

# 2020 ANNUAL REPORT

## Deaths related to opioids and other drugs

### Berrien

*This report is in memory of those who lost their life or a loved one to substance use. These losses must motivate us all to prevent future deaths.*

#### **A few notes...**

**: Purpose:**

- This data was collected by the **Office of the Medical Examiner in the Department of Pathology at WMed**. Unless otherwise noted, data is from 2020 and includes deaths where drugs were the immediate cause of death. This report is meant to provide up to date statistics to those involved in efforts to reduce the number of drug-related deaths.

- **Sections with the following headings are approximations and frequencies may be higher than what is reported:**

- Health Factors, Mental Health Factors, Social Factors, Children and Substance Use History.

**: Sources:**

- All data was extracted from a Medical Examiner database, law enforcement (LE) and EMS reports, death certificates, obituaries, Swift Toxicology of Overdose-Related Mortalities (STORM) results, medical records, toxicology reports, MDHHS reports, and autopsy reports.

Please email Chloe Bielby for additional information or to set up a time to discuss your county's report: [chloe.bielby@med.wmich.edu](mailto:chloe.bielby@med.wmich.edu)

# Deaths Related to Opioids and Other Drugs

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## All Drug-Related Deaths

Age	Race	Sex	Death Certificate: Substances Contributing to Death	Injury Zip Code
21	W	M	Pt. I: Methadone	49686
22	B	F	Pt. I: Fentanyl	49022
24	W	M	Pt. I: Fentanyl, methamphetamine	49103
25	W	M	Pt. I: Fentanyl, hydrocodone	49120
26	W	F	Pt. I: Fentanyl	49022
28	B	F	Pt. I: Methamphetamine	60409
29	W	F	Pt. I: Fentanyl, acetyl fentanyl, alprazolam, norbuprenorphine	49120
29	W	M	<i>Pt. I: Acute and chronic ethanol use*</i>	49127
29	W	F	Pt. I: Fentanyl, etizolam, cocaine	49085
30	W	F	Pt. I: Methamphetamine, fentanyl	49022
31	W	M	Pt. I: Fentanyl, promethazine, diphenhydramine	49022
31	W	M	Pt. I: Ethanol, fentanyl	49047
32	W	M	Pt. I: Cocaine, ethanol, cocaethylene, fentanyl, morphine, amphetamine	49022
35	W	F	Pt. I: Fentanyl, ethanol, mirtazapine, citalopram/escitalopram, clonazepam	49022
36	B	M	Pt. I: Cocaine, ethanol, and fentanyl	49022
37	W	F	Pt. I: Fentanyl	46241
38	B	M	Pt. I: Cocaine, ethanol, cocaethylene	49022
40	W	M	Pt. I: Cocaine, flualprazolam, isotonitazine	49892
40	W	M	Pt. I: Alprazolam, fentanyl, methamphetamine	49098
42	W	M	Pt. I: Fentanyl	49107
43	W	F	Pt. I: Methamphetamine	49120
45	W	M	<i>Pt. II: Fentanyl, morphine*</i>	49120
47	W	M	<i>Pt. II: Methamphetamine*</i>	49107
47	W	M	Pt. I: Methadone, diphenhydramine	49098
48	W	M	Pt. I: Cocaine, fentanyl, acetyl fentanyl, heroin	49085
49	W	F	Pt. I: Ethanol, alprazolam, zolpidem, gabapentin	49107
50	B	F	Pt. I: Fentanyl	49022
52	B	M	Pt. I: Cocaine, ethanol, cocaethylene, fentanyl	49022
53	B	F	Pt. I: Fentanyl	49022
54	W	F	Pt. I: Methamphetamine, chlordiazepoxide, lorazepam, 7-amino clonazepam, fentanyl, heroin	49120
58	W	M	Pt. I: Fentanyl, methamphetamine, alprazolam	49022
59	W	M	Pt. I: Opiate, amphetamine	49120
60	W	M	Pt. I: Fentanyl, diphenhydramine	49098
61	B	M	Pt. I: Cocaine	49022
63	W	M	Pt. I: Fentanyl, heroin, oxycodone, gabapentin, nordiazepam	49022
64	W	M	Pt. I: Heroin, methamphetamine, 7-amino clonazepam, fentanyl, gabapentin, zolpidem	49120
64	W	M	<i>Pt. II: Cocaine*</i>	49127
68	W	M	Pt. I: Acetaminophen, lorazepam, hydrocodone	49117

\* Case is not included in the following report

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## Total deaths due to drugs: 2019, 2020



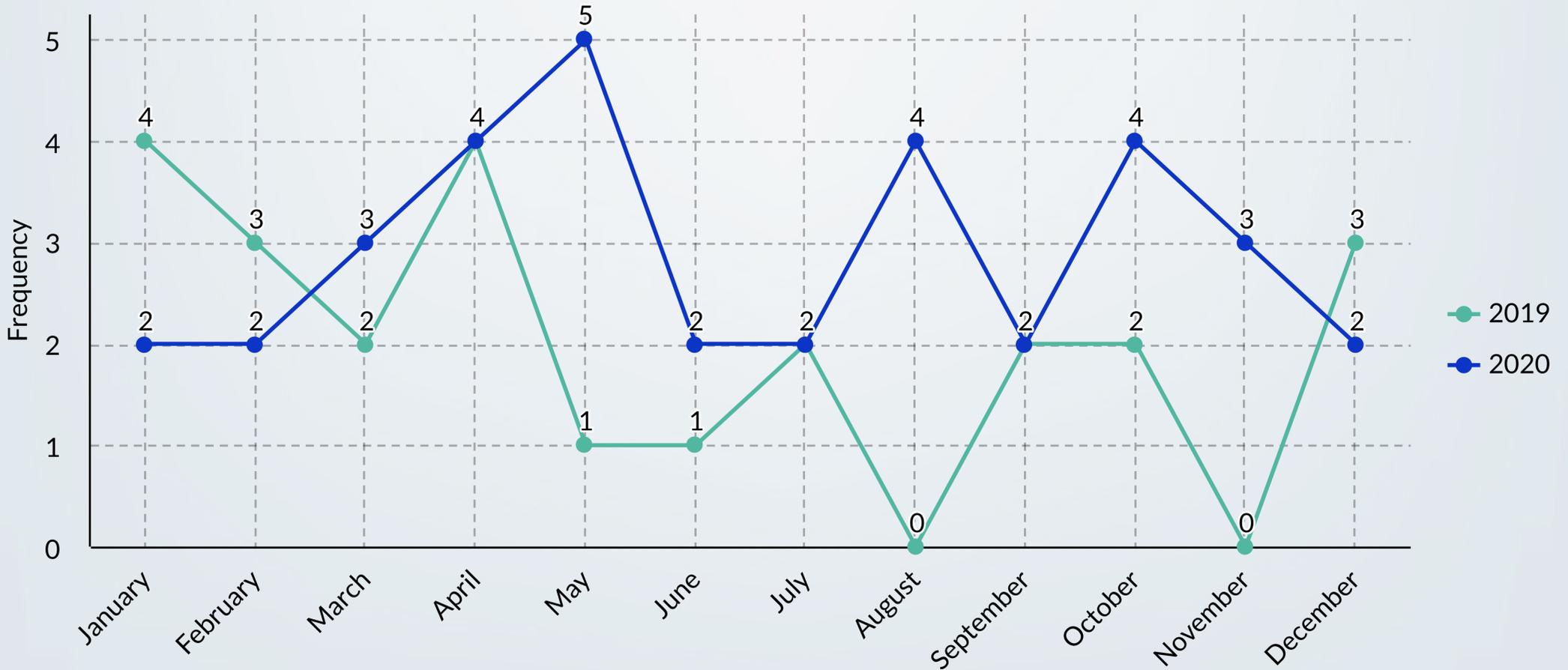
Number of nonfatal overdoses among ED discharges, 2020

**176**

**11.2**

Nonfatal overdoses per 10,000

Number of all drug-related deaths by month and year



**42%**

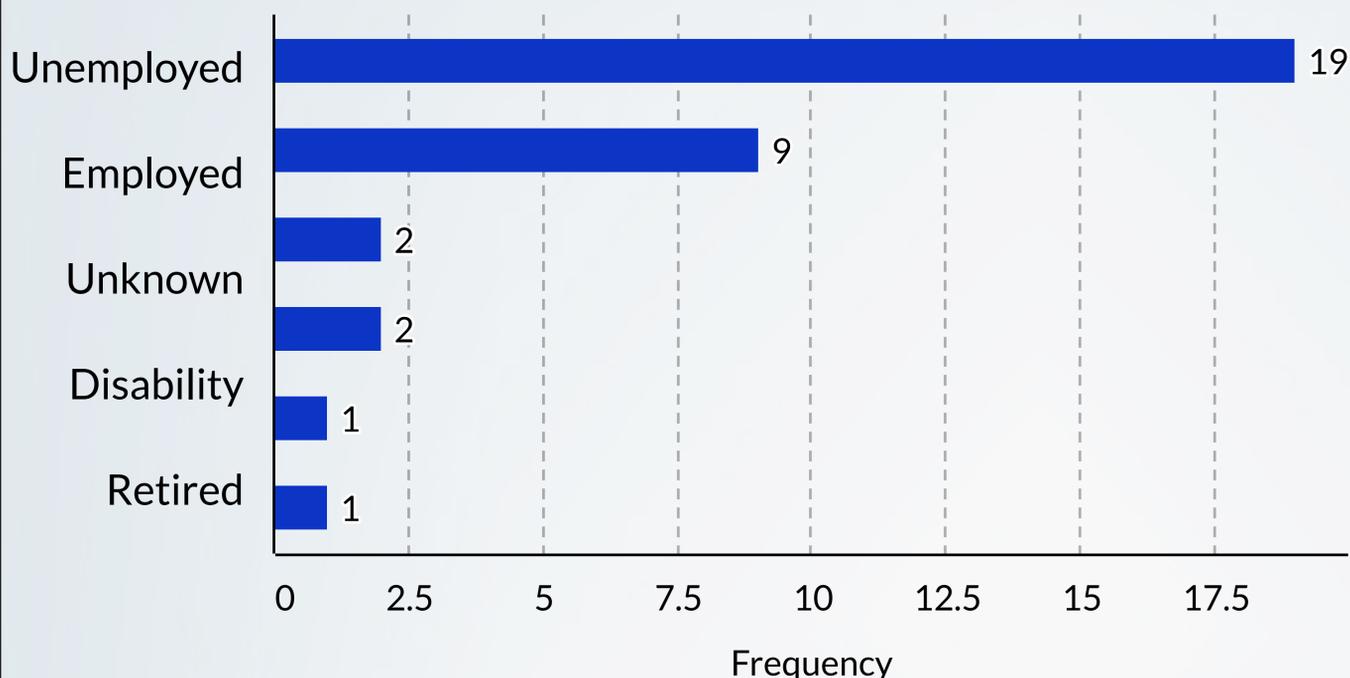
Percent increase from 2019 to 2020

# Deaths Related to Opioids and Other Drugs

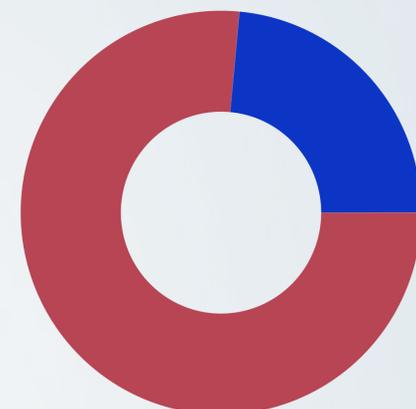
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## Demographics

### DECEDENT'S EMPLOYMENT STATUS



### RACE



White (76%)  
African American/Black (24%)

### SEX

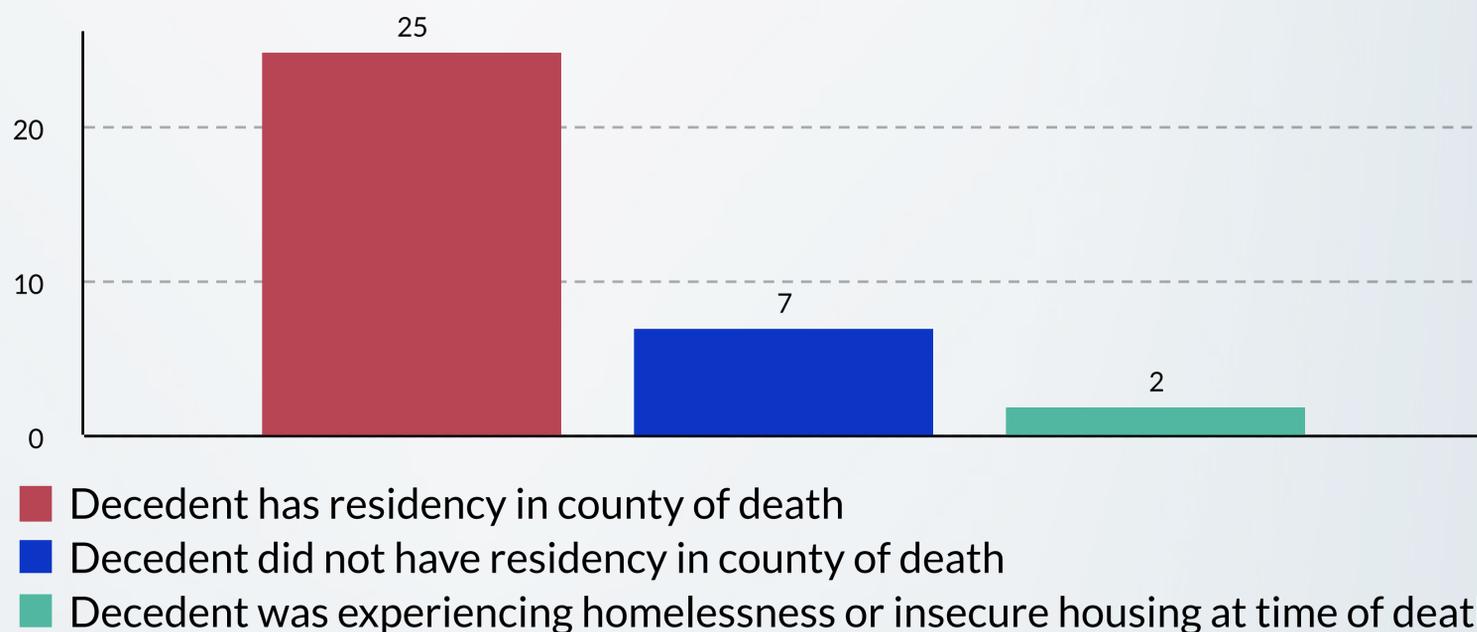


62%

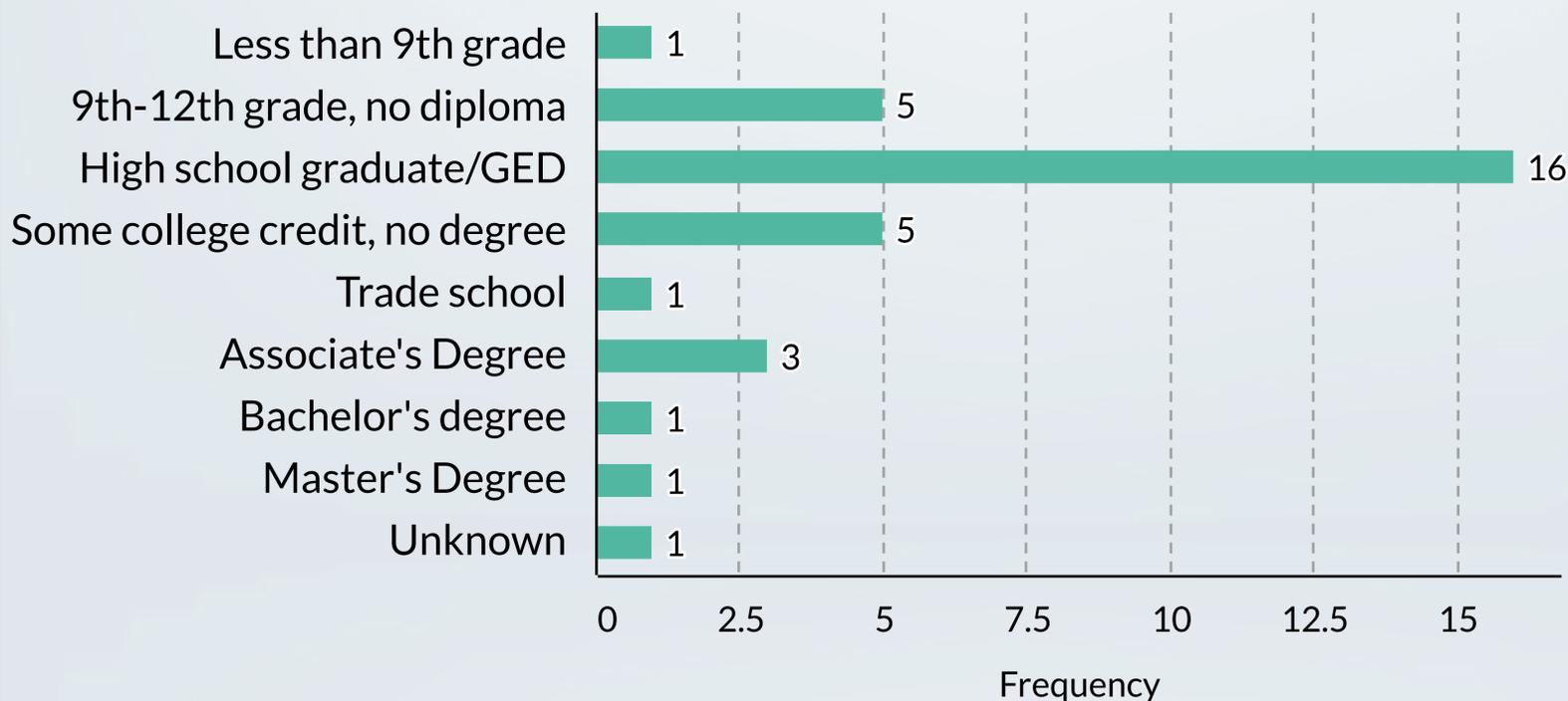


38%

### COUNTY OF RESIDENCE BY COUNTY OF DEATH



### DECEDENT'S HIGHEST LEVEL OF EDUCATION



### AGE

Minimum Age  
**21 years**

Maximum Age  
**68 years**

Average Age  
**42 years**

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## Health Factors

### MOST PREVALENT AILMENTS\*

Hypertension (24%)

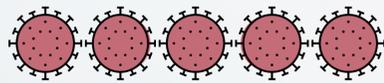
Chronic Pain (18%)

Heart\*\* (18%)

Lung (15%)

Diabetes (15%)

\*Decedents may be represented in more than one category. Only illnesses with official diagnosis are included.  
 \*\*Heart includes MI, CABH, CAD, AFib, ACD, and heart failure



At least **5** decedents were **Hepatitis C** positive

**4** of these decedents were known to use **substances intravenously**



Decedent used tobacco

**89%+**



Decedent drank alcohol

**62%+**

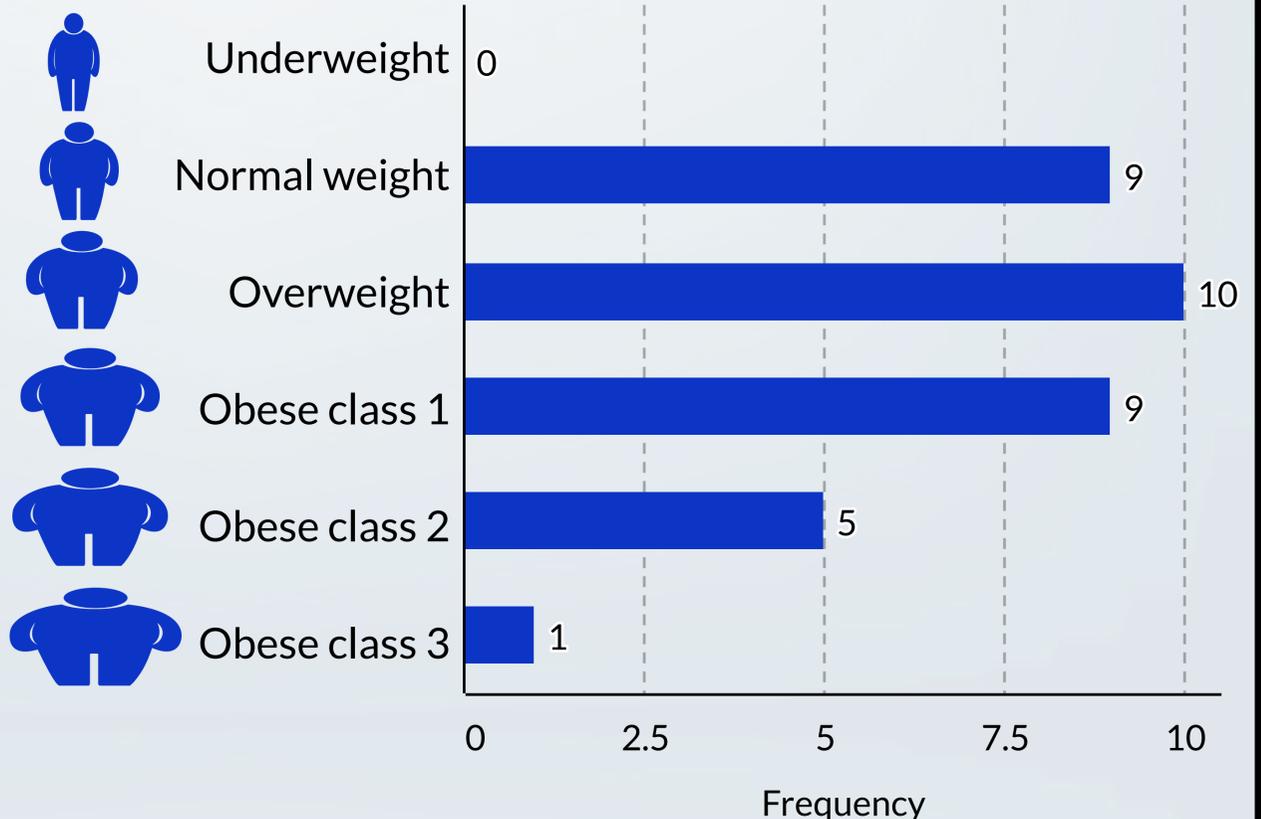


Decedent had a PCP

**32%**



### BODY MASS INDEX (BMI)



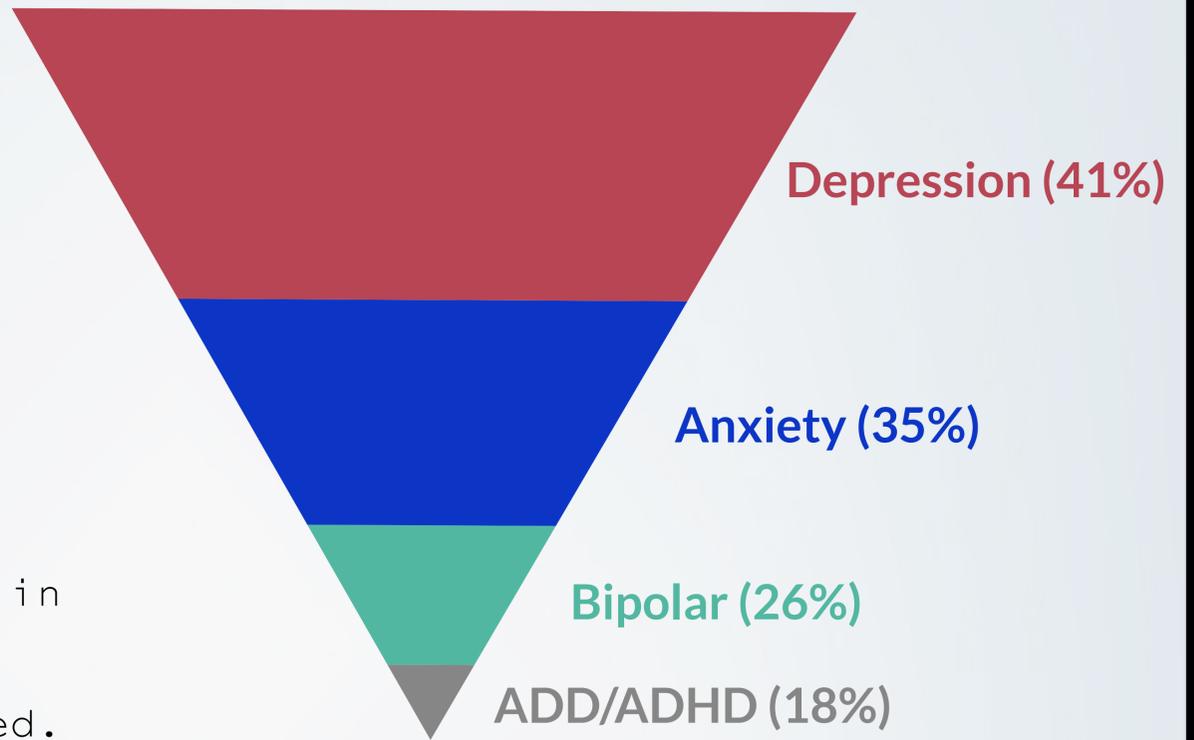
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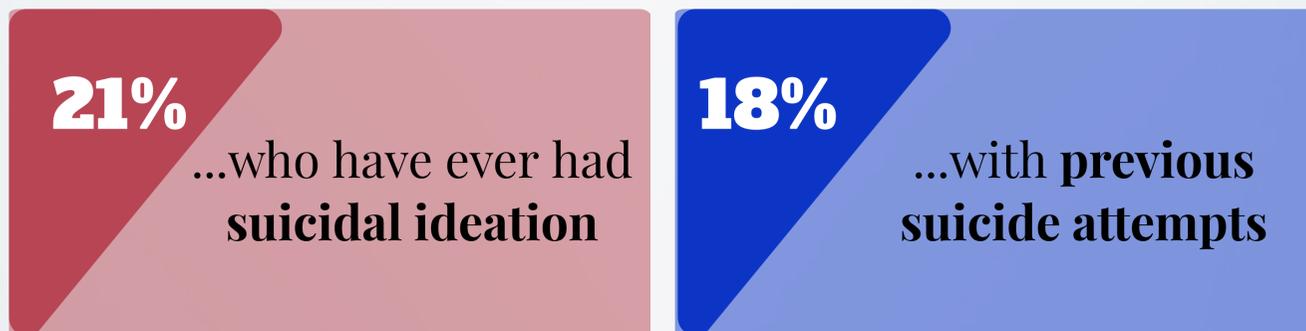
## Mental Health Factors

**MOST  
PREVALENT  
MENTAL ILLNESSES\***

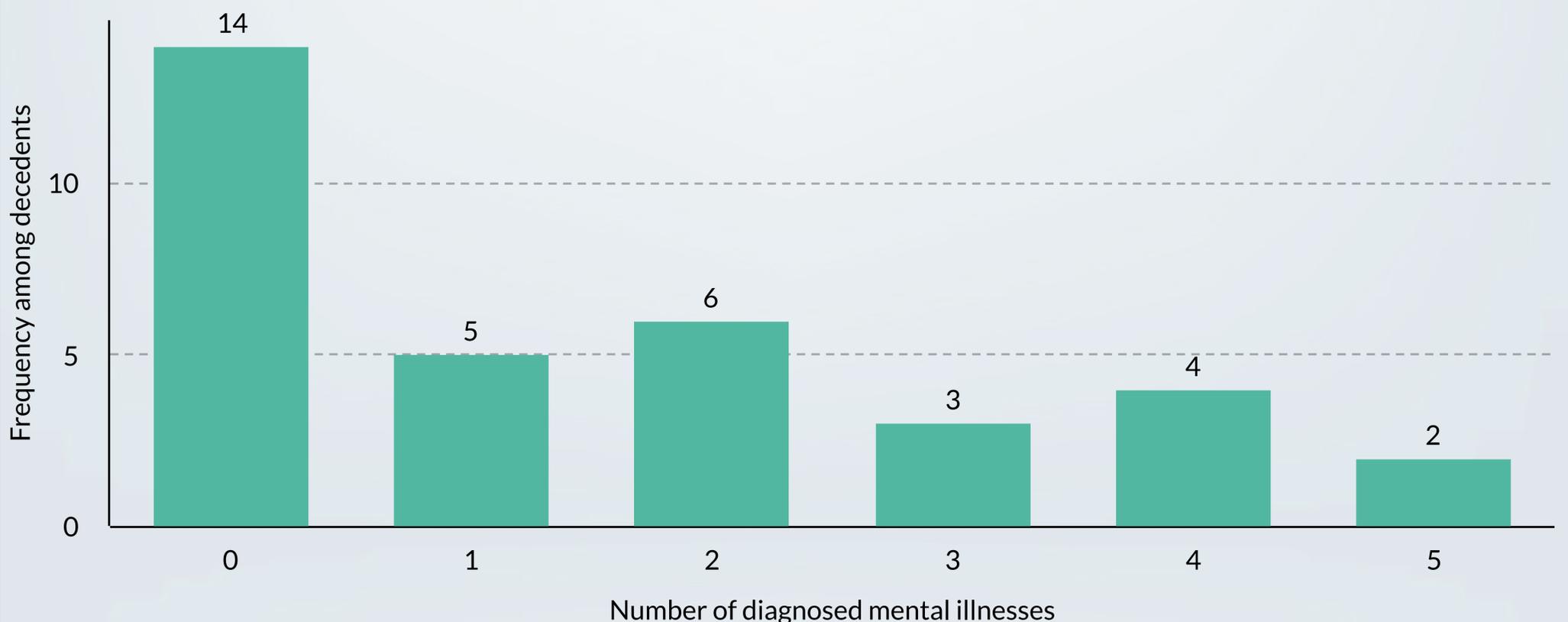
\*Decedents may be represented in more than one category. Only mental illnesses with official diagnosis are included.



### PERCENTAGE OF DECEDENTS...



### NUMBER DIAGNOSED MENTAL ILLNESSES AMONG DECEDENTS



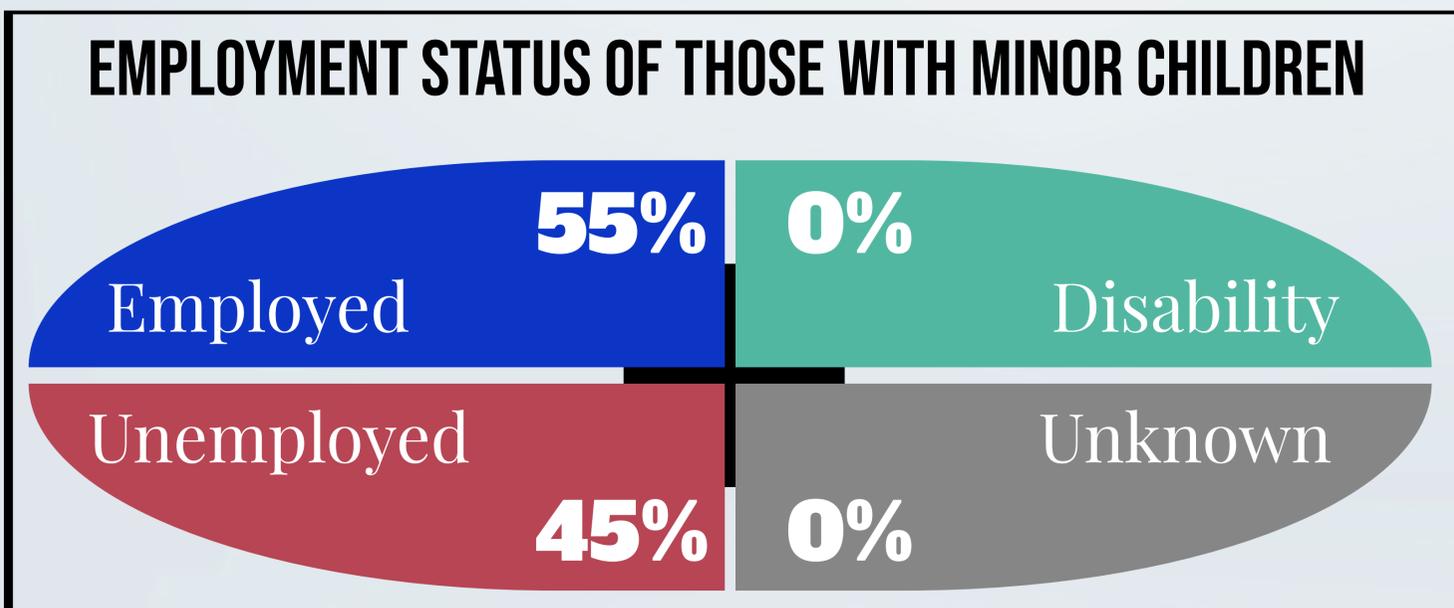
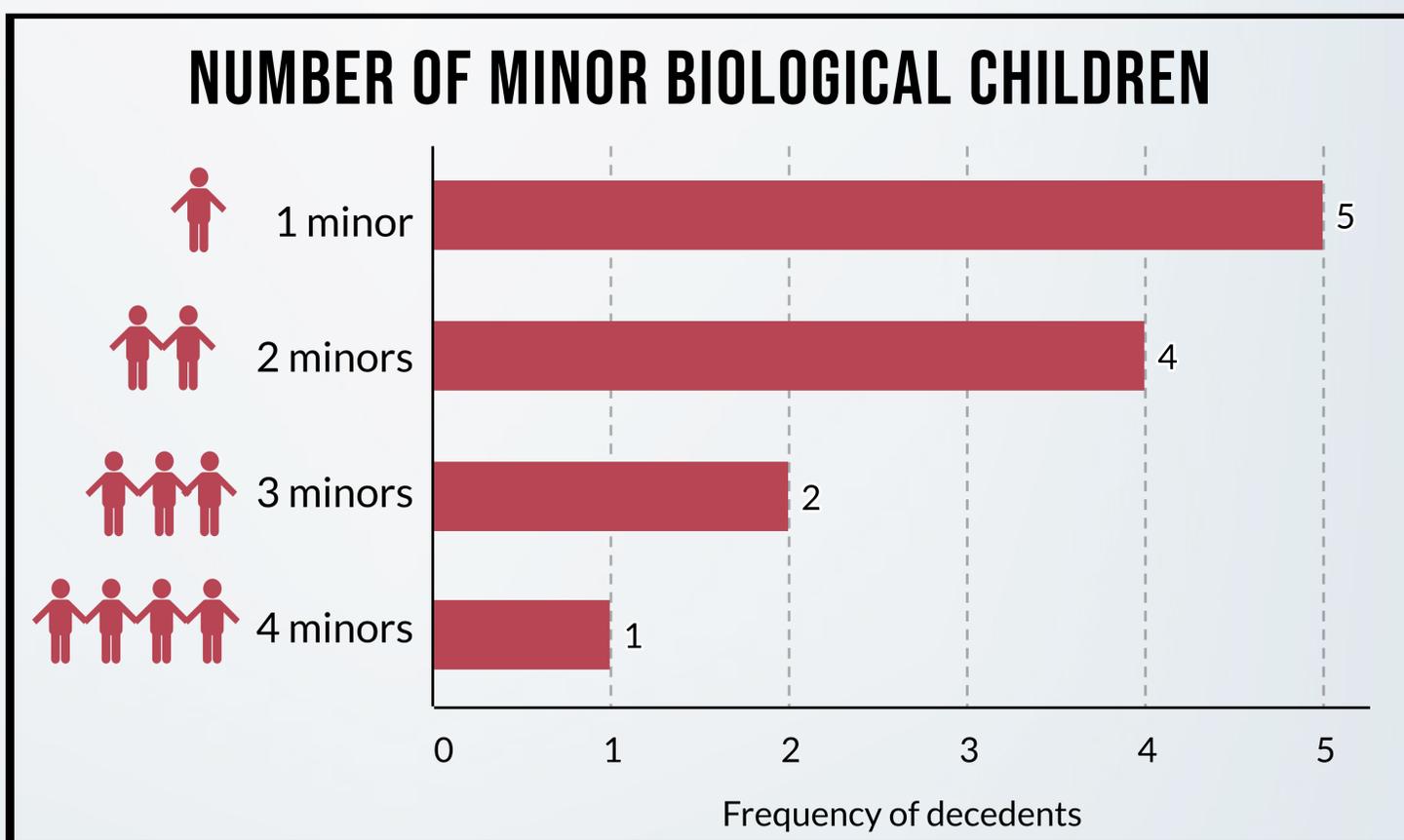
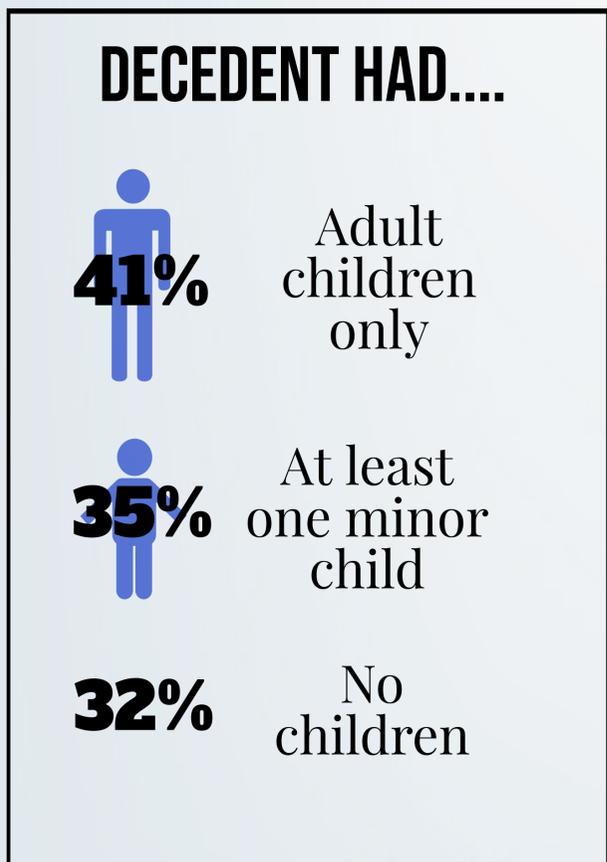
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## Social Factors



## Children

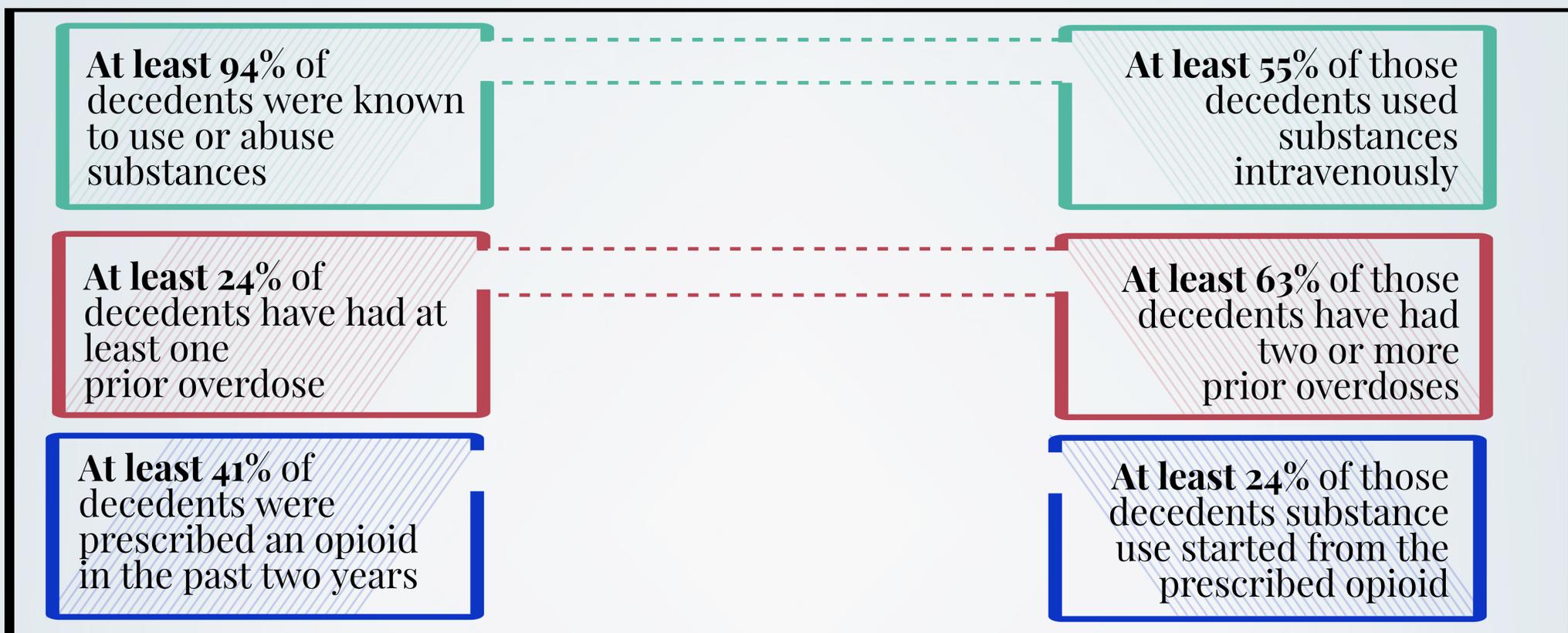


5 decedents lived with their minor child(ren) at time of death

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## Substance Use History



### RECOVERY HISTORY (N=32\*)

**38%**

Decedent has been to a **substance rehabilitation clinic** at least one time

**15%**

Decedent was currently receiving or has received a form of medication-assisted treatment (MAT) in the past two years

**38%**

Decedent was recently **substance free** in the past three weeks

#### SUSPECTED REASONS FOR RELAPSE\*\*

**36%**  
Left jail/rehab

**28%**  
Life stress\*\*\*

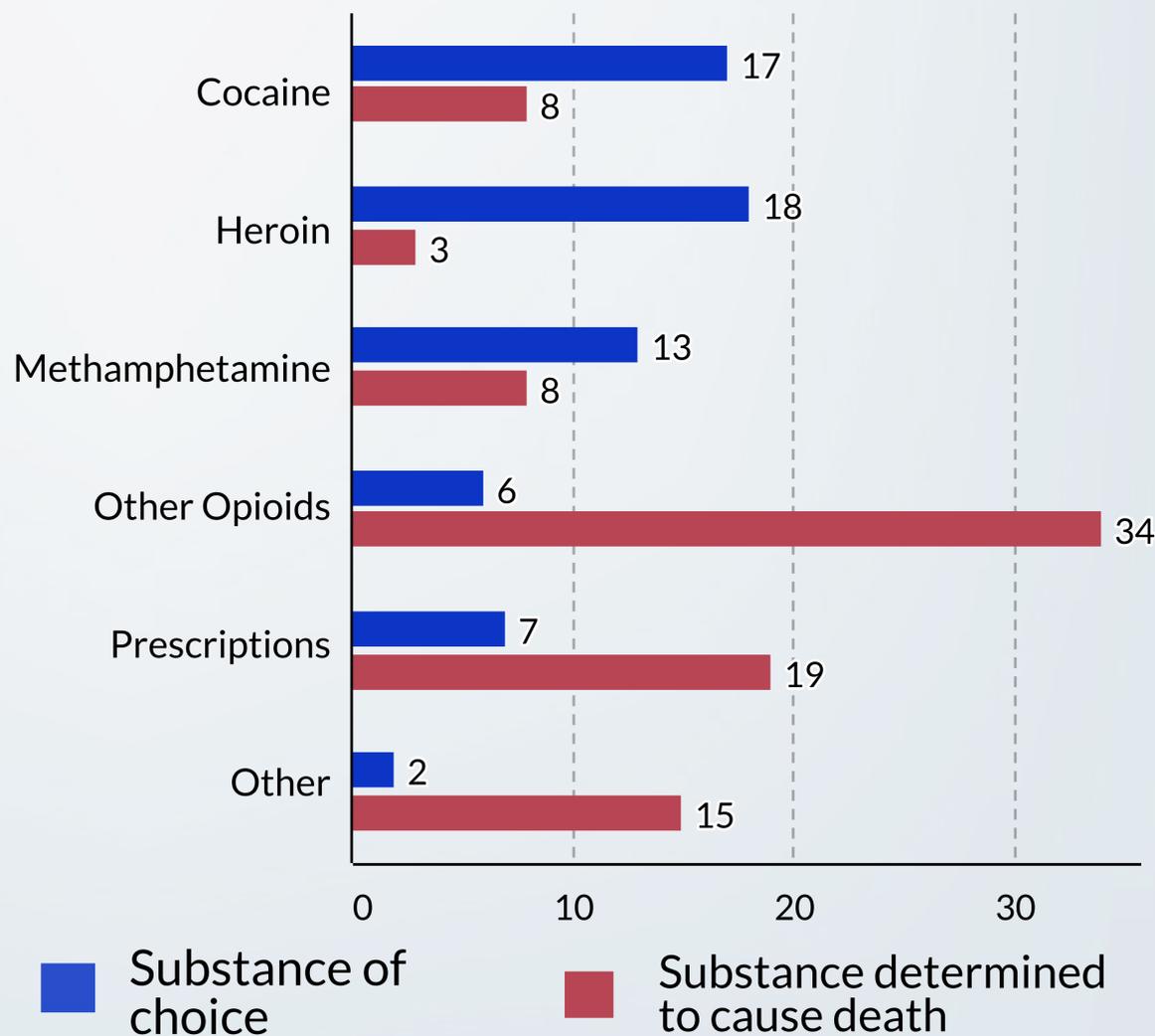
**36%**  
Unknown

\*ONLY decedents known to use substances are included.

\*\*These factors were mentioned by those close to decedent for why they may have begun to use substances again after a few months to years of living substance free.

\*\*\*Life stress includes fight with a S/O, job loss, and social circle influence.

### DECEDENT'S SUBSTANCE OF CHOICE VS. WHAT WAS DETERMINED TO CAUSE DEATH\*



\*Decedent may have had more than one substance of choice and in their toxicology.

NOTE: 2 decedents would use any substance available and 2 were not known to use substances.

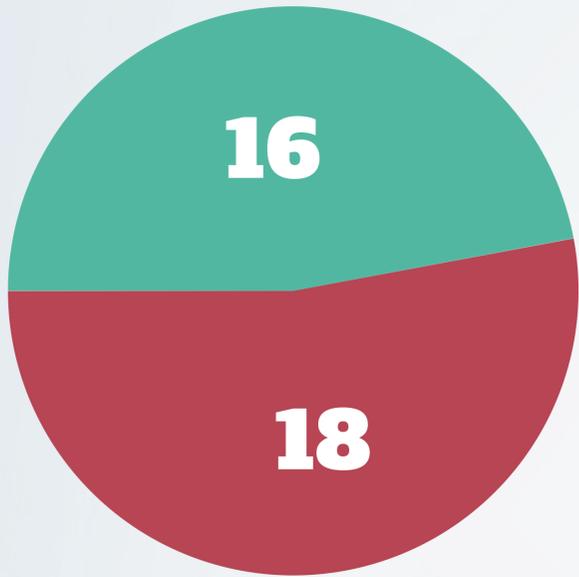
Prescriptions do not include opioids. Other includes acetaminophen, cocaethylene, diphenhydramine, ethanol, flualprazolam, ketamine, mitragynine, and inhalants.

# Deaths Related to Opioids and Other Drugs

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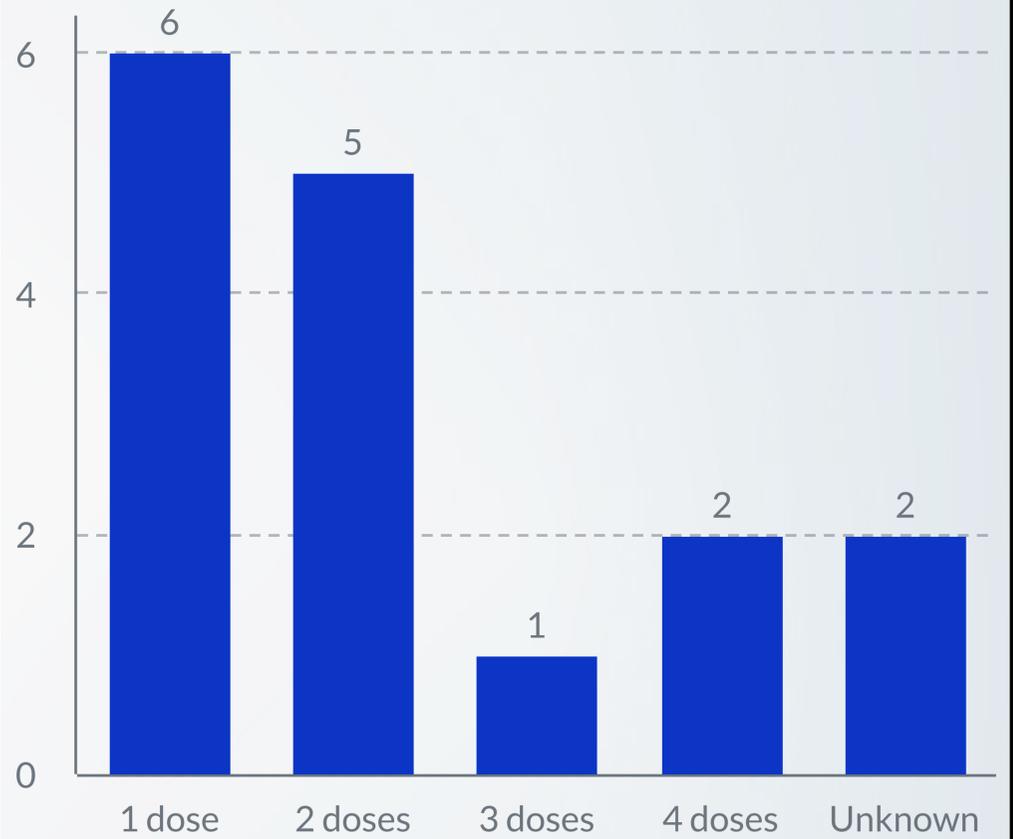
## Naloxone Administration

### NALOXONE ADMINISTRATION STATUS

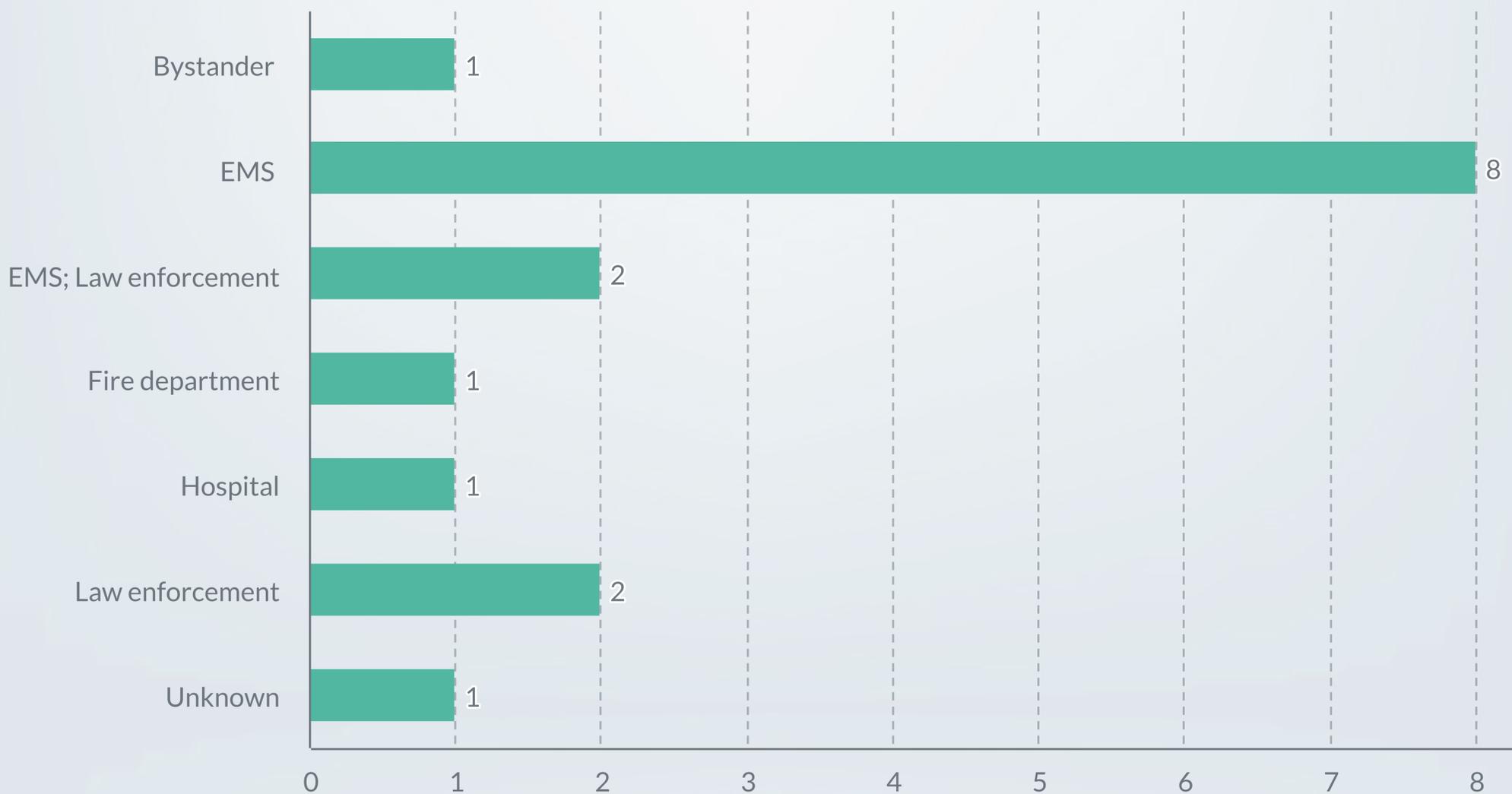


■ Naloxone administered      ■ No Naloxone administered

### HOW MANY DOSES (2 MG) OF NALOXONE WERE ADMINISTERED



### WHO ADMINISTERED NALOXONE?



# Deaths Related to Opioids and Other Drugs

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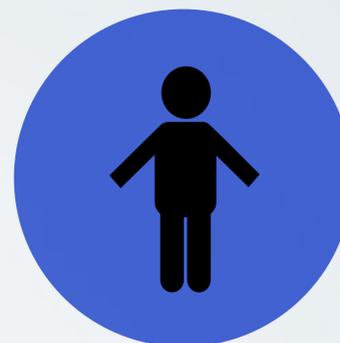
## Death Scene Findings



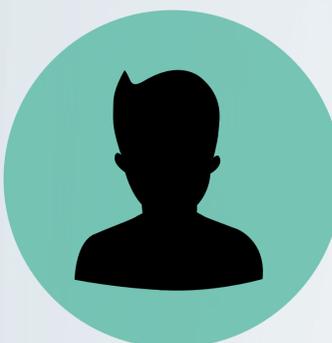
**35%**  
Were found by family



**50%**  
Died at their residence



**6%**  
Were found by a minor



**89%**  
Used the fatal substance(s) alone



Syringes, pipes and suspected illicit drugs were the most common paraphernalia found on scene



**9%**  
Had Narcan on scene and/or were prescribed Narcan



**53%**  
Were dead upon EMS arrival



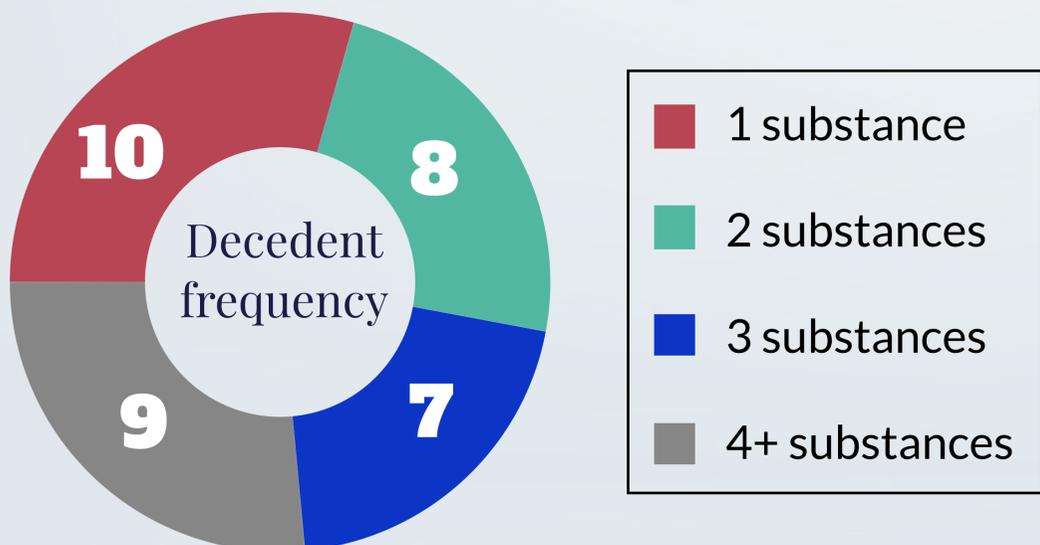
**21%**  
Died at the hospital



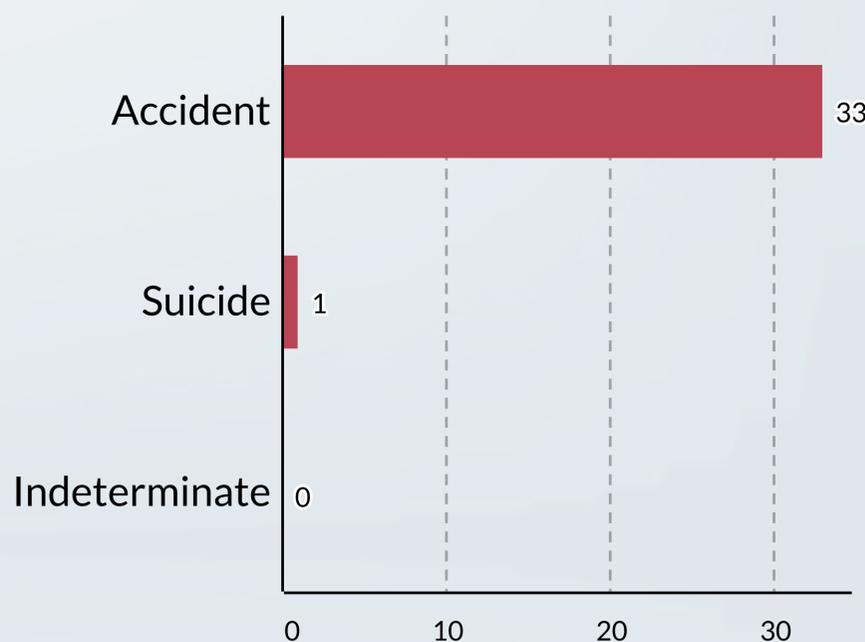
**47%**  
Were given Narcan

## Autopsy and Toxicology Results

NUMBER OF SUBSTANCES CONTRIBUTING TO DEATH



MANNER OF DEATH

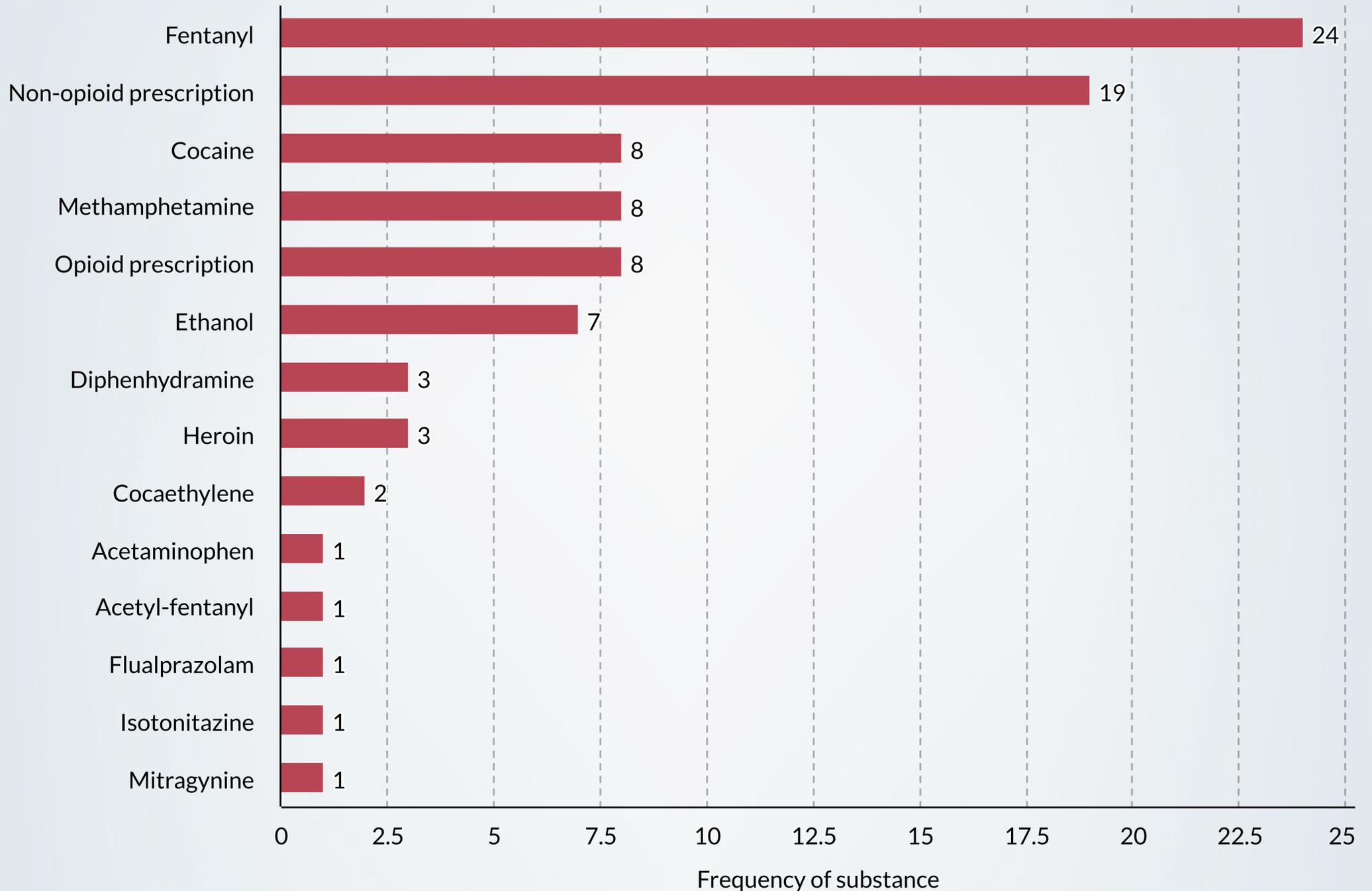


# Deaths Related to Opioids and Other Drugs

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## Substance Breakdown

### SUBSTANCES CONTRIBUTING TO DEATH



Please see graphs on the next page for a list of opioid and non-opioid prescriptions.

#### HEROIN & FENTANYL

3 decedents had heroin in their toxicology

All 3 of these decedents also had fentanyl in their toxicology

#### XYLAZINE & FENTANYL

0 decedents had xylazine in their toxicology

0 of these decedents also had fentanyl in their toxicology

#### BENZODIAZEPINES & OPIOIDS

10 decedents had a benzodiazepine and an opioid in their toxicology

2 decedents were prescribed that opioid and benzodiazepine

#### METHAMPHETAMINE & OPIOIDS

6 decedents had methamphetamine and opioid(s) in their toxicology

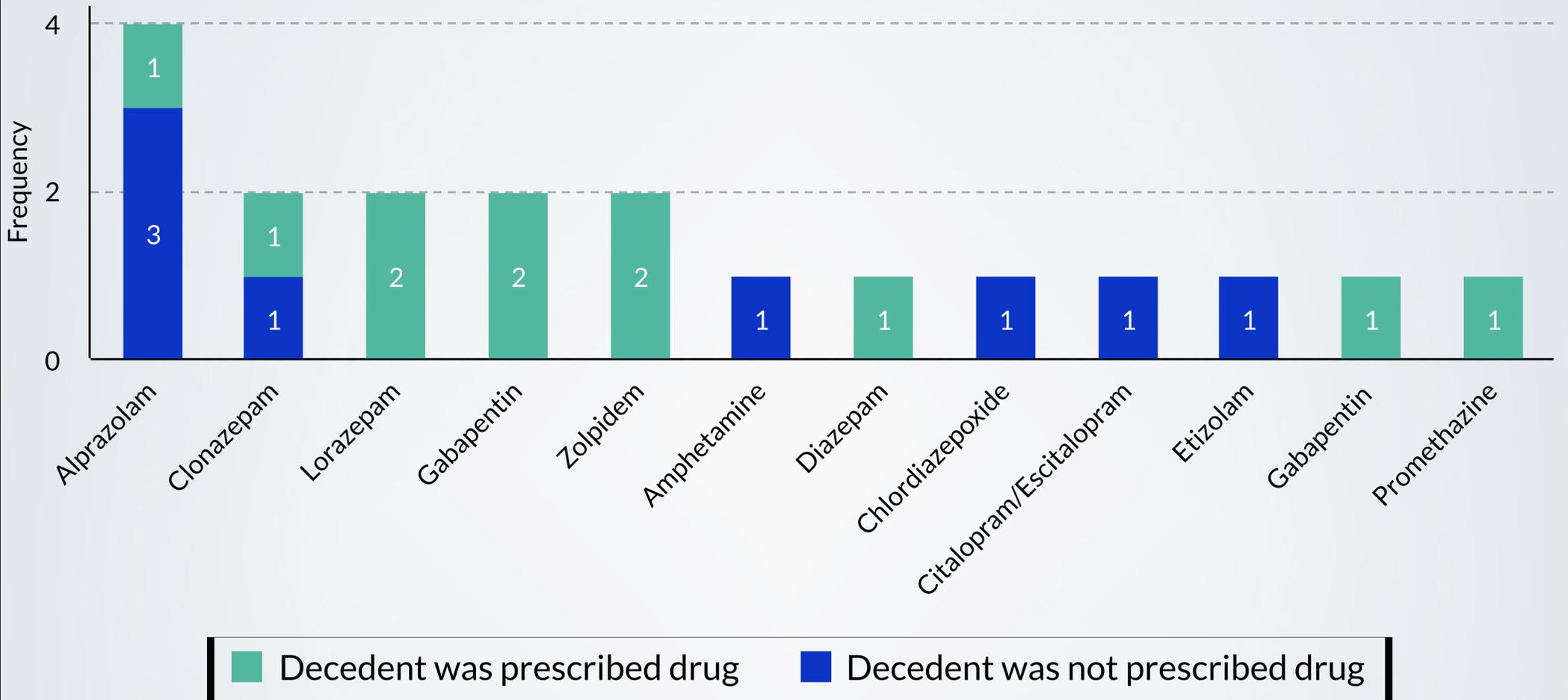
1 decedent had methamphetamine and heroin in their toxicology

# Deaths Related to Opioids and Other Drugs

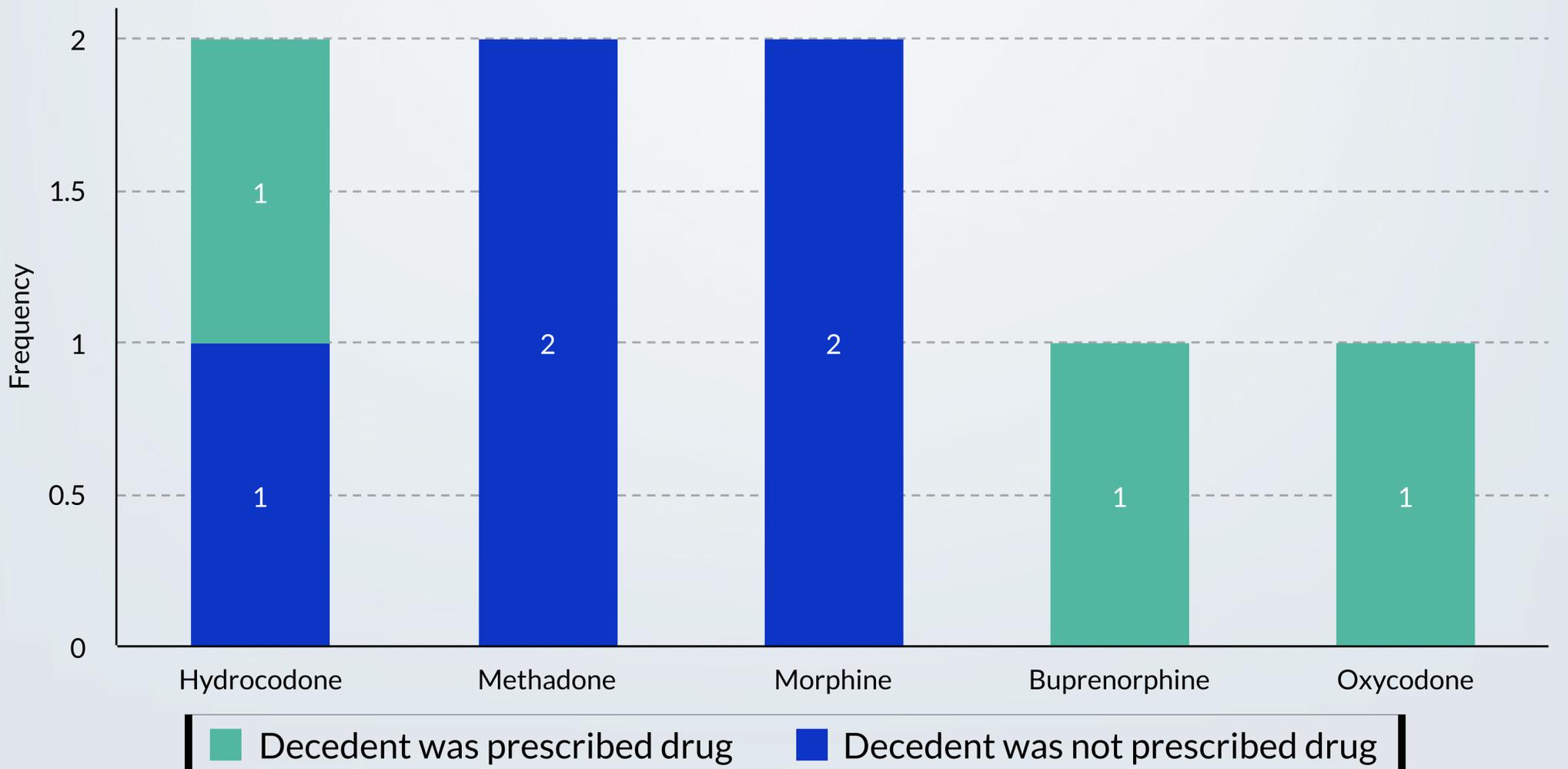
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## Autopsy and Toxicology Results, cont.

### NON-OPIOID PRESCRIPTIONS PRESENT IN TOXICOLOGY



### OPIOID PRESCRIPTIONS PRESENT IN TOXICOLOGY



**Note: Of the 24 decedents with fentanyl present in their toxicology, 0 were prescribed fentanyl**