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The Family Support Program: helping people bereaved by drug poisoning through New York City's Medical Examiner Office

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Introduction

Karli Hochstatter, PhD, MPH

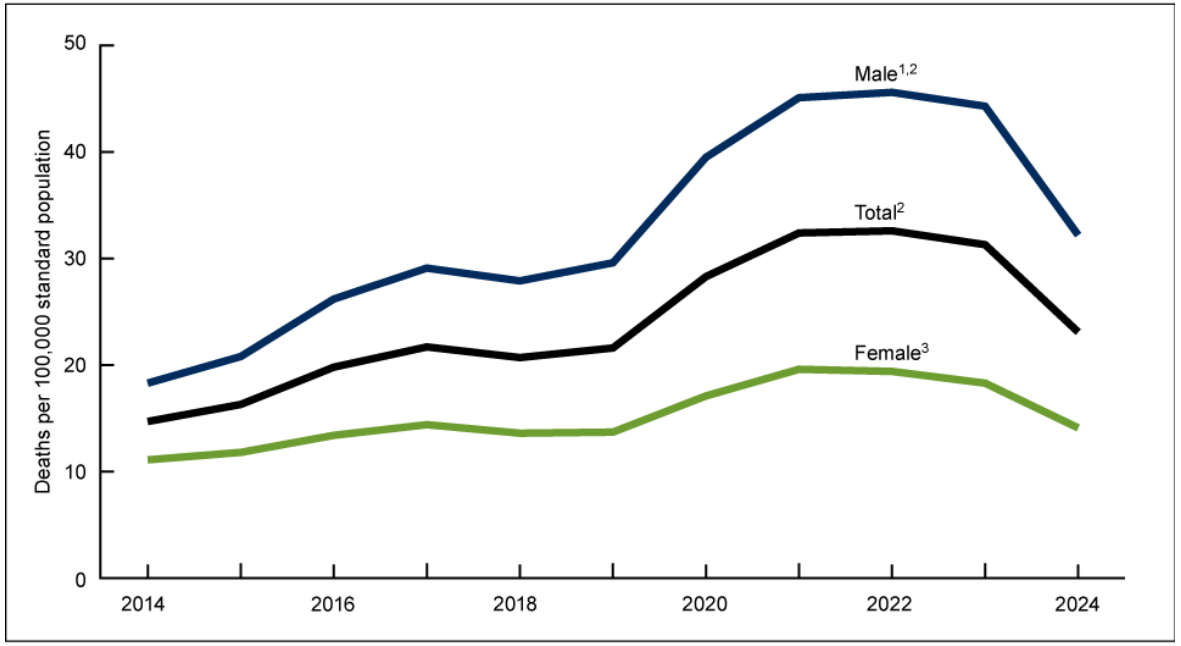
I am a substance use epidemiologist and health services researcher. My research focuses on bridging real-time surveillance data with public health response in the context of an increasingly volatile and unpredictable street drug market. Current projects involve developing and testing innovative strategies to identify drug overdose deaths in near-real time and leveraging that data to respond to overdose decedent's social network members at increased risk.



Background

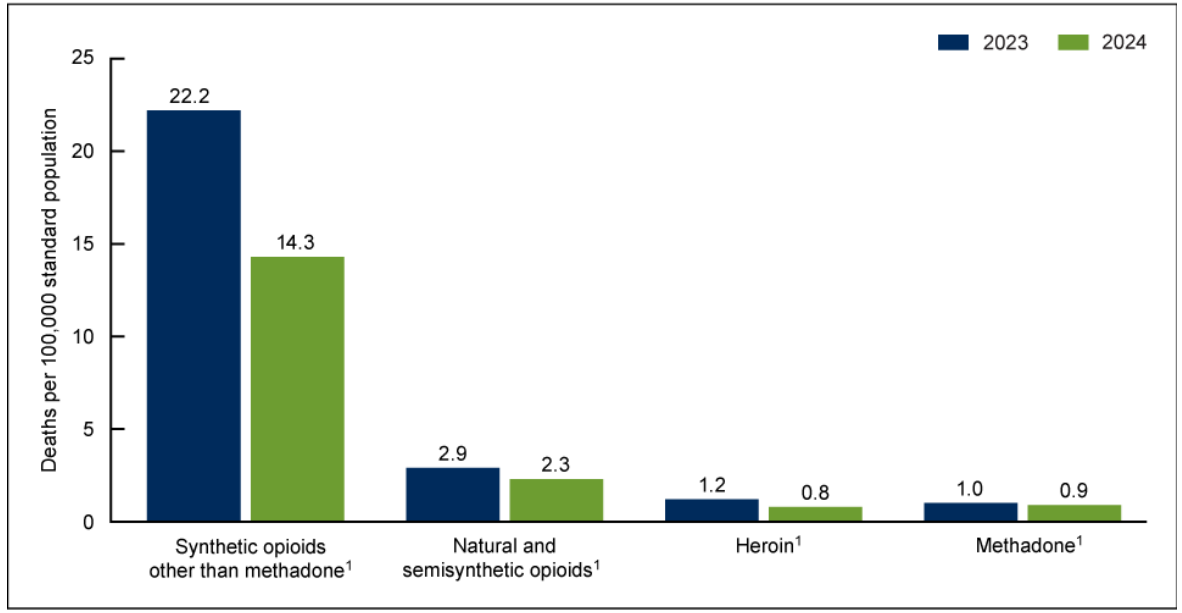
Drug Overdose in the U.S.

Figure 1. Age-adjusted rate of drug overdose deaths, by sex: United States, 2014–2024



[1]Significantly higher than for females for all years ($p < 0.05$).
[2]Significant increasing trend from 2014 to 2022 ($p < 0.05$). Rate in 2024 was significantly lower than in 2023 and 2022 ($p < 0.05$).
[3]Significant increasing trend from 2014 to 2022 and significant decreasing trend from 2022 to 2024 ($p < 0.05$). Rate in 2024 was significantly lower than in 2023 ($p < 0.05$).
NOTES: Drug overdose deaths are identified using *International Classification of Diseases, 10th Revision* underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. The number of drug overdose deaths in 2024 was 79,384. Age-adjusted death rates were calculated using the direct method and the 2000 U.S. standard population.
SOURCE: National Center for Health Statistics, National Vital Statistics System, mortality data file.

Figure 4. Age-adjusted rate of drug overdose deaths involving opioids, by type of opioid: United States, 2023 and 2024



[1]Significant decrease between 2023 and 2024 ($p < 0.05$).
NOTES: Drug overdose deaths are identified using *International Classification of Diseases, 10th Revision* underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. Drug overdose deaths involving selected drug categories are identified by specific multiple-cause-of-death codes: heroin, T40.1; natural and semisynthetic opioids, T40.2; methadone, T40.3; and synthetic opioids other than methadone, T40.4. Deaths involving more than one drug category (such as a death involving both methadone and a natural or semisynthetic opioid) are counted in both categories. The percentage of drug overdose deaths that identified the specific drugs involved was 96% in 2023 and 2024. Age-adjusted death rates were calculated using the direct method and the 2000 U.S. standard population.
SOURCE: National Center for Health Statistics, National Vital Statistics System, mortality data file.

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Background

Prevalence of OD Loss

TABLE 1— Lifetime Prevalence and Impact of Exposure to Overdose Deaths: United States, 2023

Question/Item	Survey Respondents, %[a]	Estimated Number of US Adults[b]
How many people over the course of your life do you personally know who have died by overdose?		
0	57.6	170 472 586
1	19.0	56 232 277
2–5	18.9	55 936 317
≥6	4.5	13 318 171

[a]Based on wave 14 of the American Life Panel.
[b]Based on 2022 census reports of the number of adults in the United States (295 959 351). See the appendix for detailed methodological information (available as a supplement to the online version of this article at http://www.ajph.org).

Athey A, Kilmer B, Cerel J. An Overlooked Emergency: More Than One in Eight US Adults Have Had Their Lives Disrupted by Drug Overdose Deaths. Am J Public Health. 2024 Mar;114(3):276-279. doi: 10.2105/AJPH.2023.307550. PMID: 38382027; PMCID: PMC10882395.

Background

Parental OD Loss

Table 1. Estimates of Community-Dwelling Children Who Lost a Parent to Drug Overdose in the US, 2011-2021, by Parental Age, Sex, Race, and Ethnicity[a].

Variable	Estimate (95% CI)			
	Parental age group, y			Overall
	18-25	26-40	41-64	
Overall	6975 (5664-8287)	175 355 (157 064-193 646)	139 236 (113 864-164 729)	321 566 (276 592-366 662)
By parental sex				
Male	3363 (2590-4137)	103 907 (92 186-115 627)	85 189 (69 305-101 073)	192 459 (164 081-220 838)
Female	3612 (3074-4149)	71 448 (64 878-78 019)	54 047 (44 558-63 656)	129 107 (112 510-145 824)
By parental race and ethnicity[b]				
Hispanic	1268 (986-1550)	22 525 (19 487-25 562)	16 269 (11 976-20 563)	40 062 (32 449-47 675)
Non-Hispanic American Indian or Alaska Native	290 (118-462)	3987 (2412-5561)	1751 (333-3291)	6028 (2863-9314)
Non-Hispanic Asian or Pacific Islander	38 (6-70)	1295 (768-1822)	1971 (764-3179)	3304 (1538-5071)
Non-Hispanic Black	1030 (763-296)	22 246 (18 414-26 079)	12 467 (7617-17 317)	35 743 (26 795-44 692)
Non-Hispanic White	4215 (3711-4718)	123 802 (115 014-132 590)	106 148 (93 006-119 290)	234 164 (211 731-256 598)
Non-Hispanic with >1 race	136 (79-192)	1501 (969-2032)	629 (168-1089)	2265 (1217-3313)

[a] National Vital Statistics System 2011-2021 data were used to obtain information on drug overdose deaths among individuals aged 18 to 64 years by sex, race, and ethnicity; National Survey on Drug Use and Health 2010-2014 and 2015-2019 data were used to obtain number of children aged 0-17 years living with people who used drugs by age group, sex, race, and ethnicity of those using drugs.
[b] Race and ethnicity data were collected via self-report based on classifications consistent with what was reported in the National Surveys on Drug Use and Health and included to assess disparities by race and ethnicity.

Jones CM, Zhang K, Han B, Guy GP, Losby J, Einstein EB, Delphin-Rittmon M, Volkow ND, Compton WM. Estimated Number of Children Who Lost a Parent to Drug Overdose in the US From 2011 to 2021. JAMA Psychiatry. 2024 Aug 1;81(8):789-796. doi: 10.1001/jamapsychiatry.2024.0810. PMID: 38717781; PMCID: PMC11079787.

Prolonged Grief Disorder (PGD)

PGD is characterized by elevated and persistent mental distress following the loss.

World Health Organization's **ICD-11**

- Added in 2018
- Requires at least **6 months** post-loss
- Specifies grief that persists for an "atypically long period"
- Focus on intense longing, yearning, or persistent preoccupation with the deceased

American Psychiatric Association's **DSM-5-TR**

- Added in 2022
- Requires at least **12 months** for adults (6 months for children and adolescents)
- Requires symptoms to be present nearly every day for at least the past month
- Focus on intense longing, yearning, or persistent preoccupation with the deceased, but structures the requirement around a specific count of at least three accessory symptoms (such as emotional numbness, identity disruption, or disbelief)

Background

Prevalence of PGD

Pooled prevalence rate of PGD of 49% among individuals bereaved by unnatural deaths, compared to only 10% of those bereaved by natural deaths

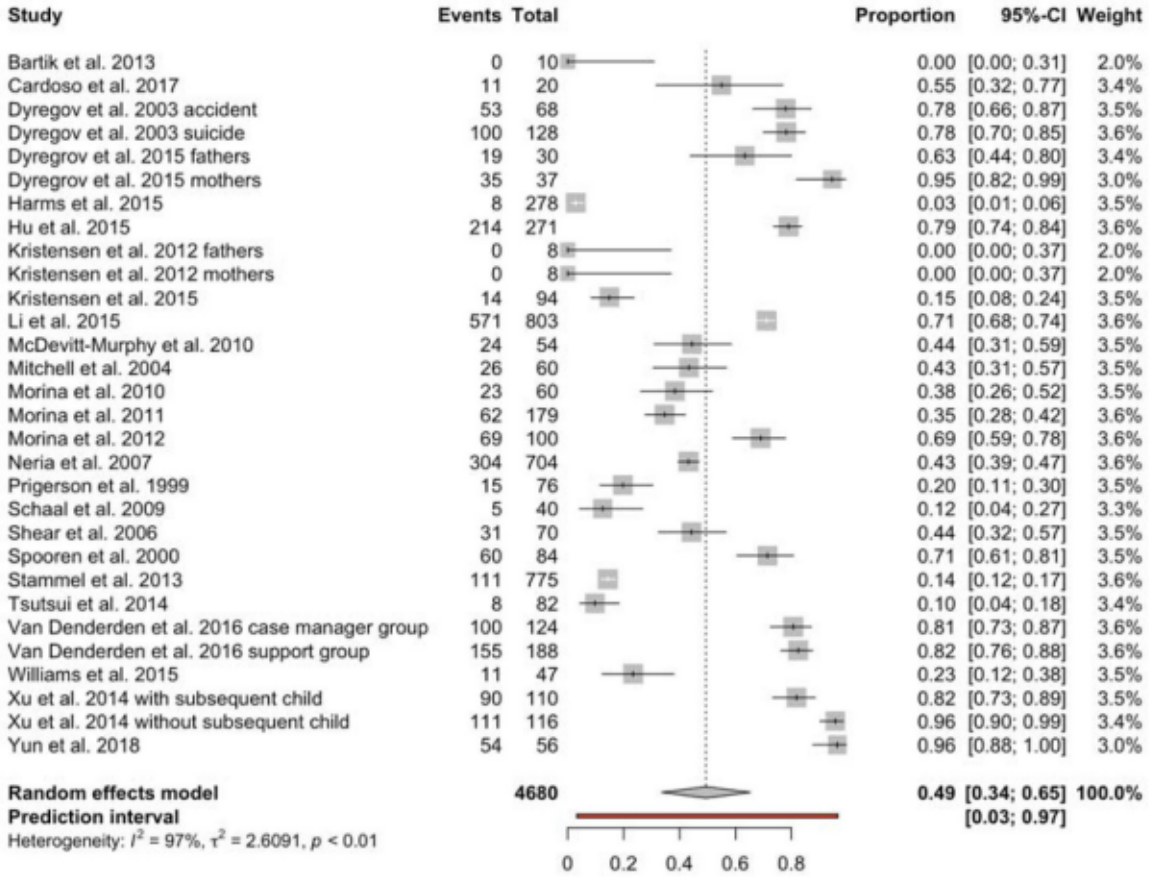


Fig. 2. Forest plot and the prevalence estimates of prolonged grief disorder following traumatic bereavement.

Djelantik AAAMJ, Smid GE, Mroz A, Kleber RJ, Boelen PA. The prevalence of prolonged grief disorder in bereaved individuals following unnatural losses: Systematic review and meta regression analysis. J Affect Disord. 2020 Mar 15;265:146-156. doi: 10.1016/j.jad.2020.01.034. Epub 2020 Jan 13. PMID: 32090736.

Background

Overdose-related PGD

26% of participants (31.2% of the parents, 21.8% of the siblings and 20.9% of the children) had scores equal to 35 or higher.

Table 2. Prevalence of PGS as Measured by PG-13.

Relation	*n*	Mean	Md	SD	Range
Parent	93	30.7	31	8.9	15–49
Mother	76	31.1	31	8.3	15–48
Father	17	29.1	28	11.2	15–49
Sibling	78	26.9	25.5	9.4	14–54
Sister	69	28	27	9.3	14–54
Brother	9	18.2	17	4.7	14–29
Child	24	27.3	27	9.2	11–47
Daughter	22	27.9	28.5	9.2	11–47
Son	2	21	21	8.5	15–27
Other family member[a]	39	26.8	24	10.4	11–55

[a]Grandparents, spouses and other family relations

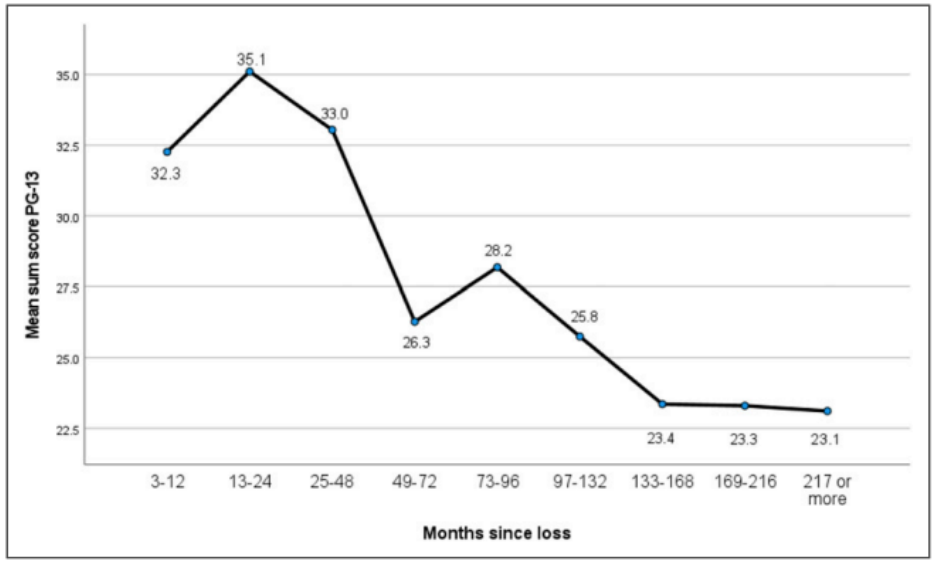


Figure 1. One-way between-groups ANOVA with post hoc tests.

Individuals who lost a family member **1 to 2 years prior** exhibited the highest levels of prolonged grief symptoms.

Titlestad KB, Dyregrov K. Does 'Time Heal all Wounds?' The Prevalence and Predictors of Prolonged Grief Among Drug-Death Bereaved Family Members: A Cross-Sectional Study. Omega (Westport). 2024 Sep;89(4):1628-1650. doi: 10.1177/00302228221098584. Epub 2022 Apr 28. PMID: 35482973; PMCID: PMC11423554.

Background

Mental Health Diagnoses

TABLE 3 Chi-square analysis examining prevalence of mental health diagnoses and elevated suicide risk based on suggested cut-off scores

Cause of death	Mental health diagnoses									
	PGD		PTSD		MDD		GAD		Sui. Risk	
Overdose *n* (%)	74 (74)	χ^2 (2) = 48.89	43 (43)	χ^2 (2) = 23.04	59 (51.3)	χ^2 (2) = 13.72	36 (31.3)	χ^2 (2) = 4.78	26 (22.6)	χ^2 (2) = 10.02
Suicide *n* (%)	120 (74.5)	$p < 0.001$	84 (52.2)	$p < 0.001$	100 (54.1)	$p = 0.001$	78 (42.2)	$p = 0.09$	66 (35.7)	$p = 0.007$
Sudden *n* (%)	32 (35.6)	$V = 0.35$	19 (21.1)	$V = 0.26$	33 (32)	$V = 0.19$	33 (32)	$V = 0.11$	21 (20.4)	$V = 0.16$
		$n = 351$		$n = 351$		$n = 403$		$n = 403$		$n = 403$

Abbreviations: GAD, Generalized Anxiety Disorder; MDD, Major Depressive Disorder; PGD, Prolonged Grief Disorder; PTSD, posttraumatic stress disorder.

Bottomley JS, Feigelman WT, Rheingold AA. Exploring the mental health correlates of overdose loss. Stress Health. 2022 Apr;38(2):350-363. doi: 10.1002/smi.3092. Epub 2021 Sep 7. PMID: 34448352; PMCID: PMC11267624.

Background

Bereavement and Mortality

Table 2

Association between bereavement and mortality, parents bereaved by a drug-related death compared with non-bereaved parents, Norway, 1986–2015

	Mothers		Fathers	
Cause of death of the parent	**External**	**Natural**	**External**	**Natural**
Having lost a child				
0–2 years ago	4.82 (3.11–7.47)	1.48 (1.24–1.76)	2.50 (1.57–3.97)	1.27 (1.08–1.49)
2–10 years ago	1.68 (1.12–2.50)	1.63 (1.49–1.78)	1.57 (1.12–2.18)	1.42 (1.30–1.54)
More than 10 years ago	1.01 (0.59–1.74)	1.27 (1.14–1.41)	0.98 (0.58–1.66)	1.39 (1.26–1.54)

Table 3

Association between bereavement and mortality, parents bereaved by a drug-related death compared with parents bereaved by other causes of death, Norway, 1986–2015

	Mothers				Fathers			
Compared with parents bereavement from	**Other external causes**		**Natural causes**		**Other external causes**		**Natural causes**	
Cause of death of the parent	**External**	**Natural**	**External**	**Natural**	**External**	**Natural**	**External**	**Natural**
0–2 years ago	1.98 (1.14–3.47)	1.13 (0.93–1.38)	3.04 (1.82–5.10)	1.05 (0.87–1.26)	1.40 (0.80–2.45)	1.07 (0.89–1.29)	1.82 (1.04–3.16)	0.98 (0.82–1.17)
2–10 years ago	1.08 (0.68–1.72)	1.25 (1.13–1.38)	1.83 (1.17–2.85)	1.26 (1.15–1.39)	1.06 (0.72–1.57)	1.20 (1.09–1.32)	1.60 (1.08–2.36)	1.12 (1.02–1.23)
More than 10 years ago	1.22 (0.66–2.26)	1.07 (0.95–1.20)	1.22 (0.67–2.21)	1.05 (0.93–1.18)	0.80 (0.45–1.43)	1.19 (1.06–1.33)	0.92 (0.51–1.63)	1.24 (1.11–1.38)

Christiansen SG, Reneflot A, Stene-Larsen K, Johan Hauge L. Parental mortality following the loss of a child to a drug-related death. *Eur J Public Health*. 2020;30(6):1098-1102. doi:10.1093/eurpub/ckaa094

Background

Bereavement and Substance Use

- Individual drug use is strongly associated with social network drug use.
- Individuals may engage in substance use as a way of coping with major life events, such as loss, by staving off negative emotions.
  - Qual research demonstrates how bereaved adults use drugs and alcohol to help them cope with loss from unnatural causes.[3,4]
  - A large cohort study found that parents who lost a child were at significantly higher risk for hospitalization for substance misuse than parents who had not lost a child.
- Grief during bereavement can exacerbate existing substance use problems.
  - In a study of 196 bereaved people who use drugs, 83% reported increasing drug consumption after suffering the loss.[1]
  - Overdose-bereaved individuals who already use drugs have also reported using more types of substances than usual to manage feelings of grief.[2]
- Social and environmental stressors of overdose loss (e.g., poverty, social isolation, housing issues) and other psychological consequences (e.g., depression, anxiety, PTSD) are themselves risk factors for substance use.

1. Masferrer L, Garre-Olmo J, Caparros B. Is there any relationship between drug users' bereavement and substance consumption? *Heroin Addiction and Related Clinical Problems*.
2. Macmadu A, Frueh L, Collins AB, et al. Drug use behaviors, trauma, and emotional affect following the overdose of a social network member: A qualitative investigation. *Int J Drug Policy*. 2022;107:103792. doi:10.1016/j.drugpo.2022.103792
3. Drabwell L, Eng J, Stevenson F, King M, Osborn D, Pitman A. Perceptions of the Use of Alcohol and Drugs after Sudden Bereavement by Unnatural Causes: Analysis of Online Qualitative Data. *Int J Environ Res Public Health*. 2020;17(3):677. doi:10.3390/ijerph17030677
4. Schlosser AV, Hoffer LD. "I don't go to funerals anymore": how people who use opioids grieve drug-related death in the US overdose epidemic. *Harm Reduction Journal*. 2022;19(1):110. doi:10.1186/s12954-022-00693-7

The Role of Medical Examiner/Coroner Offices

- C/ME offices have begun to recognize their unique positioning to support people during bereavement.

Table 1. Overview of Medical Examiner–Affiliated Grief Support Programs

Site	Services Offered
New York, NY	OCME information and logistics; supportive counseling; referrals for grief, mental health, social services, etc.
Philadelphia, PA	Bereavement counseling; peer groups; referrals; guidance on death certificates and property recovery
Denver, CO	Crisis response; emotional support; case management and referral; care packages and holiday outreach
New Mexico	Crisis intervention; autopsy report review; 8-16 session counseling model and support groups; education and training for professionals

The Role of Medical Examiner/Coroner Offices

A grief services program (GSP) at the New Mexico Office of the Medical Investigator (OMI) documented the various roles grief counselors play in this setting and demonstrate the strong need for GSPs at ME/C offices, particularly given the traumatic nature of deaths investigated by ME/Cs.

TABLE 2—*Reason individuals visited the GSP at OMI.*

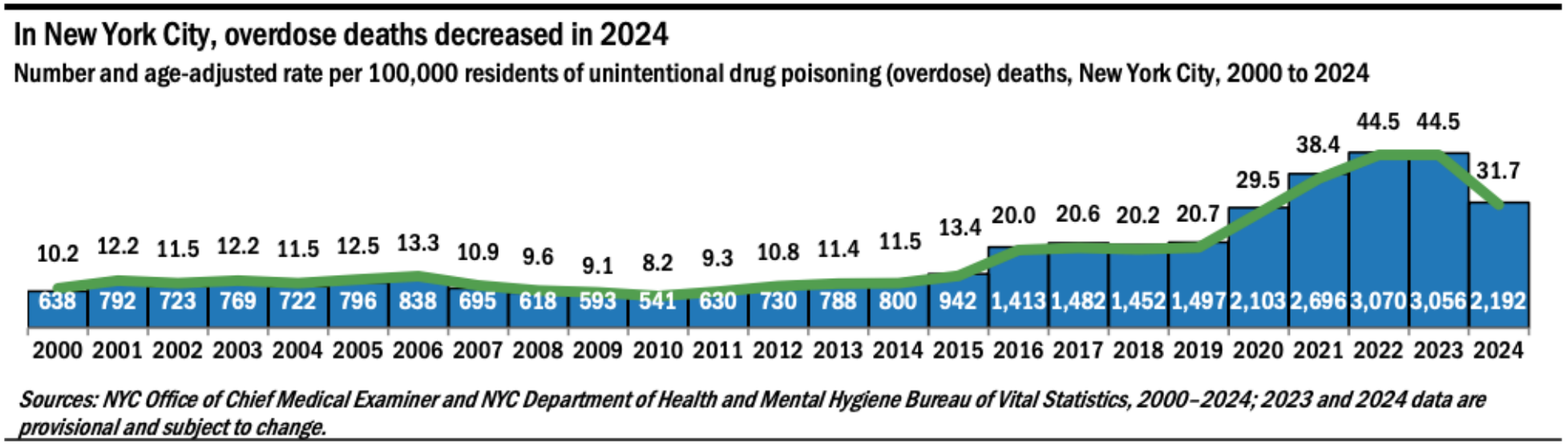
Reason for Coming to OMI	Number	Percentage
Counseling	524	74.1
Obtain information	85	12
Autopsy results	47	6.6
View body, photographs, other	24	3.4
Release of body	15	2.1
Pick up belongings	5	0.7
Class presentation	3	0.4
Identification	2	0.3
Obtain hair clipping	2	0.3

1. Berry RS, Aurelius MB, Barickman N, Lathrop SL. Utility of a grief services program for medical examiners' offices. J Forensic Sci. 2013 Mar;58(2):380-4. doi: 10.1111/1556-4029.12043. Epub 2012 Dec 27. PMID: 23278521.

Setting

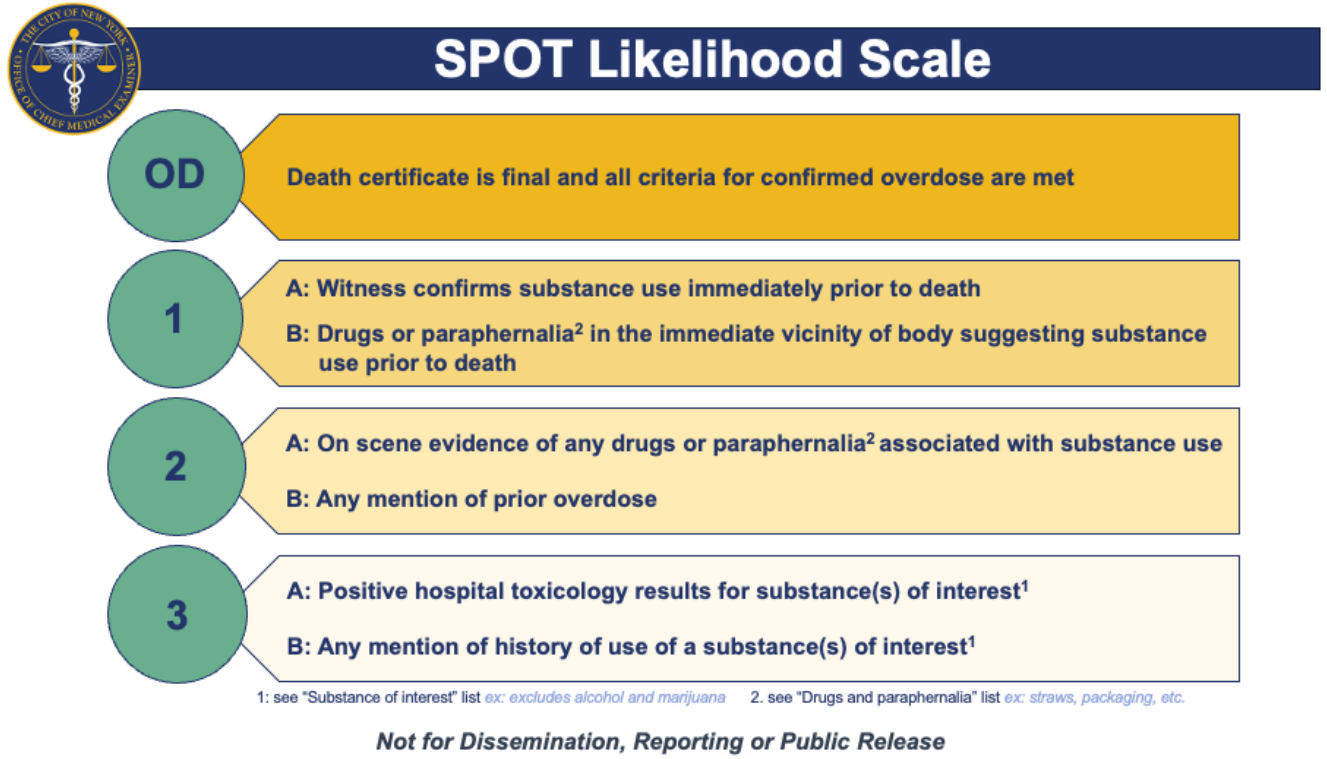
New York City, USA

- The NYC OCME is the largest medical examiner's office in the U.S. and investigates all suspected overdose deaths in the city
- In 2024, opioids were involved in 78% of overdose deaths; 73% involved fentanyl



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Population



SPOT identifies approximately **77%** of drug overdose fatalities (i.e., sensitivity) within 72 hours of the death

BMC Public Health

BMC Public Health. 2022 Jul 8;22:1311. doi: 10.1186/s12889-022-13700-0

Predicting accidental drug overdose as the cause of fatality in near real-time using the Suspected Potential Overdose Tracker (SPOT): public health implications

Karli R Hochstatter [1,2,✉], Sonal Rastogi [3,4], Kathryn Klein [3,4], Cameron Tait-Ozer [3,4], Nabila El-Bassel [1], Jason Graham [4,5]

Family Support Program: Outreach

- From the casefiles of suspected overdose decedents identified by SPOT, the FSP extracts contact information and reaches out (via **telephone**) to next-of-kin, emergency contacts, individuals present at the death scene, or others for whom the OCME has obtained contact information. These 'social network members' include:
    - Biological family
    - Chosen family
    - Partners/spouses
    - Friends
    - Others

- **Random Selection:** Given the scale of loss to drug poisoning in NYC, it has not been feasible to offer the FSP to all bereaved individuals without compromising the quality of care provided to network members. To address this, and in anticipation of the need to evaluate the impact of FSP in the future, the OCME implemented a randomized selection process for client outreach.

Family Support Program: Staffing Model

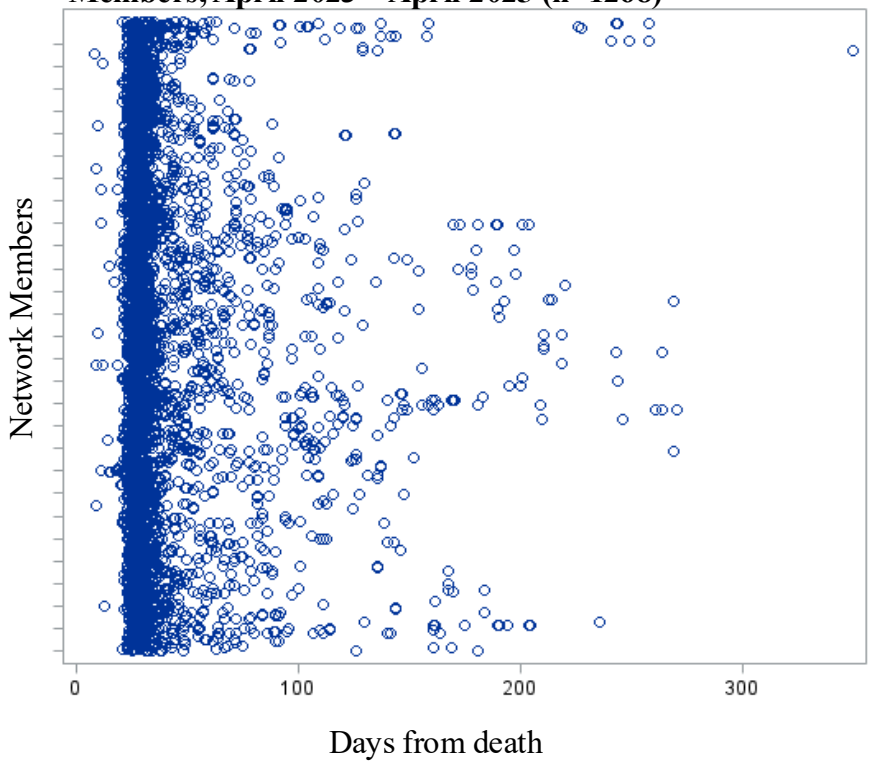
- Licensed social workers trained in pathological grief responses, substance use, etc.
- English- and Spanish-speaking social workers
- Well-versed in NYC's local resources and referral organizations (next slide provides examples)
- Each social worker is assigned approximately seven suspected overdose cases per week
- On average, each case involves contact with approximately 1.9 bereaved individuals, resulting in an estimated 14 new clients per week per social worker
- This caseload structure was informed by existing literature on trauma-exposed professionals
- The scheduling model is designed to offer flexibility and support individualized work styles

Family Support Program: Common Areas of Need

Area of Need	Examples of needs identified	Examples of services provided
OCME Sudden Death Information and Logistics	• Information about the circumstances of the death • Explanation of autopsy and toxicology timelines • OCME policies and procedures for burial and property recovery • Information about how to obtain the death certificate	• Help filing an extension request for additional time to make funeral arrangements • Coordinate with medical examiner to get 'No Foul Play' letter to life insurance provider • Share autopsy, toxicology, and cause/manner of death info
Supportive Counseling	• Feelings of despair, exhaustion, confusion, fear, anger, or sadness • Overwhelm or paralysis in decision making or taking action • Concerns about the health or safety of friends or family members	• Motivational interviewing • Mindfulness exercises • Guided discovery • Active listening • Solutions focused brief therapy
Grief & Mental Health Resources or Referrals	• Feelings of despair, exhaustion, confusion, fear, anger, or sadness • Interest in long term treatment • Interest in meeting other grieving people • Acute mental distress	• Referrals to grief support groups • Referrals to individual counseling • Deployment of city crisis intervention team • Grief and bereavement articles, books, and mindfulness exercises
Social Services Resources or Referrals	• Housing instability • Difficulty accessing social security benefits • Lack of access to appropriate health care • Mobility challenges • Interest in substance use treatment or harm reduction resources • Concern for the welfare of minors who lost a parent • Legal concerns (i.e., questions about decedent's property, child custody or burial disputes, concerns about criminality in circumstances of death)	• Referrals to NYC Department of Social Services for benefits (social security, SNAP, disability, temporary rental assistance) • Referrals to legal services • Assistance applying for access-a-ride • Referrals to senior centers for in-person case management for older New Yorkers • Information about Department of Education mental health resources for students

FSP Procedures

Figure 1: NYC OCME FSP Engagement with Network Members, April 2023 – April 2025 (n=1268)



- Initial contact occurs ~3 weeks after the death
- Take an unstructured, person-centered approach to assessing client needs
- Identify existing supports and ways to leverage those supports while connecting them to appropriate resources and services
- Provide short-term counseling as needed
- Social worker and client determine collectively whether additional follow-up calls are necessary
- Use text messaging and e-mail to follow-up, as needed
- Data are recorded in electronic case management system

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FSP Data

From September 2023 through April 2025 (20 months):

- FSP reached out to 4432 network members, which were identified among 2393 overdose decedents randomly selected for the FSP, averaging 1.9 network members per decedent
- Of those called, 3054 (68.9%) network members were successfully reached
- Of those reached, 2315 (75.8%) received some level of service or referral
- The relationships of the 4432 network members to overdose decedents included:
  - Siblings (n=1350, 30.5%)
  - Parents (n=715, 16.1%)
  - Children (n=764, 17.2%)
  - Extended family (n=584, 13.2%)
  - Partners or ex-partners (n=565, 12.8%)
  - Friends or roommates (n=402, 9.1%)

› Harm Reduct J. 2026 Jun 8;23(1):133. doi: 10.1186/s12954-026-01482-2.

Support from New York City's office of chief medical examiner for people bereaved by drug poisoning: development and implementation of the family support program

Karli R Hochstatter [1], Hannah Johnson [2], Megan Brown [2], Jan Gryczynski [3], Talia Nadel [3], Jason Graham [2 4]

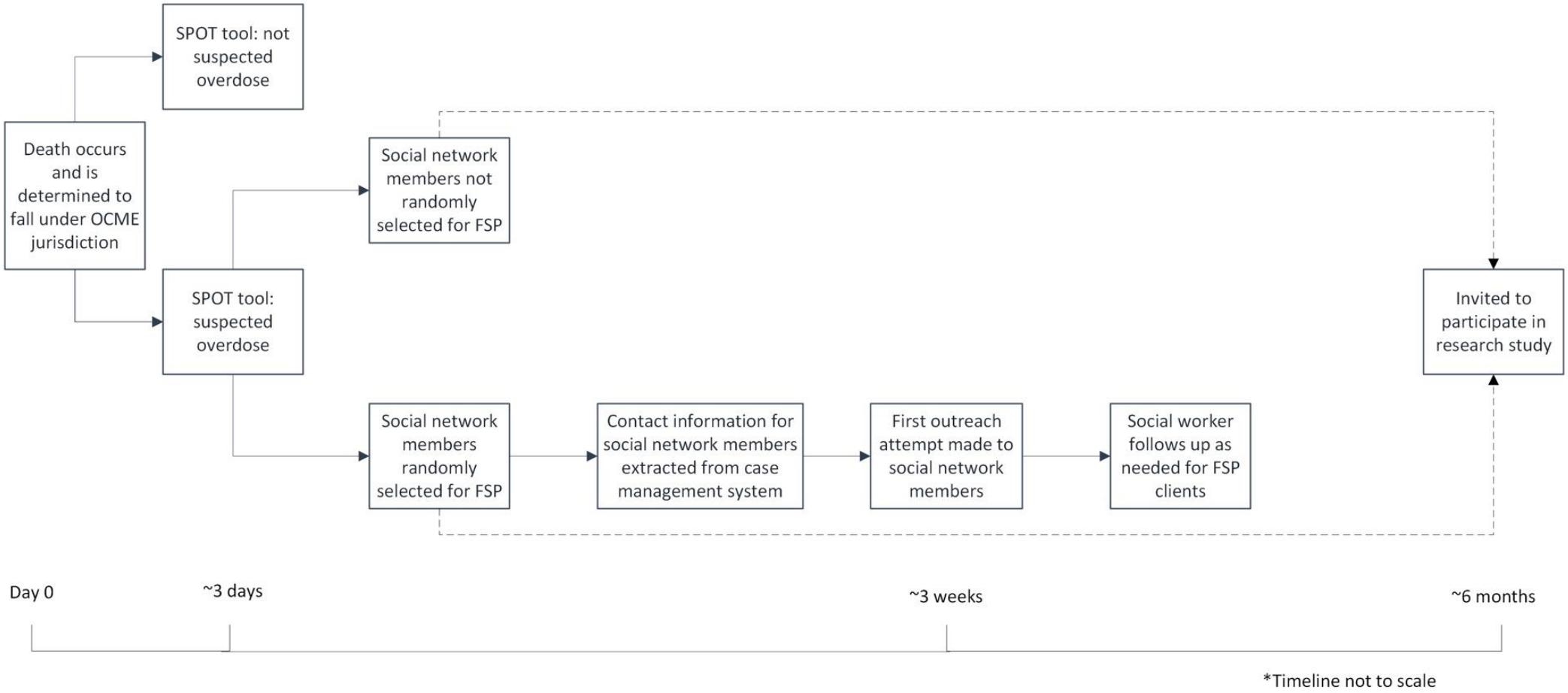
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PMID: 42260558 PMCID: PMC13471532 DOI: 10.1186/s12954-026-01482-2

Research Aims

Conduct a cross-sectional survey to characterize mental health and substance use outcomes among overdose-bereaved individuals 6 months post-loss and examine the effects of the FSP on these outcomes.

Research Study Flowchart



Recruitment

- Eligible cases: Finalized death certificate confirming accidental drug overdose death
- Intervention = the case was assigned to a social worker for outreach
- Control = the case was never assigned to a social worker for outreach
- Data collection is being conducted by a masters-level research-social worker
  - Providing trauma-informed care, active listening, empathy, etc.
  - Risk assessments and acute crisis intervention
  - Boundary setting and self care
  - Ethical-decision making

OCME Recruitment

Outcome	Count	%
Recruited	217	27.2%
Declined	106	13.3%
Other	45	5.6%
Spanish speaking	28	3.5%
Did not reach	394	49.4%
Wrong number	36	4.5%
Total	**798**	**100%**

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Enrollment

As of 11/9/2026:

- **# of participants sent from OCME to FRI: 215**
  - Decided not to participate: 13
  - Nonresponsive to three outreach attempts: 39
  - Pending (scheduled or outreach attempts remaining): 12
  - Ineligible: 2
- **# of consented participants: 151 (70%)**
  - # of fully completed surveys: 144
  - # of partially completed surveys: 6
- **# of "reverse" referrals from FRI to OCME: 42 (28%)**

Preliminary Findings

Socio-demographics

27/129 (20.9%) completed e-surveys
102/129 (79.1 %) completed phone surveys

N	129
Relationship to decedent	
Parent of decedent	21 (16.3%)
Child of decedent	22 (17.1%)
Sibling	42 (32.6%)
Extended family	20 (15.5%)
Partner or Spouse	12 (9.3%)
Friend	6 (4.7%)
Roommate	2 (1.6%)
Co-worker	0 (0.0%)
Prefer not to answer	0 (0.0%)
Other	4 (3.1%)
Participant age group	
18-25	4 (3.1%)
26-34	19 (14.7%)
35-44	25 (19.4%)
45-54	25 (19.4%)
55-64	30 (23.3%)
65-74	17 (13.2%)
75+	9 (7.0%)

Gender	
Man (cisgender)	48 (37.2%)
Woman (cisgender)	81 (62.8%)
Nonbinary, genderqueer, or gender non-conforming	0 (0.0%)
Transgender Woman	0 (0.0%)
Transgender Man	0 (0.0%)
Something Else	0 (0.0%)
Prefer not to answer	0 (0.0%)
Race/Ethnicity	
White	25 (19.4%)
Black or African American	50 (38.8%)
Asian	3 (2.3%)
American Indian or Alaska Native	2 (1.6%)
Native Hawaiian or Other Pacific Islander	0 (0.0%)
Middle Eastern or North African	2 (1.6%)
Biracial/Multiracial/Mixed	11 (8.5%)
Something Else	3 (2.3%)
Hispanic or Latino	58 (45.0%)
Prefer not to answer	3 (2.3%)

Preliminary Findings

Demographics

Residence	
Outside of NYC	56 (44.4%)
In NYC	70 (55.6%)
Employment Status	
Employed, part-time	18 (14.0%)
Employed, full-time	47 (36.4%)
Disabled and unable to work	11 (8.5%)
Retired	23 (17.8%)
Student	1 (0.8%)
Unemployed and actively seeking work	16 (12.4%)
Unemployed and not seeking work	11 (8.5%)
Other	2 (1.6%)
Prefer not to answer	0 (0.0%)
Education	
8th grade or less	1 (0.8%)
Some high school (9th to 11th grade)	12 (9.3%)
High school graduate (12th grade) or GED	38 (29.5%)
Some college or technical training	33 (25.6%)
College graduate or higher	43 (33.3%)
Don't know	0 (0.0%)
Prefer not to answer	2 (1.6%)

SUD and/or Mental Health Diagnosis History	
No	89 (69.0%)
Alcohol and/or Substance Use Diagnosis	2 (1.6%)
Mental Health Diagnosis	37 (28.7%)
Lifetime Incarceration	23 (17.8%)
Past Year Incarceration	2 (8.7%)
Past 6 Months Probation or Parole	3 (2.3%)

Preliminary Findings

Cause of Death

To the best of your knowledge, how did [*decedent's name*] die? Check all that apply.

N	135
Natural, Anticipated Cause (e.g., cancer, Alzheimer's)	4 (3.0%)
Natural, Sudden Cause (e.g., heart attack, stroke)	23 (17.0%)
Homicide	2 (1.5%)
Accident (e.g., automobile accident, accidental drowning)	7 (5.2%)
Drug-related overdose	105 (77.8%)
Suicide	5 (3.7%)
Unknown	17 (12.6%)
Other	17 (12.6%)
Prefer not to answer	1 (0.7%)

40 (30%) present at the time of death (immediately before, during, or immediately after)

Among those present who had knowledge the it was a drug-related overdose:

1/40 (2.5%) administered naloxone
11/40 (27.5%) called 911
5/40 (12.5%) performed rescue breathing
1/40 (2.5%) other
14/40 (14%) none of the above
4 (10%) none of the above

Preliminary Findings

Needs

The Sudden Bereavement Needs Inventory (SBNI), 22 items, 6 subscales (3-5 questions per subscale), answers range from 1 (not at all important) to 5 (very important)

Pragmatic Needs (mean, range 1-5)	**3.67 (1.03)**
Informational Needs (mean, range 1-5)	3.44 (1.14)
Spiritual Needs (mean, range 1-5)	4.30 (1.20)
Relational Needs (mean, range 1-5)	3.45 (1.38)
Meaning Needs (mean, range 1-5)	3.51 (1.04)
Emotional Needs (mean, range 1-5)	3.66 (1.16)
Overall Needs Score (raw total, range 21-105)	**76.08 (16.37)**

SBNI: Score can be interpreted as 'importance of needs' i.e. a higher score is a greater importance of needs.

Preliminary Findings

Coping

Instrument: Brief-COPE, 28 items, 3 overarching subscales, answers range from 1 (I haven't been doing this at all) to 4 (I've been doing this a lot)

Problem-focused coping (1-4)	**2.30 (0.75)**
Active coping avg.	2.52 (1.11)
Planning avg.	2.20 (1.06)
Instrumental support avg.	2.13 (1.00)
Positive reframing avg.	2.34 (1.07)
Emotion-focused coping (1-4)	**2.34 (0.49)**
Emotional support avg.	2.59 (1.06)
Venting avg.	1.95 (0.93)
Humor avg.	1.40 (0.77)
Acceptance avg.	3.13 (0.91)
Religion avg.	3.00 (1.11)
Self-blame avg.	1.98 (1.03)
Avoidant coping (1-4)	**1.87 (0.56)**
Self-distraction avg.	2.72 (0.97)
Denial avg.	2.05 (1.06)
Substance use avg.	1.36 (0.78)
Behavioral disengagement avg.	1.37 (0.57)

Preliminary Findings

Grief

Instrument/Scale: PG-13-R, 13 items (measuring at 6M)

N	135
PG-13-R total score (10-50)	24.66 (9.84)
PG-13-R: Prolonged Grief Disorder at 6M	
Does not meet criteria	92 (71.3%)
Meets PGD criteria	37 (28.7%)

PG-13-R: PGD criteria: cutoff score of 30 plus answering yes to question about significant functional impairment.

How does this relate to other studies?

- Rosner et al (2021) (German study) found that ~4% of the general bereaved population meets criteria for PGD.
- A meta-analysis (2017) found a pooled prevalence of PGD of 9.8% among the non-psychiatric adults exposed to non-violent bereavement.
- Titlestad and Dyregrov (2022) used the PG-13-R and found that 26% of overdose-bereaved individuals in Norway who lost a family member at least 3 months prior had met criteria for PGD.

Preliminary Findings

Depression, Anxiety, and PTSD

Instruments:
PHQ-9, GAD-7, PC-PTSD-5

PHQ-9 (Depression) total score (0–27)	**7.78 (6.75)**
PHQ-9: Depression	
Minimal/None	50 (38.8%)
Mild	33 (25.6%)
Moderate	25 (19.4%)
Moderately Severe	12 (9.3%)
Severe	9 (7.0%)
PHQ-9 Item 9: Endorsed Self Harm and/or Suicidal Ideation	13 (10.1%)
GAD-7 (Anxiety) total score (0–21)	6.12 (5.52)
GAD-7: Anxiety	
Minimal/None	63 (48.8%)
Mild	32 (24.8%)
Moderate	22 (17.1%)
Severe	12 (9.3%)
PTSD screener total (0–5)	1.89 (1.59)
PTSD screen positive (score >= 3)	43 (33.3%)

Preliminary Findings

Substance Use

	Lifetime use, n (%)	Used in the past 3 months (at least once), n (%)	Decreased use post-overdose, n (%)	No change, n (%)	Increased use post-overdose, n (%)
Cannabis (marijuana, pot, grass, hash, etc.)	76 (58.9%)	38 (29.5%)	3 (3.9%)	62 (81.6%)	11 (14.5%)
Alcoholic beverages (beer, wine, spirits, etc.)	107 (82.9%)	70 (54.3%)	16 (15.0%)	74 (69.2%)	15 (15.9%)
Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	80 (62.0%)	38 (29.5%)	5 (6.2%)	67 (83.8%)	8 (10.0%)
Prescription stimulants (Ritalin, Adderall, diet pills, etc.)	6 (4.7%)	1 (0.8%)	0 (0.0%)	5 (83.3%)	1 (16.7%)
Sedatives or sleeping pills (Valium, Xanax, Rohypnol, tranquilizers, benzos, etc.)	9 (7.0%)	4 (3.1%)	0 (0.0%)	3 (33.3%)	6 (66.7%)
Prescription opioids (Oxycodone, OxyContin, Percocet, Vicodin, methadone, Buprenorphine, etc.)	8 (6.2%)	3 (2.3%)	2 (25.0%)	6 (75.0%)	0 (0.0%)
Street opioids (fentanyl, heroin, opium, etc.)	12 (9.3%)	6 (4.7%)	0 (0.0%)	5 (100.0%)	0 (0.0%)
Street stimulants (meth, speed, molly, ecstasy, etc.)	11 (8.5%)	0 (0.0%)	1 (9.1%)	10 (90.9%)	0 (0.0%)
Cocaine (powder coke, crack, etc.)	31 (24.0%)	3 (2.3%)	1 (3.2%)	29 (93.5%)	1 (3.2%0
Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	13 (10.1%)	1 (0.8%)	0 (0.0%)	12 (92.3%)	1 (7.7%)
Inhalants (nitrous, glue, paint thinner, poppers, whippets, etc.)	5 (3.9%)	1 (0.8%)	0 (0.0%)	4 (80.0%)	1 (20.0%)

*8 unique individuals have used substances (excl. cannabis, alcohol, & tobacco) in the past 3 months

ASSIST Risk Level

Preliminary Findings

Substance Use

	Low Risk	Moderate Risk	High Risk
Prescription stimulants (Ritalin, Adderall, diet pills, etc.)	126 (97.7%)	3 (2.3%)	0 (0.0%)
Sedatives or sleeping pills (Valium, Xanax, Rohypnol, tranquilizers, benzos, etc.)	125 (96.9%)	4 (3.1%)	0 (0.0%)
Prescription opioids (Oxycodone, OxyContin, Percocet, Vicodin, methadone, Buprenorphine, etc.)	123 (95.3%)	4 (3.1%)	2 (1.6%)
Street opioids (fentanyl, heroin, opium, etc.)	118 (91.5%)	6 (4.7%)	5 (3.9%)
Street stimulants (meth, speed, molly, ecstasy, etc.)	128 (99.2%)	1 (0.8%)	0 (0.0%)
Cocaine (powder coke, crack, etc.)	118 (91.5%)	11 (8.5%)	0 (0.0%)
Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	128 (99.2%)	1 (0.8%)	0 (0.0%)
Inhalants (nitrous, glue, paint thinner, poppers, whippets, etc.)	128 (99.2%)	1 (0.8%)	0 (0.0%)
Cannabis (marijuana, pot, grass, hash, etc.)	97 (75.2%)	29 (22.5%)	3 (2.3%)

Preliminary Findings

Intervention vs. Control

	Control, n %	Intervention n %
N	54 (40%)	81 (60%)

T-test results

Measure	Control, mean (SD)	Intervention, mean (SD)	P-value
PG-13-R (Grief) total score (10-50)	25.16 (9.70)	24.33 (9.98)	0.644
GAD-7 (Anxiety) total score (0–21)	6.45 (5.40)	5.91 (5.63)	0.589
PHQ-9 (Depression) total score (0–27)	8.27 (6.59)	7.46 (6.88)	0.506
PTSD screener total (0–5)	2.02 (1.54)	1.81 (1.63)	0.462
ASSIST Global Continuum of Risk (past 3-month score)	9.90 (16.84)	13.41 (22.91)	0.349
SBNI Overall Needs Score (raw total, range 21-105)	76.53 (15.75)	75.79 (16.86)	0.799

Preliminary Findings

Feedback on FSP

	Control, n %	Intervention n %
N	52 (39.4%)	80 (60.6%)
Reported receiving a call from FSP	13 (25.0%)	61 (76.2%)

N (remembers receiving a social worker call)	**74**
Social Worker Call: Perceived Helpfulness	
Very helpful	28 (37.8%)
Somewhat/moderately helpful	27 (36.5%)
Neutral (neither helpful nor unhelpful)	16 (21.6%)
Not helpful	3 (4.1%)
Prefer not to answer	0 (0.0%)

Qualitative Interviews

FSP Experiences

"That was the experience that I didn't mind that gave me a little bit of faith back that I wasn't going down to the deep off the end then." – 2475

"Yeah, I definitely think it was helpful. She came at a perfect time. I needed that support. I didn't have therapy at that time. So, her calling me and giving me that social worker support, that really made me feel good. I needed that. My husband can't soothe every pain. You know what I mean?" – 2062

"I've had people reach out to me regarding professional help, obviously, call my phone and leave me messages, but I've just been in a space where I'm still feeling closed off to professional help only because so many people still have a way of needing me and pulling me in every direction right now" - 1101

"I had to just basically shut myself down, became an introvert. I don't know, I did not answer phone calls. Yeah, I closed down." - 1102

"She gave this aura through the phone, if I could say that, that made us feel like we were talking to someone we knew forever. And the woman was very kind. She was kind enough to give us information and go out of her way to even tell his husband that she'll get him a therapist." – 1182

"If we could have had them help with the whole thing. I would have been… Oh my God, that would've been heaven sent. They were 1,000% better than everything else we experienced with, definitely." – 1182

Programmatic Challenges, Limitations, and Lessons Learned

Challenges and Limitations

- The program may not reach individuals who lack reliable phone access, potentially limiting engagement with the most structurally vulnerable persons affected by overdose loss
- OCME as a governmental agency (concern about connections to law enforcement, etc.)
- Resource constraints

Lessons Learned

- Timeline for outreach call (shifted from 2 weeks post-loss to 3 weeks) to accommodate funeral, burial, and other arrangements)
- Follow-up procedures (moved from a standardized follow-up call ~1 month after the first outreach to a more person-centered, needs-based follow-up approach)
- The data management system was revised to improve consistency in data entry while still allowing space for narrative notes when appropriate
- Client reactions to outreach have been overwhelmingly positive

Research Lessons Learned

- Proactive outreach to overdose-bereaved families is feasible and participating in research is acceptable (91% are willing to complete a qualitative interview).
- This population is experiencing poor mental health 6 months post-loss (supporting existing literature stating that “time does not heal all wounds”), and many are interested in receiving services at this time (28% have been referred back to OCME’s FSP).
- This population has a high prevalence of lifetime substance use, mental health histories, criminal-legal involvement, etc.
- Participants in the intervention group are overwhelmingly grateful for the support provided by the social work team and report it being very helpful.

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