

Deaths related to opioids and other drugs

Annual Report 2021

Grand Traverse County

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.

Purpose: This data was collected by the Office of the Medical Examiner (MEO) in the Department of Pathology at Western Michigan University Homer Stryker M.D. School of Medicine (WMed). Unless otherwise noted, data is from 2021 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) reports, EMS runsheets, death certificates, obituaries, medical records, toxicology reports, and autopsy reports.

Note: AA/H: American Indian/Alaskan Native and Hispanic; A=Asian; B=Black/African-American; H=Hispanic; W=White; F=Female; M=Male

Please email questions to pathology@med.wmich.edu

Office of the Medical Examiner
Department of Pathology
Homer Stryker M.D. School of Medicine

Deaths Related to Opioids and Other Drugs

Grand Traverse County

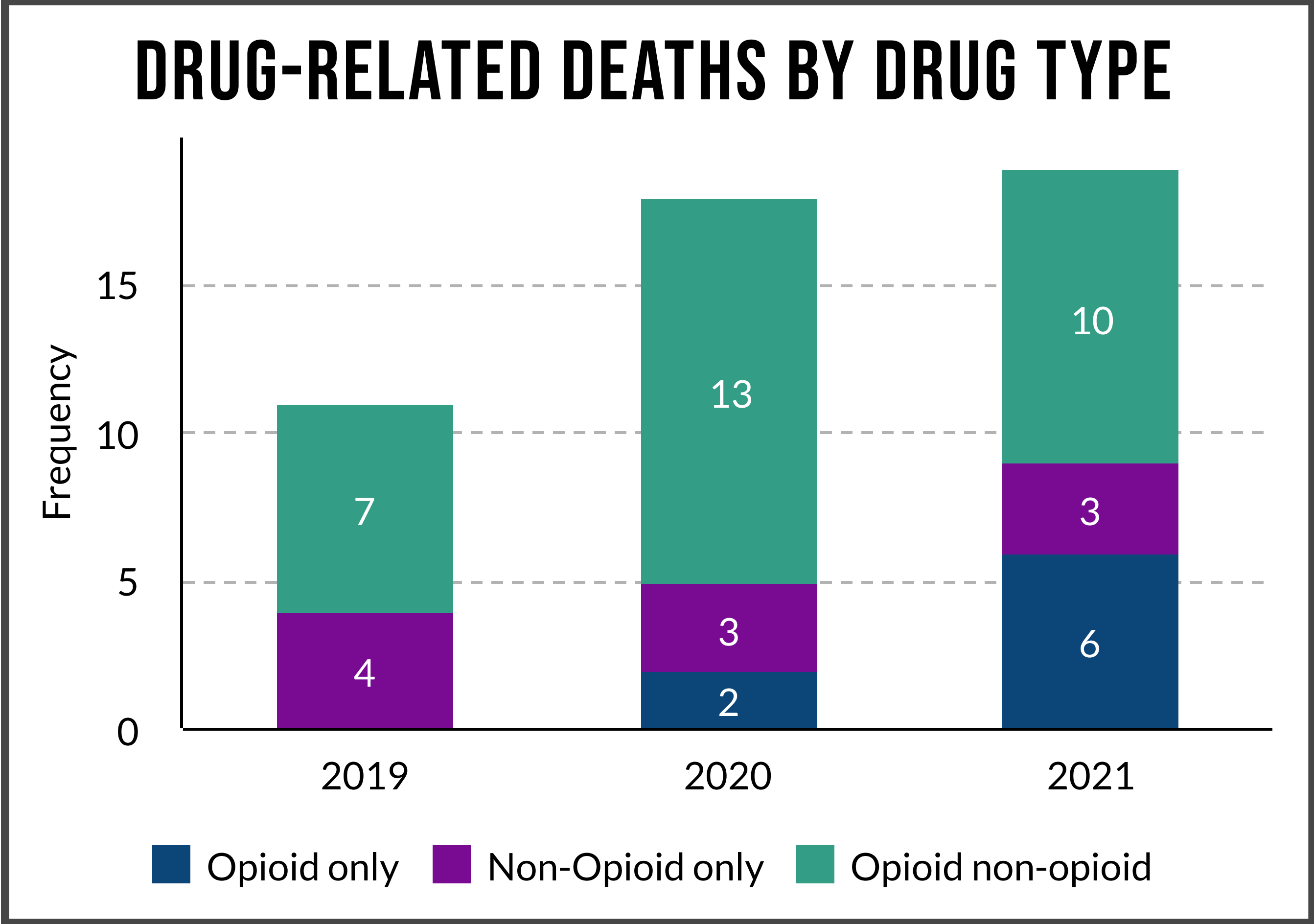
All drug-related deaths

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
29	W	M	fentanyl, methamphetamine	49685
31	W	M	fentanyl, methamphetamine	49685
32	W	M	fentanyl, heroin	49686
32	H	M	fentanyl	49617
32	W	F	mitragynine	49686
36	A	M	diazepam, fentanyl	49685
38	W	M	fentanyl, methamphetamine, para-fluorofentanyl	49601
39	W	M	diazepam, fentanyl	49650
41	AA/H	M	acetyl-fentanyl, fentanyl, mitragynine, para-fluorofentanyl	49643
42	W	M	7-amino clonazepam, acetyl-fentanyl, cocaine, fentanyl, heroin, methamphetamine, mitragynine, nordiazepam, para-fluorofentanyl, xylazine	49686
43	W	F	fentanyl, methamphetamine	Unknown
44	W	M	fentanyl	49685
48	W	M	fentanyl	49686
56	W	F	amitriptyline, gabapentin	49686
57	W	M	acetyl-fentanyl, fentanyl, heroin, methamphetamine, para-fluorofentanyl	49633
66	W	M	clonazepam, diphenhydramine	49616
68	B	M	Fentanyl, methamphetamine, para-fluorofentanyl	49643
68	W	F	bupropion	49649
68	B	M	ethanol, fentanyl, methylphenidate, para-fluorofentanyl, ritalinic acid, xylazine	49686

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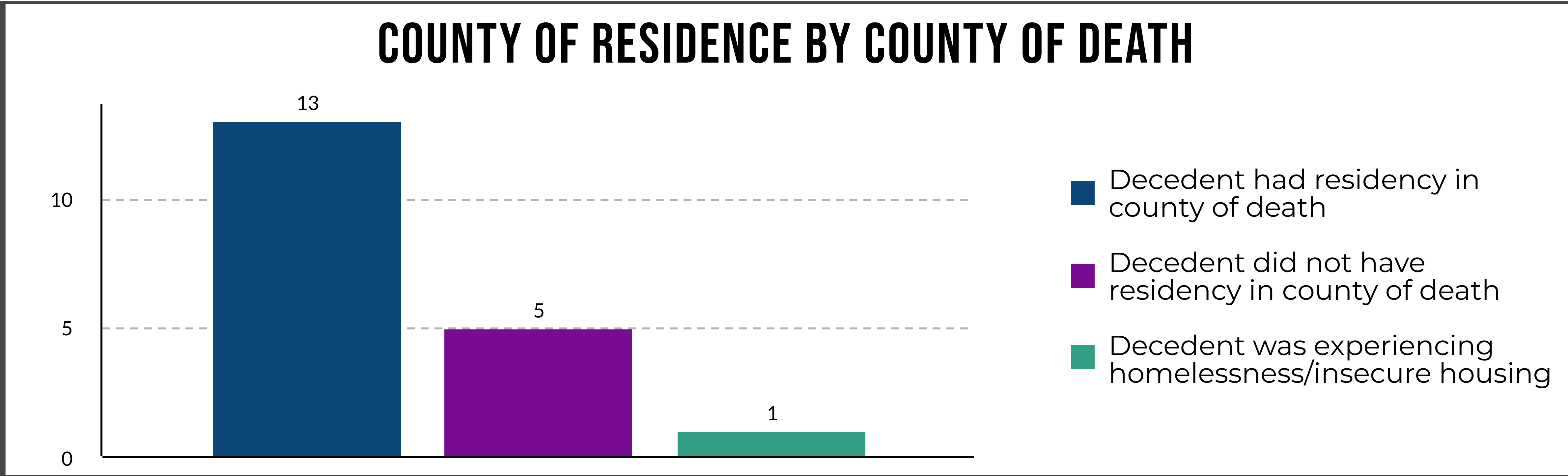
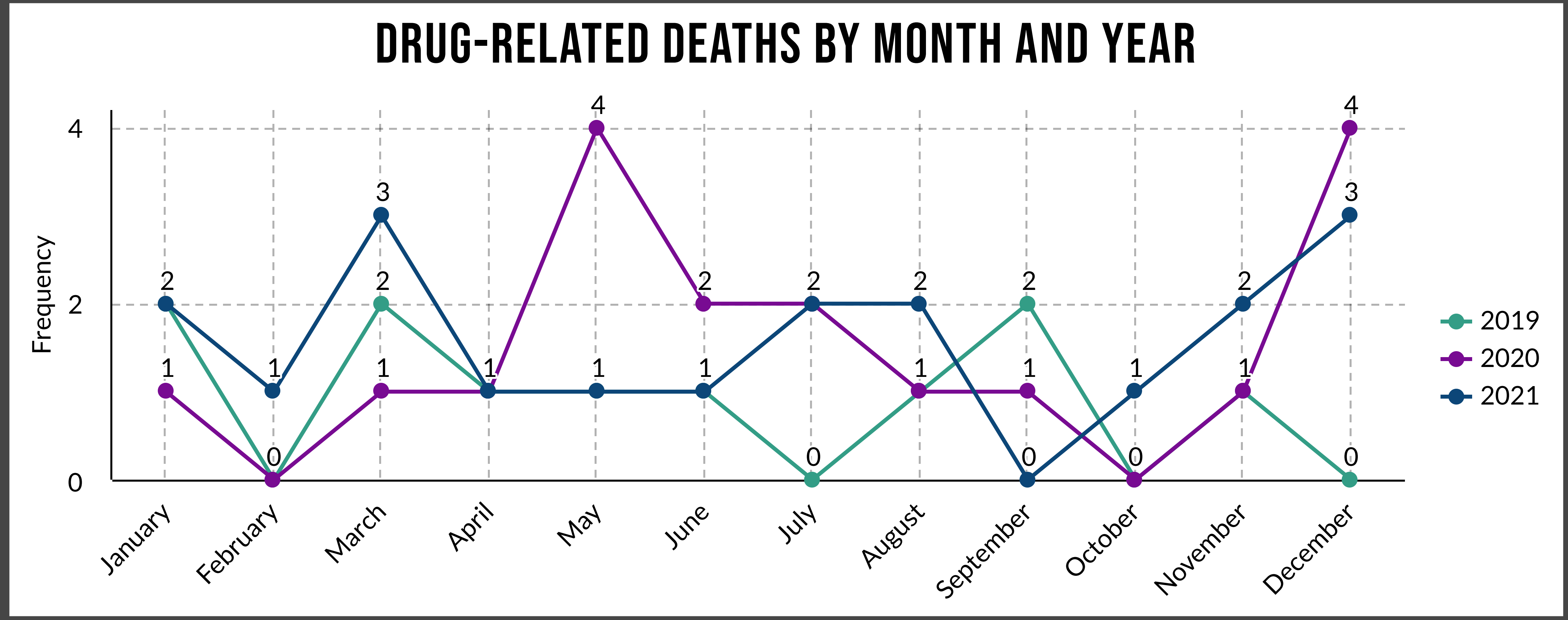
Total Drug-Related Deaths



Year	Total deaths	Deaths per 10,000
2019	11	1.2
2020	18	1.9
2021	19	2.0

Percent change

6% from 2020 to 2021

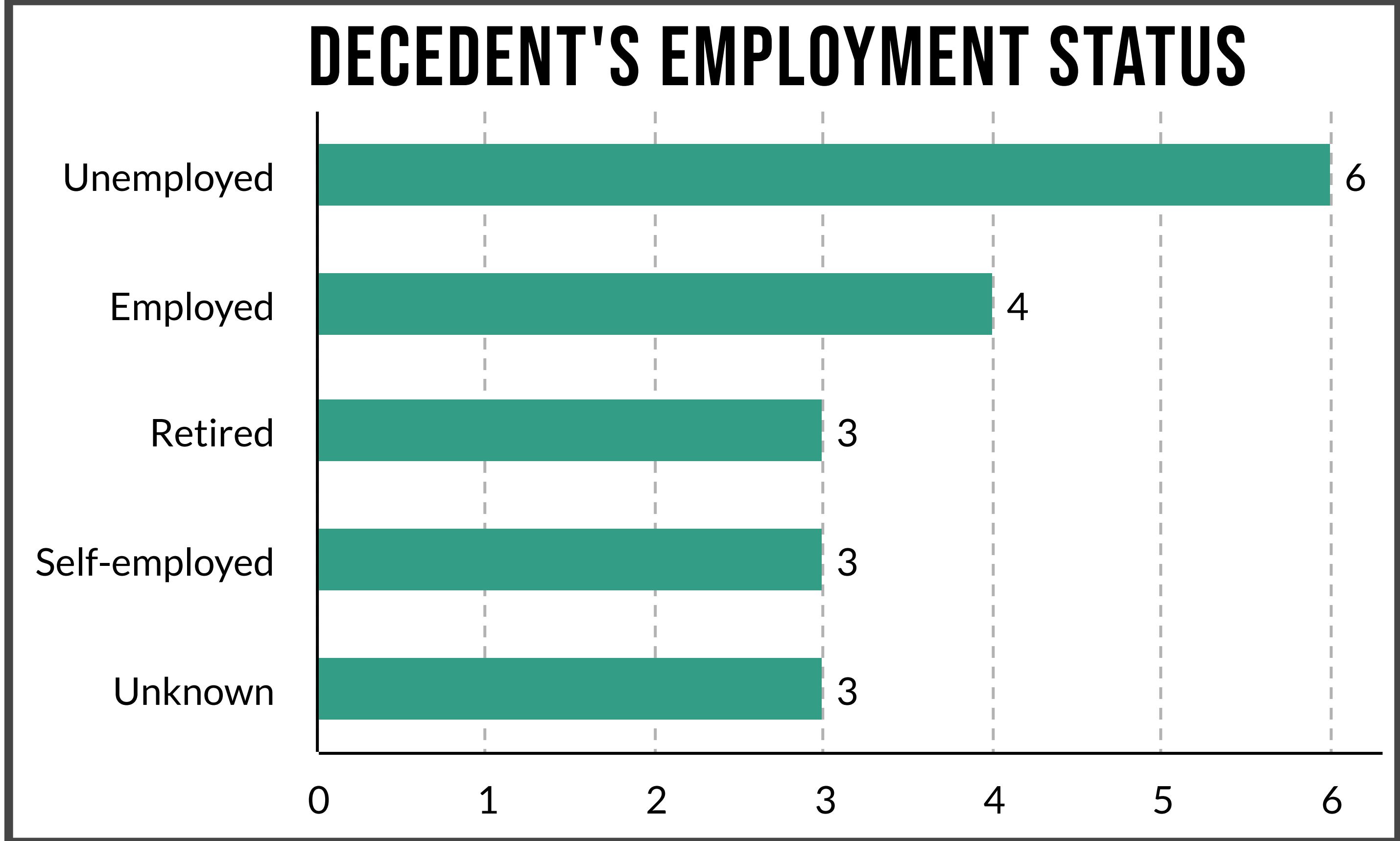


Deaths Related to Opioids and Other Drugs

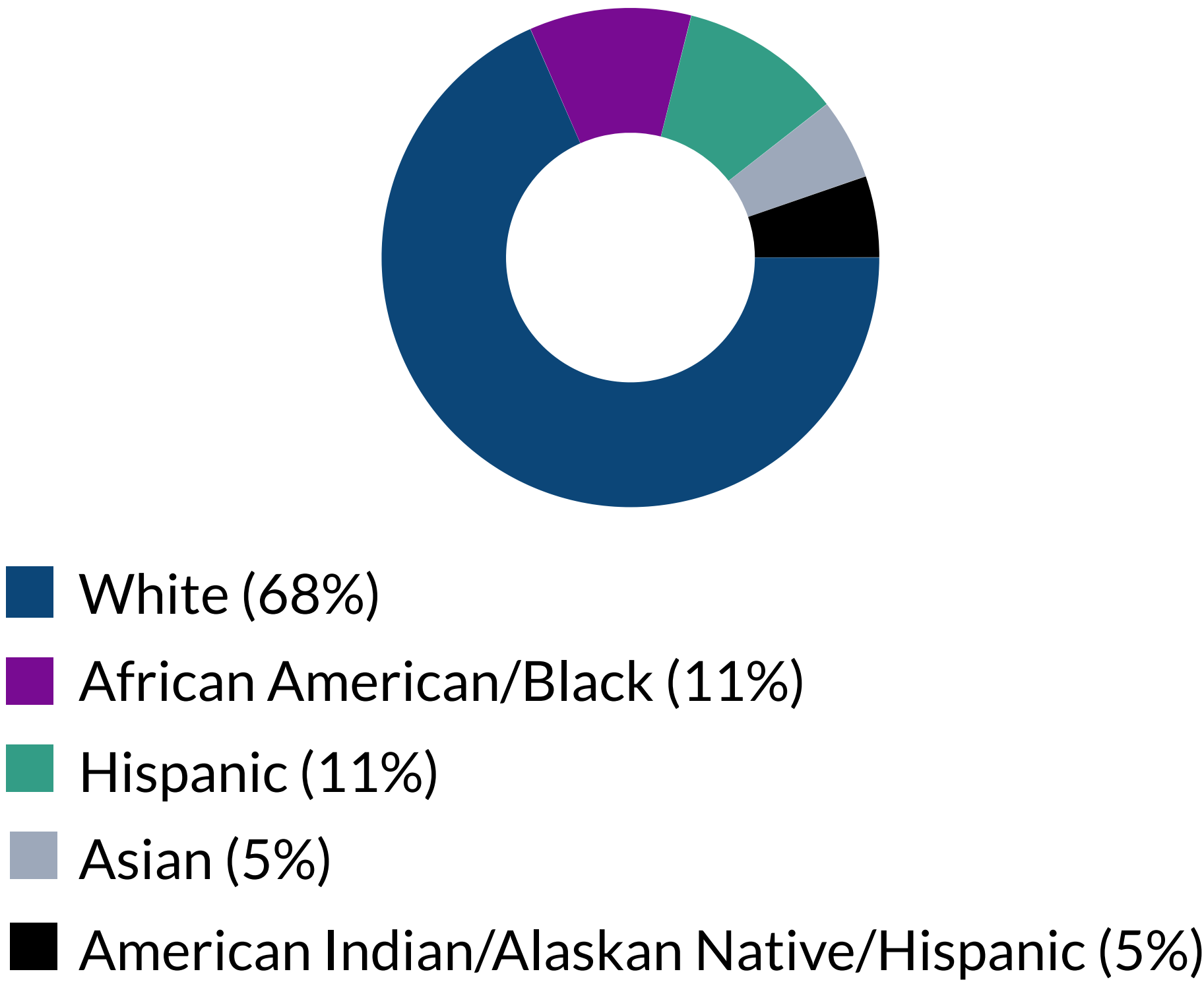
Grand Traverse County

Demographics

DECEDENT'S EMPLOYMENT STATUS



RACE



SEX

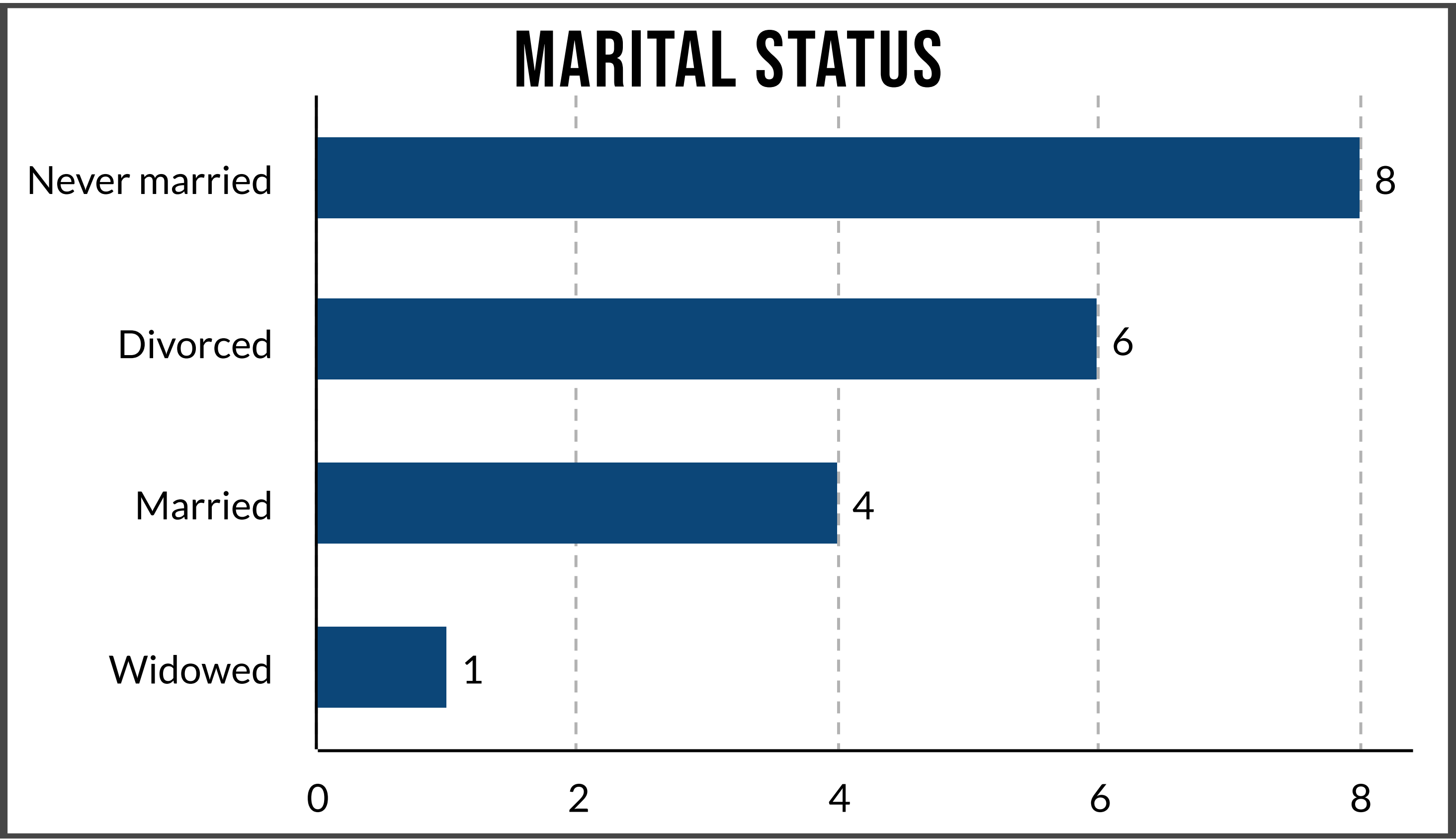


21%



79%

MARITAL STATUS



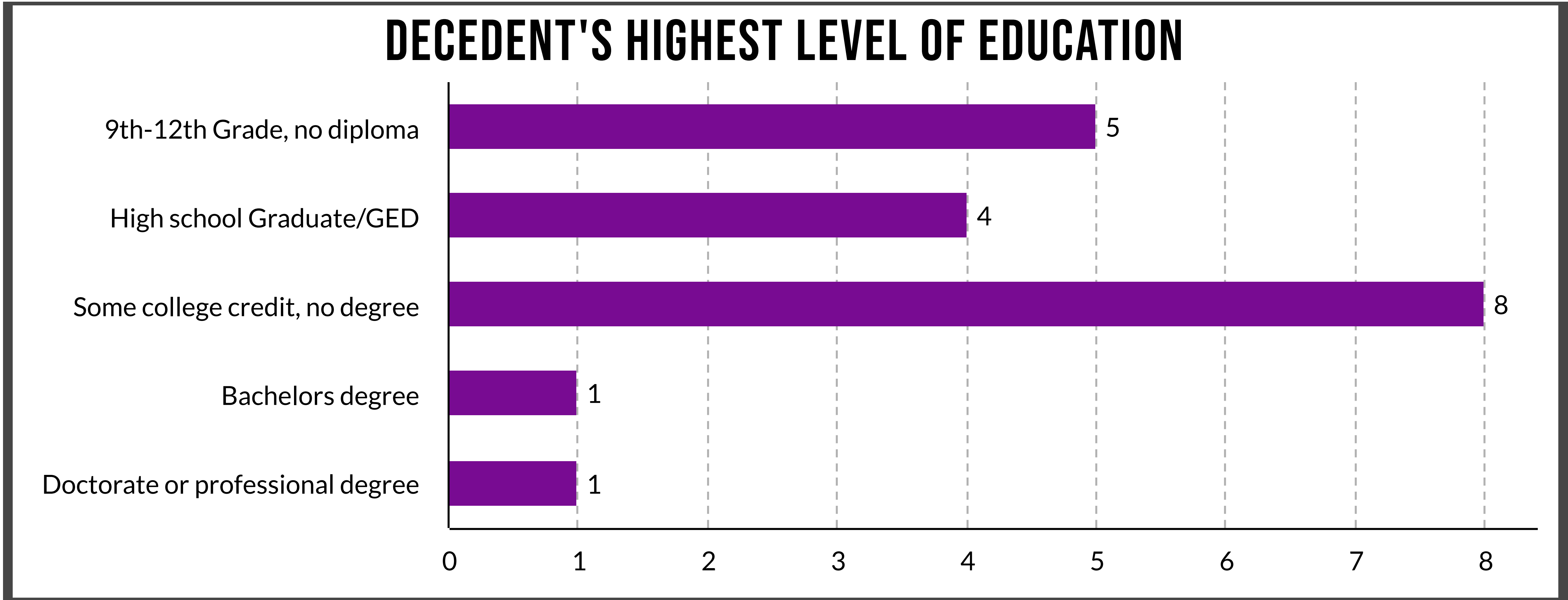
AGE

Minimum Age
29 years

Maximum Age
68 years

Average Age
46 years

DECEDENT'S HIGHEST LEVEL OF EDUCATION

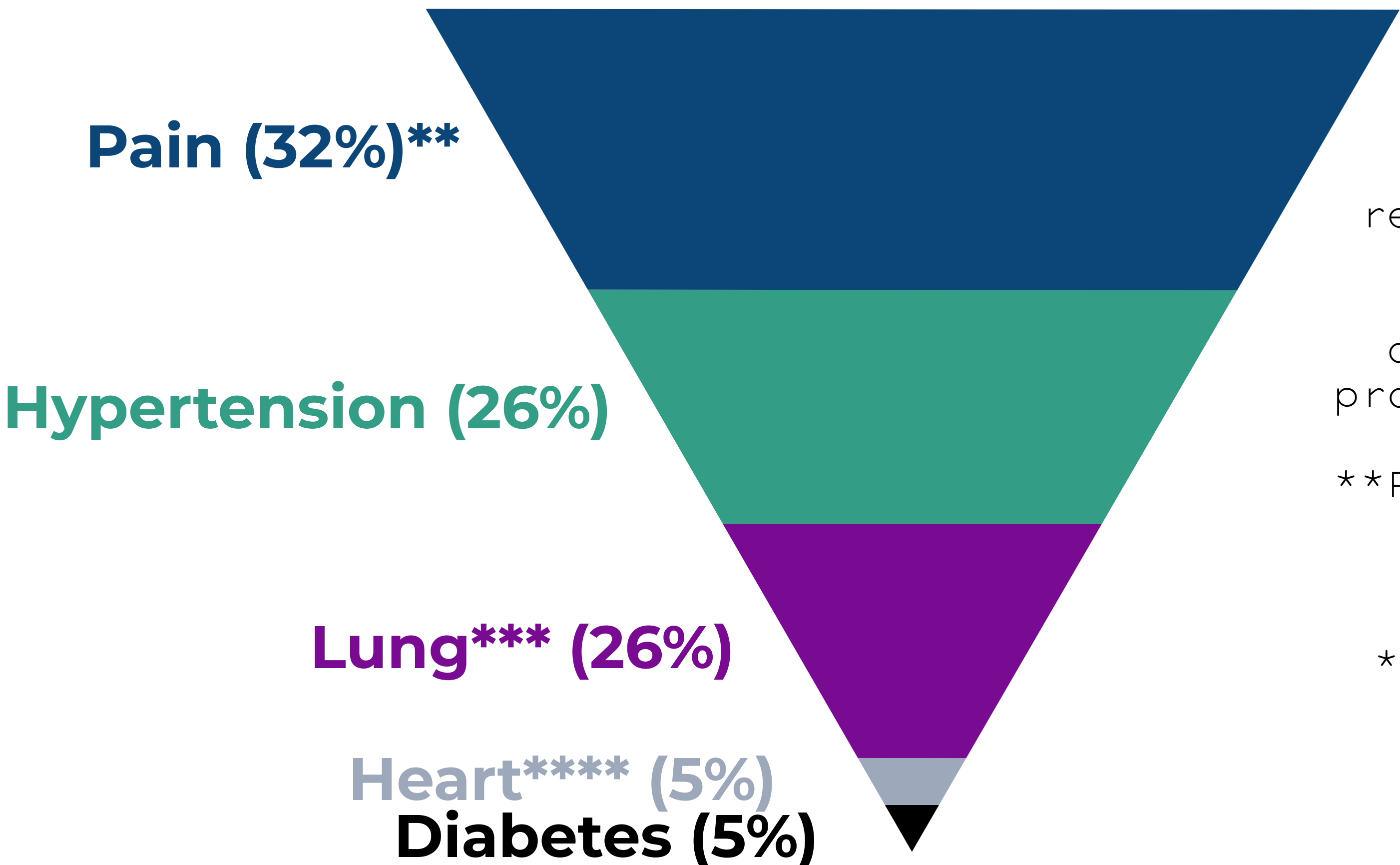


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Health Factors

MOST COMMON AILMENTS*

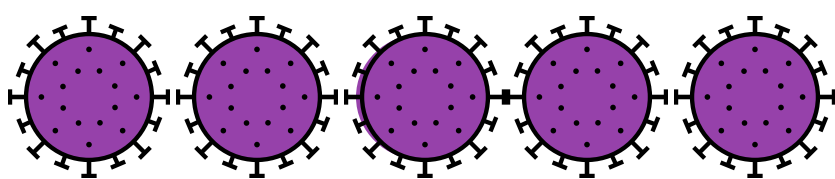


*Decedents may be represented in more than one category.
Only illnesses with diagnosis by a medical professional are included.

**Pain includes arthritis, back pain, migraine, neuropathy, and DDD

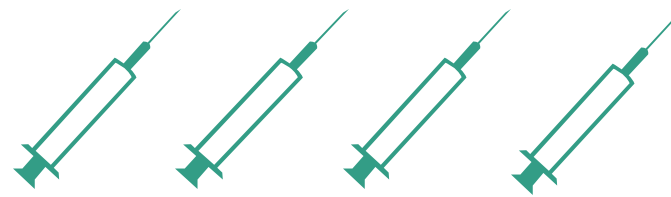
***Lung includes asthma and COPD

****Heart includes MI (see end of page)



At least **10** decedents were **Hepatitis C** positive

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



Decedent used tobacco

68%



Decedent drank alcohol

42%



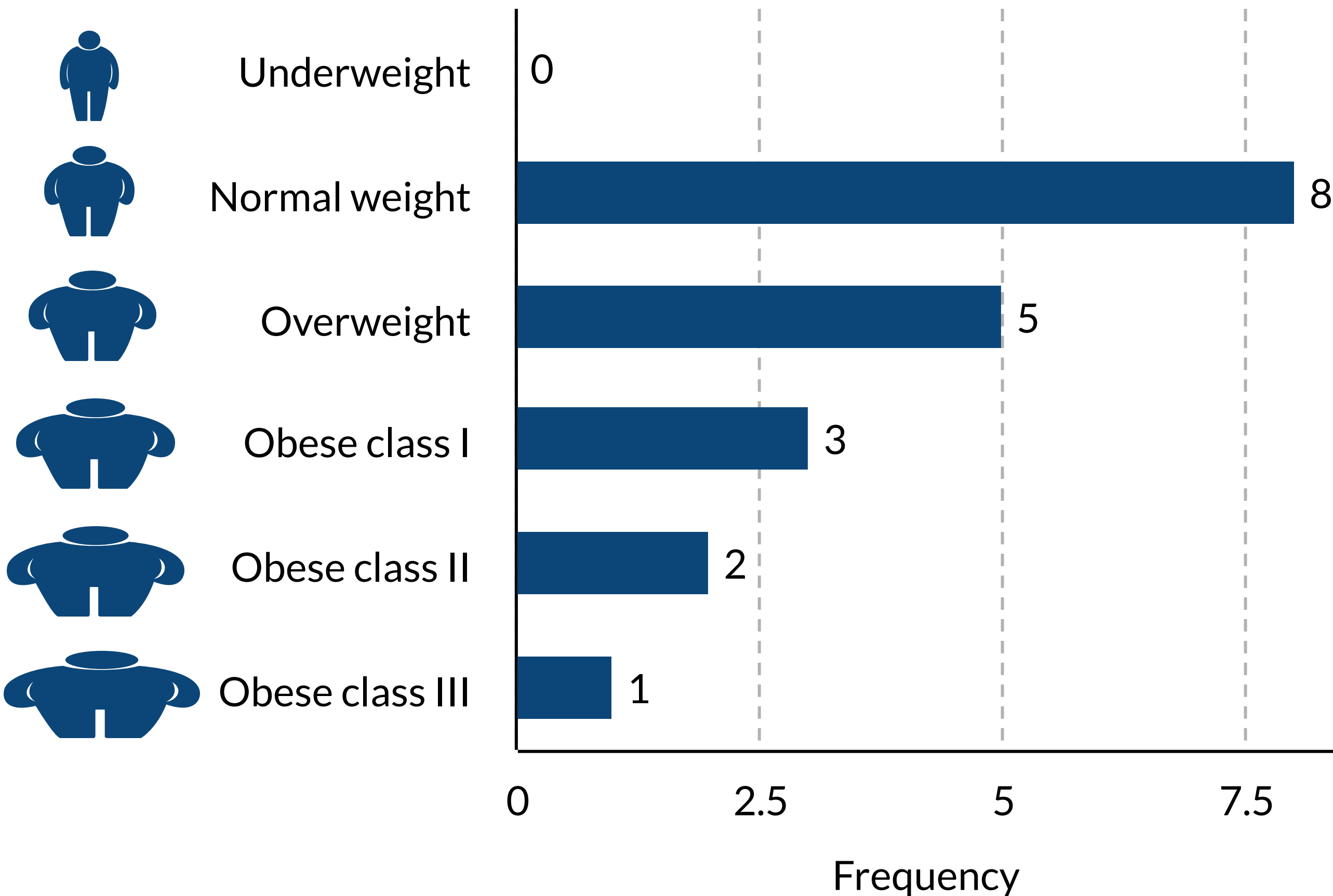
Decedent had a PCP*

58%



*Primary care physician

BODY MASS INDEX (BMI)



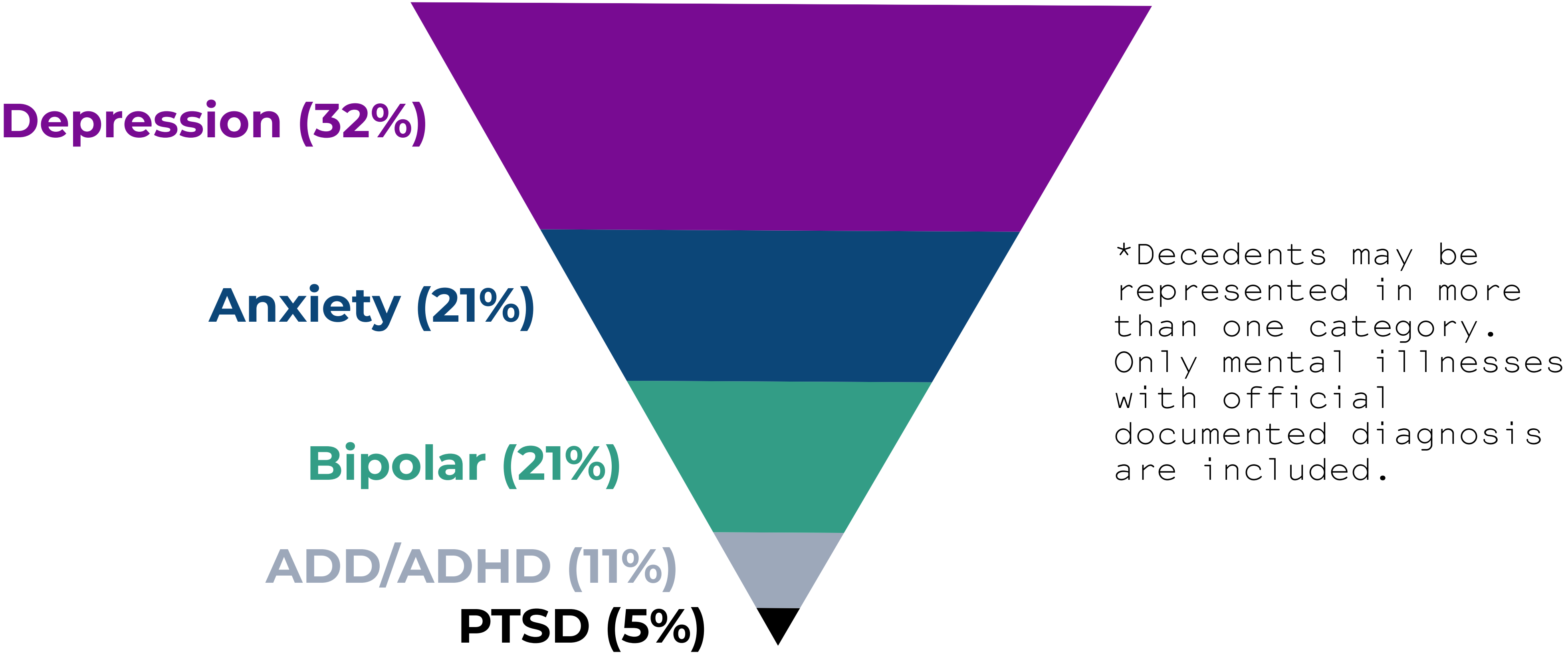
DDD=Degenerative disc disease; COPD=Chronic obstructive pulmonary disease; MI=Myocardial infarction

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Mental Health Factors

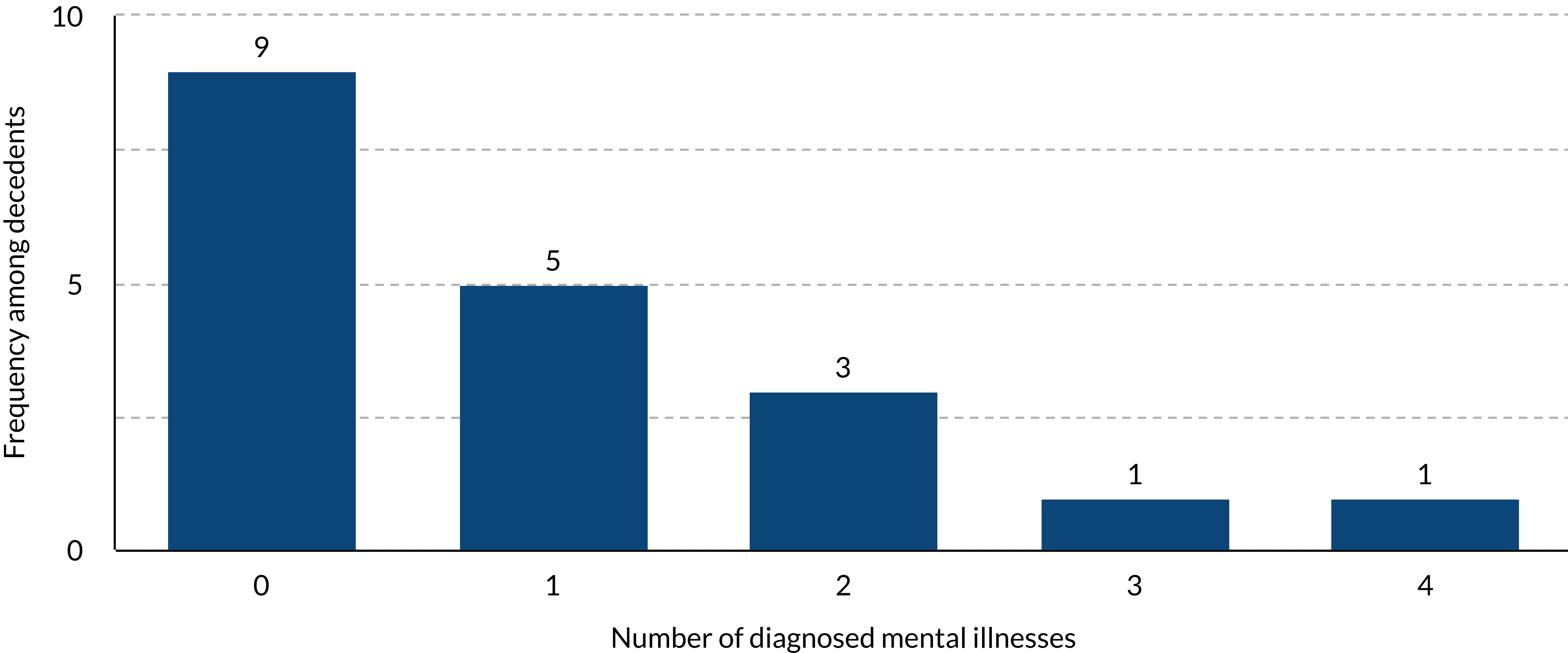
MOST COMMON MENTAL ILLNESSES



PERCENTAGE OF DECEDENTS



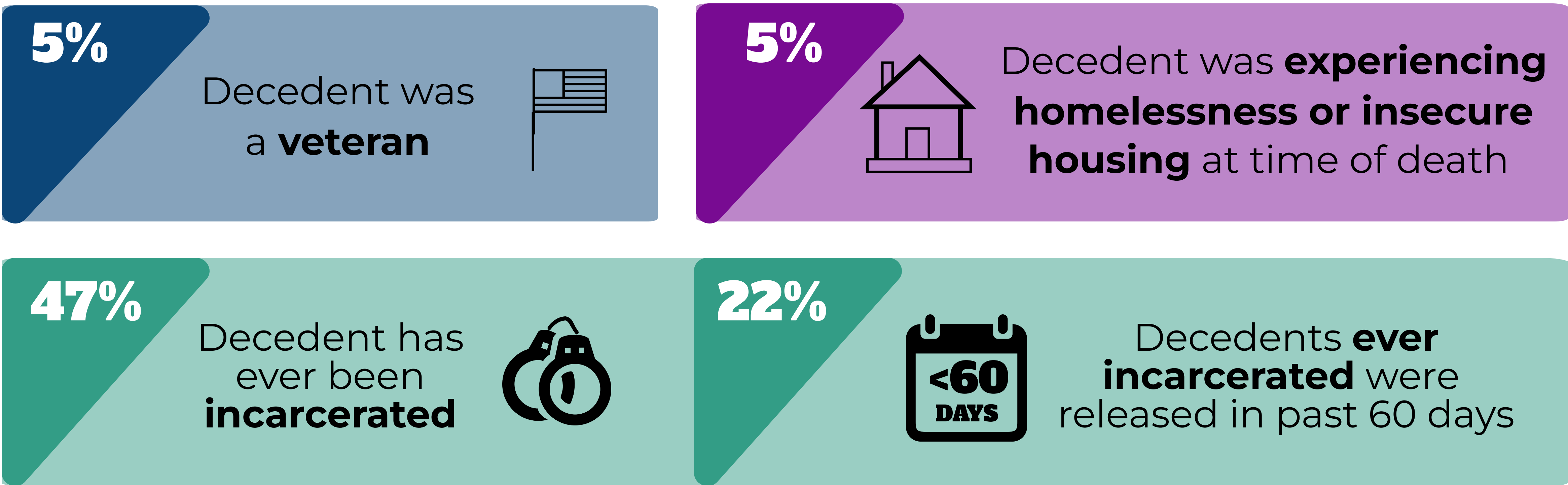
NUMBER OF DIAGNOSED MENTAL ILLNESSES AMONG DECEDENTS



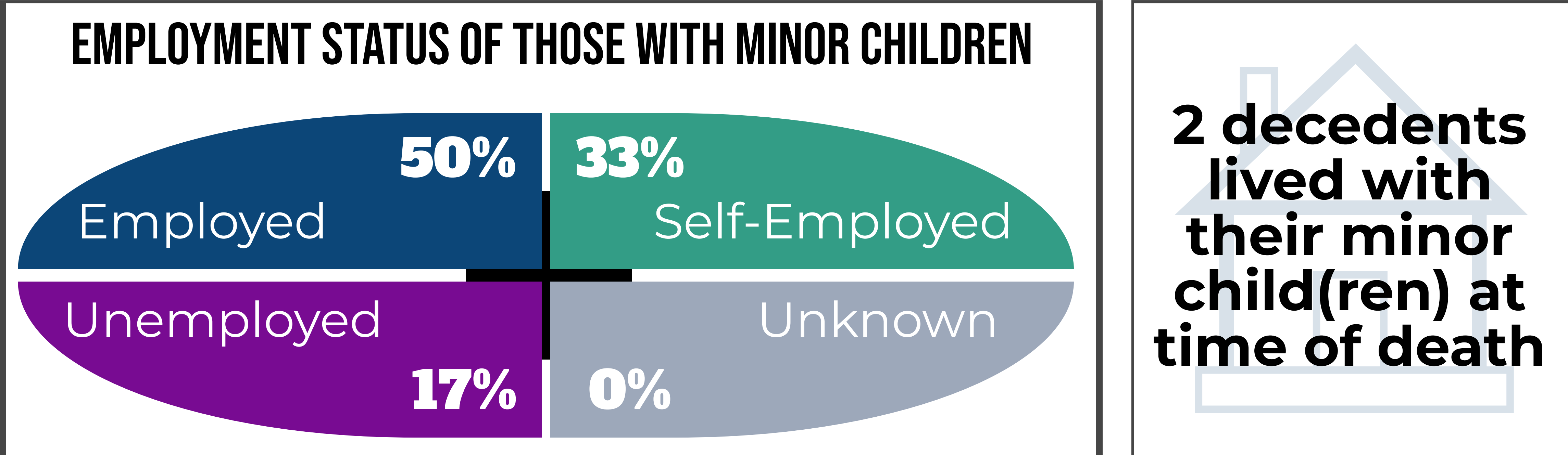
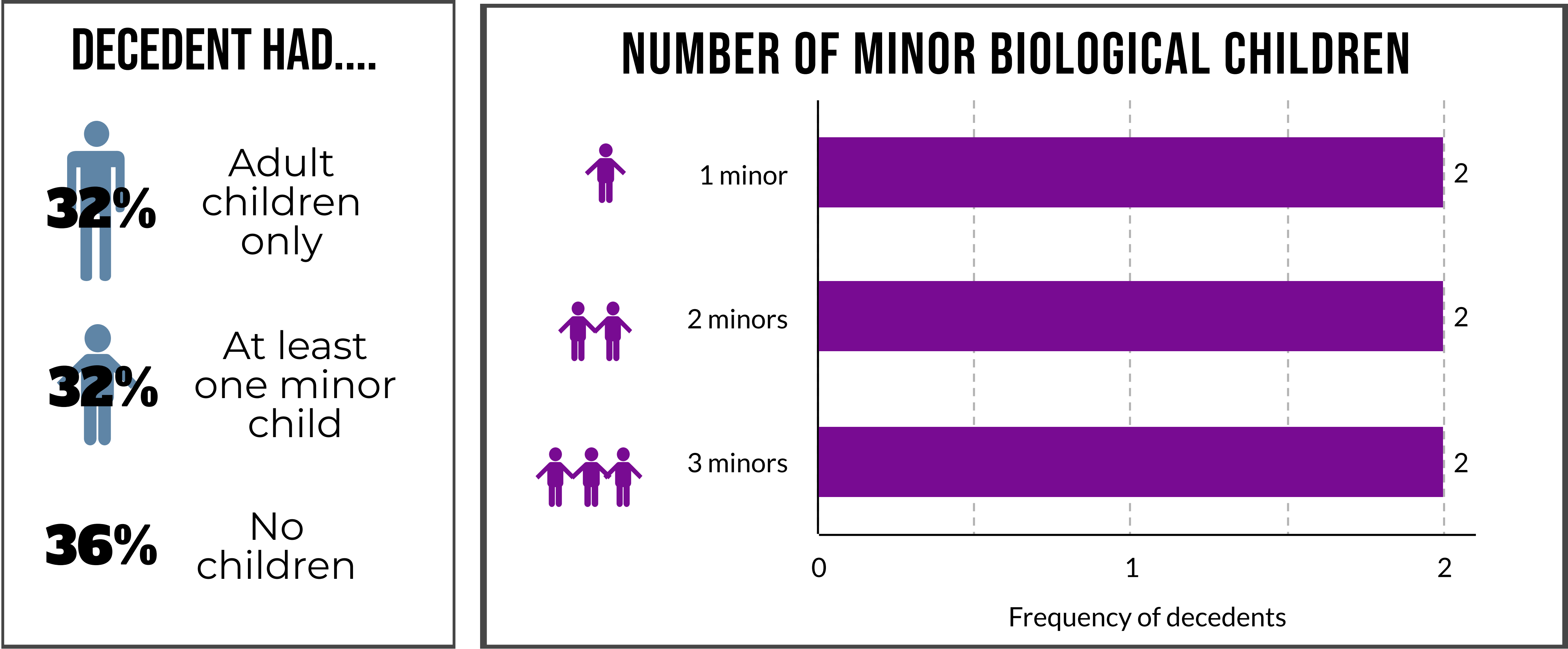
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Social Factors



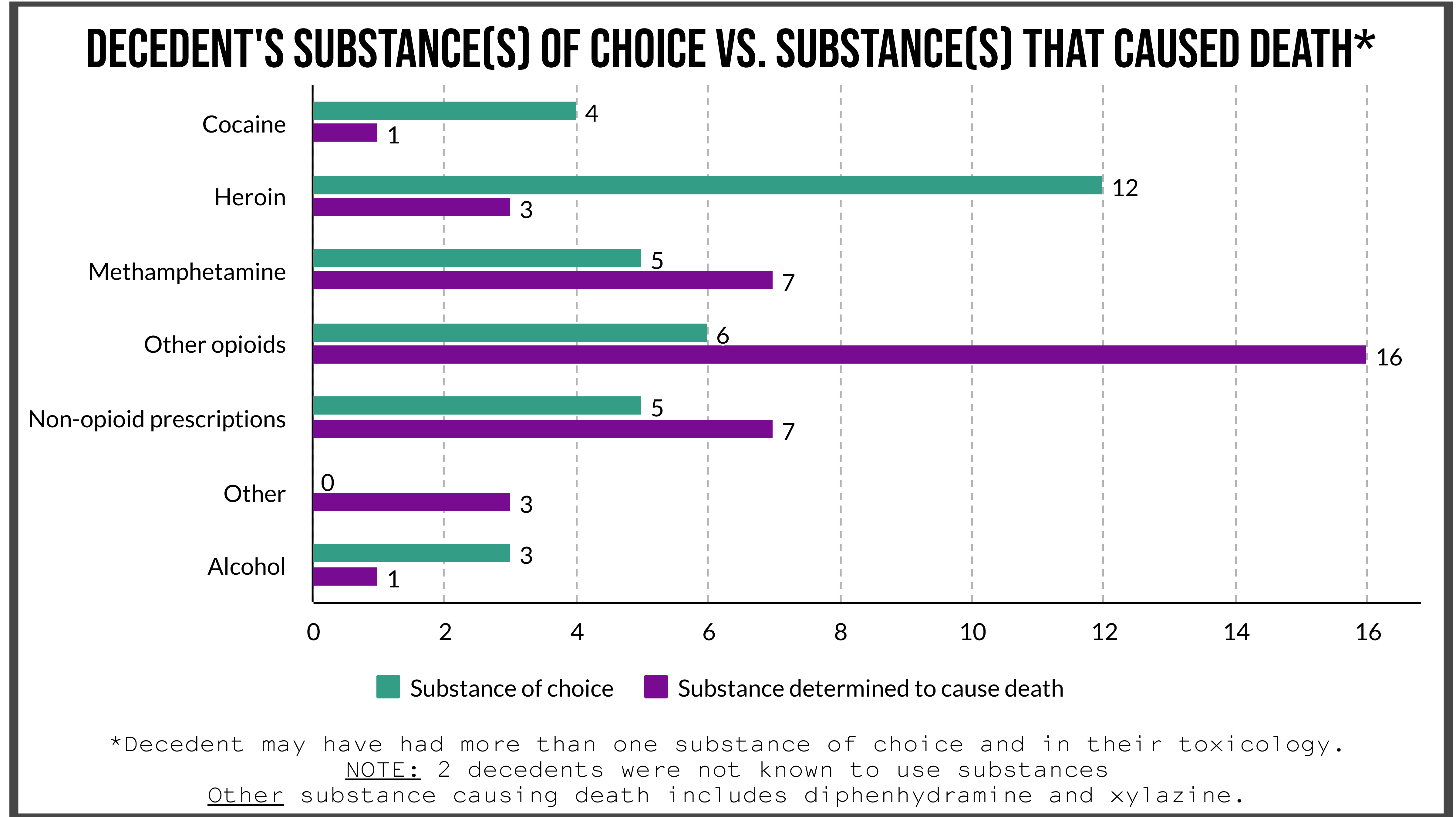
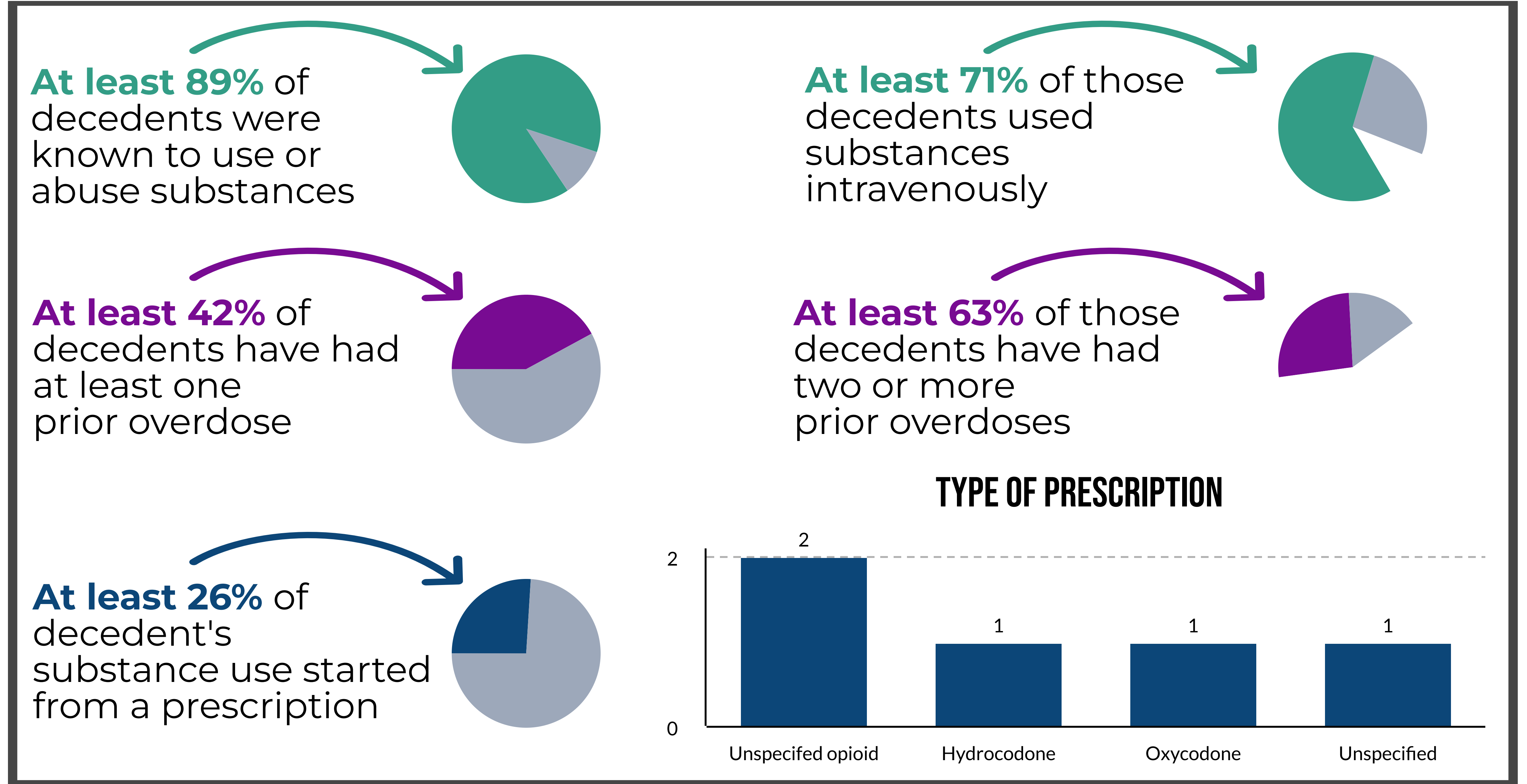
Children



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Substance Use History



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Substance Use History, cont.

PREFERRED METHOD OF ADMINISTRATION* (N=15)

Method	Male (n=12)	Female (n=3)	White (n=11)	Black (n=2)	Hispanic (n=2)	Total (n=15)**
Intravenous	10	2	10	1	1	12
Snort	3	0	1	1	1	3
Smoke	0	0	0	0	0	0
Transdermal	0	0	0	0	0	0
Huff	0	0	0	0	0	0
Oral	0	1	1	0	0	1
Unknown	0	1	1	0	0	1

*Decedent may have had more than one preferred method of administration. Only includes decedents with a substance use history. **Decedents of Asian and American Indian/Native Alaskan/Hispanic (n=1) and Asian (n=1) descent are excluded.

RECOVERY HISTORY (N=17)*

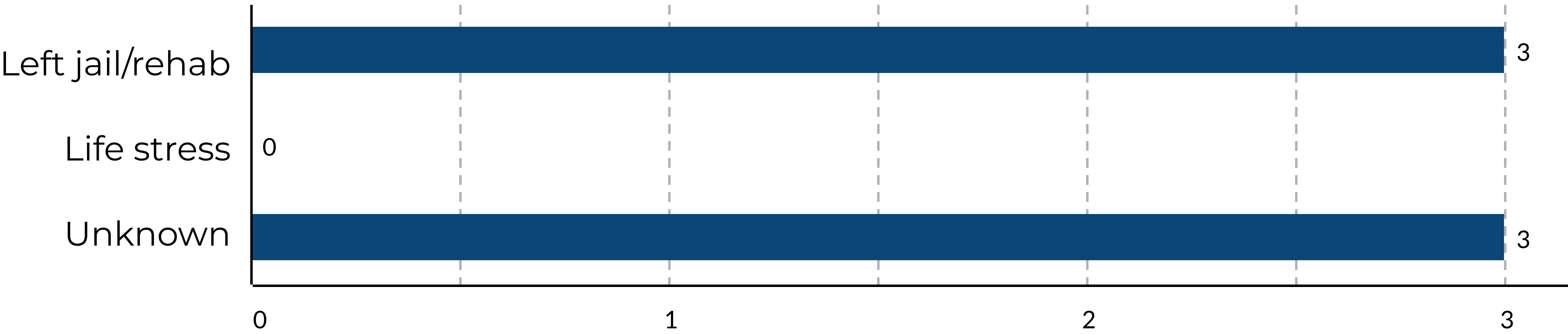
Decedent was recently
reportedly **substance
free** in the past
three weeks

24%
Decedent has been to
a **treatment clinic or
detox center** at least
one time

24%
Decedent was currently
receiving or has received
**medication for opioid use
disorder** in the past two years

41%

SUSPECTED REASON FOR RELAPSE**



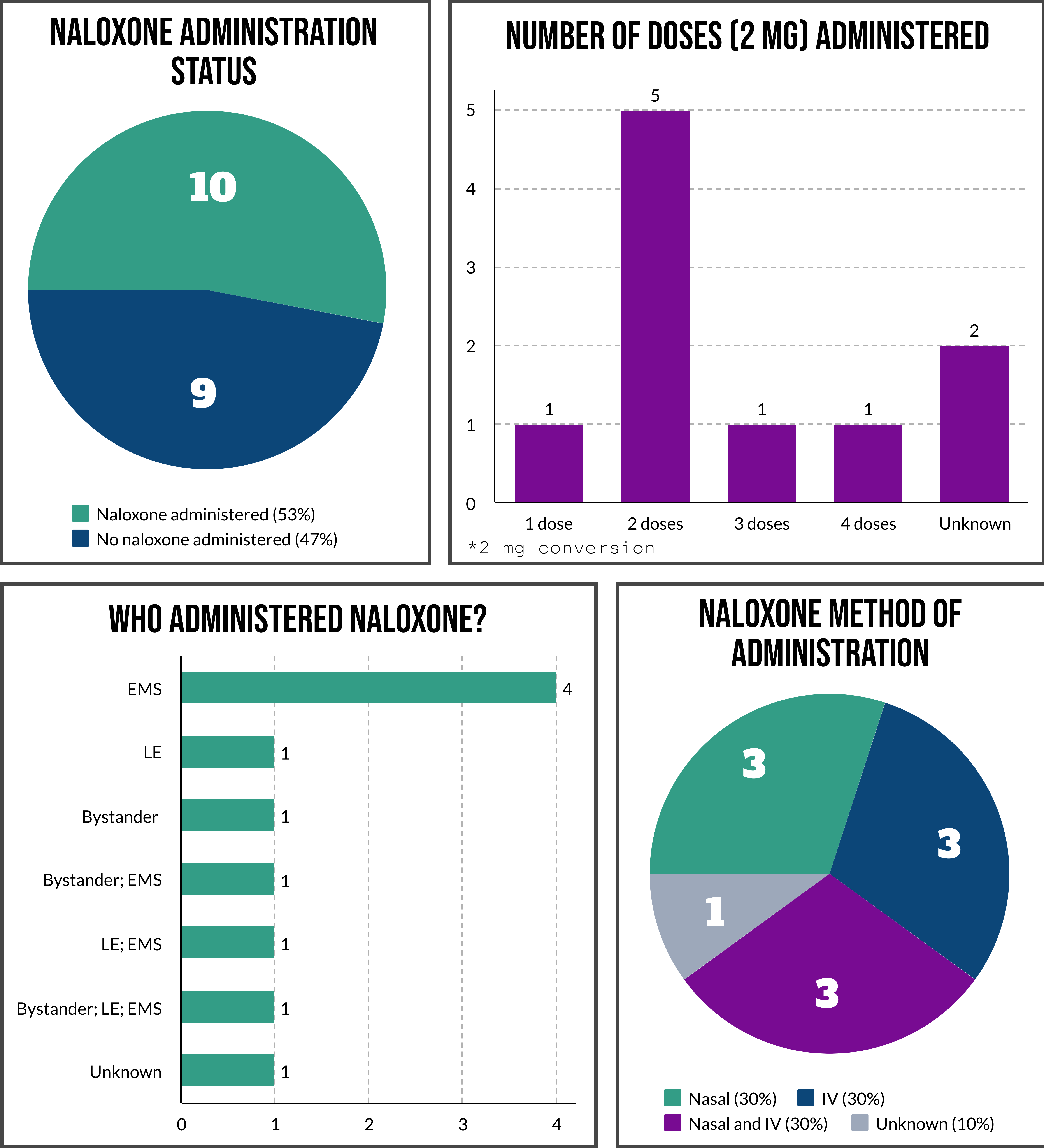
*ONLY Decedents known to use substances are included.

**These factors were mentioned by those close to the decedent for why they may have begun to use substances again after being substances free for at least three weeks.

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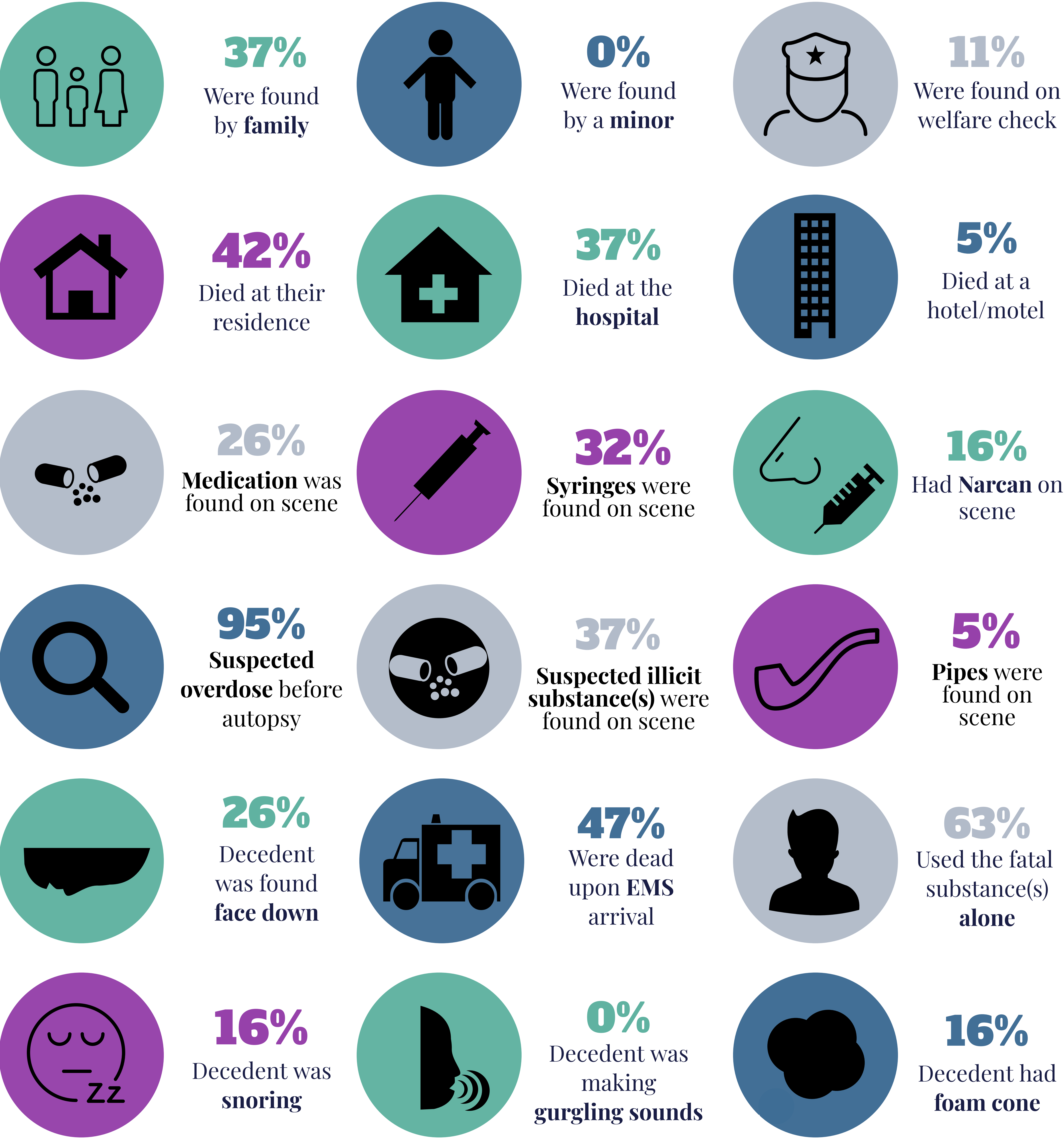
Naloxone Administration



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Death Scene Findings

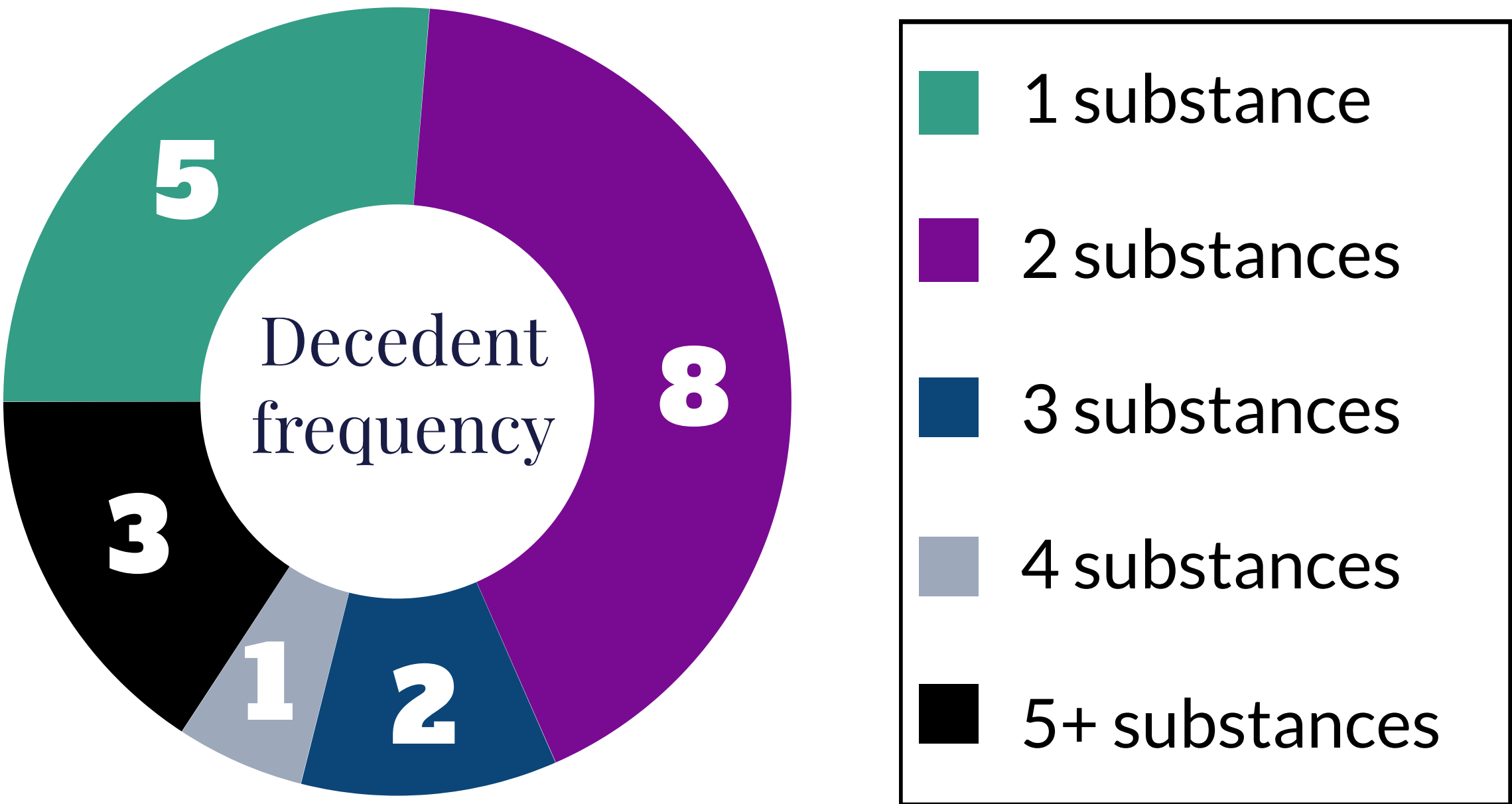


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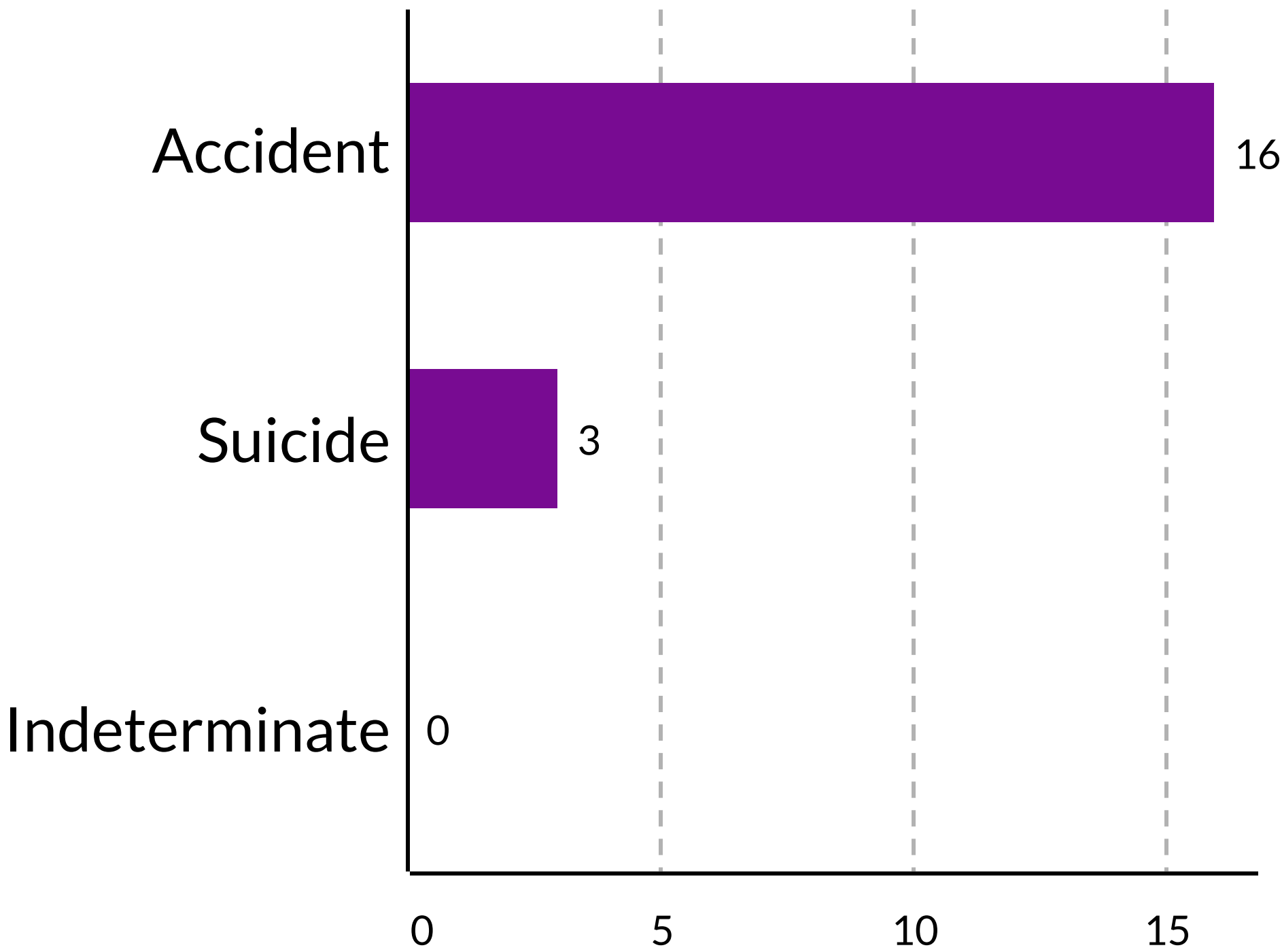
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Autopsy and Toxicology Results

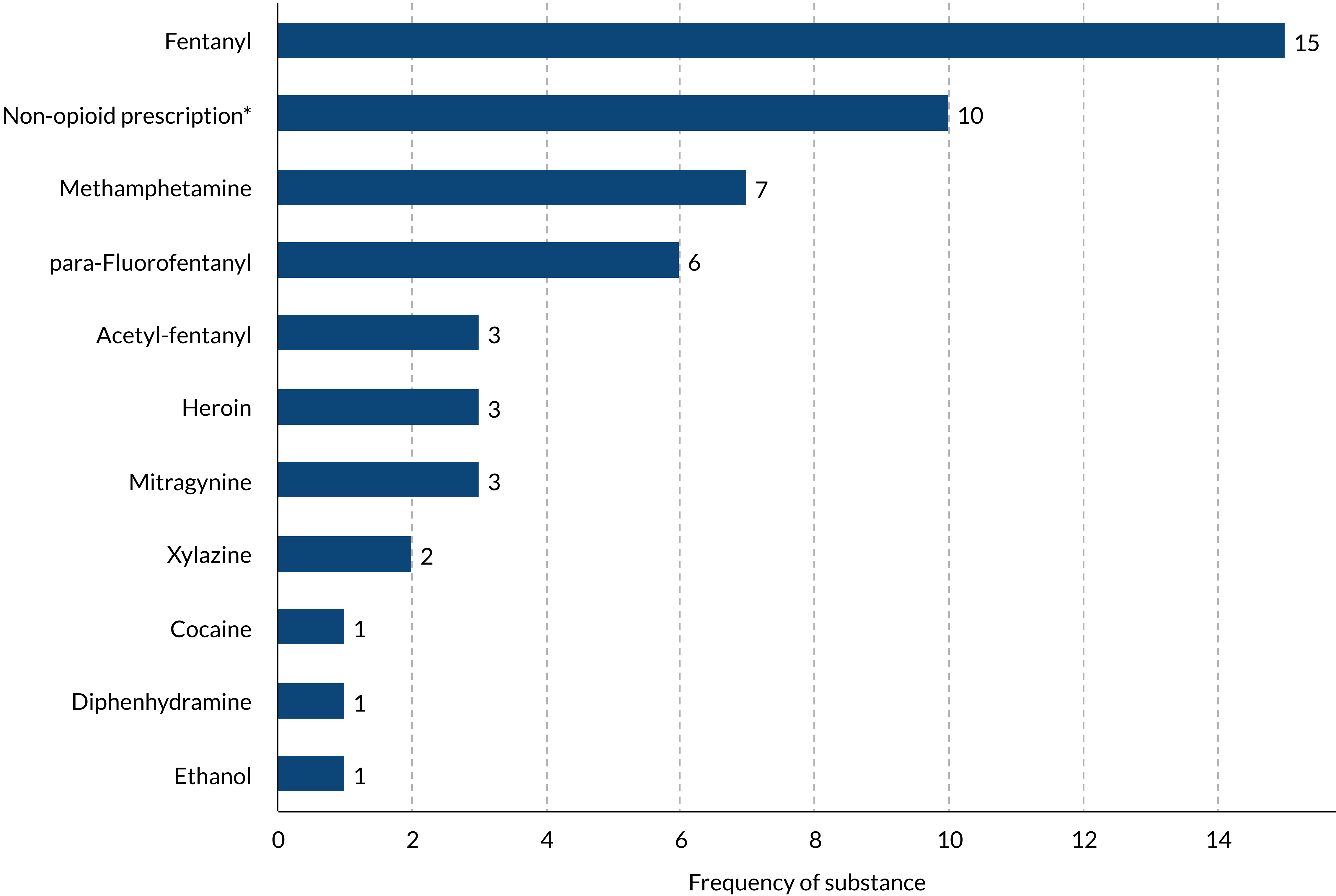
NUMBER OF SUBSTANCES
CONTRIBUTING TO DEATH



MANNER OF DEATH



SUBSTANCES CONTRIBUTING TO DEATH

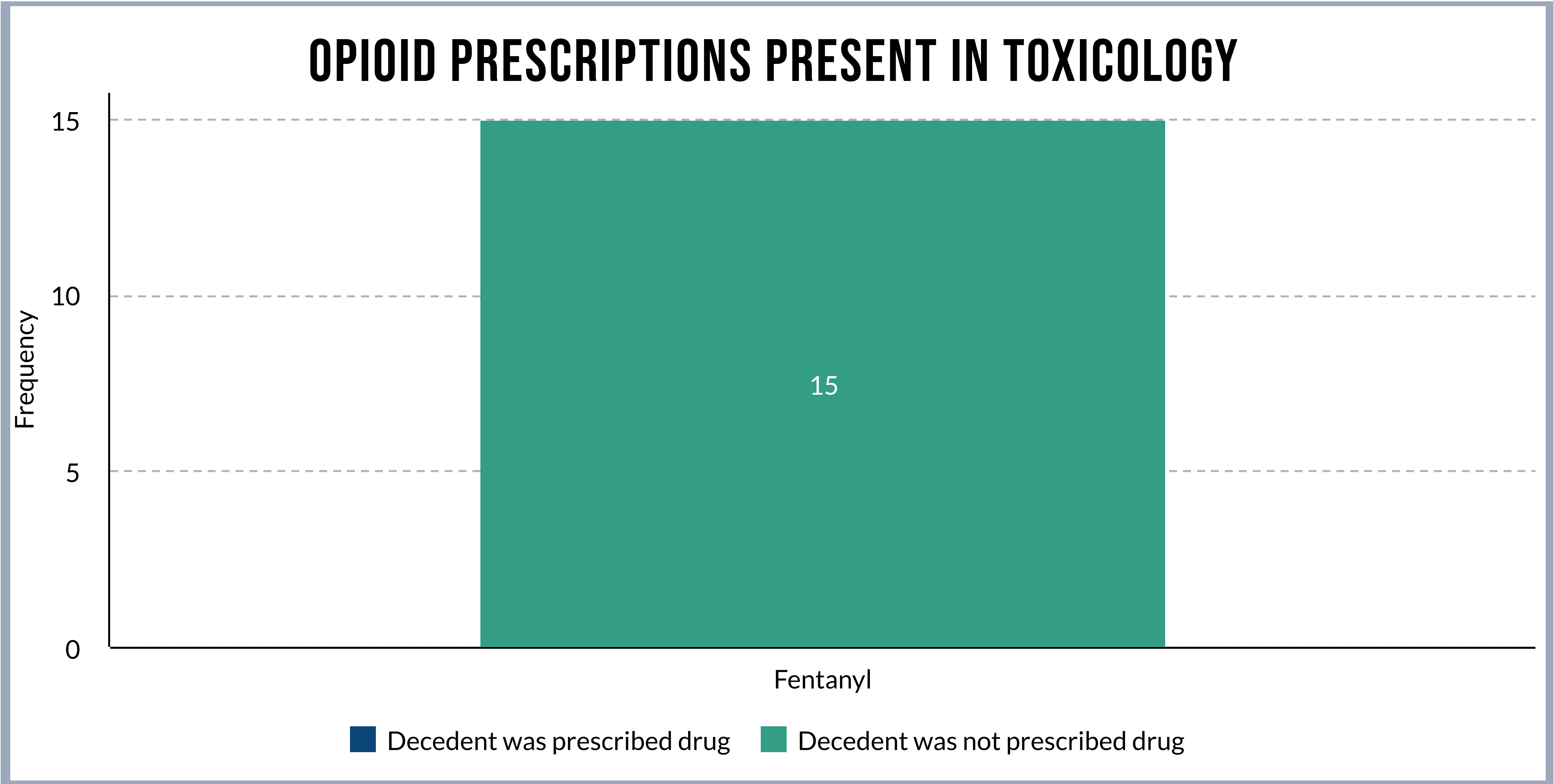
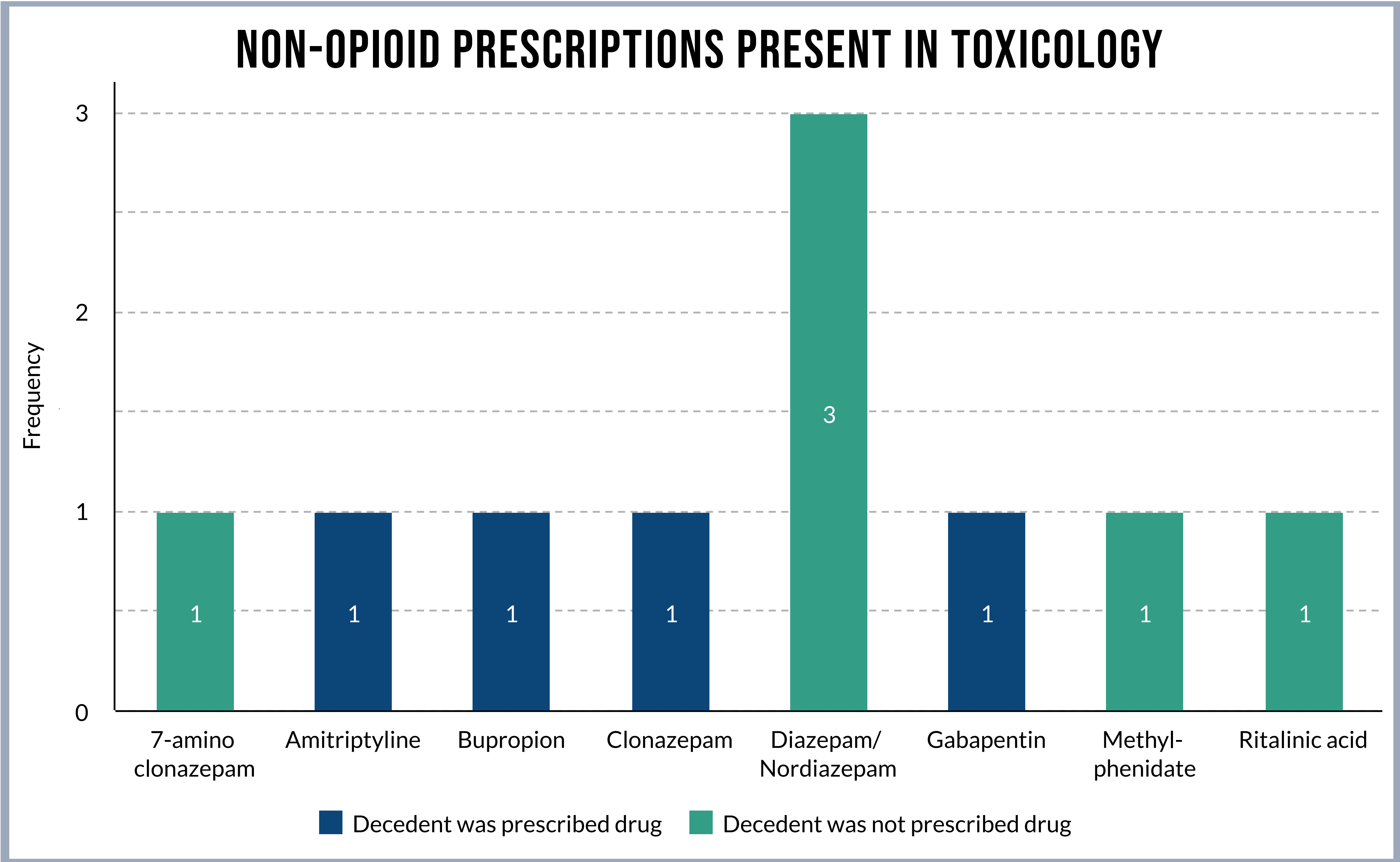


*Please see graphs on the next page for a list of opioid and non-opioid prescriptions.

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Autopsy and Toxicology Results, cont.



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Highlights

OPIOIDS AND POSITIONAL ASPHYXIA

31% (5 of 16) of decedents who died due an opioid were originally found in a potentially airway compromising position

These positions include decedent drowning or decedent found face down on the floor, their bed, or on another surface

0% (0 of 3) of decedents who died due to only non-opioid substance(s) were originally found in a potentially airway compromising position

Opioids depress the respiratory system and when coupled with positional asphyxia, there may be an increase risk of death. This MEO suggests that those who use substances not use alone and to ensure they are not at risk for slumping forward onto their face.

NOVEL SUBSTANCES

Xylazine

2 deaths

- Only approved use is for veterinarian medicine in horses, cattle, etc.
- Used for sedation, anesthesia, muscle relaxation, and analgesia

Para-Fluorofentanyl

6 deaths

- Analogue of fentanyl that causes similar effects to fentanyl
- Reportedly more toxic than fentanyl but provides lower levels of pain mitigation
- No approved medical use in the United States

Acetyl-fentanyl

3 deaths

- Analogue of fentanyl that causes similar effects to fentanyl
- Stronger than morphine but weaker than fentanyl
- No approved medical use in the United States

SUBSTANCE COMBINATIONS

HEROIN & FENTANYL

3 decedents had heroin in their toxicology

All 3 of these decedents also had fentanyl in their toxicology

XYLAZINE & FENTANYL

2 decedents had xylazine in their toxicology

Both of these decedents also had fentanyl in their toxicology

BENZODIAZEPINES & OPIOIDS

3 decedents had a benzodiazepine and an opioid in their toxicology

0 decedents were prescribed the opioid and benzodiazepine

METHAMPHETAMINE & OPIOIDS

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

All 7 of these decedents had methamphetamine and fentanyl in their toxicology