

# OVERDOSE FATALITY REVIEW (OFR) - 2024

Deaths finalized from

January 1, 2024 through December 31, 2024

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**Clermont County**  
**Public Health**  
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# OFR Overview

The Clermont County OFR Committee was formed in 2014. Overdose fatality reviews were later codified in 2021 in Ohio Revised Code 307.631 to 307.639.

This presentation is an overview of unintentional overdose fatalities that occurred in Clermont County in 2024.

The ultimate purpose of the fatality committee is to reduce the number of deaths related to unintentional overdose by identifying the circumstances surrounding the deaths to inform recommendations for prevention.

The goal of this report is to provide a snapshot of the trends related to unintentional overdose deaths in Clermont County, identify higher risk populations, identify areas for strategies and activities to work towards prevention of fatalities, influence policy change, and influence equity promotion.

A summary of these findings will be included annually in the Community Health Assessment or Community Health Assessment Update.



# OFR Committee

The Overdose Fatality Review (OFR) Committee meets once per year to review data from all confirmed unintentional overdose deaths in Clermont County. Three to five cases are chosen to discuss in greater depth in order to identify prevention strategies.

Members include professionals from the Coroner's Office, Fire/EMS, and recovery services. Under section 307.632 of the Ohio Revised Code, the Clermont County Public Health Commissioner appoints members to the OFR that include

- A chief of police from a department in the county or a representative from the county sheriff
- A public health official or designee
- The executive director of the mental health board or designee
- A physician
- County Coroner

All members must abide by all local, state, and federal laws and regulations pertaining to the security, privacy, and confidentiality of medical records' information, (also referred to as protected health information or PHI).



# OFR Data Sources

- Death Certificates
- Autopsy Reports
- Toxicology Screenings
- Police & EMS Reports
- Patient Medical Records
- Ohio Automated Rx Reporting System (OARRS) Data
- Online Public Information
  - Criminal records search
  - Social media
  - Obituaries
  - EMSIRS - Naloxone Administration



# OFR Data Analysis

“Data analysis is a process of inspecting, cleansing, transforming, and modelling data with the goal of discovering useful information, informing conclusions, and supporting decision-making,” (PHAB, 2022).

## *Purpose*

The purpose of reviewing the trending data is to identify meaning from the data, draw conclusions, and make informed decisions.

## *Methods for interpretation*

The use of data analysis software to review data trends and interpret statistical significance. Data analysis tools included: Excel and R Studio

## *Types of analysis*

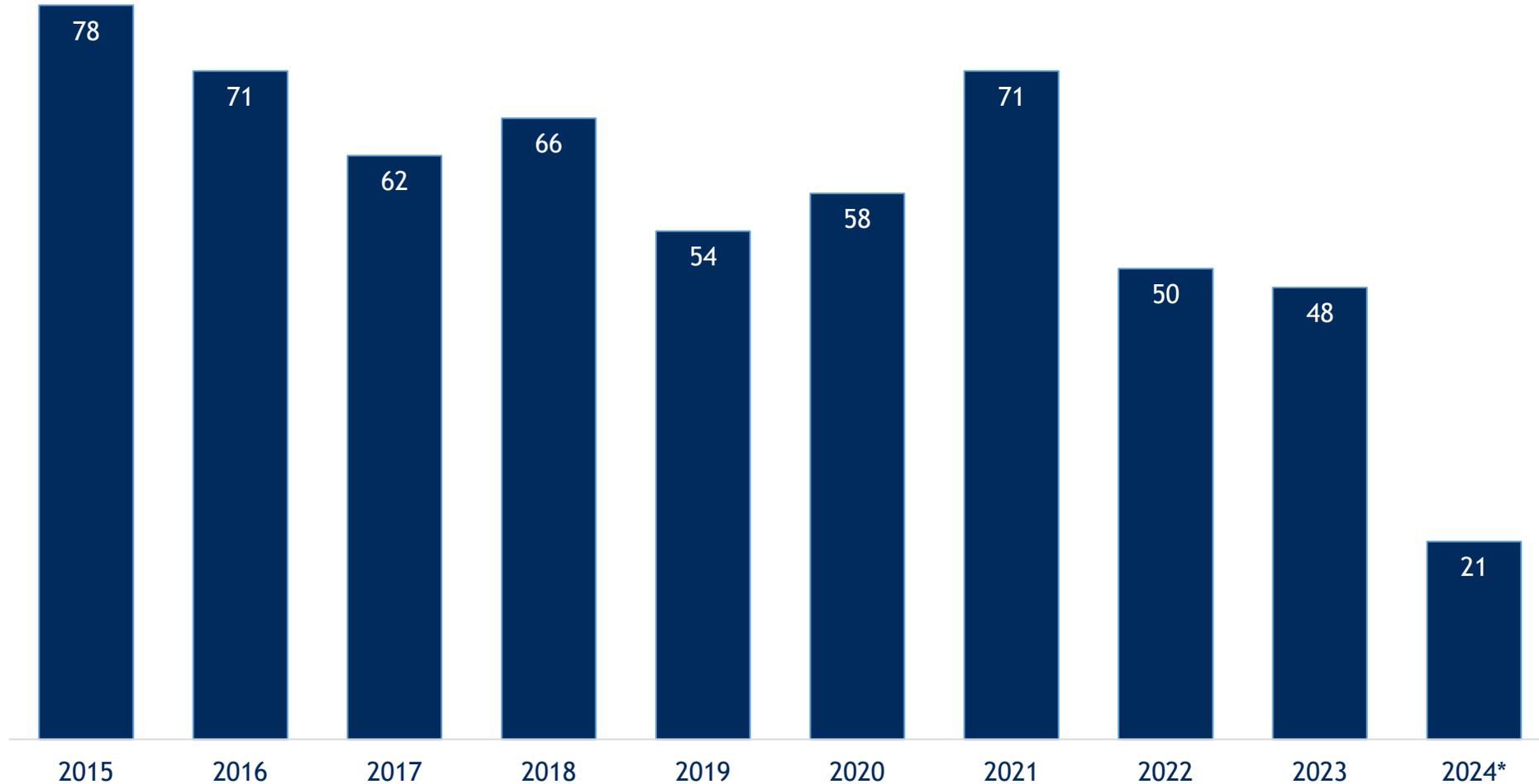
Descriptive analysis (mean, median, mode, and standard deviation)  
Exploratory data analysis (visualizations)

## *Data visualization*

“Data visualization is the process of displaying data/information in graphical charts, figures and bars. It is used as means to deliver visual reporting to users for the performance, operations or general statistics of an application, network, hardware or virtually any IT asset (Techopedia. Data Visualization. June 5, 2018),” (PHAB, 2022). The use of charts, graphs, maps, bullet points, and data elements display the relationships and meaning found within the variables.



# 2024 had the lowest number of overdose deaths in the county in the past decade.



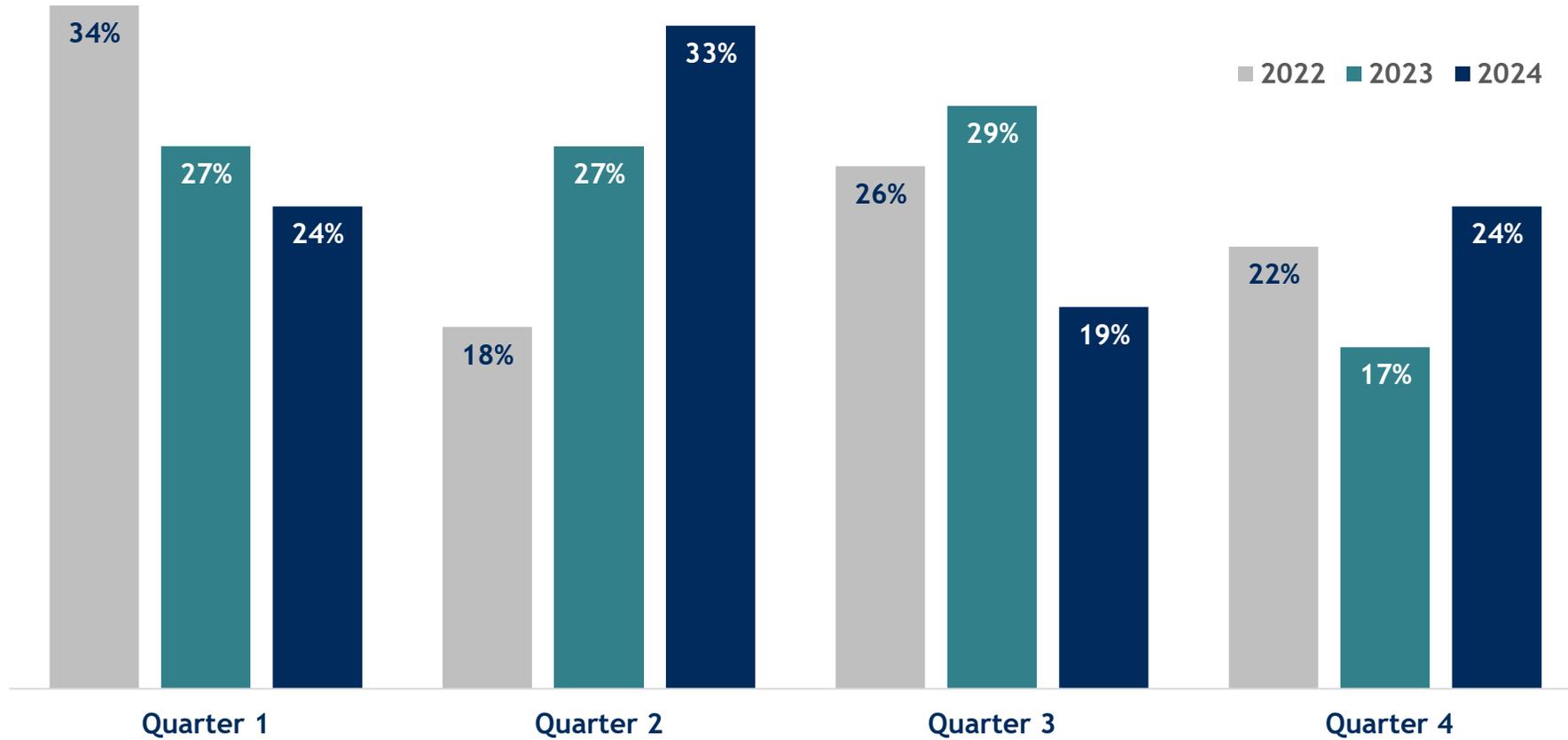
\*Preliminary data that is subject to change

Slope of trend: -4.33. P-value: 0.005. R<sup>2</sup>: 0.654. Counts have decreased from 2015-2024. This decrease is statistically significant.

Source: Ohio Public Health Information Warehouse, Clermont County Coroner's Office. Primary Data.



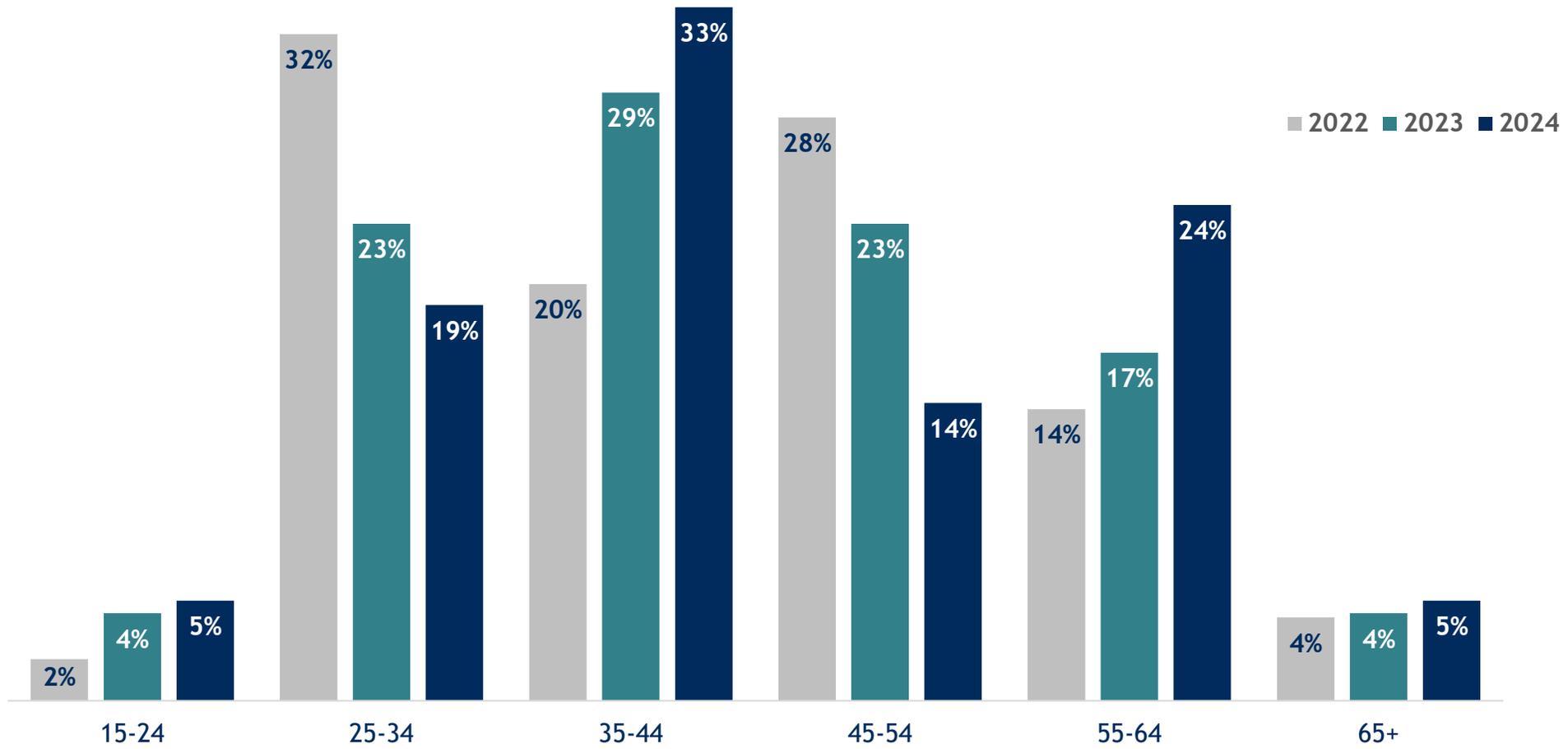
# In 2024, 33% of deaths occurred in quarter 2 (April, May, June)



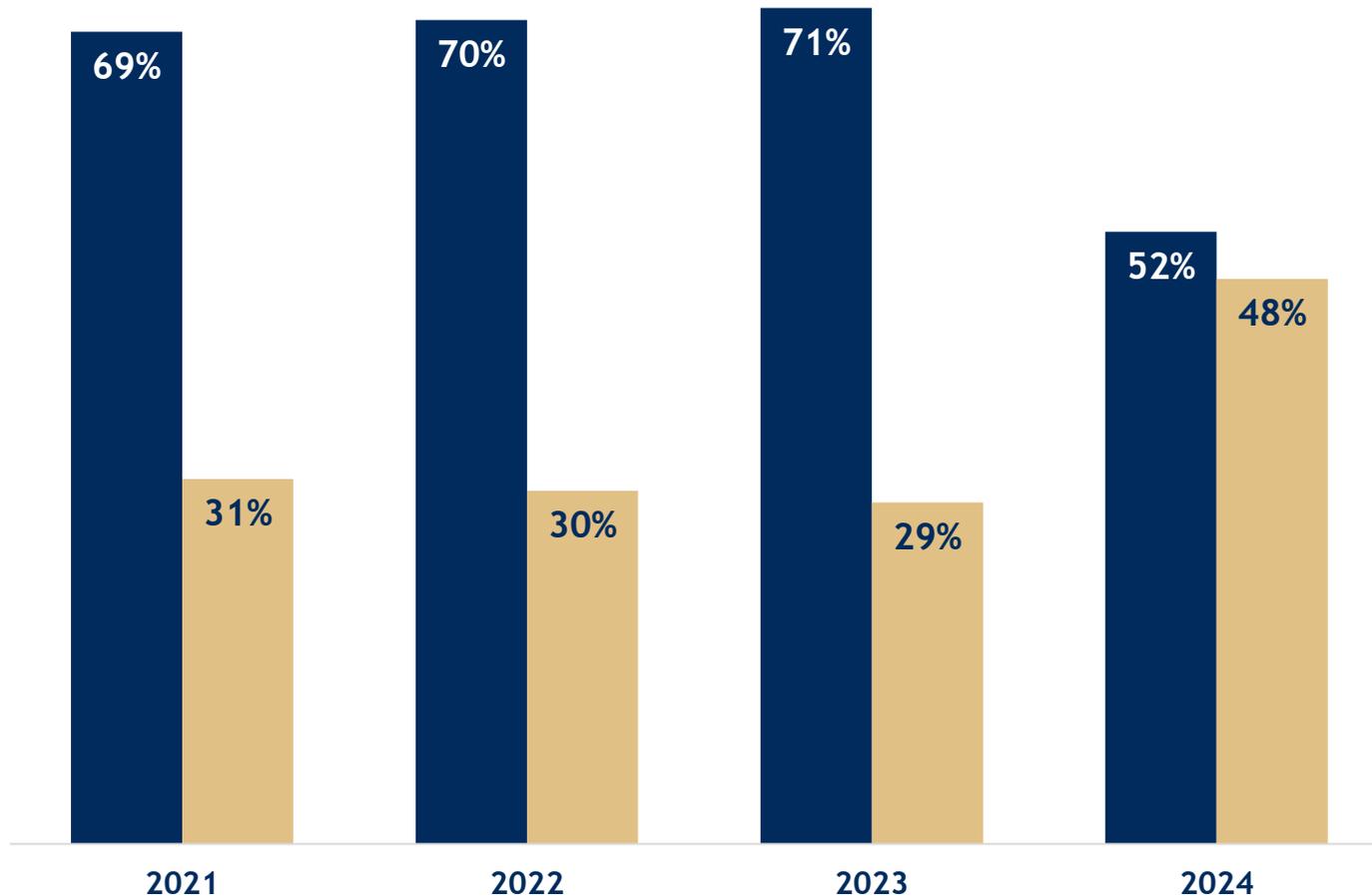
# DEMOGRAPHICS & SOCIOECONOMICS



# In 2024, a third of all decedents were aged 35-44.



# In 2024, the percentage of deaths among **females** was nearly equal to **males**.



“Men typically die of drug overdose at a higher rate due to a combination of biological (e.g., men may have a greater vulnerability to the toxicity of drugs than women), behavioral (e.g. men may use these drugs in a riskier way than women), as well as other social- and gender-related factors.”

However, **women** who are 35 and older, experience back pain or musculoskeletal conditions, have alcohol abuse or substance use disorder, have a high daily opioid use, and have had treatment with other risky drugs are at greater risk.



\*There was a statistically significant decrease in the number of deaths among women from 2018-2024 (slope: -1.821, p-value: 0.024). While there was also a decrease among men, it was not statistically significant.

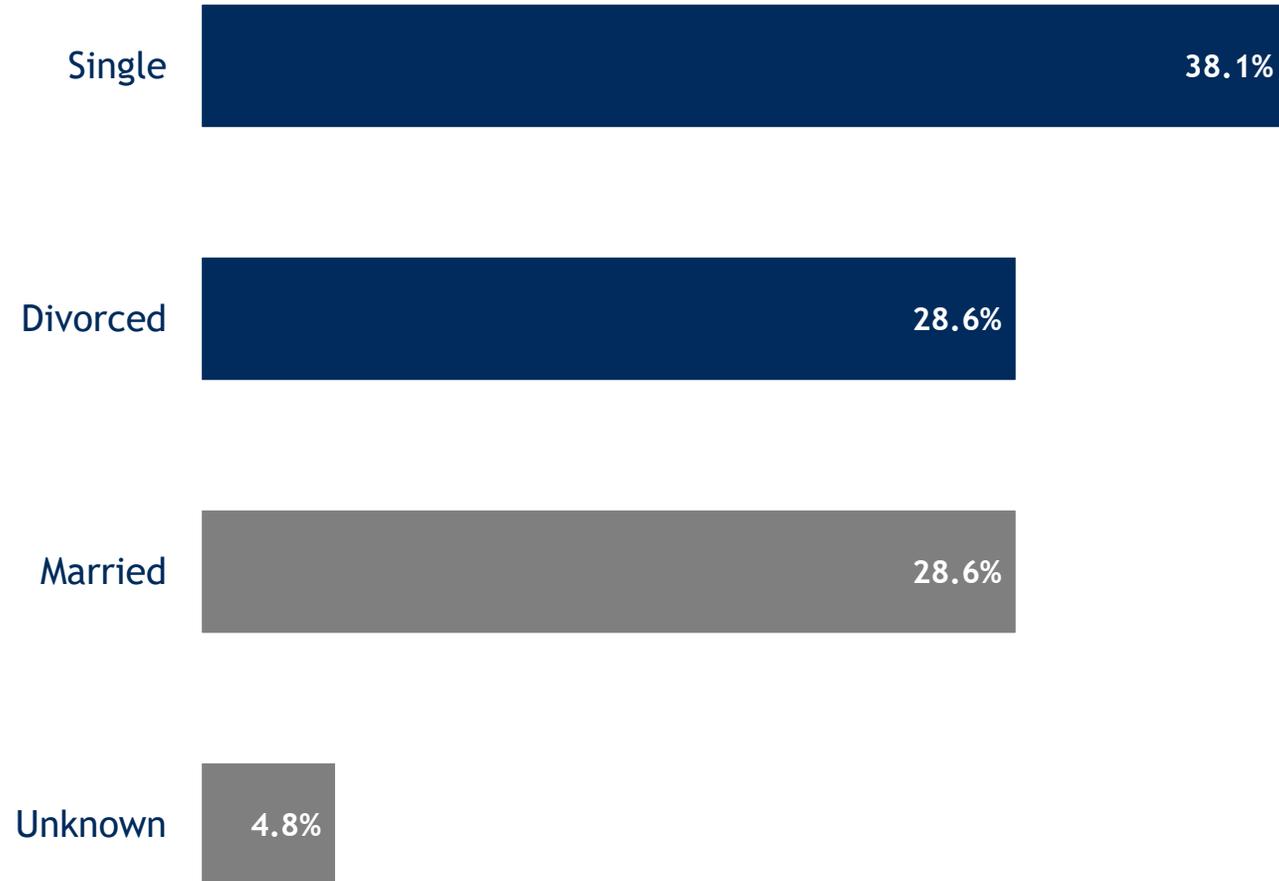
Source: Ohio Public Health Information Warehouse, Clermont County Coroner's Office. Primary Data.

<https://www.nih.gov/news-events/news-releases/men-died-overdose-2-3-times-greater-rate-women-us-2020-2021>

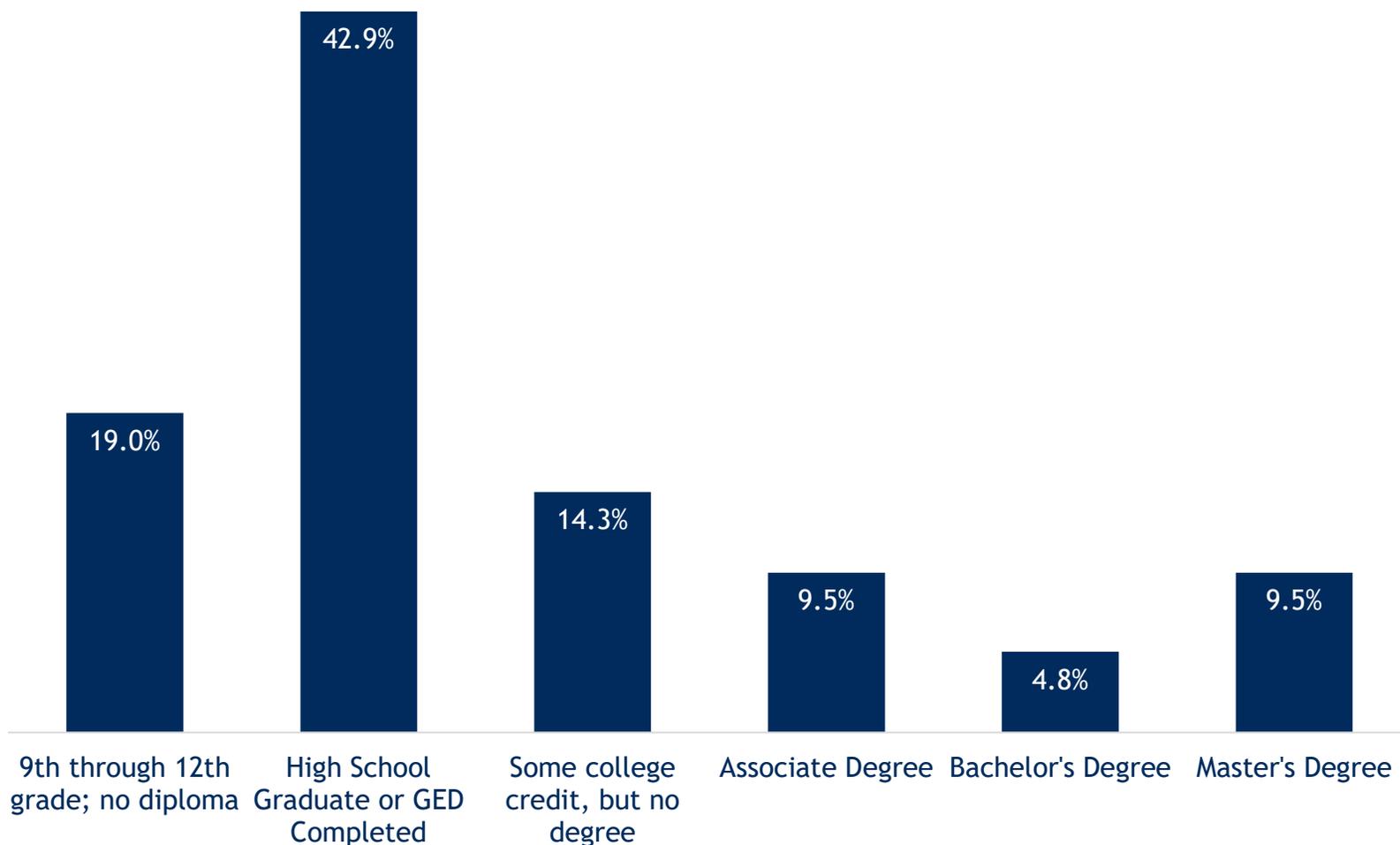
Drug Overdose: Differing Risk Models for Women and Men among Opioid Users with Non-Cancer Pain - PMC

# 66.7% of decedents were single or divorced.

**Unmarried individuals** are at higher risk for drug overdose death. This risk is higher for men. To reduce these deaths, public health interventions should address the needs of vulnerable populations, including unmarried individuals, especially men.



# 76.2% of decedents did not have a higher education degree.



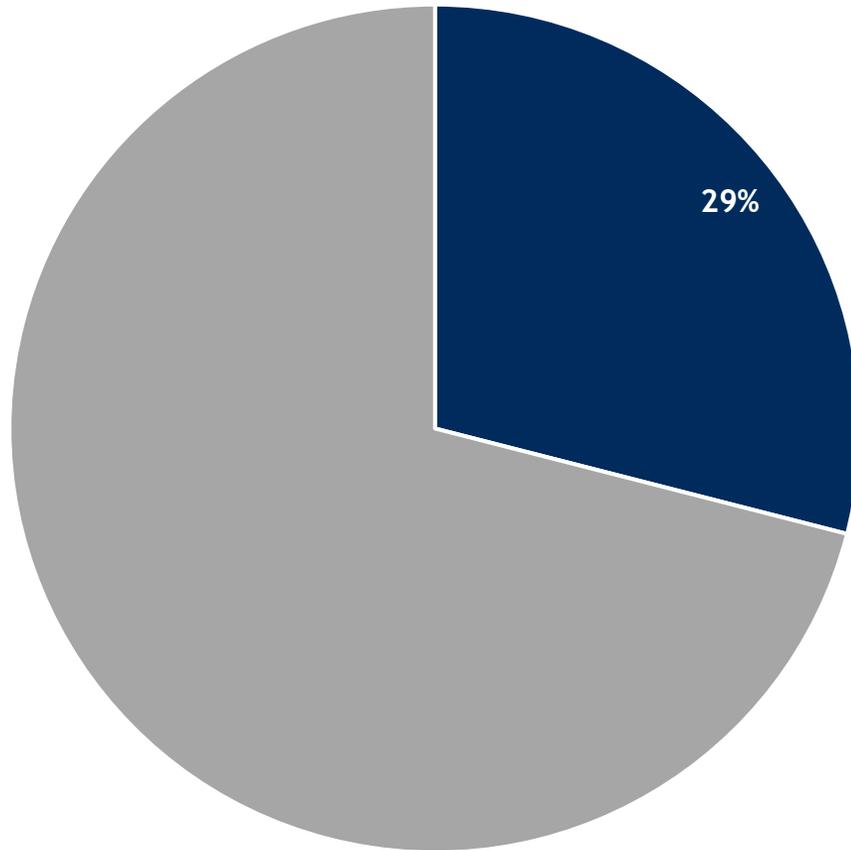
Countywide, 91.4% of adults hold a high school diploma or GED compared with only 71% of decedents.

**Education is a social determinant of health. It makes individuals more likely to find employment that pays a living wage, access quality healthcare, and live in a safe environment.**



Source: Ohio Public Health Information Warehouse, Clermont County Coroner's Office. Primary Data.  
<https://pmc.ncbi.nlm.nih.gov/articles/PMC7326385/>  
<https://www.census.gov/quickfacts/fact/table/clermontcountyohio/PST045222>

# 29% of decedents had indications of experiencing homelessness and/or barriers to transportation.

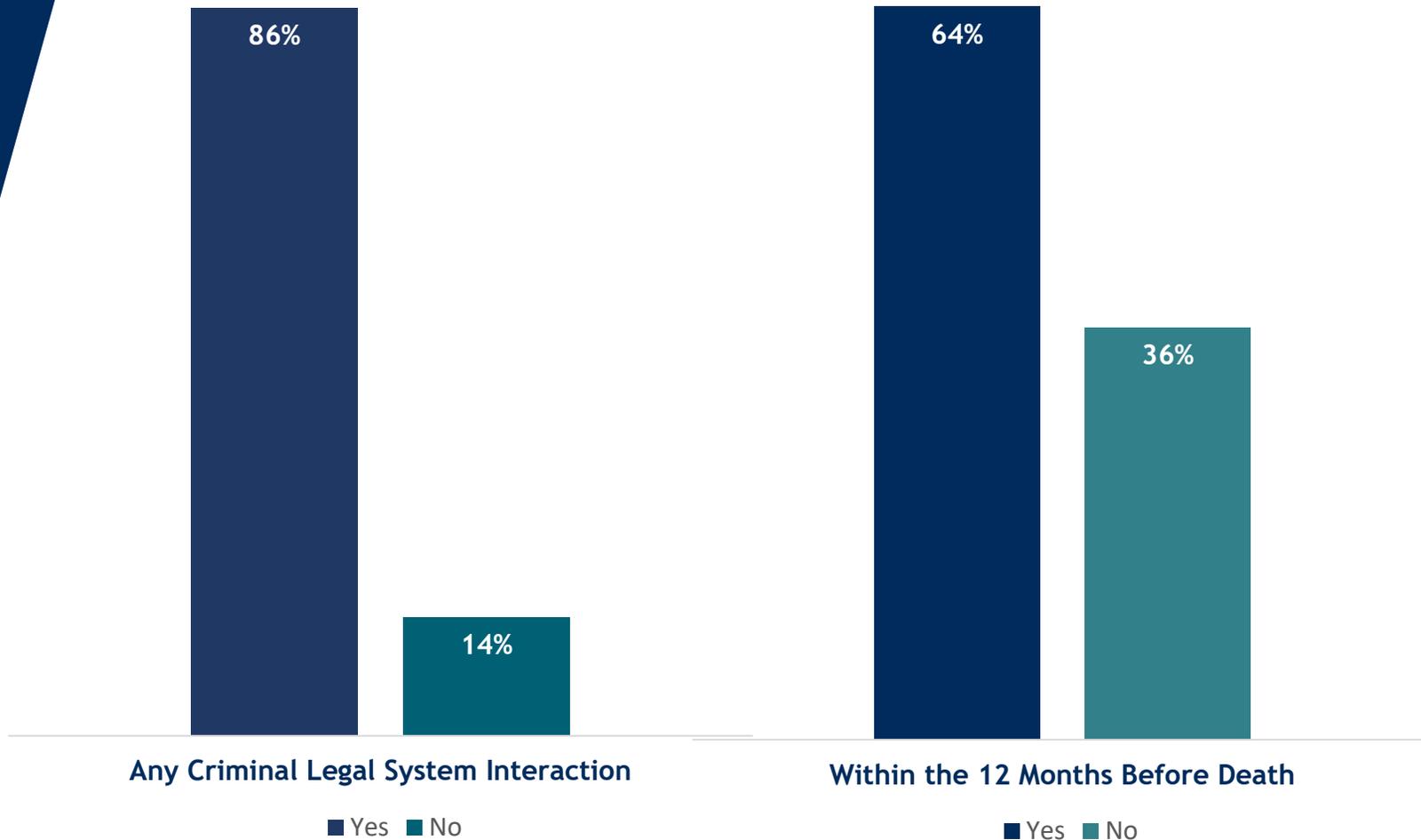


“Economic deprivation is a risk factor for opioid overdoses in the United States and contributes to patterns of declining life expectancy that differ from most developed countries.”

“Permanent Supportive Housing significantly improves housing stability, and housing stability supports sustained substance use disorder treatment.”



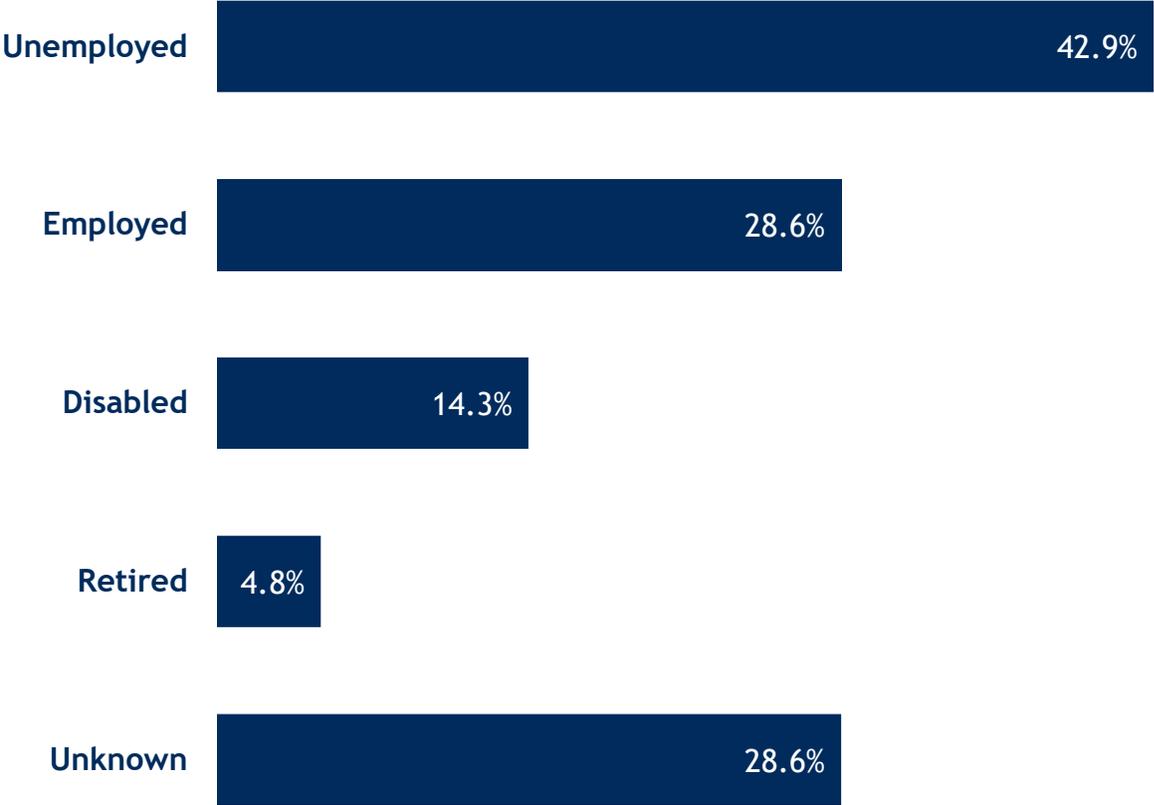
# 86% of decedents had previous interaction with the criminal legal system in Clermont or Hamilton County.



Post-release opioid-related overdose mortality is the leading cause of death among people released from jails and prisons. Individuals entering the criminal legal system have greater prevalence of past trauma, chronic pain, medical, psychiatric and substance use conditions. Programs are needed to divert individuals with substance use disorder away from the criminal legal system and into treatment and social services, preventing incarceration.



# Only 28.6% of decedents were known to have been employed at the time of their death.



“For most individuals in opioid use disorder treatment, being employed is an important part of their recovery journey. **Employment** has several benefits, including reductions in preoccupation with symptoms, social isolation, risk of suicide, hopelessness, and economic instability, which if not addressed, often result in homelessness.”



# HEALTH FACTORS



# 90% of decedents had a documented or reported **physical illness.**

The most common were

**Diseases of the liver**

**Respiratory diseases**

**Chronic pain condition**

**Diseases of the heart**

“Substance abuse is common amongst patients attending primary healthcare settings.

Substance abuse management within the context of primary care could increase access to and retention in care and improve health outcomes.”

**Access to care and the use of SBIRT will continue to be evaluated as intervention points for fatality prevention.**



# 81% of decedents had a documented mental health diagnosis.

The most common were

**Depressive disorders (67%)**

**Anxiety disorders (62%)**

**Others included PTSD, Bipolar disorder, and ADHD**

Additionally, insomnia or chronic fatigue was also noted in several cases.

These conditions can lead to or worsen mental health conditions.

“Persons with SUD and MHD can experience similar barriers, such as stigma, access to care, and economic factors, which could affect the willingness or ability of those facing such obstacles to seek care; removing these barriers could help reduce overdose deaths.

Implementing evidence-based screening for substance use and mental health disorders during potential intervention opportunities and expanding efforts to integrate care for these disorders could improve mental health and reduce overdoses.”



# Substance Use History

**90%** of decedents were identified or reported to have had a **history of substance use**.

**38%** of decedents had a documented **non-fatal overdose** previously.

**57%** of decedents were noted to have had a history of **substance use treatment**.

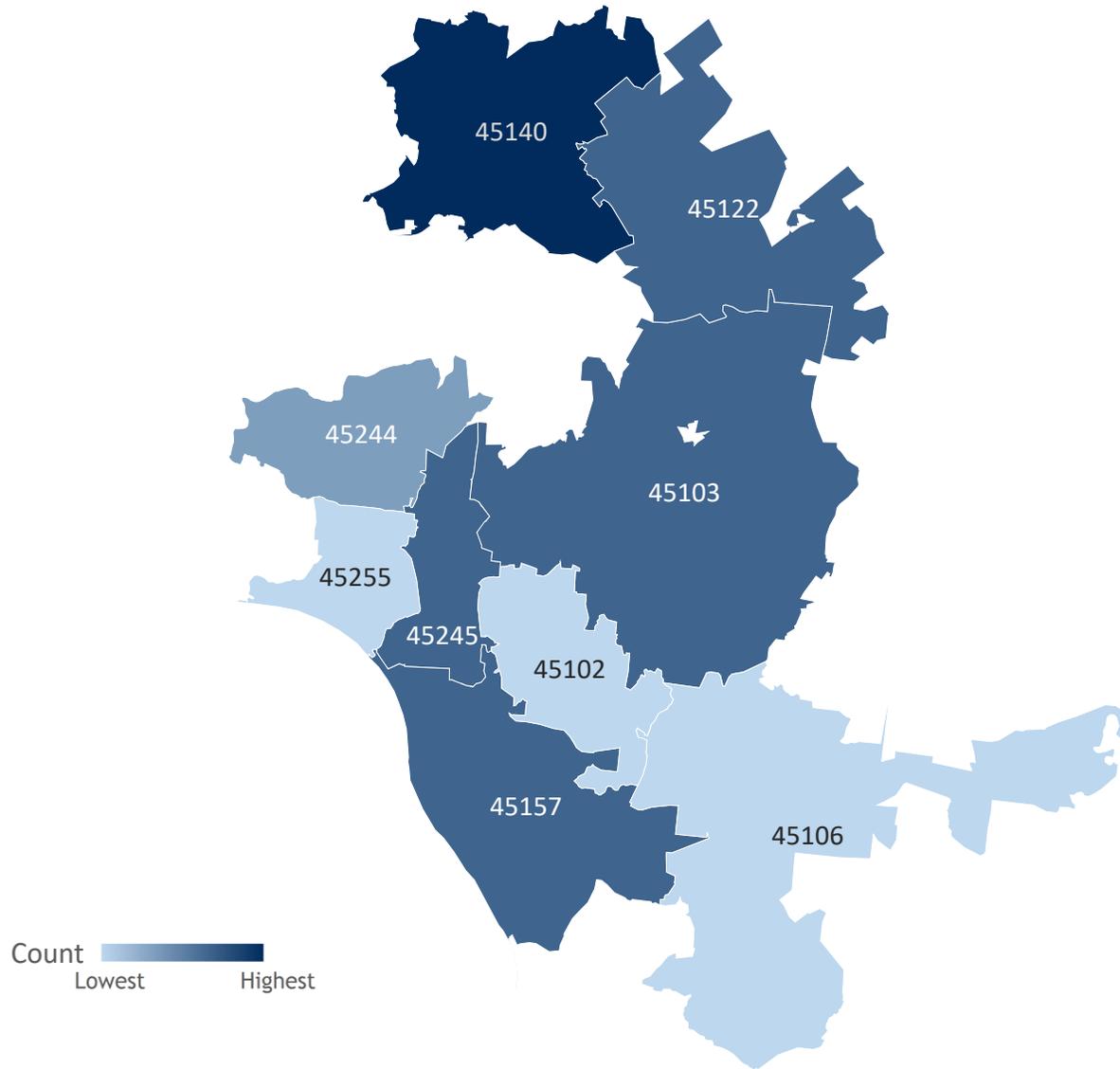
**38%** of decedents were noted to have had a history of treatment within **Clermont County agencies**.

“Adults treated for opioid overdose frequently have repeated opioid overdoses in the following year. They are also at high risk of fatal opioid overdose throughout this period, which underscores the importance of efforts to engage and maintain patients in evidence-based opioid treatments following nonfatal overdose.”



# DEATH INVESTIGATION





The  
ZIP Codes with the highest  
number of injuries were

- 45140 (Loveland)
- 45122 (Goshen)
- 45103 (Batavia)
- 45245 (Cincinnati)
- 45157 (New Richmond)

The mobilization of  
prevention resources can  
be prioritized in the areas  
most impacted.

Powered by Bing  
© TomTom



# Location of Overdose

**71%**

of overdoses occurred at the decedent's residence.

Only **19%** of decedents were transported to a hospital.

**81%**

of deaths occurred at the location of the overdose.

In **62%**

of cases, **paraphernalia** or substances were noted to have been found at the scene. However, **syringes** were only noted in **2** cases.



# Lifesaving Interventions



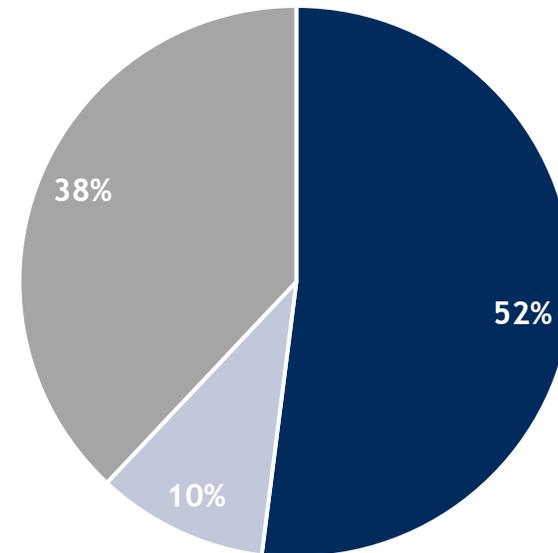
52% of decedents were noted to have received CPR either from a bystander or first responder.

In 43% of cases, it was noted that **Naloxone** was administered either by a bystander or first responder.

48% were obvious deaths when found.

The average **EMS response time** was **7 minutes 27 seconds** (based on 12 EMS reports)

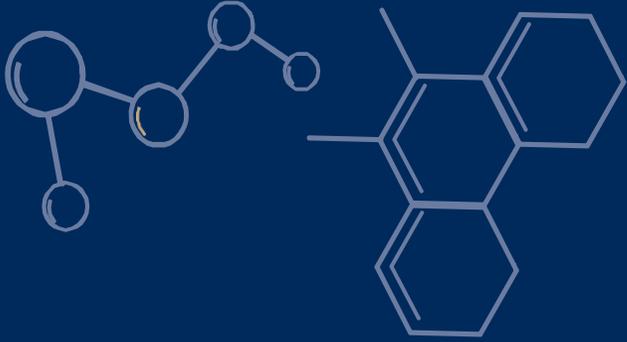
52% were found alone at the time of death.



■ Alone ■ Not Alone ■ Unknown

Individuals using substances alone are less likely to receive lifesaving interventions.

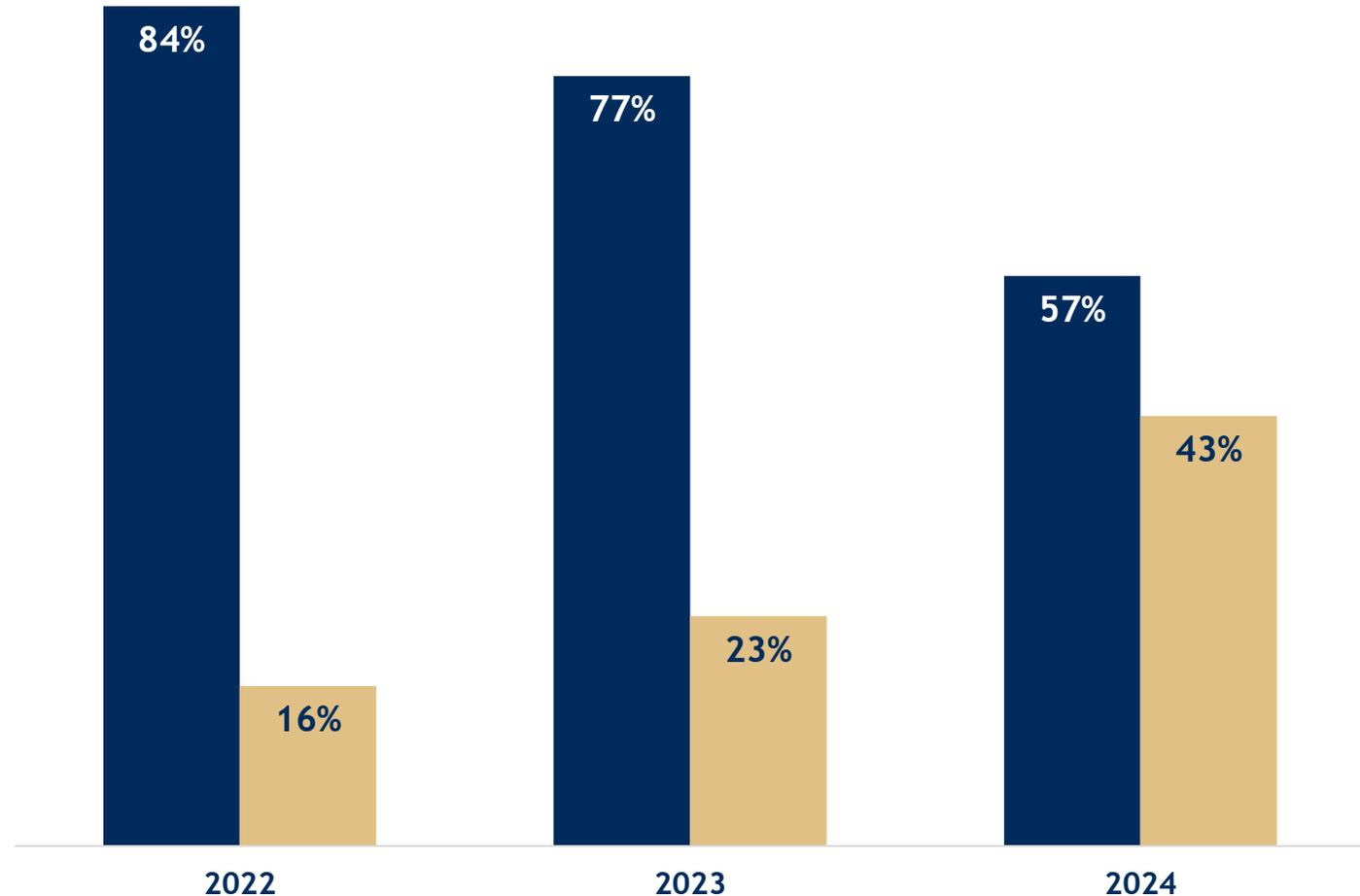




# Toxicology

Substances used in combination with one another can mask or intensify a drug's effects, increasing the risk of overdose death.

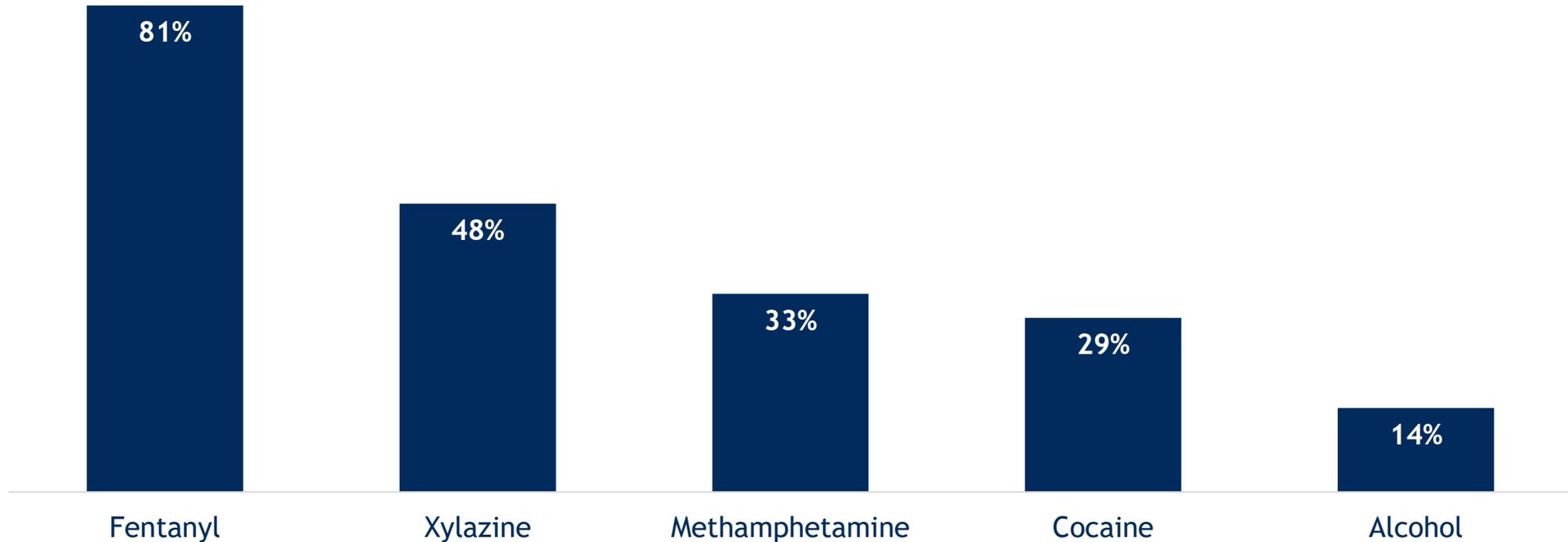
## 57% of decedents' toxicology results were polysubstance.



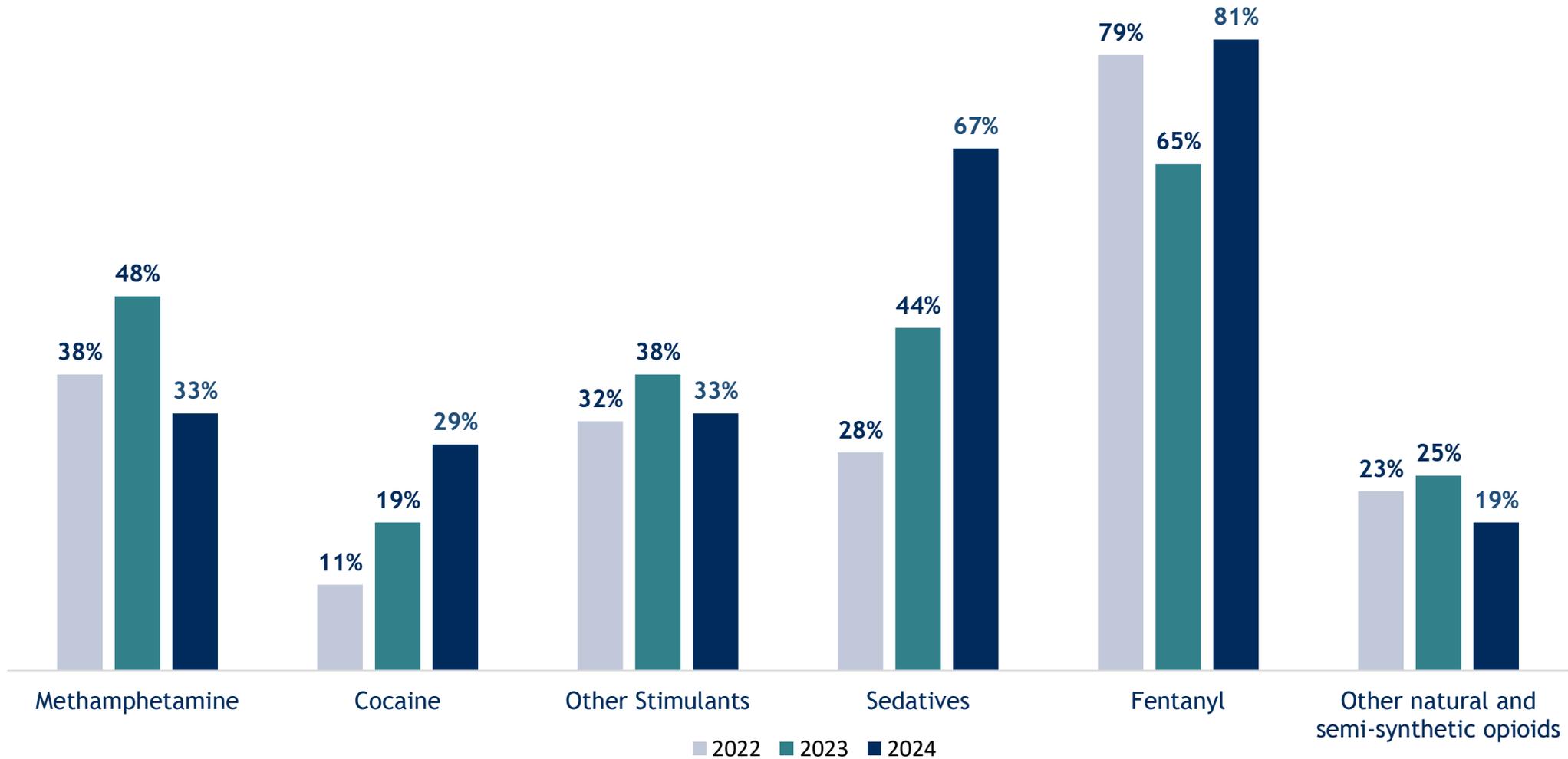
Source: Clermont County Coroner's Reports. Primary data.



# Fentanyl was the top substance present among toxicology reports.



In 2024 there was an increase in the percentage of cocaine, sedatives, and fentanyl present.



NOTE: DATA LABELS INDICATE THE PERCENTAGE OF TOTAL CASES THAT WERE POSITIVE FOR EACH SPECIFIC SUBSTANCE

Source: Clermont County Coroner's Reports. Primary data.



**19** toxicology reports detected **opioids**.  
**Fentanyl** was detected in **17** of them.  
 Opioids other than fentanyl were only detected in **4** reports.

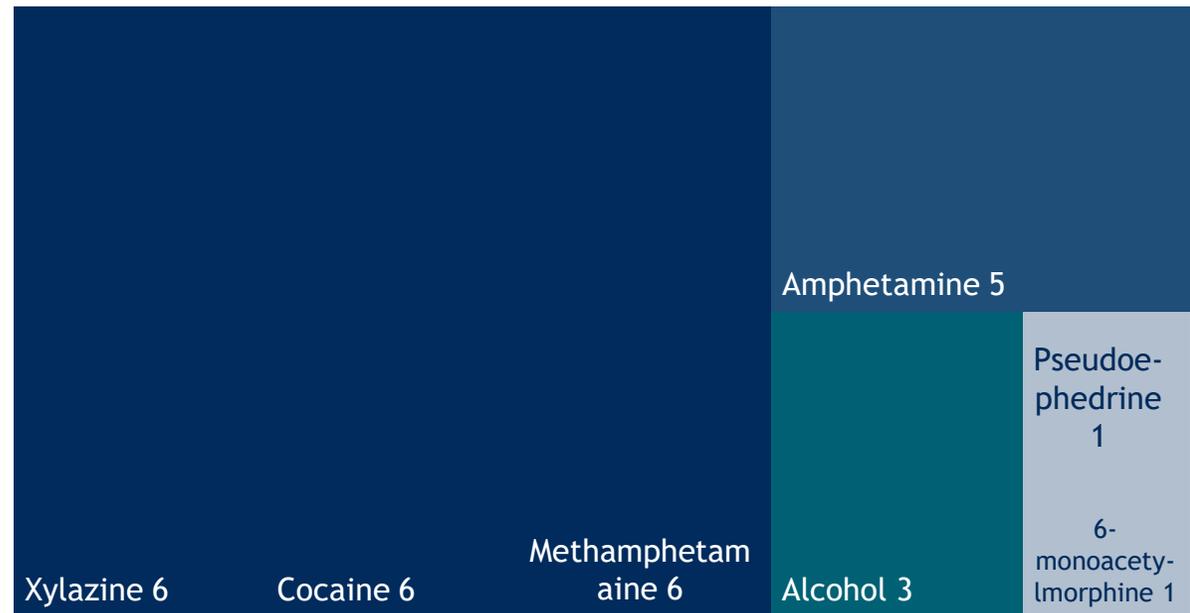
Fentanyl 17

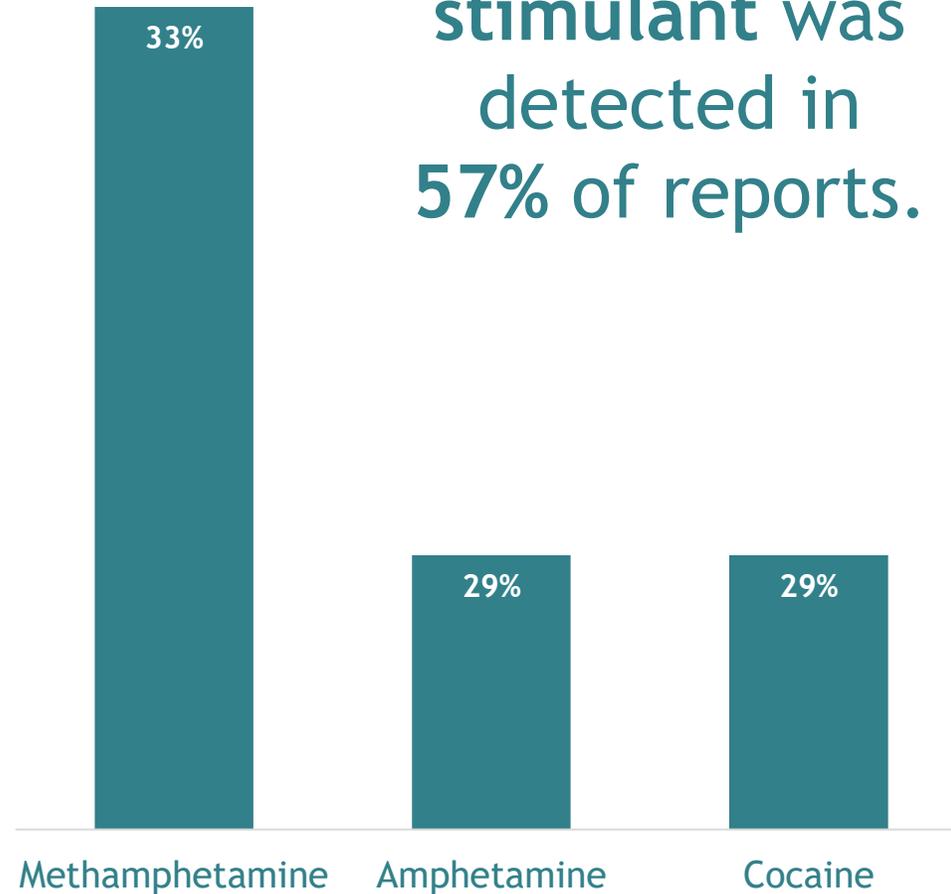
Buprenorphine 1      Methadone metabolite (EDDP) 1      6-monoacetylmorphine 1      Mitragynine 1

**65%** of toxicology reports that were positive for fentanyl were **polysubstance**.

Xylazine, cocaine, and methamphetamine were most commonly present in addition to fentanyl.

Among polysubstance reports containing fentanyl, the fentanyl analogs **acetylfentanyl** and **norfentanyl**, were also commonly found.

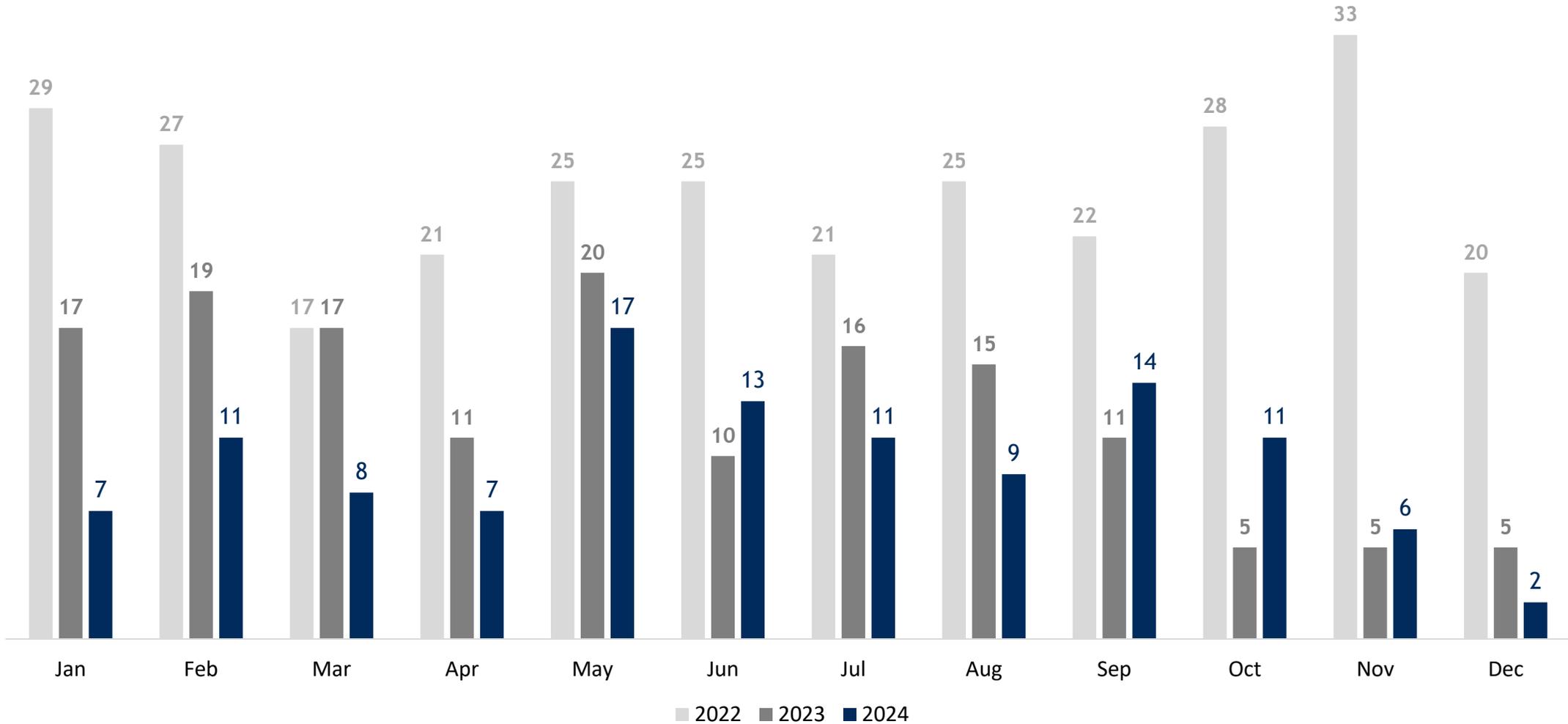




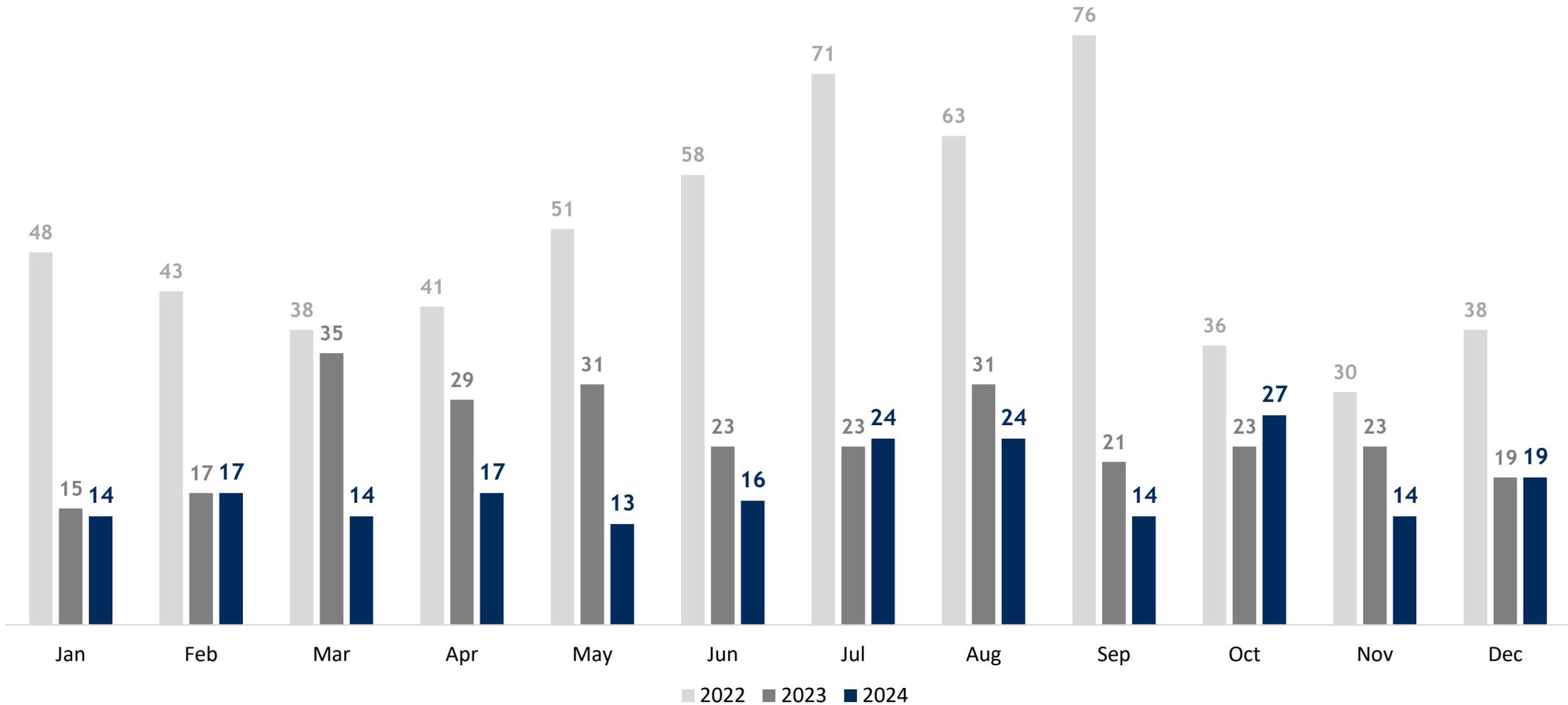
# Surveillance Data



**911 calls reported** for unintentional drug overdose peaked in **May**, but were overall **fewer** in number than in 2023.

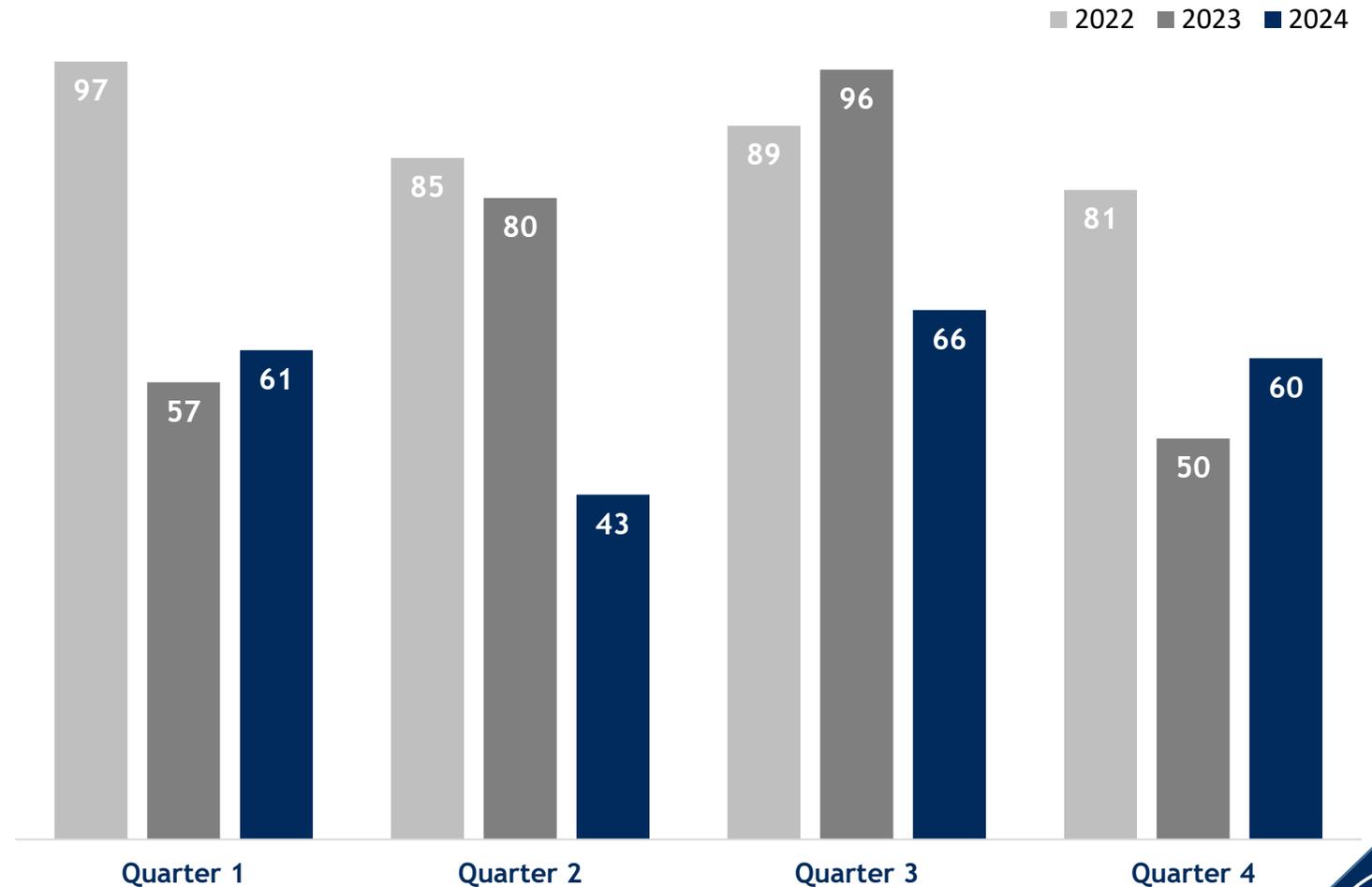
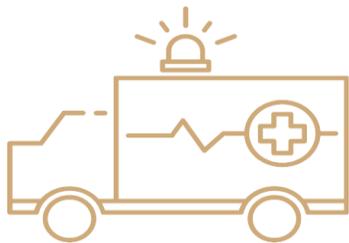


# *Emergency department visits* for unintentional drug overdose peaked in October, but were overall fewer in number than in 2023.



## Naloxone dose administration by EMS in the county continued to peak in quarter 3 (July, August, September).

- Clermont ranked **15<sup>th</sup>** out of all Ohio counties with **230** doses administered in 2024.
  - While the ranking has increased from 18<sup>th</sup> in 2023, the number of doses has decreased from 283.



*\*86.1 % OF Transporting Ohio EMS Agencies Reporting*



# The number of Naloxone doses administered by EMS providers was highest in the 45245 (Cincinnati) ZIP code

**\*\*85.8% OF Transporting Ohio EMS Agencies Reporting**



Source: Ohio Emergency Medical Services, Naloxone Administration by County. [EMS Naloxone Admin By Zip Code 2024.pdf \(ohio.gov\)](#).

Secondary data.

Rates were calculated with the population estimated in the 2020 US Census.

Zip Code	City	Number of doses in 2023	Number of doses in 2024	Population	Rate per 10,000
45245	Cincinnati	80	61	21,505	28
45102	Amelia	41	47	22,869	21
45103	Batavia	44	37	31,976	12
45255	Cincinnati	25	28	21,923	13
45157	New Richmond	32	27	10,228	26
45150	Milford	50	24	33,169	7
45106	Bethel	21	24	13,014	18
45140	Loveland	39	18	56,093	3
45122	Goshen	26	17	12,271	14
45176	Williamsburg	20	15	9,851	15
45244	Cincinnati	24	12	28,755	4
45120	Felicity	12	12	2,960	41
45121	Georgetown	38	10	8,615	12
45107	Blanchester	14	6	9,459	6
45162	Pleasant Plain	3	6	2,330	26
45130	Hamersville	17	4	4,013	10
45160	Owensville	2	2	837	*
45147	Miamiville	1	2	208	*
45153	Moscow	11	1	1,564	6
45112	Chilo	0	1	62	*
45118	Fayetteville	7	0	3,768	0
45158	Newtownsville	1	0	426	0
45156	Neville	0	0	65	0

\*rates not calculated for populations under 1,000

# Emerging Substance: Medetomidine

**Medetomidine** is a veterinary tranquilizer, more potent than xylazine, that can cause adverse effects including slowed heart rate, low blood pressure and decreases in brain and spinal cord activity. It is not approved for use in people.

Medetomidine can cause central nervous system depression and death.

Like xylazine, medetomidine is not reversed by medications such as Narcan.

Unlike xylazine, testing strips are not yet available to detect this drug.

Medetomidine has been identified in overdose deaths in Pennsylvania, Michigan, Illinois, Missouri, and California.

Local substance use disorder organizations, health care providers and harm reduction agencies are urged to raise awareness and promote harm reduction practices as medetomidine like xylazine may be increasingly found in the illicit drug supply.

The Hamilton County Crime Laboratory, which issues toxicology reports for all decedents, is currently testing for this substance.



# TRENDS



# Identified Trends

- Clermont County continues to see a downward trend in number of fatal overdoses for the third year in a row. In 2024, there was a 53% decrease from 2023. There was a 66% decrease from the 2015-2023 average.
- 100% of decedents were white non-Hispanic. White non-Hispanic individuals have historically accounted for most overdose deaths in the county. Clermont County has had an increase in the past decades of other racial and ethnic populations but remains 93% white non-Hispanic.
- While males continue to make up most decedents, they accounted for 19% fewer deaths than in 2023.
- 29% of individuals indicated experiencing homelessness or barriers to transportation. These are social determinants of health that contribute to poorer health outcomes.
- The age group with the highest number of deaths continues to be 35-44. There was also an increase in the percentage of individuals 55+.



# Identified Trends

- Fentanyl continues to be the most common substance found. There was a 16% increase in the percentage of fentanyl present. 17 out of 21 toxicology reports in 2024 had fentanyl present.
- Xylazine presence continues to rise. It was found in 27% more reports compared to 2023.
- One report included 6-Monoacetylmorphine, an active metabolite of heroin. This is the first time heroin has been identified since 2021.
- Marijuana was not found in any toxicology reports. In previous years, it had been a commonly found substance.
- Opioids like codeine, hydrocodone, morphine, and oxycodone were not found in any toxicology reports. In previous years, these have been commonly found substances.



# Data to Action: Strategies and Activities



# Strategies and Activities

## Syringe services program (SSP)

- 733 total visits
- 151 new clients
- 190,978 syringes distributed
- 1,052 doses of Narcan distributed
- 2,007 fentanyl test strips distributed
- 1,940 xylazine test strips distributed



# Strategies and Activities

The Clermont County Mental Health & Recovery Board installed a second Harm Reduction Vending Machine in the county:

- Located on the campus of UC Clermont College
- Items available include Narcan, drug disposal bags, first aid kits, sharps containers, hygiene kits, safer sex kits, fentanyl test strips, and wound care kits



The vending machine is black with a large orange and yellow graphic on the front. The graphic features a sun and the text "Harm Reduction Saves Lives". Below this, it lists "CRISIS HOTLINE 24/7: 513-528-SAVE (7283)". To the right of the machine is a circular logo for "CLERMONT COUNTY ADDICTION & RECOVERY PARTNERSHIP" and a QR code.

To register, please scan the QR code. If you are unable to scan, go to [www.ccmhrb.org](http://www.ccmhrb.org)

If you want to talk about treatment options please call 513-528-SAVE (7283)



The logo for the Clermont County Mental Health & Recovery Board, featuring a stylized sun and the text "Clermont County MENTAL HEALTH & RECOVERY BOARD".



# Strategies and Activities

## **The Clermont County Mental Health & Recovery Board conducted Crisis Intervention Training**

- 18 Law Enforcement Officers, two Probation Officers, and two Corrections Officers graduated from the five-day training and learned skills on how to handle mental health crisis events.
- This marks the 16th completed CIT training for Clermont County. Clermont County CIT has been in existence since 2011 and has trained over 90% of law enforcement in the County.

## **The Clermont County Mental Health & Recovery Board**

- July and August 2024, radio ads promoting prevention and reducing the stigma around substance misuse played on 6 different Cincinnati-area radio stations. Additionally, DJs talked about how they have been impacted by overdose to help raise awareness in the community.



# Strategies and Activities

The Clermont County Mental Health & Recovery Board awarded 14 mini-grants to local organizations. These included

- **Bluebird Bus of Hope, Mentoring Services:** To expand mentoring services, particularly in underserved, rural communities by training additional mentors to become certified community life coaches. This initiative aims to strengthen connections to mental health and addiction recovery services.
- **Clermont County Public Health: Wound Care Kits and Xylazine Test Strips-** Funding to purchase Xylazine test strips and wound care kits for distribution through the Clermont County Bloodborne Infectious Disease Prevention Program.
- **Inter Parish Ministry, Food Pantry Summer Picnic:** To provide summer picnics, hot meals, and “pop-up” picnics in various communities, along with mental health resource information and empowerment items. This program supports the well-being of food-insecure families and individuals.
- **Streetlight Ministry, Homeless Outreach:** To provide essential resources and connect the homeless population with mental health, addiction, and other services.
- **St. Vincent de Paul, Charitable Pharmacy:** To support staffing at the Charitable Pharmacy, which provides free medication and health education to uninsured and underinsured individuals.
- **West Clermont School District, Feeding and Fueling Minds:** To offer workshops focused on food, nutrition, and mental health, aimed at empowering families with healthy life choices.
- **YWCA House of Peace, Support Groups:** To provide learning materials and self-care supplies for support groups addressing trauma, emotional regulation, and healthy relationships among residents.



# Strategies and Activities

- **Clermont County Public Health Harm Reduction program** partnered with the mobile IPM food pantry to reach populations within the county that have been identified with potential health risk factors (access to care, poverty, healthy food access, etc.) to provide access to proper medication disposal, overdose reversal (education and Narcan distribution), and county resource education
- **Clermont County Community Services**
  - Provides homeless access points for the county
  - Utilizes housing first priorities with all clients to assist them with obtaining housing as quickly as possible
  - Currently housing clients in hotels up to 30 day stays



# Recommendations



# Recommendations

The purpose of the Overdose Fatality Review (OFR) is to provide a comprehensive and multidisciplinary review of the circumstances of identified deaths to understand how and why the fatality occurred. Case review findings are used to catalyze action to prevent other deaths and ultimately improve the health and safety of individuals, families, and communities.

During the review process, OFR team members bring relevant agency records to the case review meeting. These records contain the information teams use to determine what happened in the individual's life, what led to the death, and what the community's response to the death looked like. The team then documents extensive data on the individual, the family/support system, the incident leading to the death, the death investigation, cause-specific risk and protective factors, and systems issues and barriers. The team also documents findings and prevention recommendations. The recommendations presented were developed through this process.



# Recommendations

- Greater coordination between hospital systems and Clermont County services to ensure follow up and referral to addiction treatment services
- Advocacy for affordable housing including
  - permanent supportive for those in addiction recovery
  - housing support upon release from incarceration
  - expansion of homeless services
  - referral to legal aid services for those facing eviction or financial instability
- Maximize health records systems to include automatic referral to services after an individual experiences a non-fatal overdose
- Unified linkage to care among addiction treatment facilities
- Championing for newborn home visits for new parents in addiction recovery
- Increase outreach to those who are not using substances via injection and who may not have interaction with the syringe services program
- Increase support for primary intervention and upstream prevention including
  - generational/family support
  - preventing adverse childhood experiences (ACEs)



# QUESTIONS

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