custodian, and 2% from another relative. Ten children were removed at the time of their parent's death.

Child welfare involvement is often an indicator of parental vulnerability, which includes mental health issues, substance abuse, family and intimate partner violence, and experiences of abuse and trauma themselves. The long histories of these families in child welfare point to a variety of complex challenges they are facing and that child welfare involvement is not always proximate to an overdose.”

Figure 4: Timing of first child welfare referral, case and home removal for parents who died of an overdose, 2016 through 2023

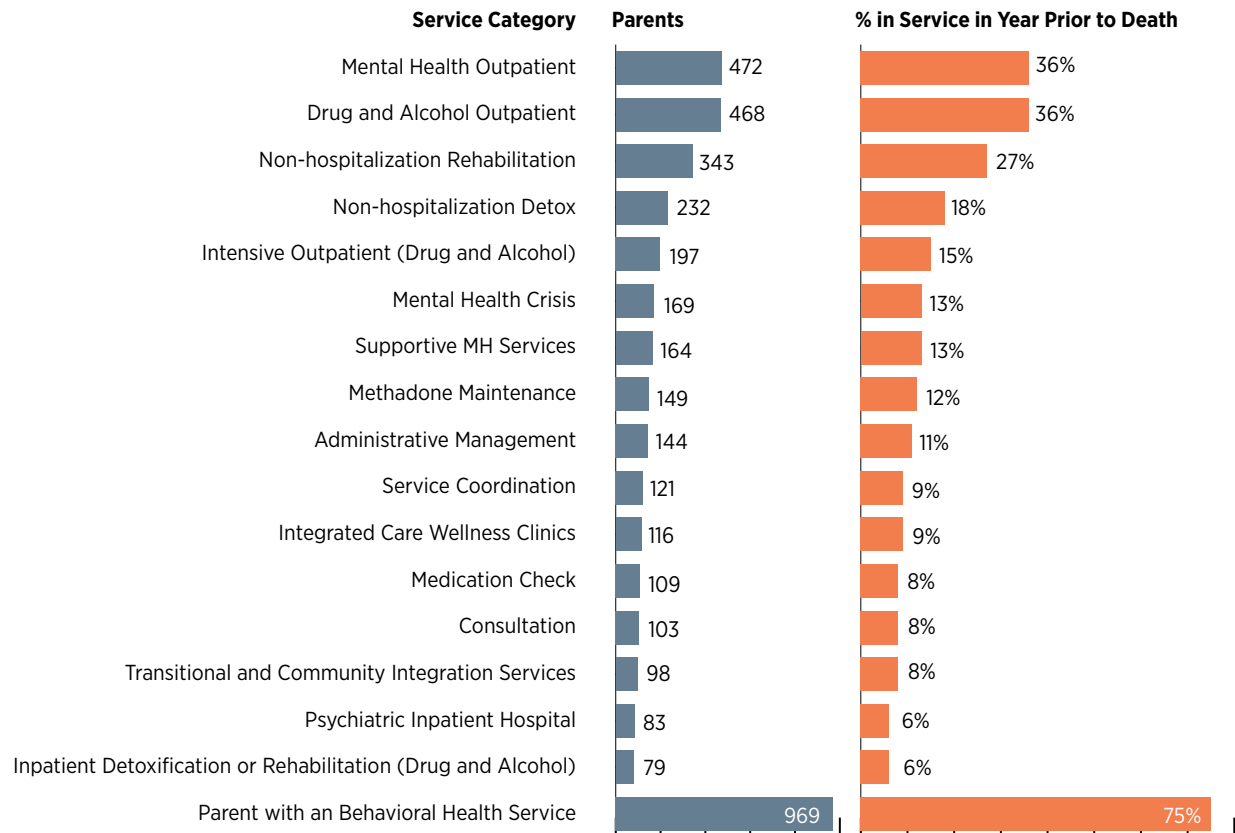


Behavioral health services

Eighty-nine percent of parents who died of an overdose had a prior HealthChoices enrollment (76% within a year of their death). Seventy-five percent of these parents were involved in behavioral health services in the year prior to their death. Most had engaged in prior substance use disorder (SUD) services, and more than half were receiving a SUD service within a year of their death (see **Table 3**).

The most common services for parents in the year prior to their death were mental health and drug & alcohol outpatient services. Four of the five most-used services were drug & alcohol-specific services (see **Figure 5**). Thirteen percent used a mental health crisis service in the year prior to their death. Six percent (79) used inpatient hospitalization for detoxification or rehabilitation for substance use disorders. (See **Appendix** for Service Definitions)

FIGURE 5: Behavioral Health services used by parents in the year before their overdose death



Of those with a history of involvement in behavioral health services, 63% (955) had a diagnosis of OUD at some point in their history. About one-third had an alcohol use disorder diagnosis and most had a prior mental health diagnosis—the most common being depressive disorders, bipolar disorder, anxiety disorder and adjustment disorder (see **Table 3**).

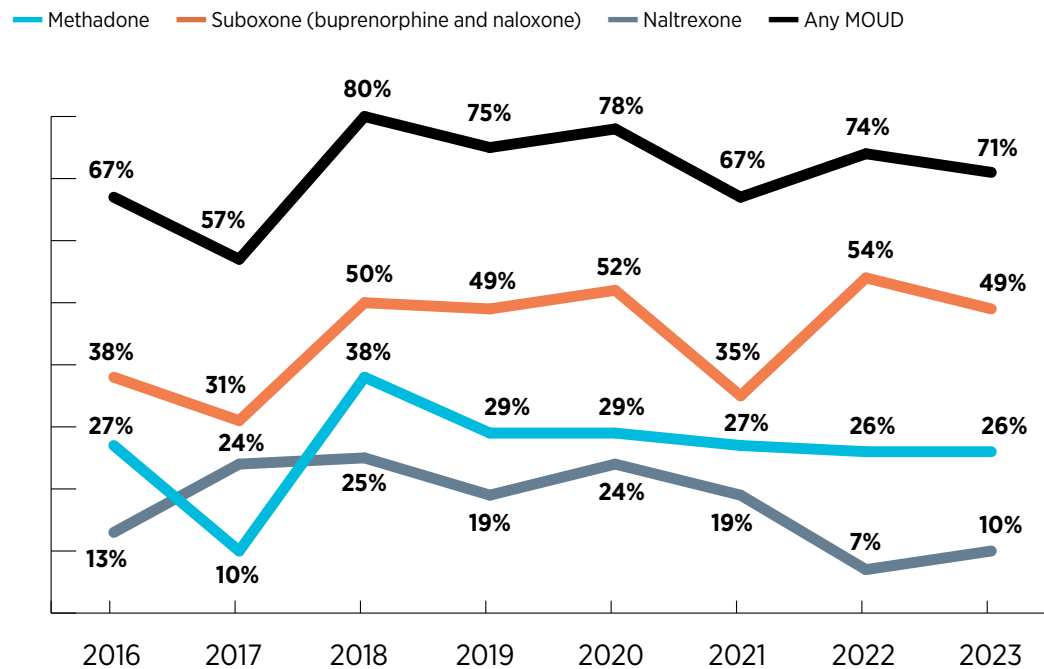
TABLE 3: Prior behavioral health diagnoses for parents who died of overdoses, HealthChoices enrollees only

PRIOR SUBSTANCE USE DISORDER DIAGNOSIS			PRIOR MENTAL HEALTH DIAGNOSES		
DIAGNOSIS	TOTAL PARENTS	% OF PARENTS	DIAGNOSIS	TOTAL PARENTS	% OF PARENTS
Opioid	955	63%	Depressive Disorder	848	56%
Alcohol	473	31%	Major Depression	659	44%
Poly-Substance	470	31%	Bipolar Disorder	545	36%
Cocaine	349	23%	Anxiety Disorder	513	34%
Cannabis	251	17%	Adjustment Disorder	478	32%
Substance induced psychosis*	247	16%	Acute Stress	192	13%
			Schizophrenia	174	12%
			ADHD	147	10%

*A diagnosis of substance induced psychosis is a indication of substance intoxication, withdrawal or recent consumption of psychoactive drugs.

Of the 63% of parents with a prior OUD diagnosis, 71% (445) used MOUD in the year prior to their death. The use of MOUD in parents did not substantially increase during this period; in fact, it fell from a high of 80% in 2018 to 71% in 2023 (see **Figure 6**). Most parents on MOUD were using suboxone in the year prior to their death. Only 12% (187) received treatment for an alcohol use disorder in their prior to their death. Of these, 19% received a medication for alcohol use disorder (MAUD).

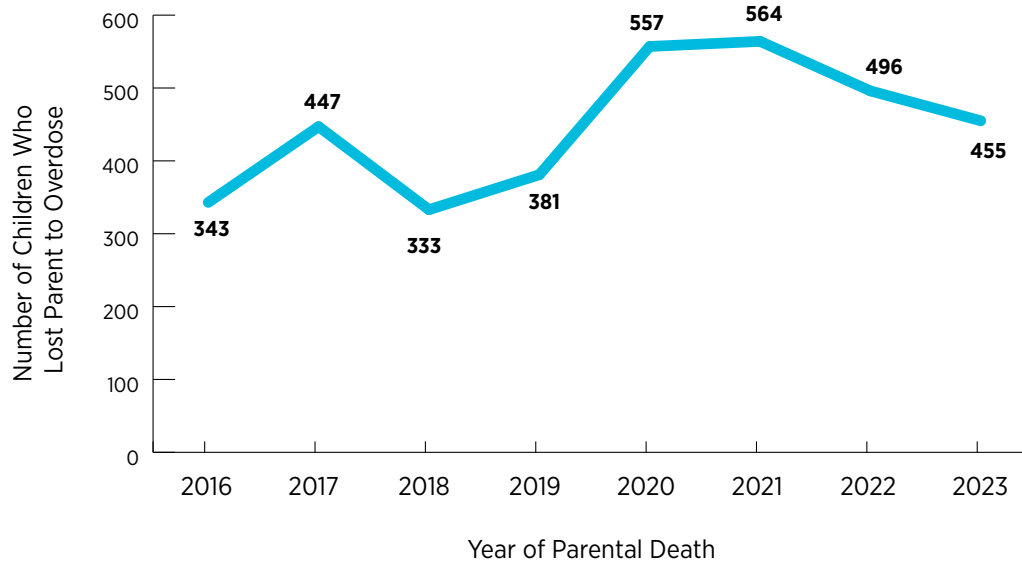
FIGURE 6: Percentage of parents with OUD who used MOUD in the year prior to their death, 2016 through 2023



Children with a Parent who died of an overdose

We identified 3,512 children who lost a parent to an overdose during this period, for an average of 447 children each year (see **Figure 7**). Seventy-four percent (2,596) were under 18 at the time of their parent's death and half were under 12. Two percent (75) of children were infants at the time of their parent's death. Eleven percent (8) of these infants were referred to child welfare for an allegation related to substance exposure as a newborn.

FIGURE 7: Number of children who lost a parent to an overdose, 2016 through 2023



Fifty percent (1,773) of children who lost a parent were male. Although the majority (63%, 2,223) of children who lost a parent were White, Black children were disproportionately represented (see **Table 4**); they accounted for 19% of the county-wide population under the age of 18 but accounted for 32% of children who lost a parent to an overdose.

TABLE 4: Demographic information for children who lost a parent to an overdose, 2016 through 2023

	NUMBER OF CHILDREN	% OF CHILDREN
Race		
White	2,223	63%
Black	1,107	32%
Other	34	1%
Unknown	148	
Gender		
Male	1,773	50%
Female	1,726	49%
Unknown	13	0%
Age at time of parent's death		
<1 years old	75	2%
1–4 years old	428	12%
5–8 years old	565	16%
9–12 years old	666	19%
13–17 years old	862	25%
18–24 years old	731	21%
25+	185	5%
Total	3512	100%

Fifty-one percent (1,806) of the children lost their father, while 46% lost their mother and three percent lost both parents (3,512) (**Table 5**). When the child lost both parents (96 children), the deaths might have occurred in different years.

TABLE 5: Number of Children by parent(s) who died, 2016 through 2023

DEATH BY PARENT TYPE	CHILDREN	% CHILDREN
Father	1,806	51%
Mother	1,610	46%
Father & Mother	96	3%
Total	3512	100%

Human Service Involvement of Children

Most of the children who lost parents had not engaged with human services before or after their parent's death. However, compared to the total under-18 Medicaid population, this population is more likely to engage mental health outpatient services, have a child welfare placement, or be involved in juvenile probation. For those who had engaged, the most common service was mental health outpatient services.⁶ Even though only 10% of these children were in a child welfare placement in the year before and after their parent's death, they experienced high rates of historical interaction with the child welfare system (see **Table 6**).

Eight percent of younger children (five or younger at any point in the year prior to their parent's death) were involved with a family center and 16% were engaged in early intervention services.

TABLE 6: Number and percentage of children involved in services, 1-year pre- and post parental overdose (compared to overall children enrolled in Medicaid)

	INVOLVED IN YEAR PRIOR TO DEATH		INVOLVED IN YEAR POST-DEATH		<18 MEDICAID POPULATION (2023)	
	#	%	#	%	#	%
Mental Health Outpatient Services*	438	21%	570	27%	9,983	10%
Mental Health Crisis Services	90	3%	100	3%	7,521	7%
Mental Health Inpatient Services*	37	2%	38	2%	560	1%
Drug and Alcohol Services*	47	3%	49	3%	183	1%
Child welfare placement**	246	10%	264	10%	1,731	2%
Homeless Services	16	<1%	17	<1%	490	<1%
Family Support Centers***	53	8%	40	6%	3,558	11%
Early intervention***	100	16%	77	15%	4,219	20%
Assisted housing	333	9%	307	9%	13,867	14%
Juvenile Probation****	168	9%	172	9%	982	2%
Public benefits: SNAP	1372	54%	1270	54%	66,055	65%

*Of the 2,111 children enrolled in HealthChoices

**Of the 2,596 children under 18 at the time of parent death

***Of children 0-4 at any point during period

****Of youth 10-21

⁶ Service utilization is only available for the 60% of children and youth enrolled in HealthChoices.

Nine percent of youth (10–21)⁷ were involved in juvenile probation at the time of their parent’s death. This is more than 4x the rate of the total <18 medicaid population. When we examine interactions with the juvenile system over time, we do not see increases in involvement for this population in the three years after their parent’s death. In addition, for those youth who have at least one year of exposure to the adult criminal justice system, 8% had a criminal filing and 4% were booked into the Allegheny County jail. This rate also does not increase over time (See **Appendix**).

Child welfare

Fifty-eight percent of the children had a prior child welfare referral and 35% of them had ever had an open child welfare case (see **Table 7**). Thirty percent of these children had a prior child welfare removal and 7% (182) were in placement at the time of their parent’s death.

TABLE 7: Child welfare involvement rates for children who lost parent(s) to overdose

CHILD WELFARE	% OF CHILDREN WHO LOST A PARENT	# OF CHILDREN WHO LOST A PARENT
Any referral	58%	2,045
Referral for substance use	16%	572
Any case opening	35%	1,242
Any removal	30%	1,062
Removed at the time of parent death*	7%	182
Total	100%	3,512

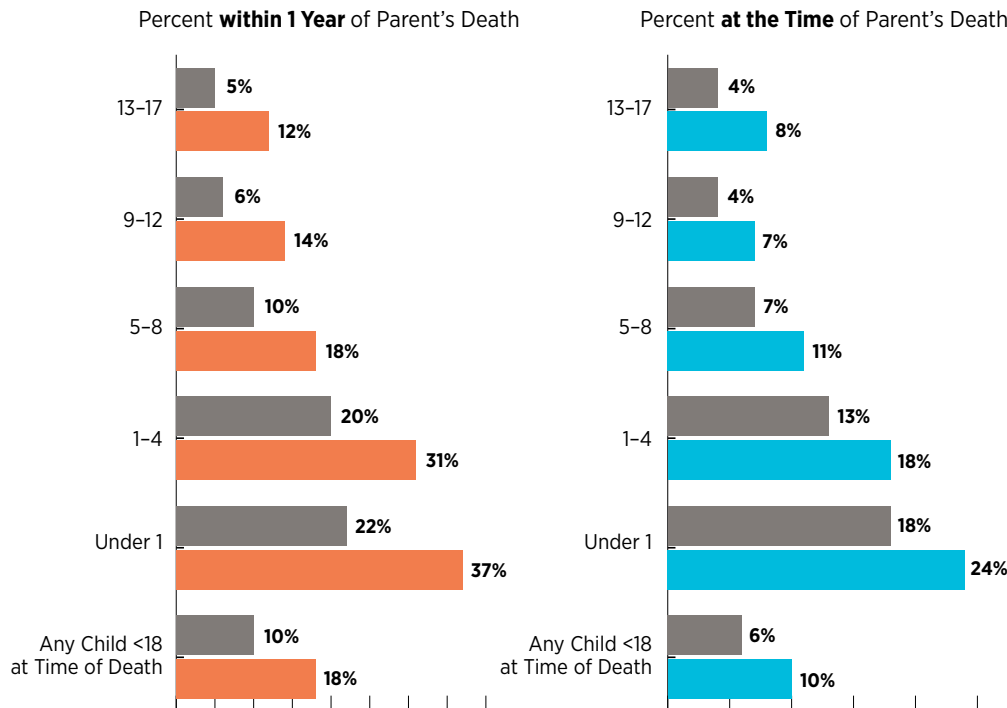
*Of the 2,596 children who were under the age of 18 at the time of their parent’s death

⁷ Juvenile Probation can provide jurisdiction for supervision of youth from age 10 to 21. They provide supervision for youth who are charged as juveniles in the county.

Younger children were much more likely to be involved with child welfare in the year prior to their parent's death. Thirty-seven percent of children under one and 31% of children 1-4 had an active child welfare case in the year prior to their parent's death. Almost one in five of these children were in an out-of-home placement during this time (see **Figure 8**).

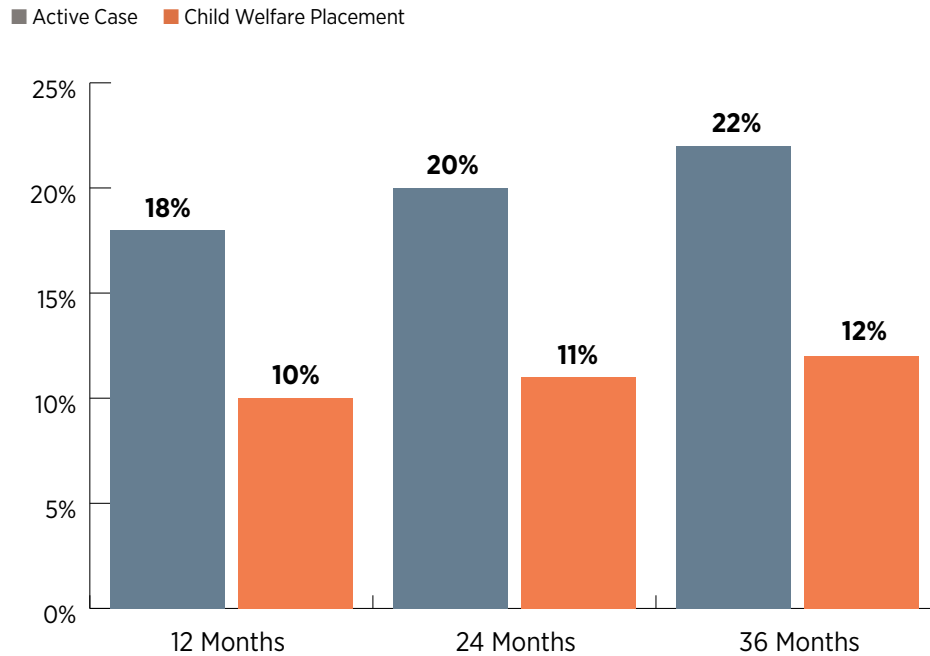
FIGURE 8: Percent of children involved in child welfare within 1 year and at time of parent death, by age group

■ Child Welfare Placement ■ Active Case ■ Active Case



We do not observe large increases in the percent of children involved in child welfare before and after their parent's death. 18% of children were involved in the year prior to their parents death and 18% in the year post their death. An additional 4% of children were involved in the 3 years post parental death.

FIGURE 9: Percent of children involved in child welfare after their parent's death

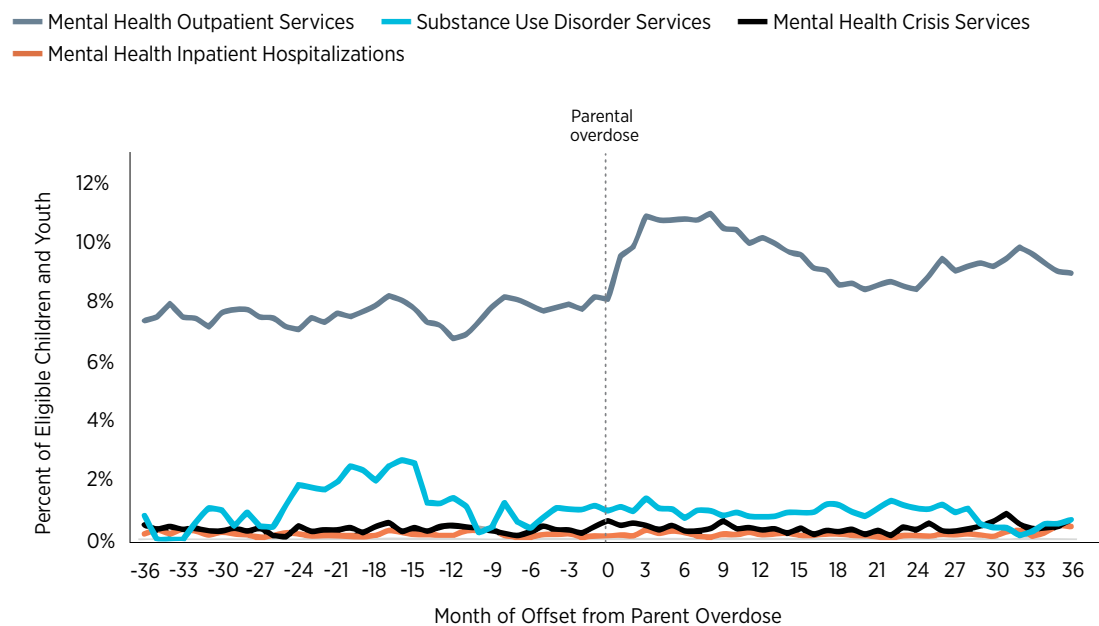


Behavioral health involvement before and after parental death

Sixty percent (2,111) of children who lost a parent were enrolled in HealthChoices during this period. Of these, 21% were involved in mental health outpatient services in the year prior to their parent's death, rising to 27% in the year after their death. (Table 7)

In the three years prior to a parent’s death, a steady rate of about seven percent of children were involved with mental health outpatient services each month. This increased to about 11% each month in the months following a parent’s death and begins to decline about nine months after the death, ultimately falling back to rates only slightly higher than those prior to their parent’s death. This shows that children and youth are engaging in services in the months directly after their loss. Rates of involvement in inpatient, crisis and substance use disorder (SUD) services remained low throughout the observation window (three years pre- and post-parental death) (see **Figure 10**).

FIGURE 10: Percent of HealthChoices-enrolled children participating in behavioral health services in the 3 years pre- and post-parental death, by type of service



Next steps

In 2021 and 2022, an historic settlement was reached between states/localities and opioid manufacturers and distributors, as well as pharmacy chains and a consulting firm, for their roles in the opioid epidemic. The Opioid Settlement Fund (OSF) was designed to promote the long-term goals of (1) reducing fatal overdoses and (2) reducing the harm from OUD. As a result of these settlements, Allegheny County receives annual payments in varying amounts through at least 2038.

In 2022 and 2023, Allegheny County received \$8.4M and \$6.05M, respectively. In December 2024, however, Allegheny County received \$26.4M in 2024 from OSF and other settlements—a payment substantially larger than prior and future payments.⁸

⁸ Read more about Allegheny County’s Opioid Settlement Fund and its uses [here](#).

The County is allocating OSF for several important initiatives, including some that are designed to help children impacted by the opioid crisis. Among others, this includes expansion of an early head start-child care partnership to support children born with neonatal opioid withdrawal syndrome or born to families impacted by substance use disorder; a County-wide campaign promoting safe storage of medications and the administration of naloxone for small children; and support for student assistance programs for school-aged children with SUD. In addition to its regular annual funding for substance use treatment (more than \$90M), the County is also using the more flexible settlement dollars to augment and supplement activities ineligible for funding through HealthChoices, including increasing access to MOUD, especially for people in ACJ, and piloting innovative interventions, including contingency management, for people with addiction to stimulants.

Given the high numbers of children and families impacted by overdoses, the County is implementing/has implemented strategies designed to improve its understanding of the impact of the Opioid epidemic and its knowledge of the most effective interventions. These include issuing a solicitation to the community, researchers and providers, seeking ideas to support this population with OSF; and direct outreach to families through a lens of victims' rights, to help us understand their perspective challenges and needs.

AUTHOR/ANALYTICS

Kathryn Collins
Ping Jui Ko
Lisa Kessler
Kelly Shaw
Lindsey Lacey
Erin Dalton

REVIEWERS

Stuart Fisk (Allegheny County Department of Human Services)
Cathy Palm (Center for Children's Justice)
Sarah Anne Font (Penn State University)

ACKNOWLEDGMENTS

This paper is a follow-up from a [previous analysis](#), led by Eric Hulsey, DrPH, MA.
The authors want to acknowledge his contribution to this work.

APPENDIX

APPENDIX

TABLE 9: Match rate between people who died from overdose and children, by source system

DEATH YEAR	TOTAL DEATHS	MATCHED BIRTH RECORDS	MATCHED CYF RECORDS	MATCHED HOUSING RECORDS	TOTAL MATCHED
2016	649	125 (19%)	135 (21%)	11 (2%)	172 (27%)
2017	736	169 (23%)	172 (23%)	15 (2%)	236 (32%)
2018	491	118 (24%)	119 (24%)	20 (4%)	148 (30%)
2019	569	145 (25%)	139 (24%)	18 (3%)	187 (33%)
2020	687	174 (25%)	199 (29%)	34 (5%)	232 (34%)
2021	724	199 (27%)	219 (30%)	52 (7%)	262 (36%)
2022	691	184 (27%)	177 (26%)	33 (5%)	238 (34%)
2023	667	164 (25%)	179 (27%)	31 (5%)	219 (33%)
Total	5,213	1,278 (25%)	1,339 (26%)	214 (4%)	1,694 (32%)

Service Descriptions

Administrative Management

Administrative Management applies to those activities and administrative functions undertaken by staff in order to ensure intake into the county mental health system and the appropriate and timely use of available resources and specialized services to best address the needs of individuals seeking assistance. Services are available for all persons who have a mental health diagnosis, as identified within the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) or a subsequent revision; or within the International Classification of Diseases, Ninth Edition (ICD-9) or a subsequent revision. Services are delivered for the purposes of facilitating and monitoring a person's access to mental health services and community resources.

Child Welfare Services

Allegheny County's child welfare system investigates allegations of child abuse or neglect and opens a case if there are ongoing concerns about the safety or well-being of the child or if the family requires additional support. If, despite the provision of non-placement services, the child's safety continues to be at risk, or if the court determines that the child is in immediate danger, the child may be removed from home and placed in an out-of-home placement (foster care, kinship care or congregate care). Child welfare placement services are provided to all children in placement.

Consultation

A psychiatrist or other mental health professional providing a psychiatric evaluation, diagnosis, and recommendation for appropriate treatment interventions or services to address clients' mental health needs, which can be done in collaboration with other healthcare providers and often take place in a hospital setting.

APPENDIX**DHS Housing and Homeless Support Services**

DHS provides temporary housing assistance and support services to individuals and families who experience housing crises. **Homeless Services** provides temporary housing assistance to individuals facing a housing crisis. **Homeless Prevention and Other Supportive Services** help individuals and families who are homeless or at risk of homelessness, with supportive services such as rental assistance, utility assistance or non-housing supports. The **Permanent Housing for Formerly Homeless** program helps individuals or families with long-term housing support or short-term rent assistance as they rapidly transition from homelessness to permanent and stable housing.

Drug and Alcohol Outpatient

An organized, non-residential treatment service provided in regularly scheduled treatment sessions. Services consist of less than 9 hours for adults and less than 6 hours for adolescents.

Drug and Alcohol Services

Publicly funded services for clients in need of drug and alcohol abuse treatment; includes both clinical services such as individual and group therapy and non-clinical services such as case management. Services may include a level-of-care assessment, designed to ascertain an individual's treatment needs based on the degree and severity of alcohol and drug use by gathering a personal history, including medical, emotional, occupational, educational and family information.

Early Intervention

Early intervention encompasses a variety of supports and services for children through age three with developmental concerns. Supports and services are provided in the home, at a childcare site or at another community setting.

Family Support Services

Family Support Centers, located in various communities around the County, provide services for children 5 and under in the areas of well-being, child development and school readiness and provide referrals/access to a comprehensive network of services.

Head Start

Head Start is a program for preschoolers that provides education, health and social services to families with children aged three to five.

Inpatient Detoxification or Rehabilitation (Drug and Alcohol)

An organized service delivered by medical and nursing professionals that provides for 24-hour medically directed evaluation and withdrawal management in an acute care inpatient setting. Services are delivered under a defined set of physician-approved policies and physician-managed procedures or medical protocols. An organized service delivered in an acute care inpatient setting. It is appropriate for patients whose acute biomedical, emotional, behavioral, and cognitive problems are so severe that they require primary medical and nursing care. Treatment is provided 24 hours a day in a permanent facility with inpatient beds.

APPENDIX**Integrated Care Wellness Clinics**

Pennsylvania's Integrated Community Wellness Centers (ICWC) are a state-specific adaptation of the federal Certified Community Behavioral Health Clinic (CCBHC) model, implemented at the end of 2019. ICWCs provide comprehensive behavioral health services to individuals with mental health and substance use disorders.

The program offers nine essential services:

- Crisis mental health services, including 24-hour mobile crisis teams, emergency crisis intervention, and crisis stabilization
- Screening, assessment, and diagnosis, including risk assessment
- Person-centered treatment planning
- Outpatient mental health and substance use services
- Primary care screening and monitoring of health risks
- Targeted case management services
- Psychiatric rehabilitation services
- Peer support, peer counseling, and family support services
- Intensive, community-based mental health care for active armed services members, veterans, and their families

ICWCs operate under a monthly per-member, per-month prospective payment system, which replaced the previous funding model. This change aimed to improve access to high-quality, community-based behavioral health services while integrating behavioral and physical health care and increasing the use of evidence-based practices

Intensive Outpatient (Drug and Alcohol)

An organized non-residential SUD treatment service provided according to a planned regime consisting of regularly scheduled treatment sessions. Treatment consists of 9-19 hours of structured programming per week for adults and 6-19 hours of service per week for adolescents. (Note: IOP is licensed as an outpatient activity).

Juvenile Probation

These are mandatory services for youth up to 18 who are alleged to have committed a delinquent act (an alleged offense committed by a juvenile), part of Allegheny County Juvenile Court, Court of Common Pleas, Family Division and Children's Court.

Medication Check

Mobile medication management and observation to assist individuals with developing skills and coping techniques to manage medications effectively and control symptoms.

APPENDIX**Mental health Crisis Intervention Services**

Mental Health Crisis Intervention Services are immediate, crisis-oriented services designed to ameliorate or resolve precipitating stress, which are provided to adults or children and their families who exhibit an acute problem of disturbed thought, behavior, mood, or social relationships. The services provide rapid response to crisis situations which threaten the well-being of the individual or others. The Mental Health Crisis Intervention Services activities include: intervention, assessment, counselling, screening and disposition services in the following categories:

- Telephone crisis services
- Walk-in crisis services
- Mobile Crisis services (individual-delivered)
- Mobile Crisis services (team delivered)
- Medical Mobile Crisis services (team-delivered)
- Crisis residential services, and
- Crisis in-home support services

Mental Health Outpatient

Outpatient mental health treatment services delivered by a clinic or a practitioner to a consumer who is not admitted to a hospital, institution, or community mental health facility for twenty-four hour a day service. These services provide assessment/evaluation, diagnosis, and treatment for behavioral health conditions by providing therapy (individual, family, and/or group), medication management, and coordinating care plans. Services may be provided in a clinic, in the community (mobile), or by telehealth.

Mental Health Services

Publicly funded services for people in need of mental health treatment. Includes both clinical services such as individual and group therapy, crisis services, inpatient and outpatient services, and non-clinical services such as case management.

Methadone Maintenance

A medication assisted treatment (MAT) for opioid use disorders (OUD), typically provided in specialized clinics called opioid treatment programs (OTPs) or methadone clinics, that provide medication management, medication dispensing and supervision, and counseling/therapy.

Non-hospitalization Detox

An organized non-residential SUD treatment service provided according to a planned regime consisting of regularly scheduled treatment sessions. Detoxification services for people struggling with addiction include: evaluation, elimination of the addictive substance or the dependency factors from the system—while keeping the health risks from substance withdrawal to a minimum, and support and efforts to motivate people to seek on-going treatment.

APPENDIX**Non-hospitalization Rehabilitation**

The provision of a planned format of skilled treatment services delivered on an individual and group basis. This is designed for those individuals who would benefit from more intensive services than are offered in outpatient treatment programs, but who do not require 24-hour care.

Psychiatric Inpatient Hospital

This applies to treatment or services provided an individual in need of twenty-four hours of continuous psychiatric hospitalization. The activities involve care in a licensed psychiatric inpatient facility.

Service Coordination

Adults with serious mental illness are often involved with several systems such as employment, physical healthcare, legal or court, Social Security, Medical Assistance, and/or Medicare. Service Coordination helps to ensure that the best interest of each individual, as well as attaining his or her personal goals, are the driving forces behind how the services from these systems are delivered.

Supportive Mental Health Services

Supportive services designed to enable persons with serious mental illness (SMI), children and adolescents with or at risk of serious emotional disturbance (SED), and their families, to be maintained at home with minimal disruption to the family unit.

Transitional and Community Integration Services

This includes services that are provided to individuals who are residing in a facility or institution as well as individuals who are incarcerated, diversion programs for consumers at risk of incarceration or institutionalization, adult outreach services, and homeless outreach services. Services may have a dual focus such as helping the individuals to reintegrate into the community or services directed to the underserved and or atypical populations. This service captures services and activities that cannot be appropriately billed as case management.

APPENDIX

TABLE 10: Timing of first child welfare referral, case and home removal for parents who died of an overdose, 2016 through 2023

	FIRST CHILD WELFARE REFERRAL		FIRST CHILD WELFARE CASE		FIRST HOME REMOVAL	
	N	%	N	%	N	%
4+ years before parent death	925	72%	516	70%	284	61%
3-4 years before parent death	84	7%	57	8%	29	6%
2-3 years before parent death	76	6%	53	7%	25	5%
1-2 years before parent death	57	4%	43	6%	30	6%
0-1 years before parent death	72	6%	46	6%	36	8%
0-1 years after parent death	36	3%	16	2%	37	8%
1-2 years after parent death	13	1%	1	<1%	7	2%
2-3 years after parent death	16	1%	0	---	2	<1%
3-4 years after parent death	4	0%	0	---	4	1%
4+ years after parent death	6	0%	0	---	10	2%
Total	1289	100%	732	100%	464	100%
Total % of parents	76%		43%		27%	

APPENDIX

TABLE 11: Comparison of demographics of parents who died vs. all people who died of an overdose, 2016 through 2023

	NUMBER OF PARENTS	% OF PARENTS	NUMBER OF TOTAL PEOPLE	% OF TOTAL PEOPLE
Race				
White	1,229	73%	3,985	77%
Black	462	27%	1,152	22%
Other	3	0%	68	1%
Gender				
Male	984	58%	3,567	69%
Female	709	42%	1,638	31%
Unknown	1	0%		
Age at time of death				
Under 18	1	<1%	13	0%
18–24	40	2%	272	5%
25–34	417	25%	1,258	24%
35–44	661	39%	1,318	25%
45–54	402	24%	1,128	22%
55–64	161	10%	949	18%
65 and older	12	1%	247	5%
Total	1,694	100%	5,205	100%

Justice Involvement

Eight percent of youth (10–21)⁹ were involved in juvenile justice at the time of their parent’s death. This rate did not increase over time, remaining at eight percent through three years post-death. Of older youth¹⁰ (765 were under 18 at the time of their parent’s death but over 18 years old at some point during the study period), eight percent had ever had a criminal filing, and four percent were ever booked into the ACJ (see **Table 8**). This rate did not increase over time.

TABLE 12: Juvenile and Criminal Justice System Involvement, post-death

	1 YEAR POST DEATH	2 YEARS POST DEATH	3 YEARS POST DEATH
Juvenile Justice Involvement	8%	8%	8%
Total qualifying youth (aged 10–21)	1,546	1,581	1,629
AT ANY POINT POST-DEATH			
Criminal filing		8%	
Allegheny County Jail Booking		4%	
Qualifying youth		765	

⁹ Only youth ages 10 through 21 are the appropriate age for involvement in the juvenile justice system.

¹⁰ After turning 18, youth may be involved in the adult system.

REFERENCES

REFERENCES

- Melhem NM, Walker M, Moritz G, Brent DA. (2008). Antecedents and sequelae of sudden parental death in offspring and surviving caregivers. *Arch Pediatr Adolesc Med.* 162(5):403-410.
- Thompson MP, Kaslow NJ, Kingree JB, King M, Bryant L, Rey M. (1998). Psychological symptomatology following parental death in a predominantly minority sample of children and adolescents. *J Clin Child Psychol.* 27(4):434-441.
- Kaplow JB, Saunders J, Angold A, Costello EJ. (2010). Psychiatric symptoms in bereaved versus nonbereaved youth and young adults: A longitudinal epidemiological study. *J Child Psychol Psychiatry.* 49(11):1145-1154.
- MP, Light LS. (2011). Examining gender differences in risk factors for suicide attempts made 1 and 7 years later in a nationally representative sample. *J Adolesc Health.* 48:391-397.
- Wilcox HC, Kuramoto SJ, Lichtenstein P, Langstrom N, Brent DA, Runeson B. (2010). Psychiatric morbidity, violent crime, and suicide among children and adolescents exposed to parental death. *J Am Acad Child Adolesc Psychiatry.* 49(5):514-523.
- Burke, L. A., & Neimeyer, R. A. (2013). Prospective risk factors for complicated grief: A review of the empirical literature. In M. Stroebe, H. Schut, & J. van den Bout (Eds.), *Complicated grief: Scientific foundations for health care professionals* (pp. 145-161). New York, NY, US: Routledge/Taylor & Francis Group.
- Brent, D., Melhem, N., Donohoe, B.M., and Walker, M. (2009). The incidence and course of depression in bereaved youth 21 months after the loss of a parent to suicide, accident, or sudden natural death. *American Journal of Psychiatry*, 166, (7).