

2020 ANNUAL REPORT

Deaths related to opioids and other drugs

Kalamazoo

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

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
26	W	M	Pt. I: Buprenorphine	49007
18	O	M	Pt. I: Fentanyl, tramadol, etizolam	49009
20	W	M	Pt. I: Fentanyl, methamphetamine	49007
20	W	M	Pt. I: Oxycodone, cocaine, flualprazolam, amphetamine, MDMA, norketamine	49001
21	B	M	Pt. I: Hydrocodone, fentanyl, oxycodone	49048
21	W	F	Pt. I: Ethanol*	49008
24	W	M	Pt. I: Fentanyl, hydrocodone, mitragynine, quetiapine, xylazine	49006
24	W	M	Pt. I: Ethanol*	49071
28	W	F	Pt. I: Fentanyl, methamphetamine	49017
28	B	M	Pt. I: Methamphetamine, fentanyl	49008
28	W	M	Pt. I: Fentanyl	49009
28	B	M	Pt. I: Heroin, fentanyl, acetyl-fentanyl, methamphetamine	49007
30	W	M	Pt. I: Fentanyl, methamphetamine, ethanol, alprazolam	49048
31	W	M	Pt. I: Heroin, acetyl-fentanyl, fentanyl, methamphetamine	49009
31	W	M	Pt. I: Fentanyl, methamphetamine, diphenhydramine	49097
32	W	M	Pt. I: Cocaine, methamphetamine, fentanyl	49007
32	W	M	Pt. I: Ethanol, methamphetamine, fentanyl	49007
32	W	F	Pt. I: Methamphetamine	49045
32	W	M	Pt. I: Fentanyl, heroin, methamphetamine	49024
32	W	F	Pt. I: Fentanyl	49007
32	W	M	Pt. I: Methamphetamine, fentanyl	49009
32	W	M	Pt. I: Tramadol	49001
33	W	M	Pt. I: Fentanyl, acetyl-fentanyl, methamphetamine	49009
33	W	M	Pt. I: Fentanyl, methadone, ethanol, alprazolam, lorazepam	49037
33	W	M	Pt. I: Fentanyl, acetyl-fentanyl, methamphetamine	49004
33	W	M	Pt. I: Fentanyl, alprazolam, ethanol	49048
34	W	M	Pt. I: Fentanyl, methamphetamine, methadone	49004
35	W	M	Pt. I: Methamphetamine, fentanyl	49082
36	W	M	Pt. I: Buprenorphine, amphetamine, fentanyl	49001
36	W	M	Pt. I: Fentanyl, acetyl-fentanyl, tramadol gabapentin	49007
37	W	F	Pt. I: Methamphetamine, fentanyl	49001
37	W	M	Pt. I: Amphetamine, methamphetamine, acetyl-fentanyl, fentanyl	49048
37	W	M	Pt. I: Methamphetamine, heroin, fentanyl	49009
37	W	M	Pt. I: Acute and Chronic Alcohol Use*	49024
38	W	M	Pt. I: Heroin, fentanyl	49009
38	W	M	Pt. I: Fentanyl, methamphetamine, hydrocodone, clonazepam	Unknown

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All Drug-Related Deaths (cont.)

39	W	M	Pt. I: Fentanyl, ethanol	49037
39	W	M	Pt. I: Fentanyl, norfentanyl	49004
40	W	M	Pt. I: Thyroid hormone	Unknown
41	W	M	Pt. I: Methamphetamine	49004
42	W	F	Pt. I: Opiates, methadone, buprenorphine, benzodiazepine, amphetamine	49012
42	B	M	Pt. I: Cocaine, cocaethylene, fentanyl	49048
42	W	M	Pt. I: Methamphetamine	49048
42	W	M	Pt. I: Fentanyl	49087
43	W	M	Pt. I: Fentanyl, methamphetamine	49001
43	W	M	Pt. I: Methamphetamine, fentanyl, heroin	49048
43	W	F	Pt. I: Buprenorphine, fentanyl, acetyl fentanyl	49048
44	W	F	Pt. I: Heroin, xylazine, fentanyl, acetyl-fentanyl	49008
44	W	M	Pt. I: Fentanyl, acetyl-fentanyl, xylazine, methamphetamine	49007
47	W	M	Pt. I: MDMA	49036
48	B	F	Pt. I: Fentanyl	49006
49	W	M	Pt. I: Methamphetamine, methadone	49001
49	B	M	Pt. I: Fentanyl, tramadol	49024
50	B	M	Pt. I: Fentanyl, acetyl-fentanyl, morphine, ethanol	49007
52	W	M	Pt. I: Methamphetamine, fentanyl	49002
53	B	M	Pt. I: Methamphetamine	49001
55	W	M	Pt. I: Methamphetamine, fentanyl	Unknown
55	W	F	Pt. I: Metoprolol	49008
57	W	M	Pt. I: Clozapine, valproic acid, lurasidone, diazepam	49002
58	B	M	Pt. I: Fentanyl	49007
59	W	M	Pt. I: Quetiapine	49008
59	B	F	Pt. I: Ethanol, fentanyl, acetyl fentanyl	49008
61	W	M	Pt. I: Heroin, fentanyl, trazodone, acetyl-fentanyl	49010
61	B	M	Pt. I: Fentanyl, cocaine	49048
61	W	F	Pt. I: Fentanyl	49037
62	B	M	Pt. I: Cocaine	49007
62	W	M	Pt. I: Methamphetamine	49008
62	W	M	Pt. I: Methamphetamine	49004
62	W	M	Pt. I: Fentanyl, acetyl-fentanyl, heroin, methamphetamine	49007
63	W	M	Pt. I: Fentanyl, methamphetamine	49001
64	B	M	Pt. I: Cocaine, ethanol	49037
64	W	M	Pt. I: Acetyl-fentanyl, amphetamine, fentanyl, flualprazolam, heroin	49001
67	W	M	Pt. II: Methamphetamine, ethanol*	49266
76	W	M	Pt. II: Opioid*	49009

* Case is not included in the following report

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Total deaths due to drugs: 2018, 2019, 2020

2018**68 deaths****21** opioid only**15** non-opioid only**32** opioid & non-opioid**2.6**

deaths per 10,000

2019**55 deaths****7** opioid only**21** non-opioid only**27** opioid & non-opioid**2.1**

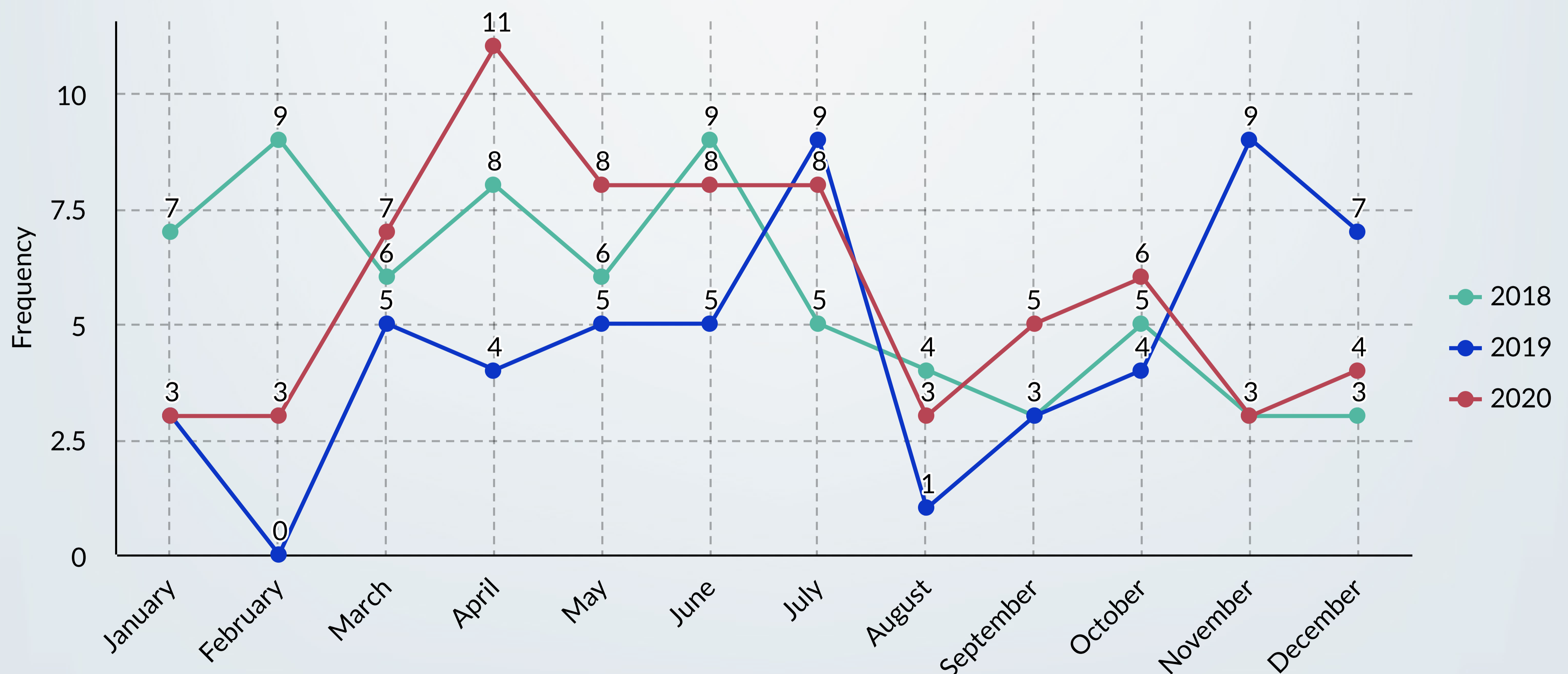
deaths per 10,000

2020**69 deaths****12** opioid only**13** non-opioid only**44** opioid & non-opioid**2.6**

deaths per 10,000

Number of nonfatal
overdoses among ED
discharges, 2020**800****32.0**Nonfatal overdoses
per 10,000

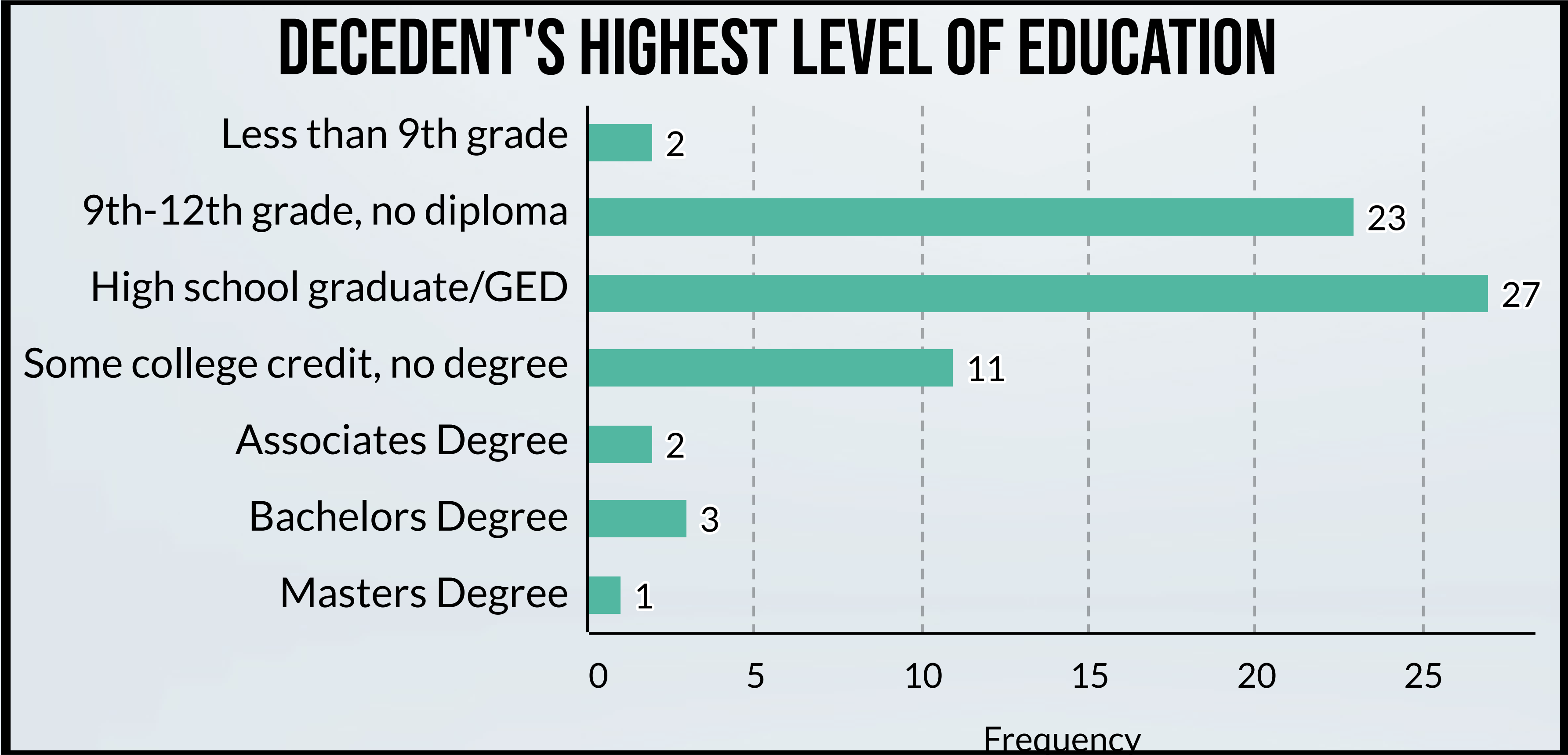
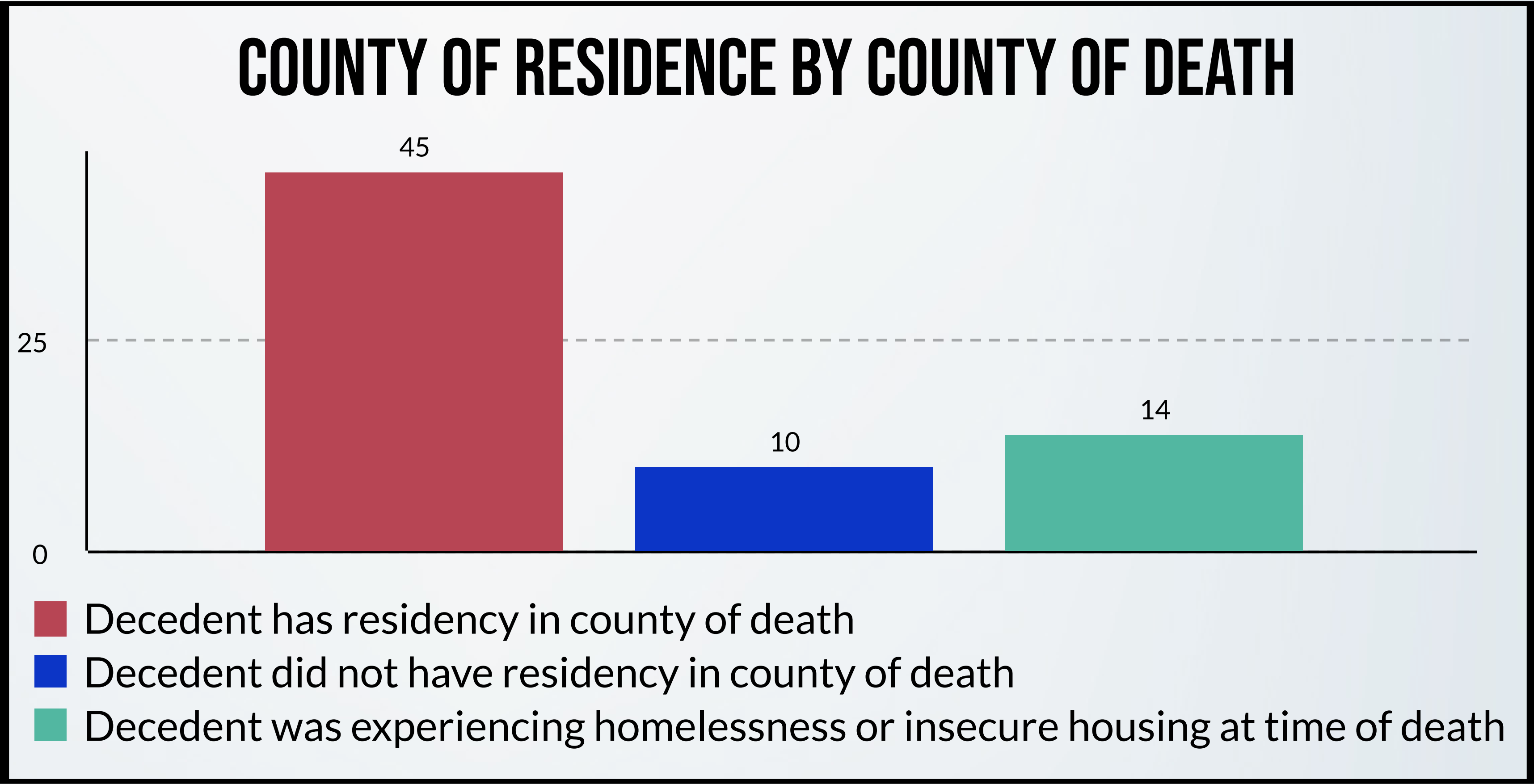
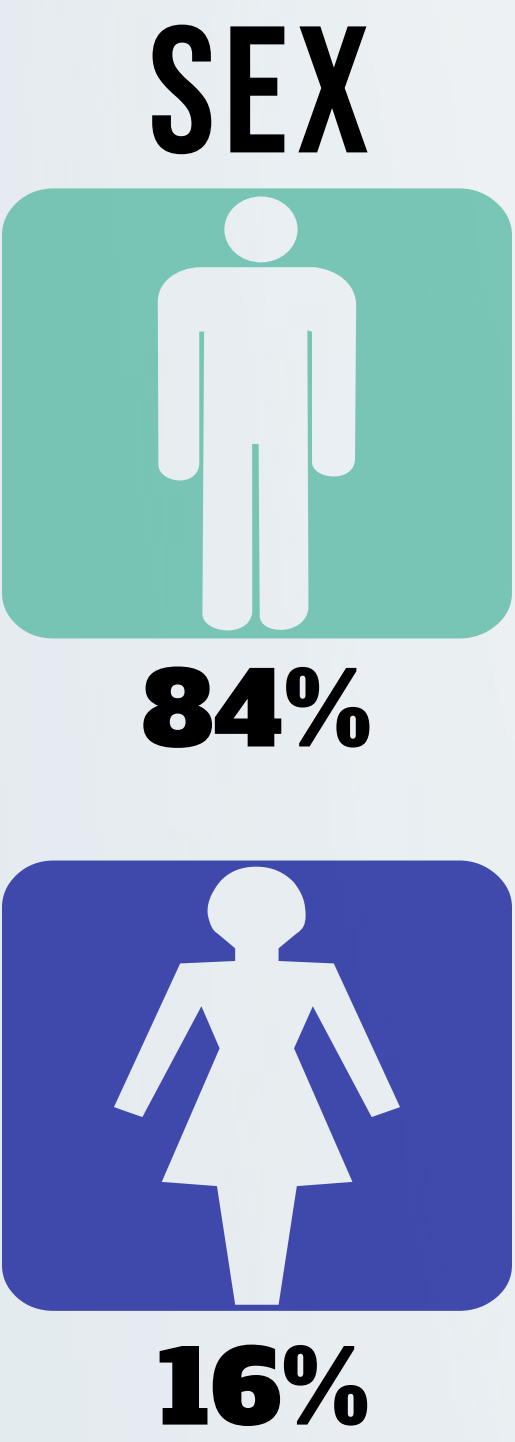
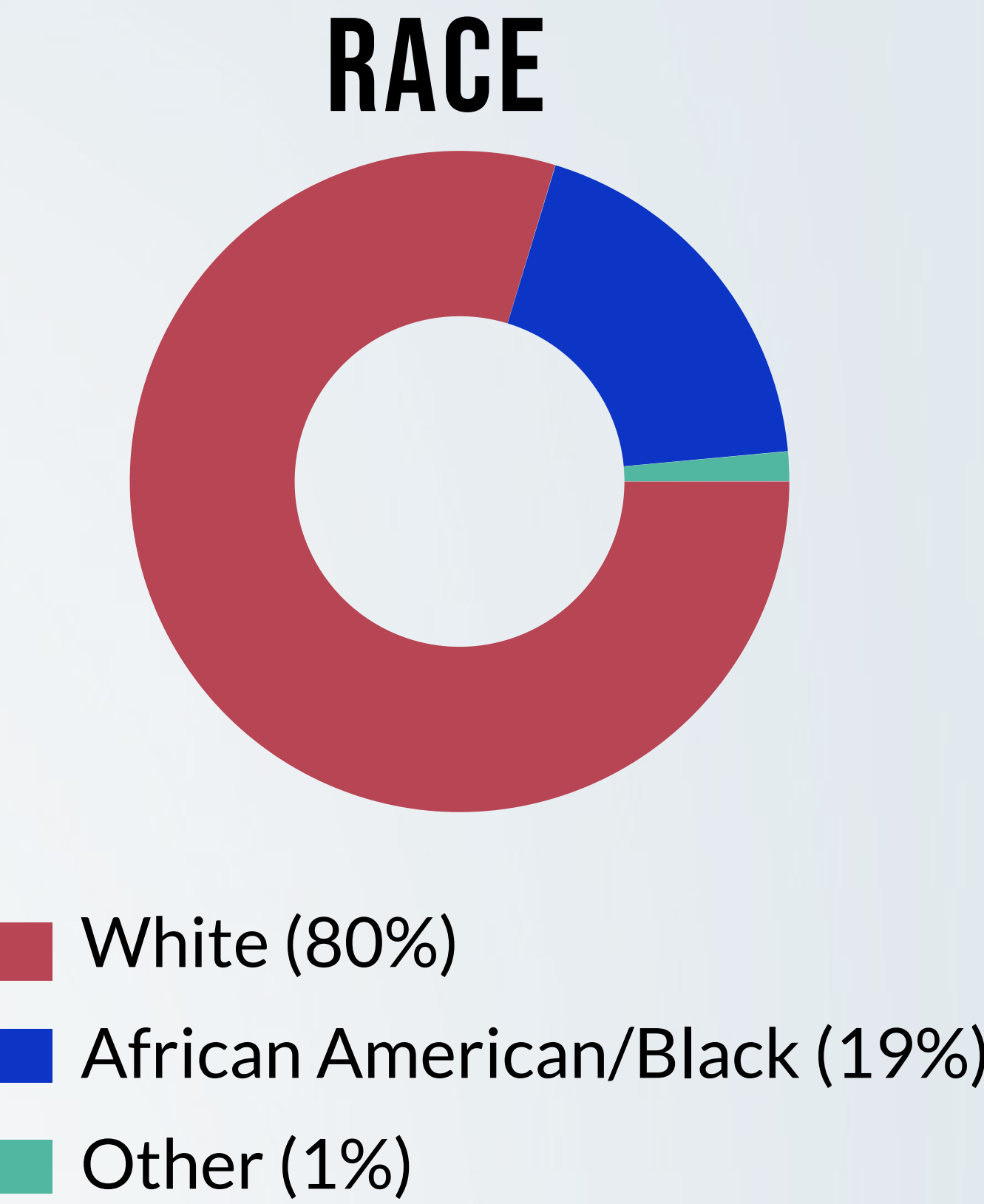
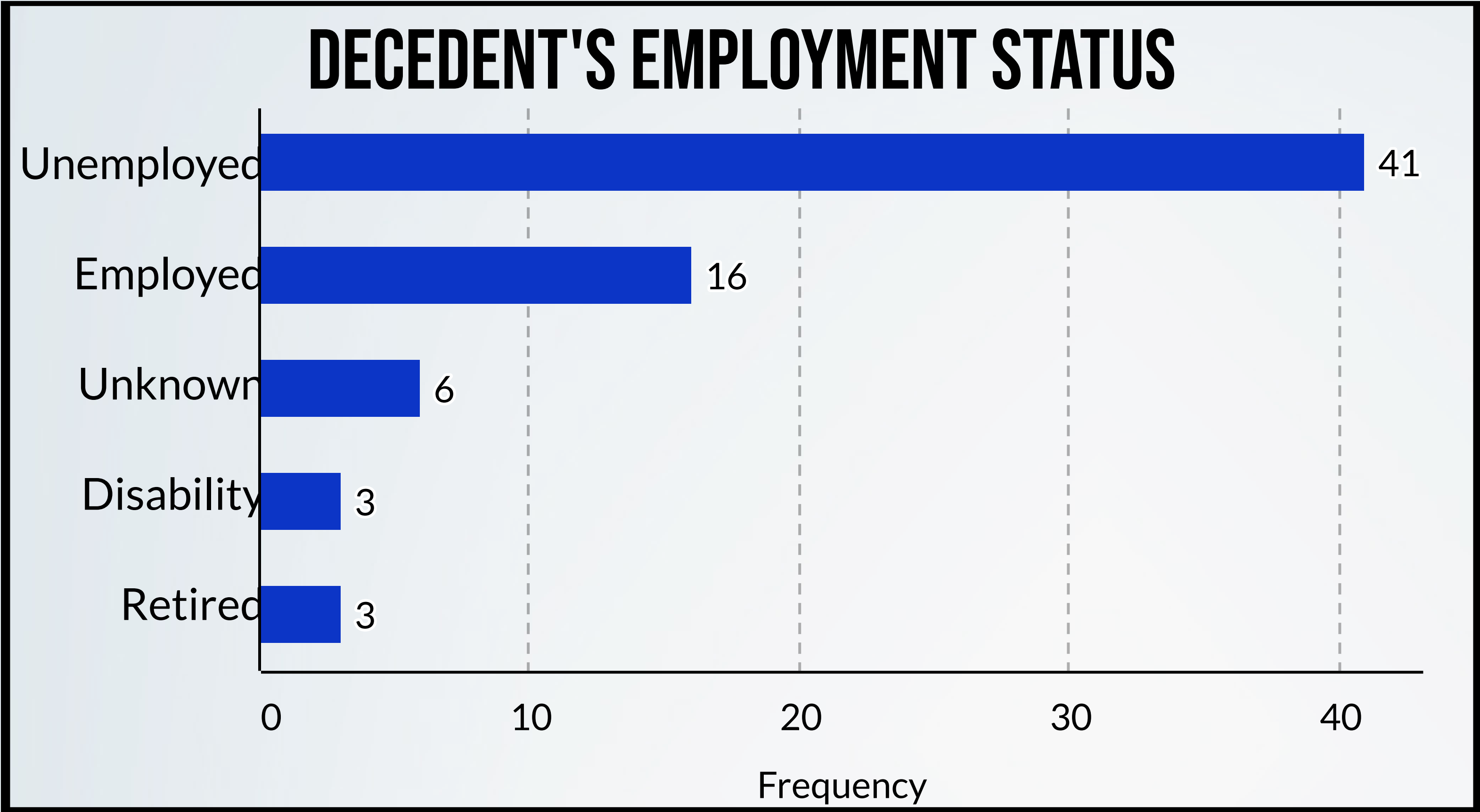
Number of all drug-related deaths by month and year

Percent decrease
from 2018 to 2019**19%****25%**Percent increase
from 2019 to 2020

Deaths Related to Opioids and Other Drugs

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Demographics

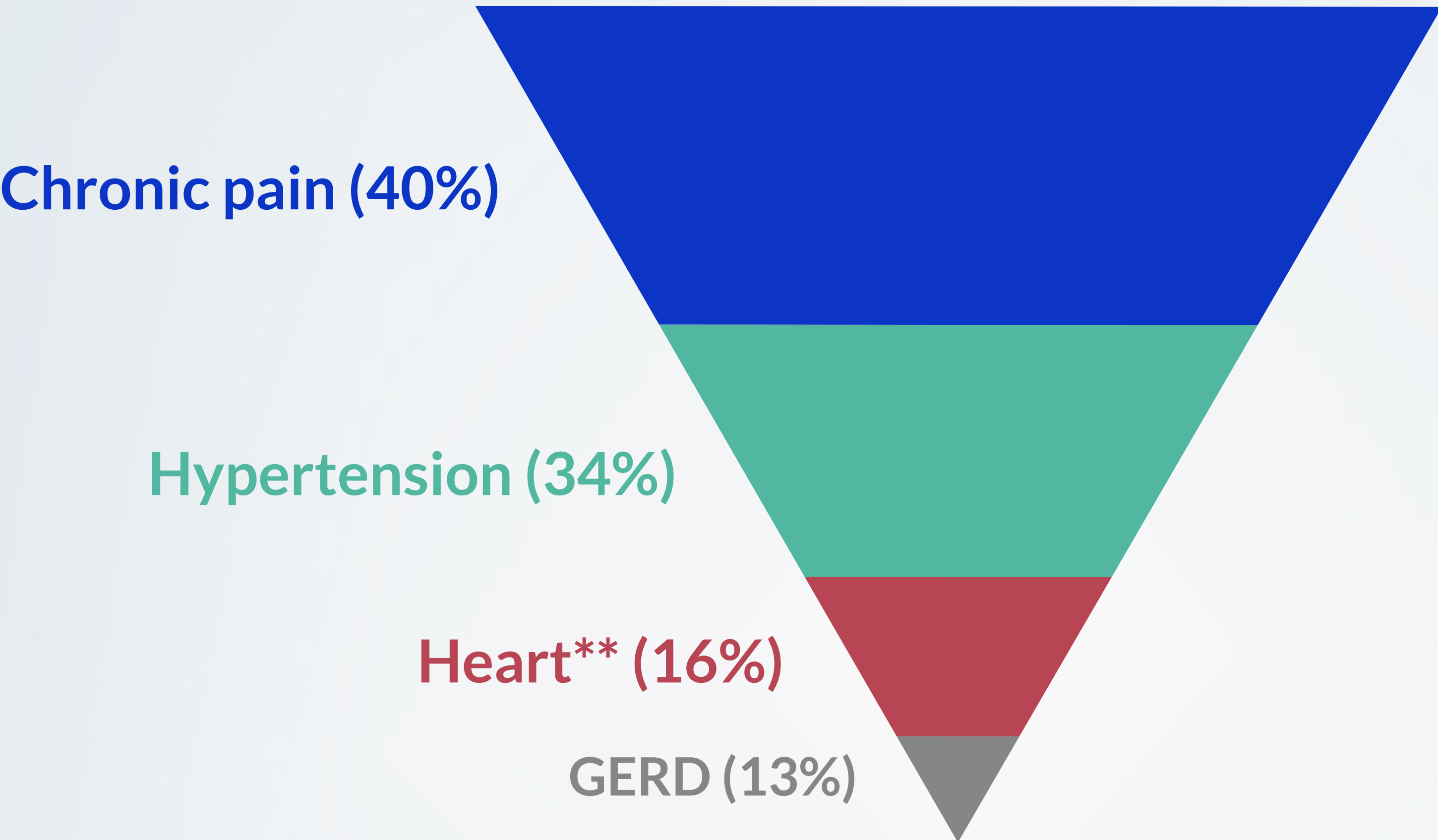


Deaths Related to Opioids and Other Drugs

Kalamazoo

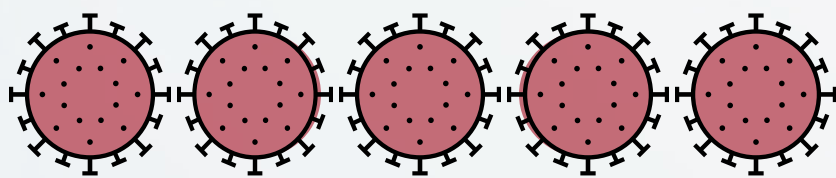
Health Factors

MOST PREVALENT AILMENTS*



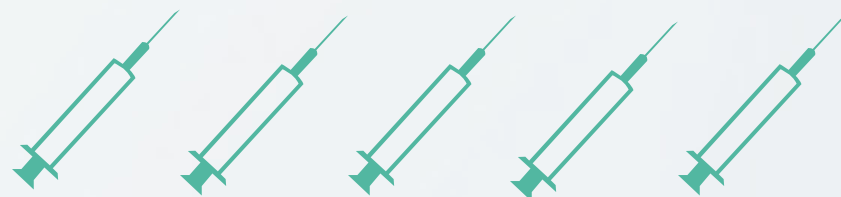
*Decedents may be represented in more than one category. Only illnesses with official diagnosis are included.

**Heart includes MI, CABH, CAD, AFib, ACD, and heart failure



At least **18** decedents were **Hepatitis C** positive

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



Decedent used tobacco

69%+



Decedent drank alcohol

50%+

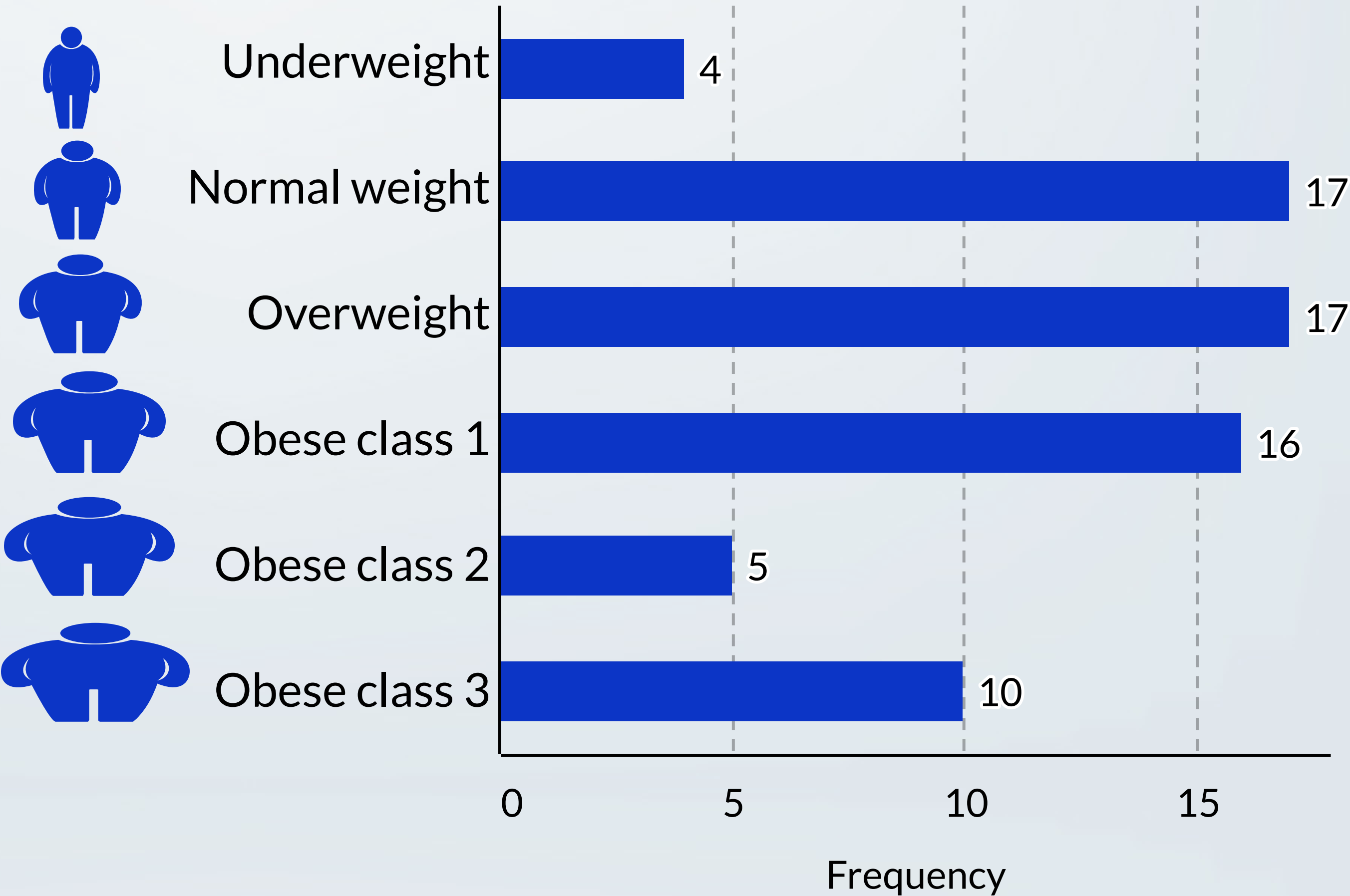


Decedent had a PCP

63%



BODY MASS INDEX (BMI)



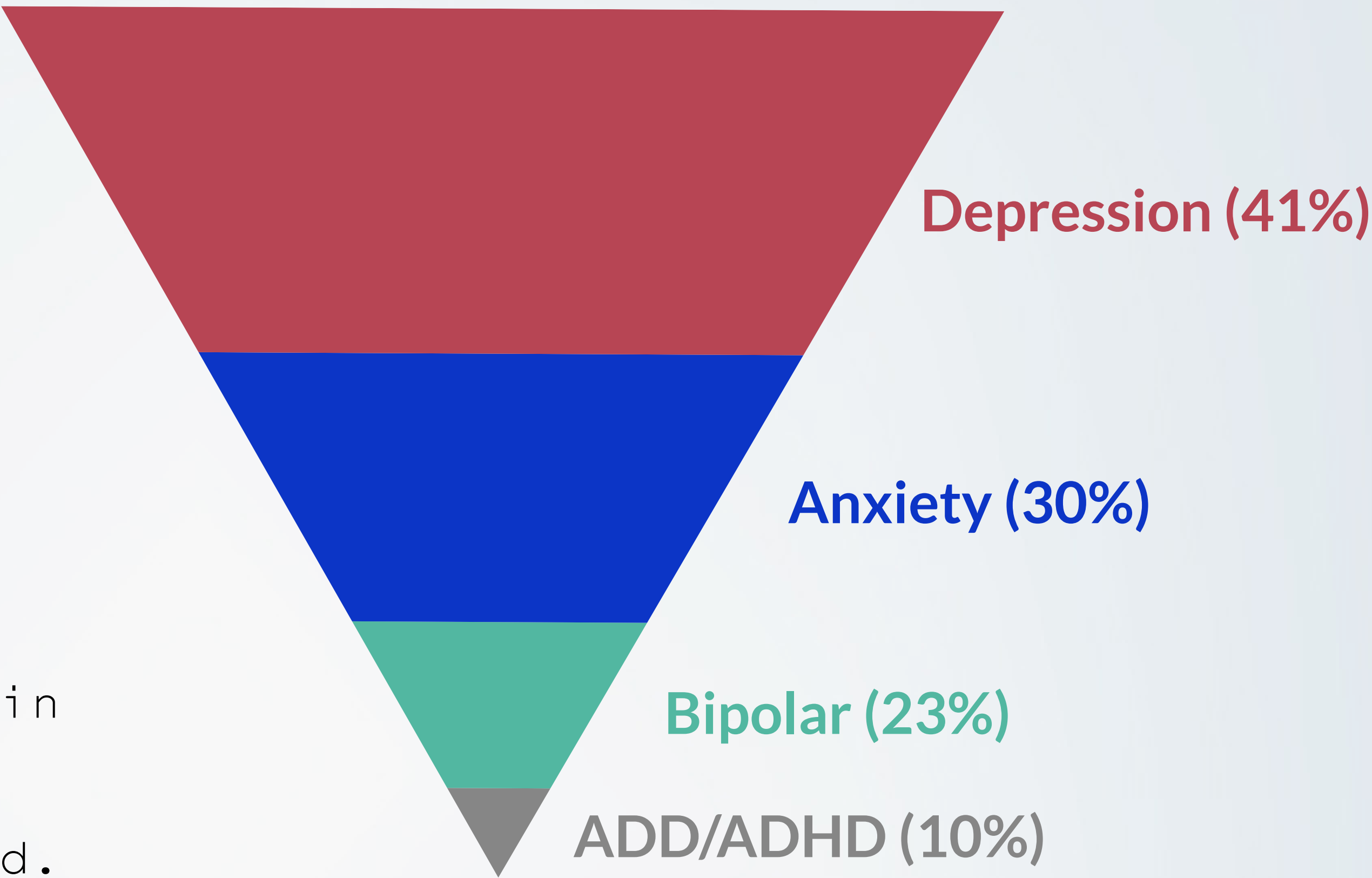
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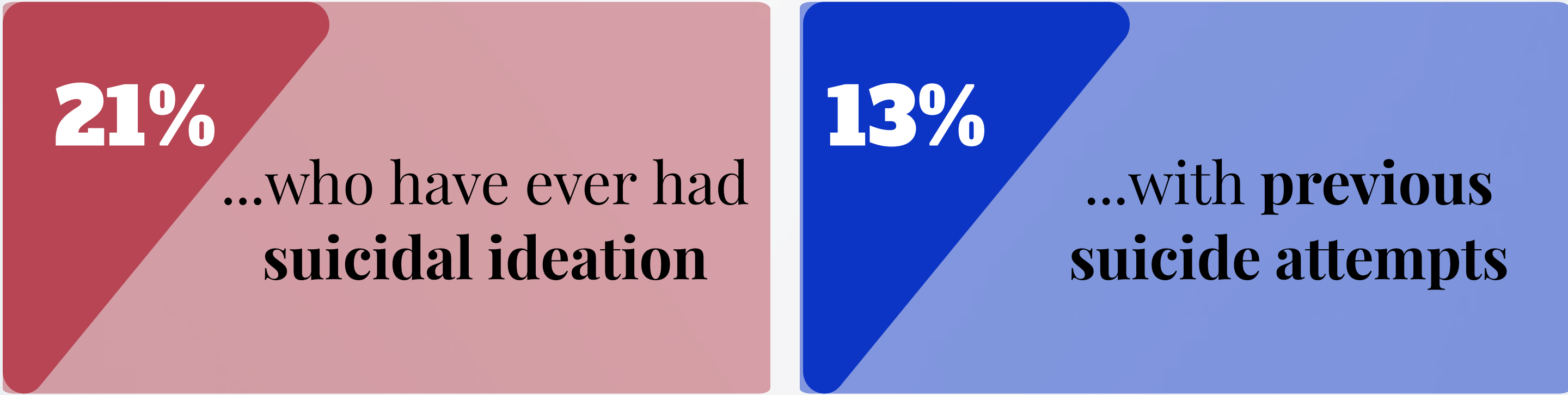
Mental Health Factors

MOST
PREVALENT
MENTAL ILLNESSES*

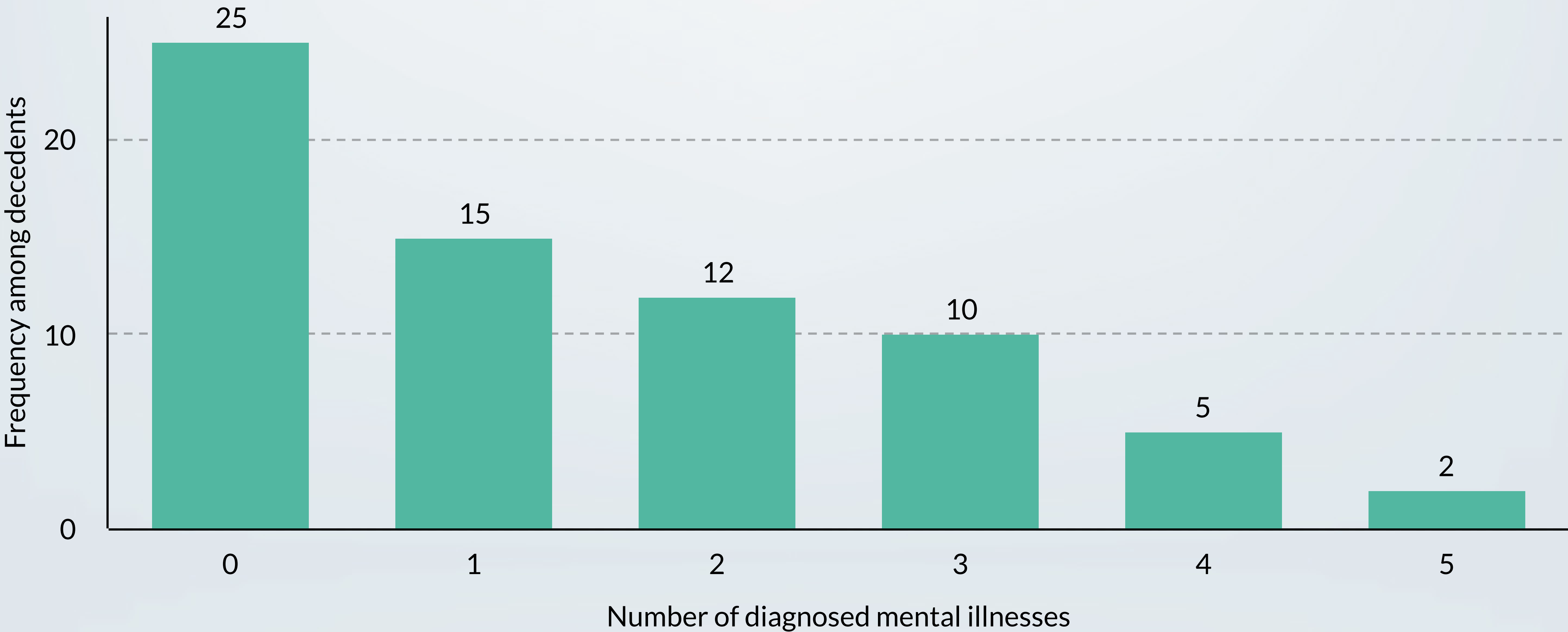
*Decedents may be represented in more than one category. Only mental illnesses with official diagnosis are included.



PERCENTAGE OF DECEDENTS...



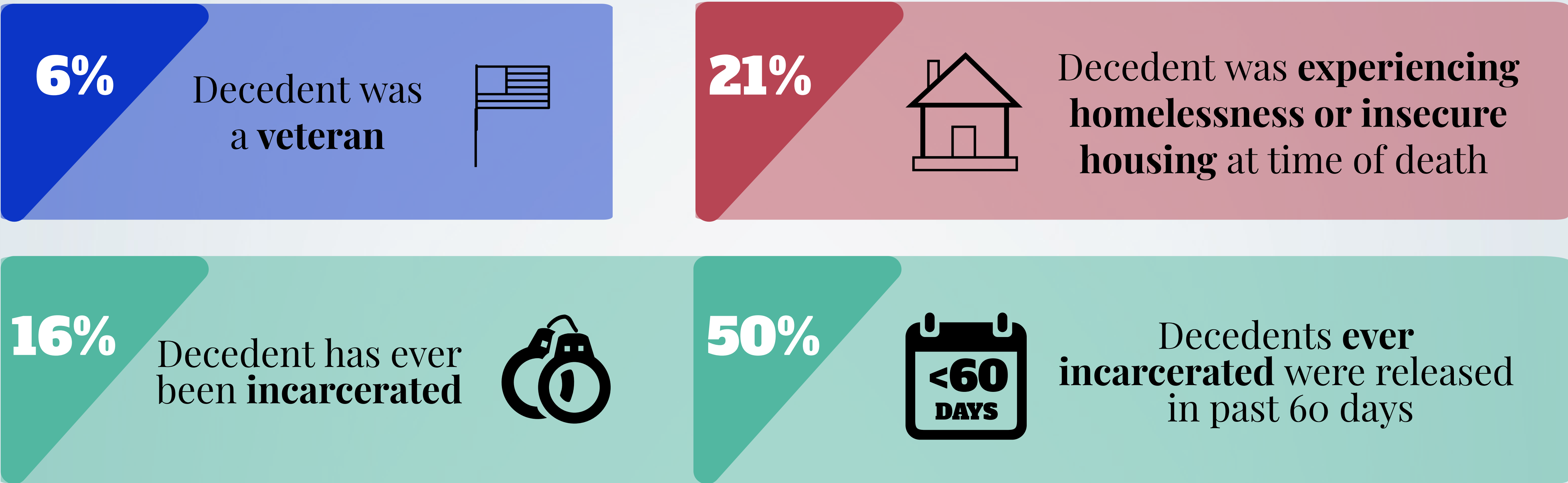
NUMBER DIAGNOSED MENTAL ILLNESSES AMONG DECEDENTS



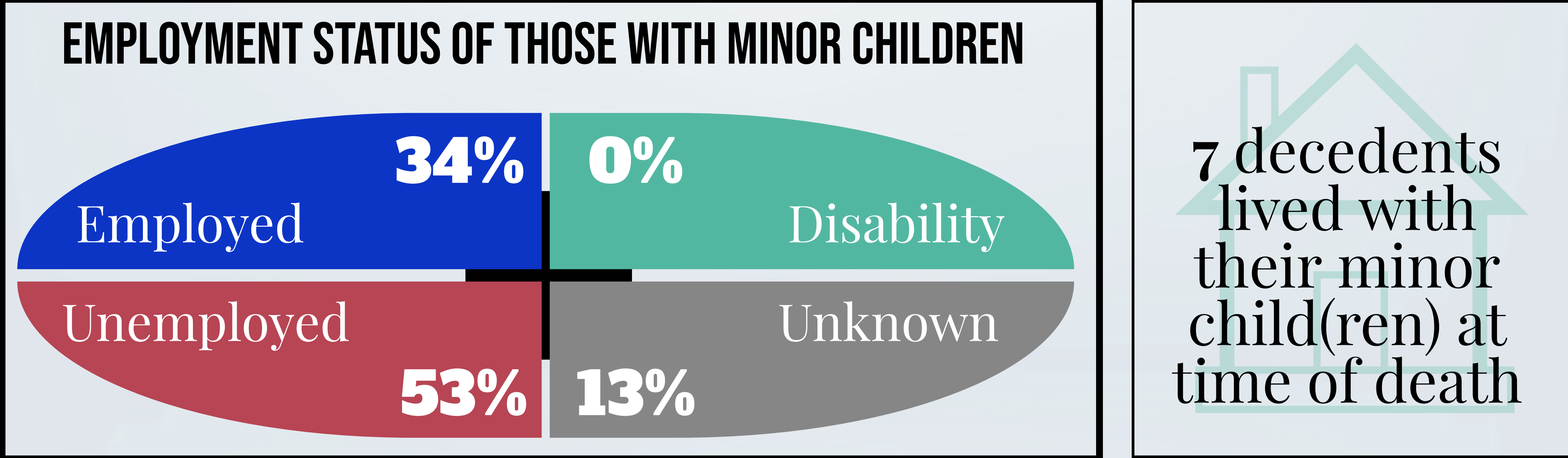
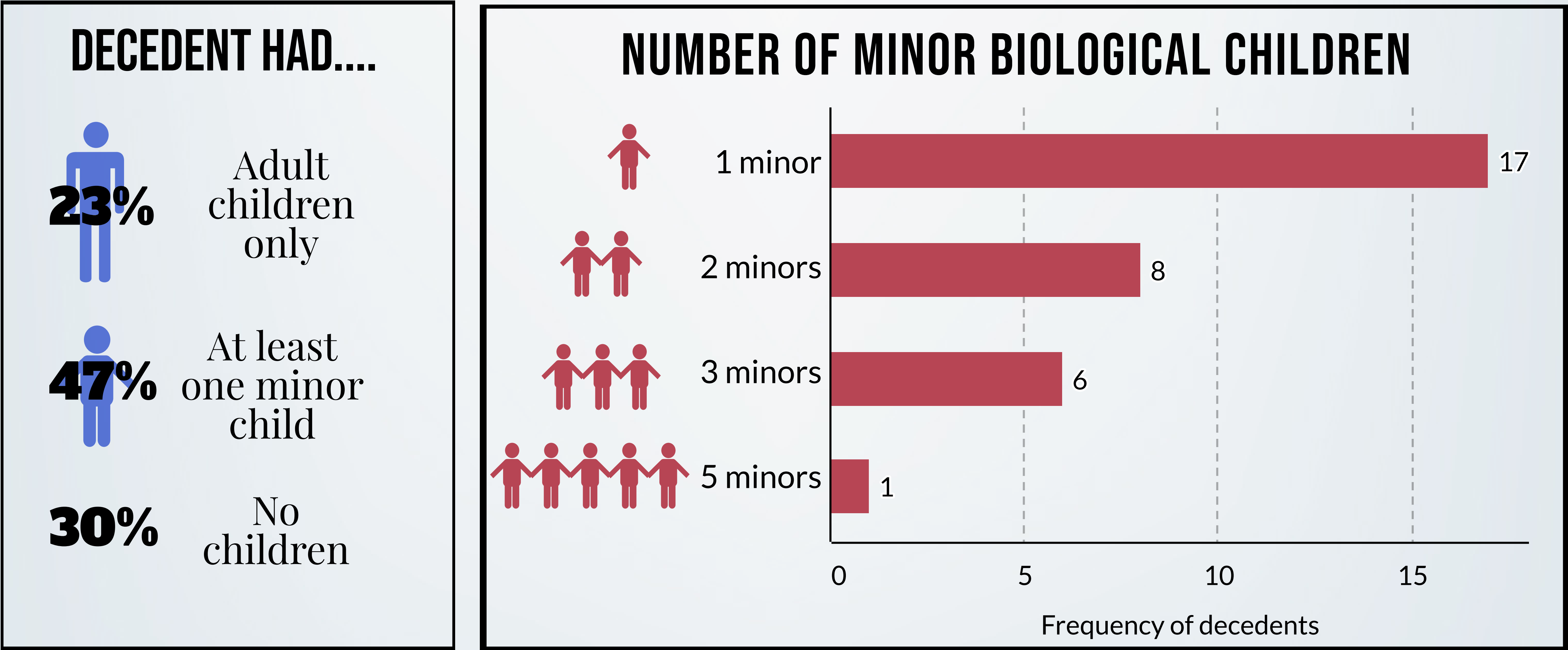
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Social Factors



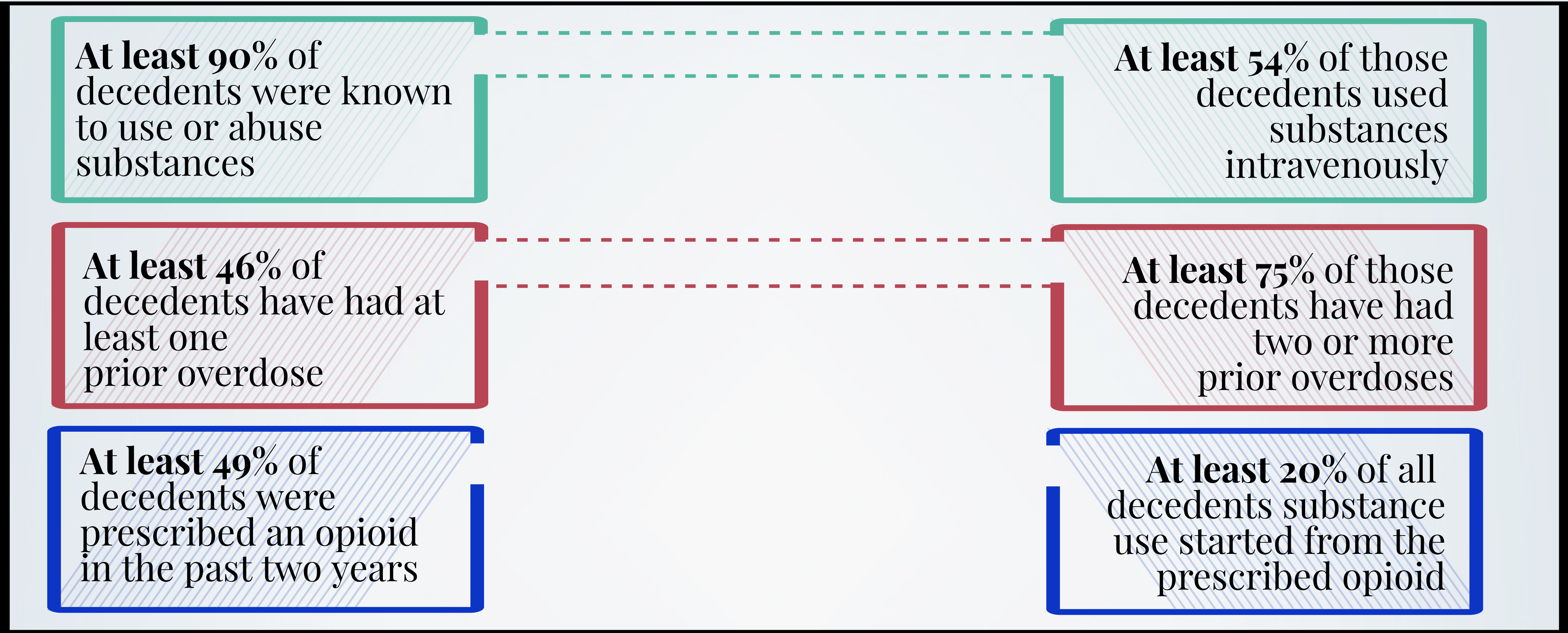
Children



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Substance Use History



RECOVERY HISTORY (N=62)*

35%

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

19%

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

35%

Decedent was recently substance free in the past three weeks

SUSPECTED REASONS FOR RELAPSE**

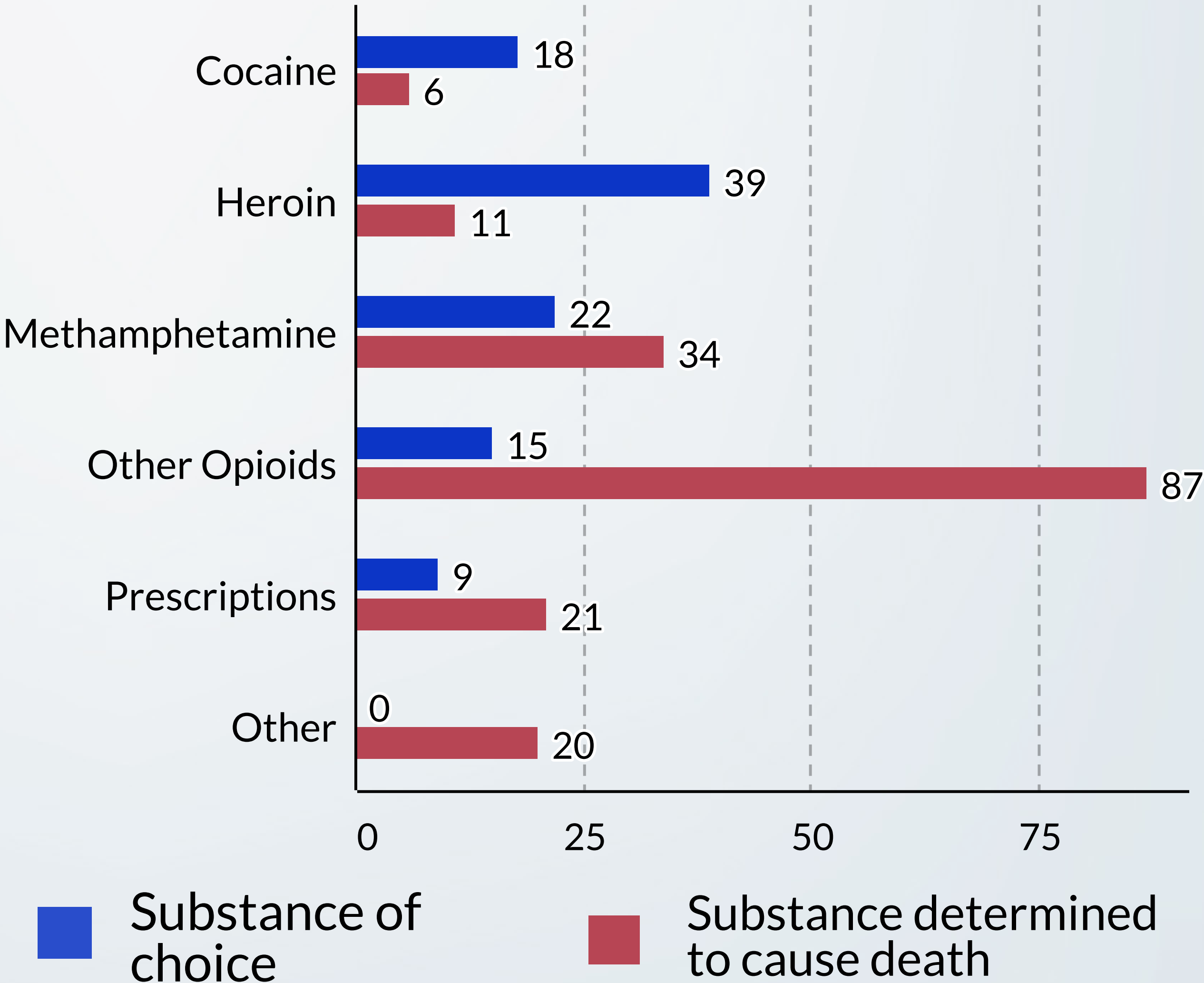


*ONLY decedents known to use substances are included.

**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 death of a family member, fight with a S/O, paranoia, and social circle pressure

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: 1 decedent would use any substance available, 6 were not known to use substances, and substance of choice information was unavailable for 3 decedents.

Prescriptions does not include opioids.

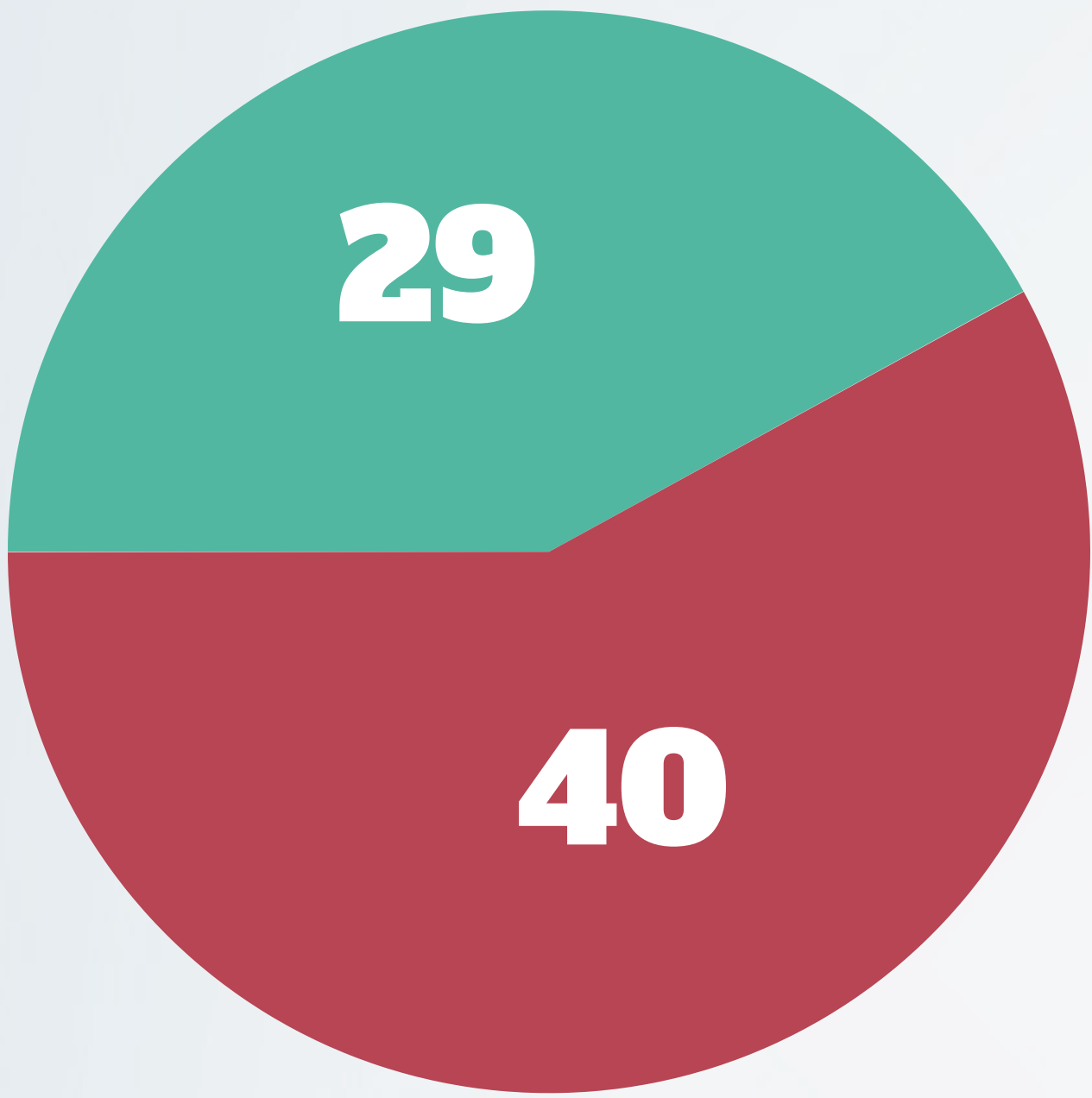
Other includes diphenhydramine, ethanol, flualprazolam, ketamine, MDMA, mitragynine, thyroid hormone, and xylazine.

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Naloxone Administration

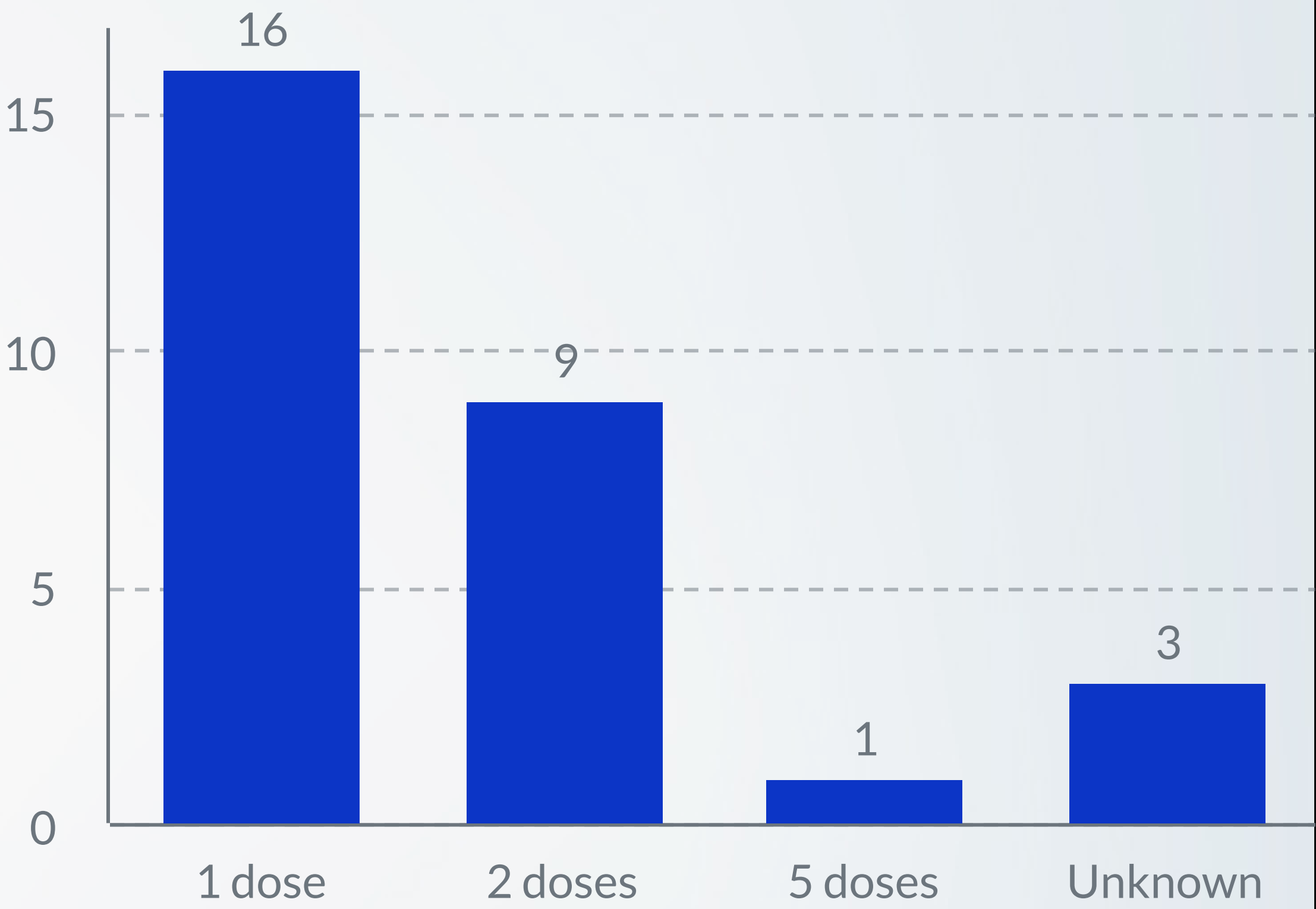
NALOXONE ADMINISTRATION STATUS



Naloxone administered

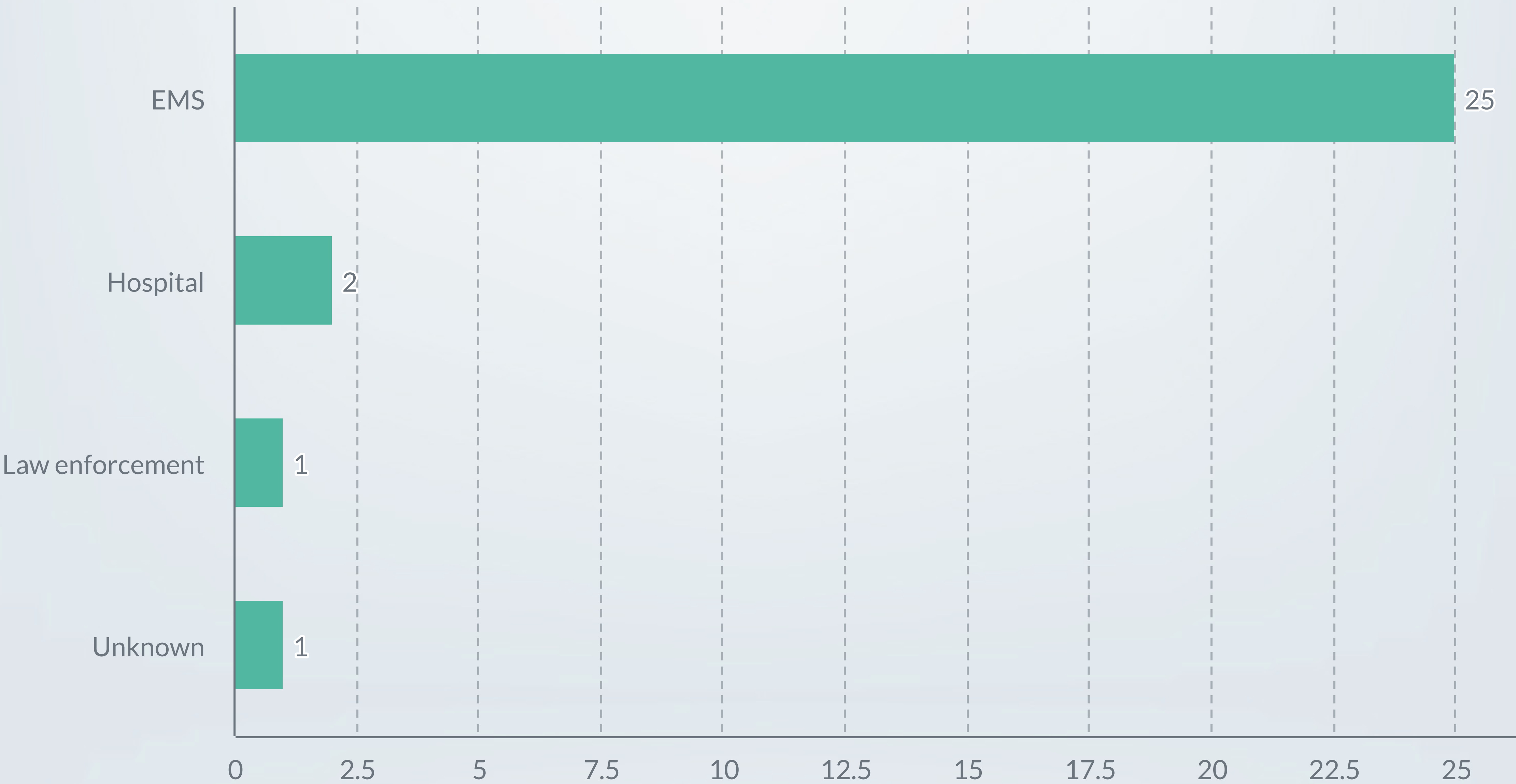
No Naloxone administered

HOW MANY DOSES (2 MG) OF NALOXONE WERE ADMINISTERED



6 decedents were given extensive resuscitative efforts (CPR, epinephrine, AED shock) but were not given Naloxone.

WHO ADMINISTERED NALOXONE?



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Death Scene Findings



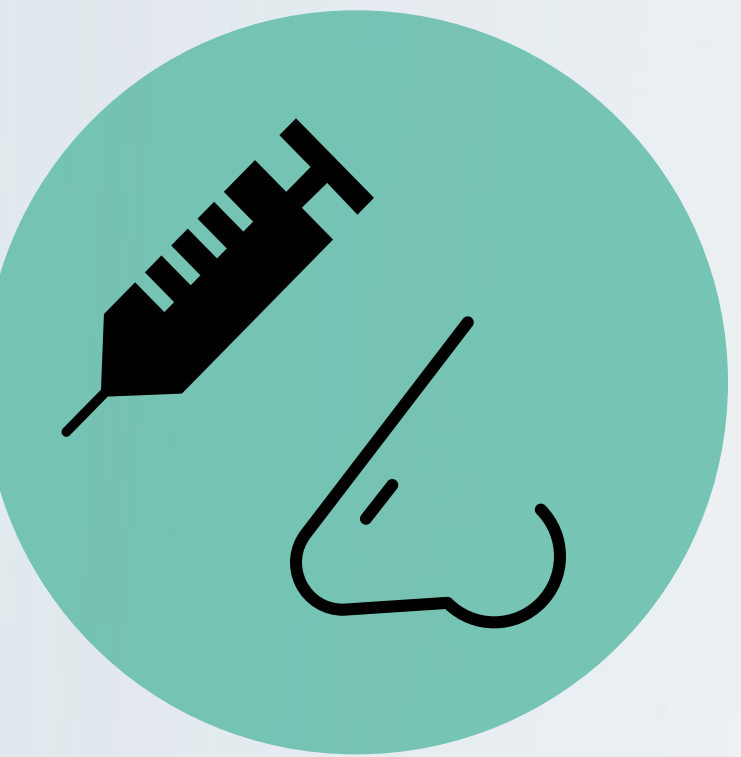
26%
Were found
by family



77%
Used the fatal
substance(s)
alone



0%
Were found
by a minor



42%
Were given
Narcan



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



7%
Had Narcan on
scene and/or
were prescribed
Narcan



38%
Were dead
upon EMS
arrival



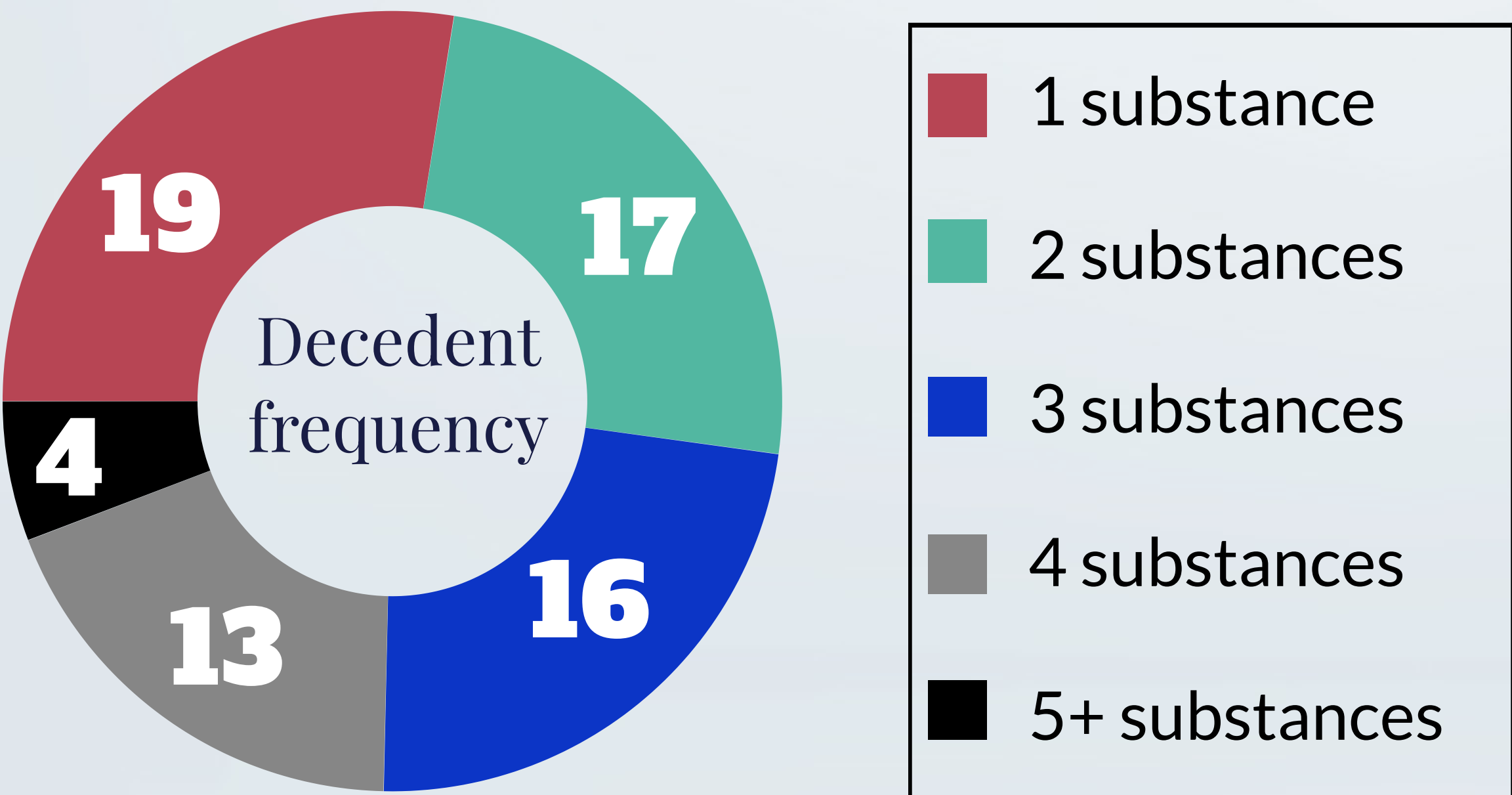
37%
Died at the
hospital



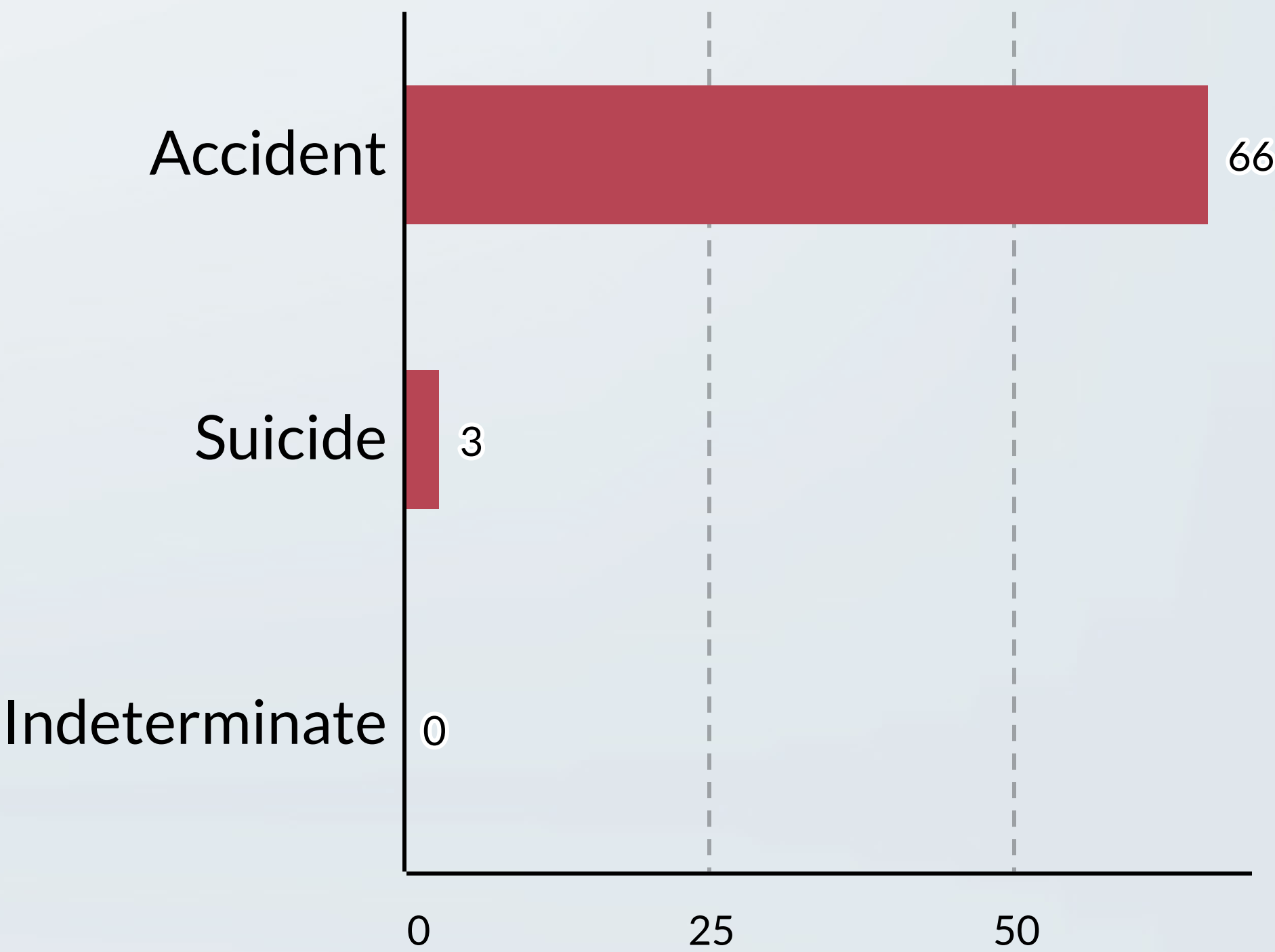
33%
Died at their
residence

Autopsy and Toxicology Results

NUMBER OF SUBSTANCES
CONTRIBUTING TO DEATH



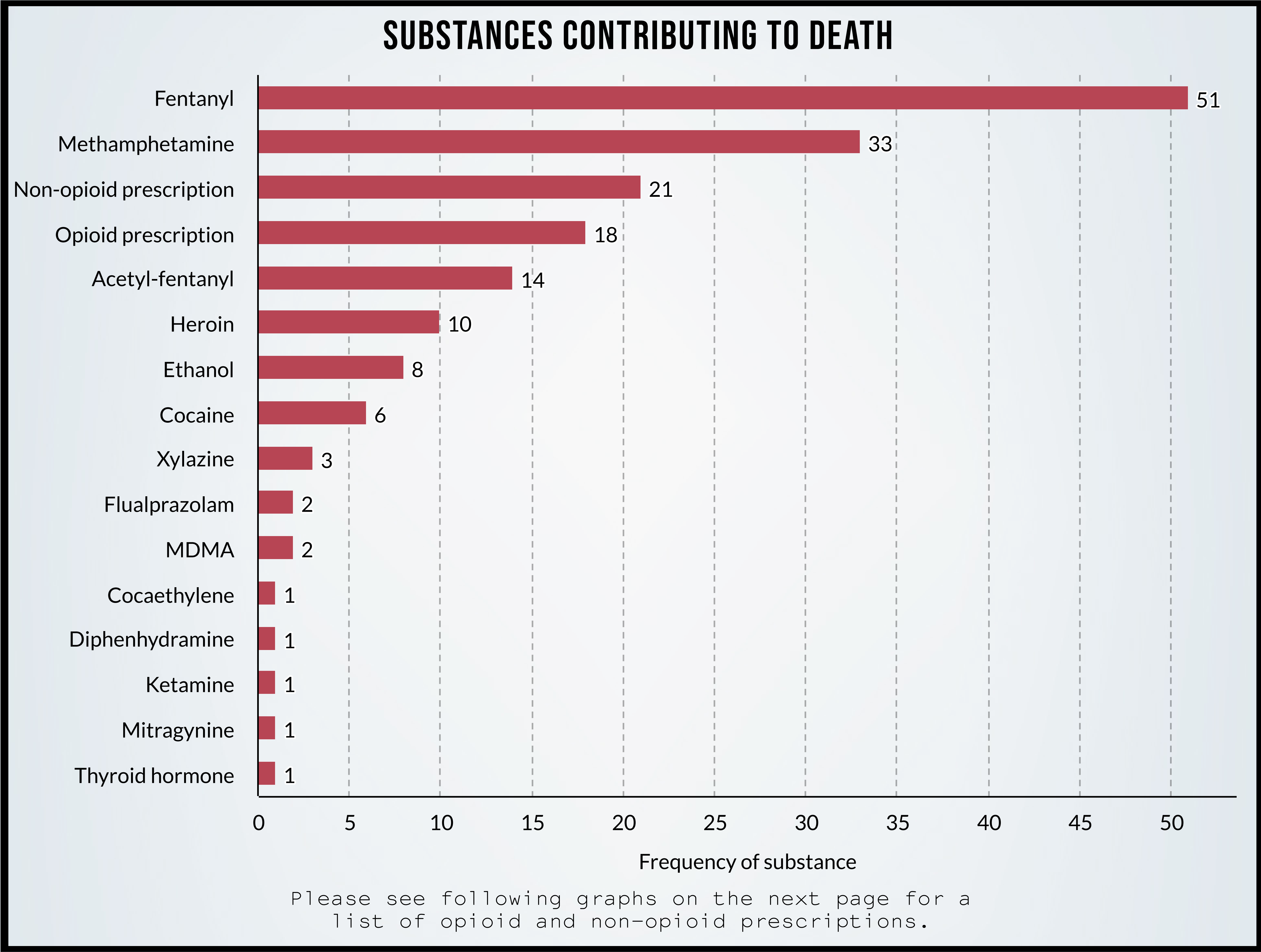
MANNER OF DEATH



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Substance Breakdown



HEROIN & FENTANYL

- 10 decedents had heroin in their toxicology
- All 10 of these decedents also had fentanyl in their toxicology

XYLAZINE & FENTANYL

- 3 decedents had xylazine in their toxicology
- All 3 of these decedents also had fentanyl in their toxicology

BENZODIAZEPINES & OPIOIDS

- 7 decedents had a benzodiazepine and an opioid in their toxicology
- 3 decedents were prescribed that opioid and benzodiazepine

METHAMPHETAMINE & OPIOIDS

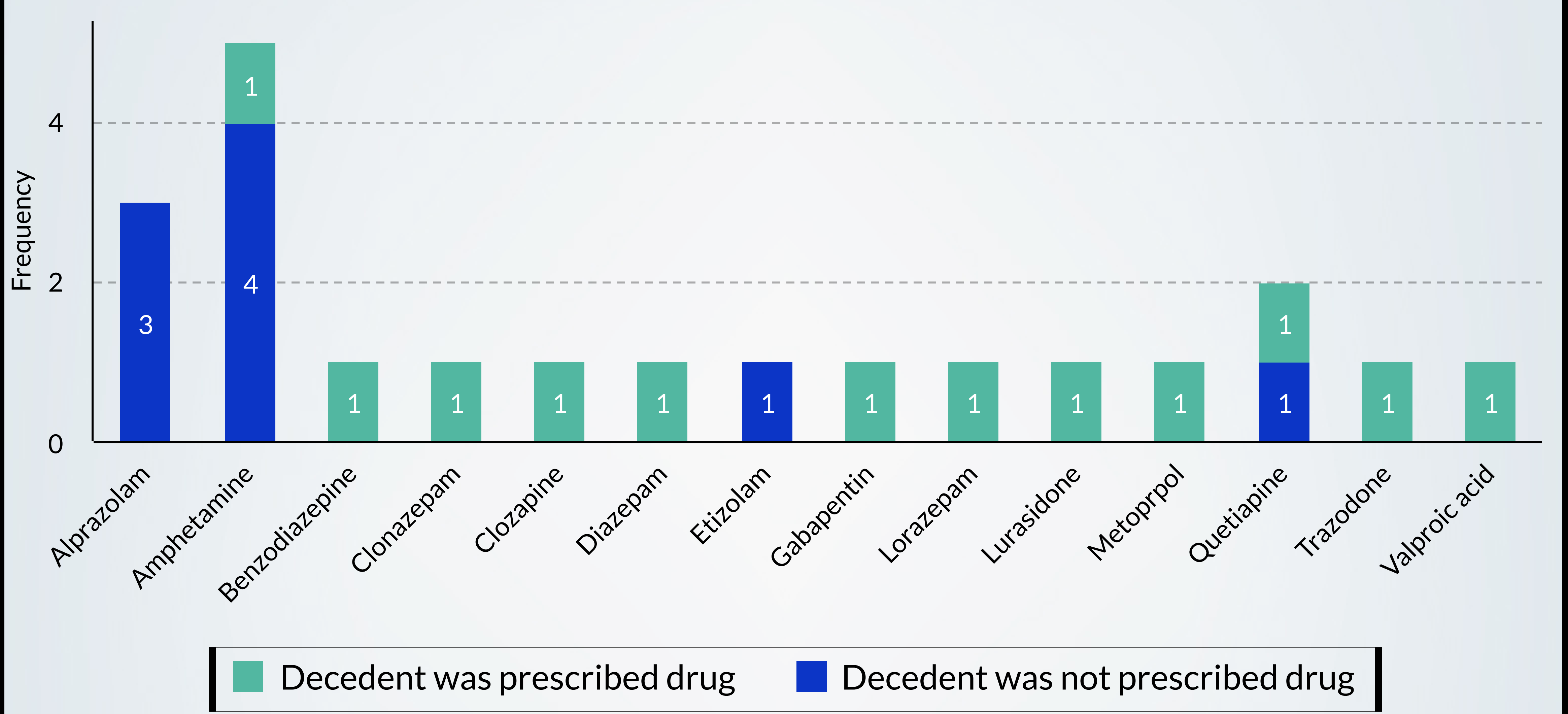
- 27 decedents had methamphetamine and opioid(s) in their toxicology
- 6 decedents had methamphetamine and heroin in their toxicology

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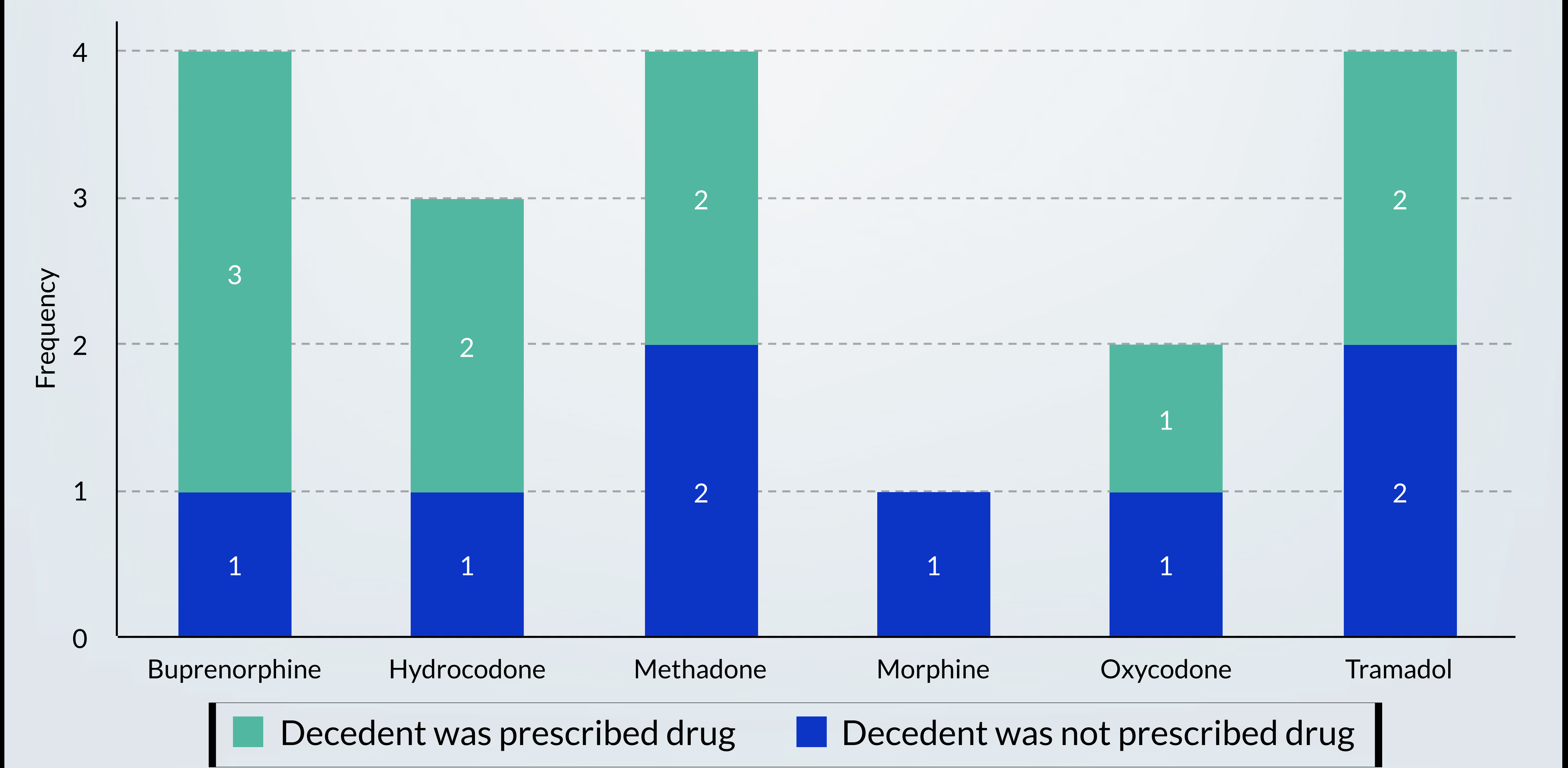
Kalamazoo

Autopsy and Toxicology Results, cont.

NON-OPIOID PRESCRIPTIONS PRESENT IN TOXICOLOGY



OPIOID PRESCRIPTIONS PRESENT IN TOXICOLOGY



Note: Of the 51 decedents with fentanyl present in their toxicology, 0 were prescribed fentanyl