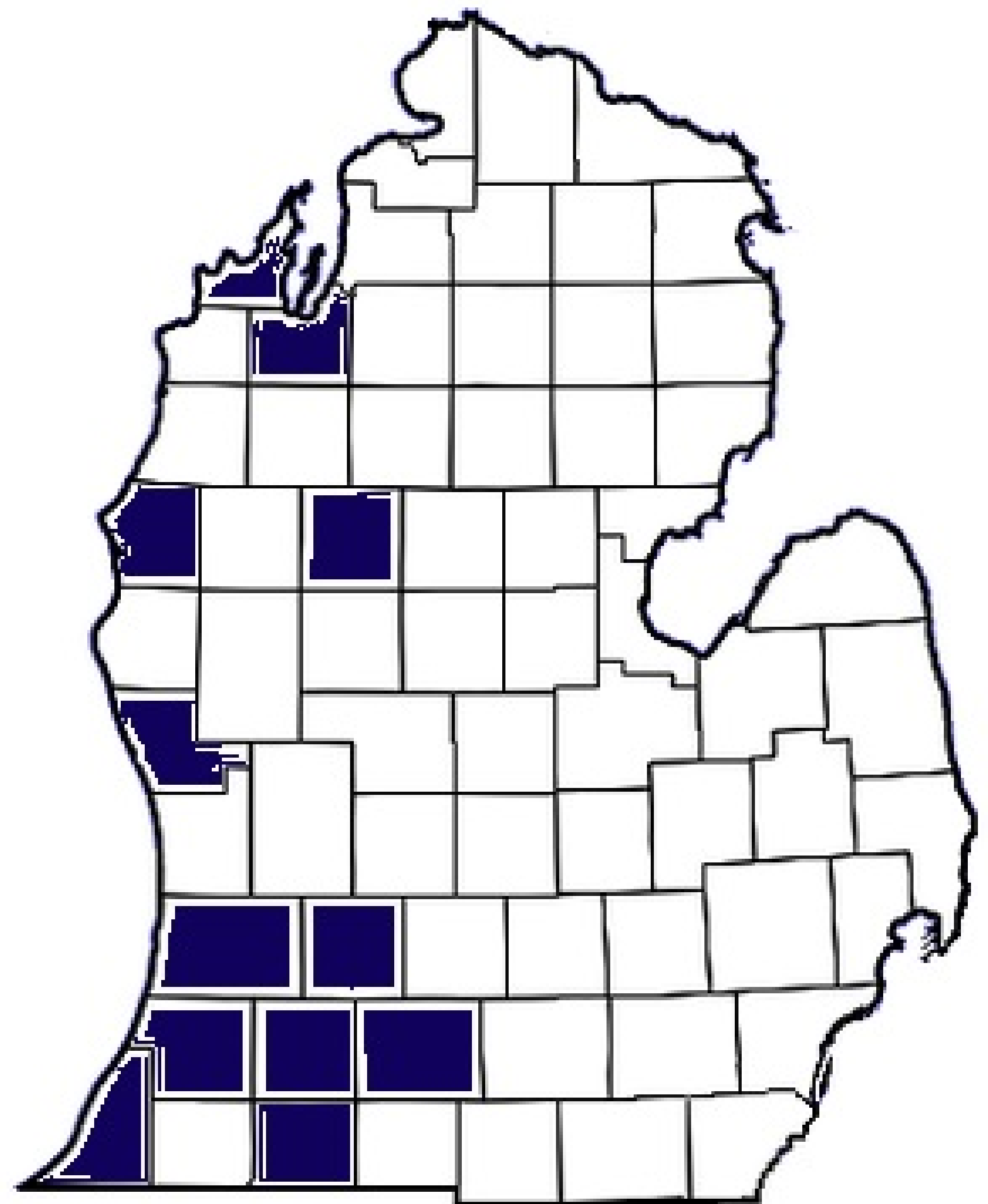


Deaths Related to Opioids and Other Drugs

Medical Examiner Office

Counties covered in this report:

Allegan
Barry
Berrien
Calhoun
Grand Traverse
Kalamazoo
Leelanau
Mason
Muskegon
Osceola
St. Joseph
Van Buren



Purpose:

This data was collected from 12 counties served by the Office of the Medical Examiner in the Department of Pathology at WMed. Data 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, and Decedent Substance Use History.

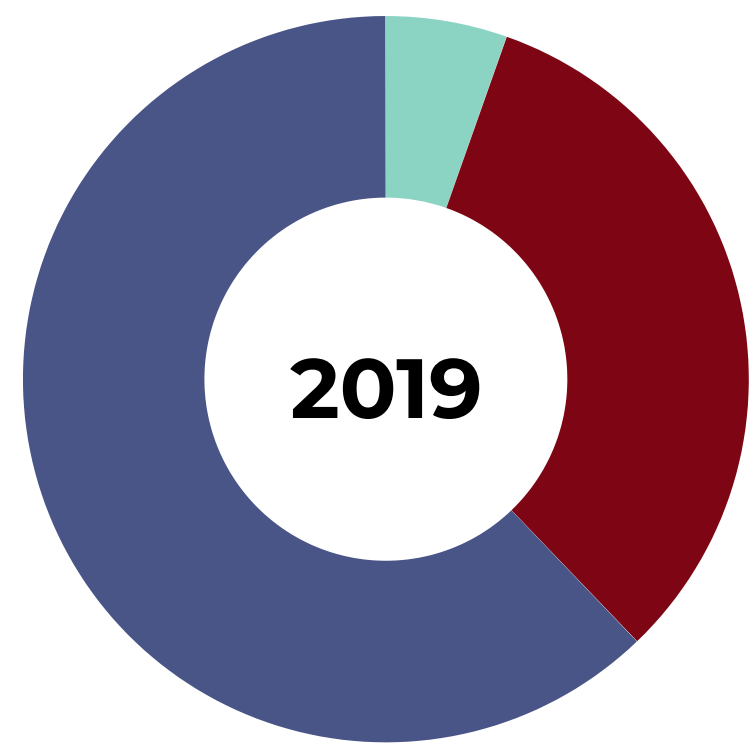
Sources: All data was extracted from a Medical Examiner database, law enforcement (LE) and EMS reports, death certificates, obituaries, STORM (Swift Toxicology of Overdose-Related Mortalities) results, toxicology reports, and autopsy reports.

Please contact **Chloe Bielby** for additional information at chloe.bielby@med.wmich.edu

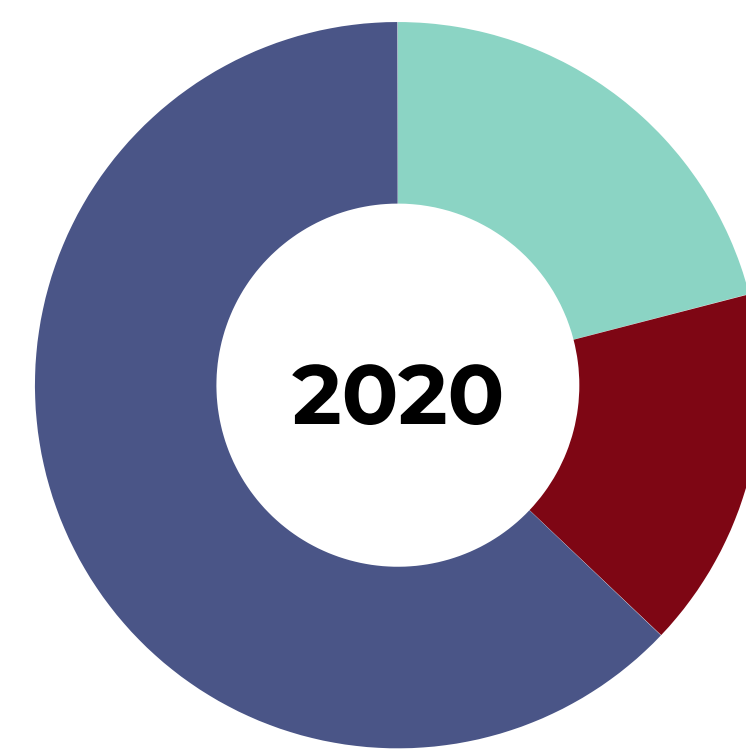
Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

Total Drug-Related Deaths

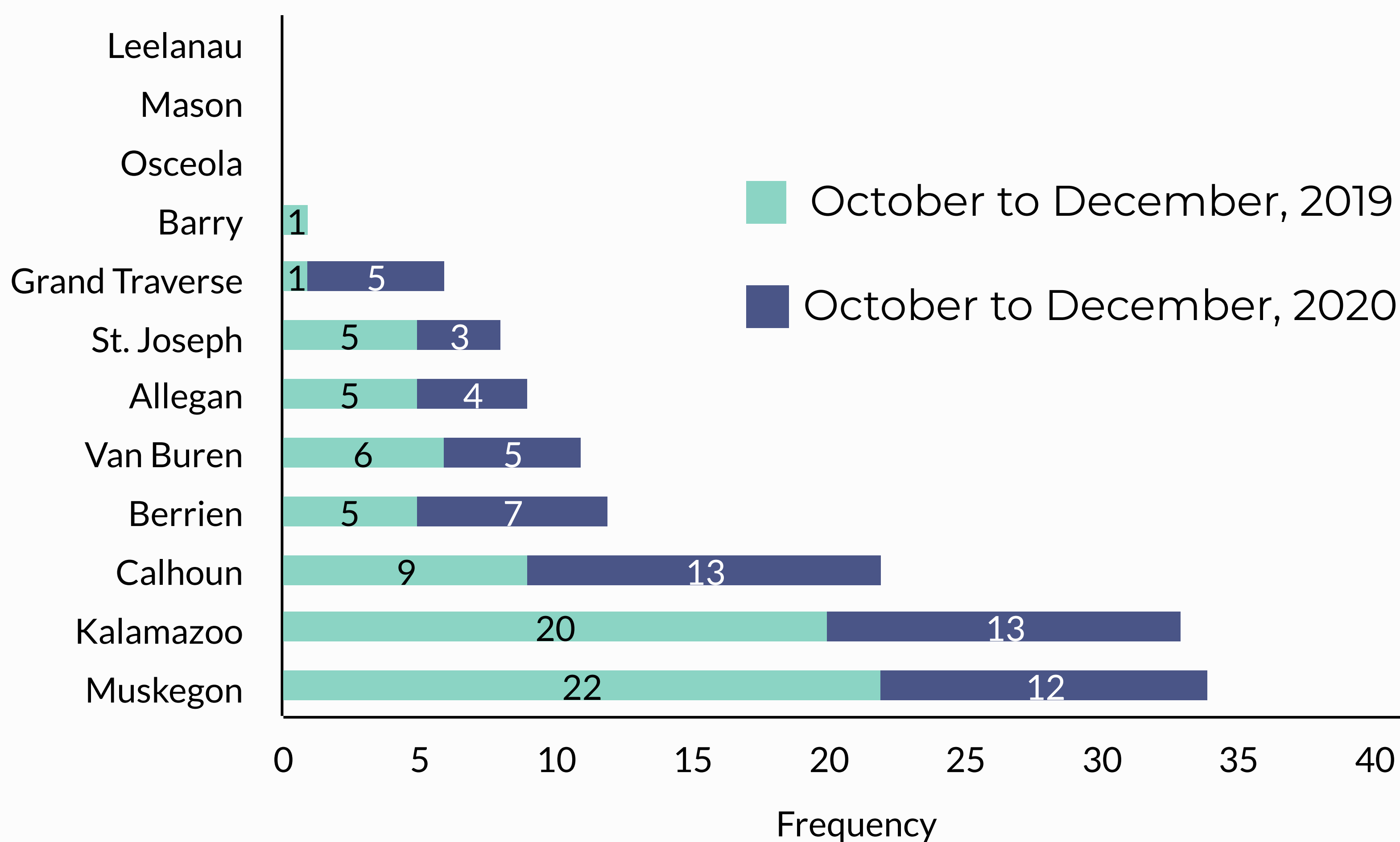


- ➔ 46 opioid and non-opioid
- ➔ 4 opioid only
- ➔ 24 non-opioid only



- ➔ 39 opioid and non-opioid
- ➔ 13 opioid only
- ➔ 10 non-opioid only

County of Death

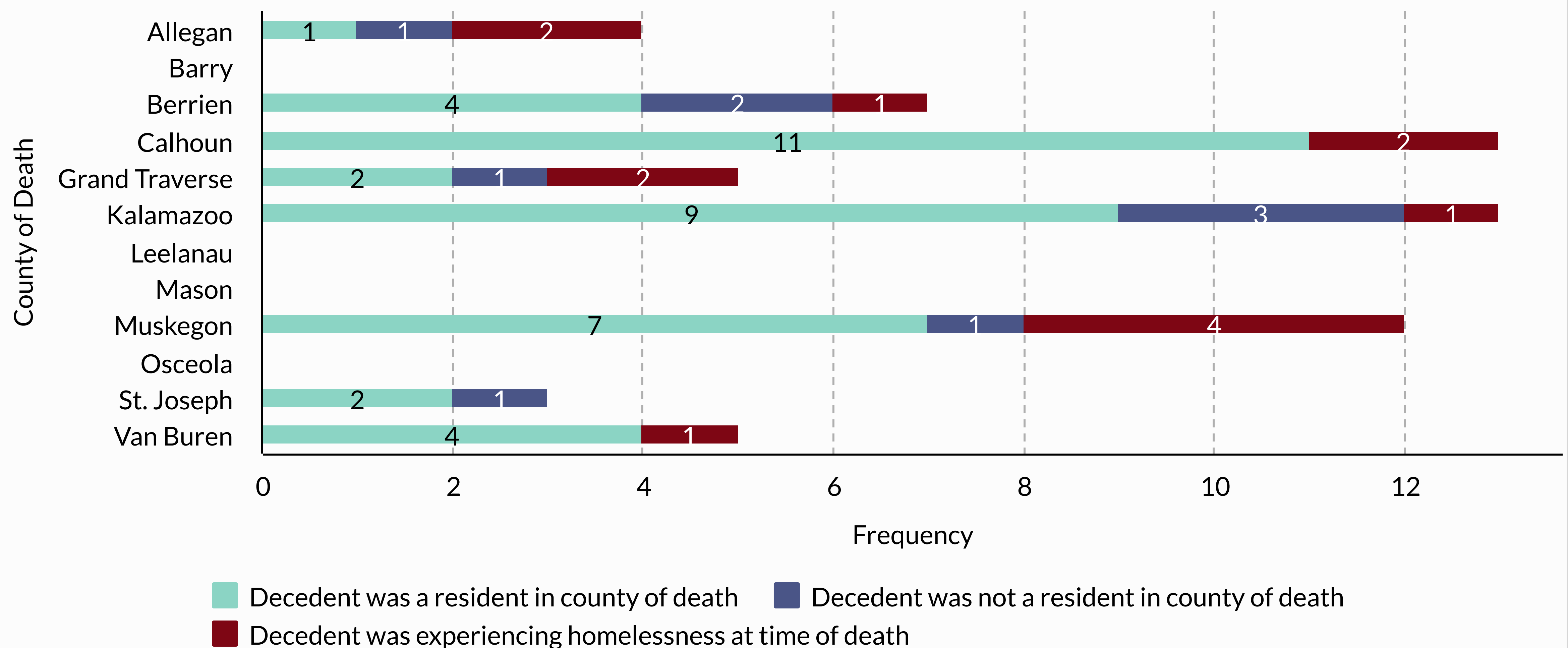


October to December, 2019
74 deaths

October to December, 2020
62 deaths

Drug-related deaths decreased
16%
from 2019 to 2020

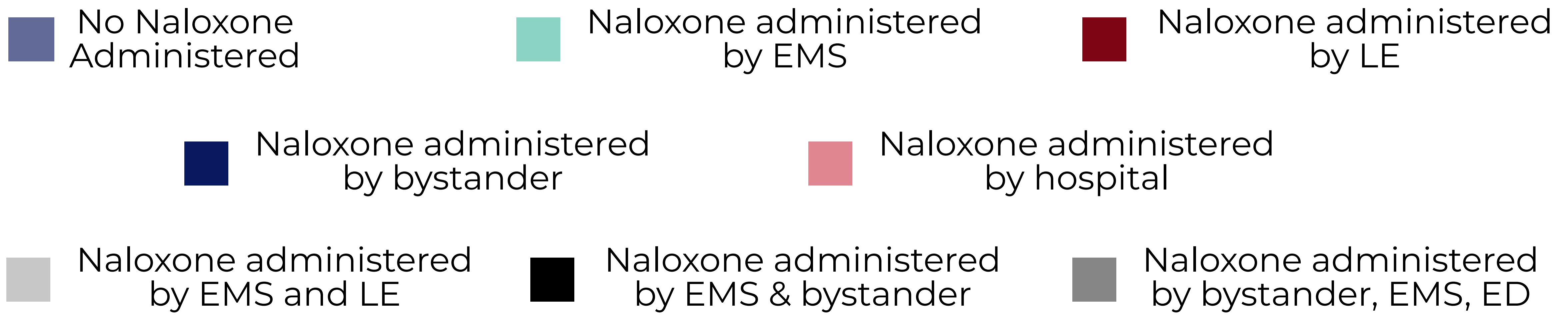
County of Residence by County of Death



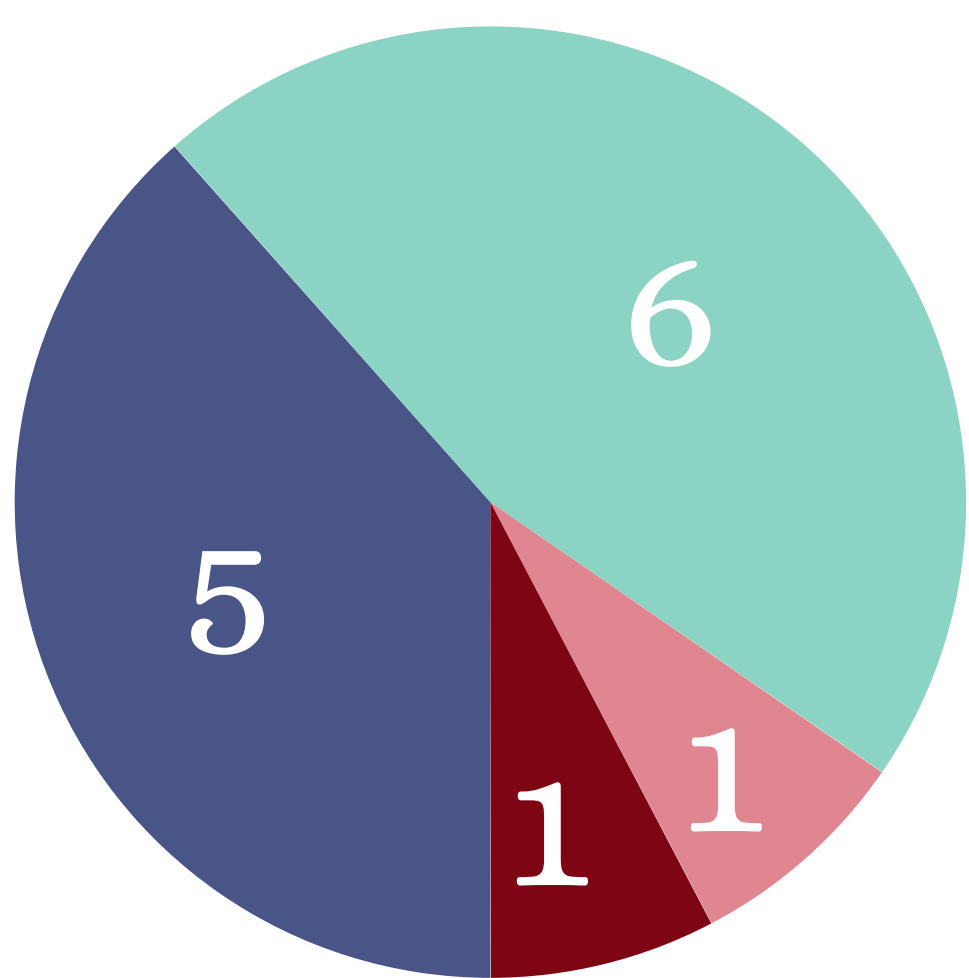
Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

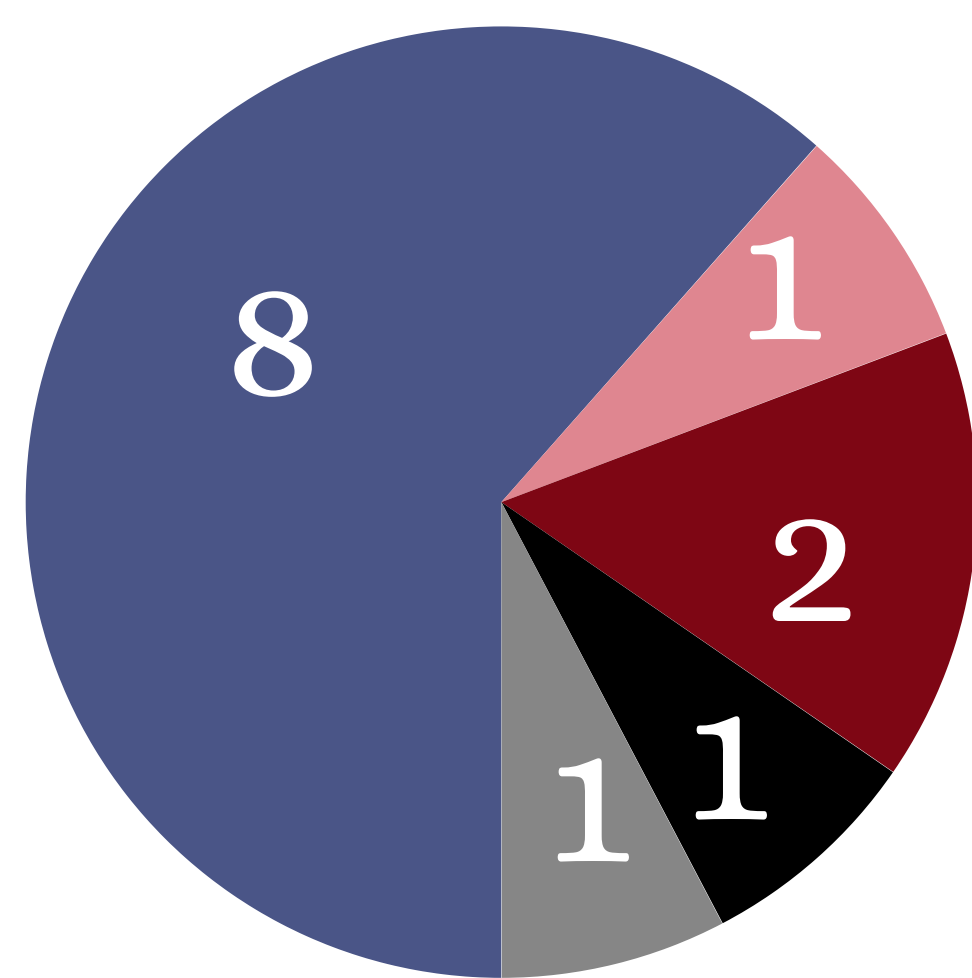
Naloxone Administration



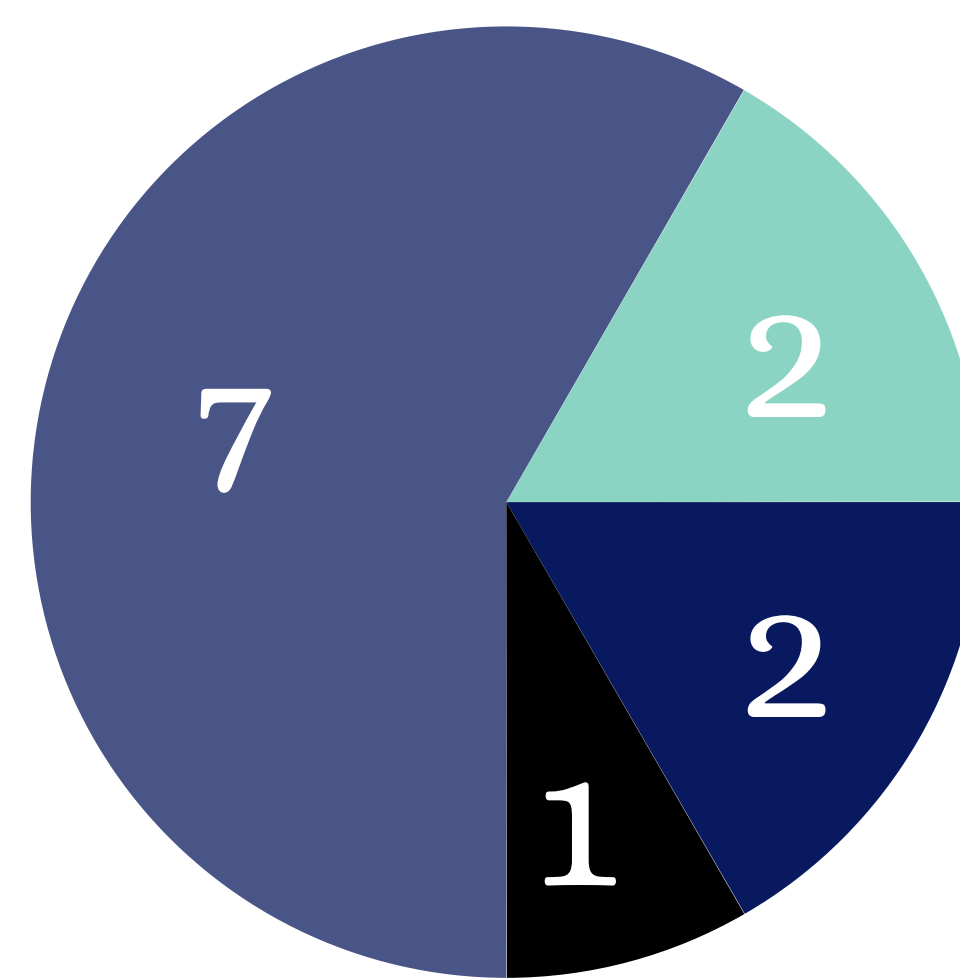
Kalamazoo (n=13)



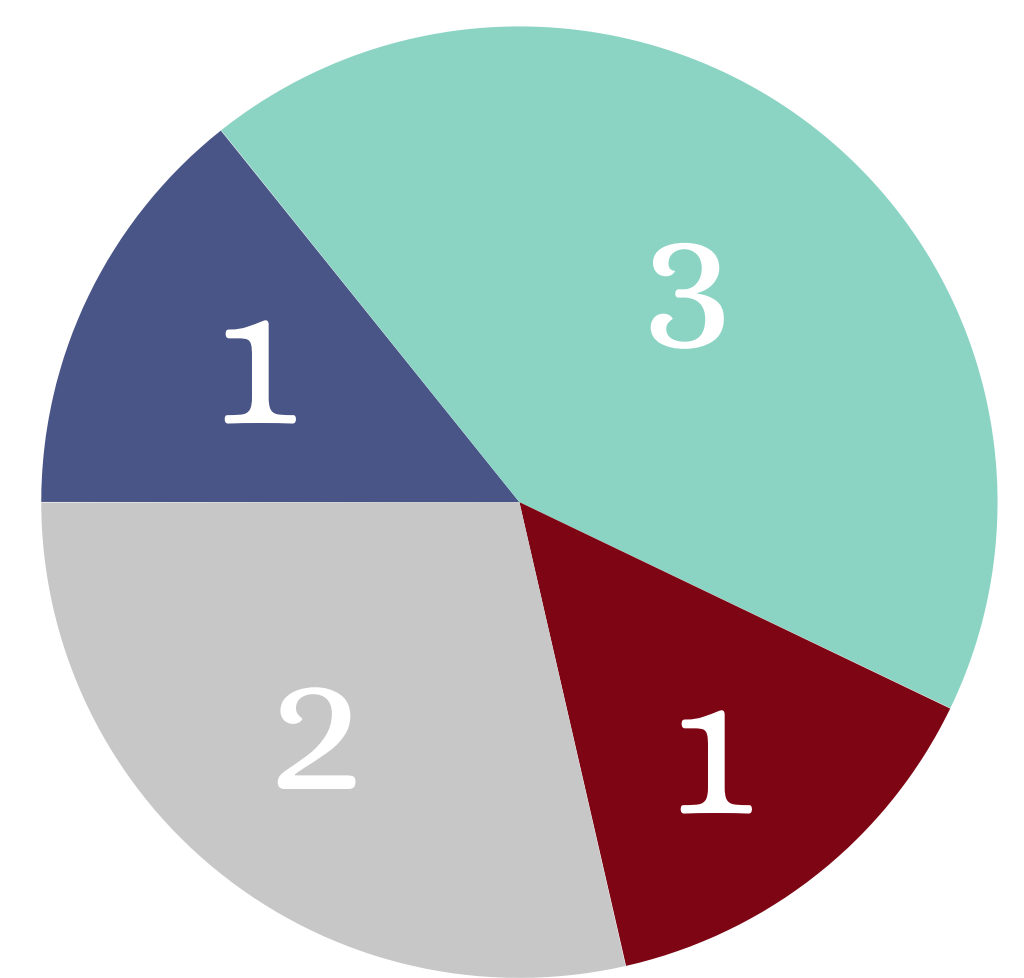
Calhoun (n=13)



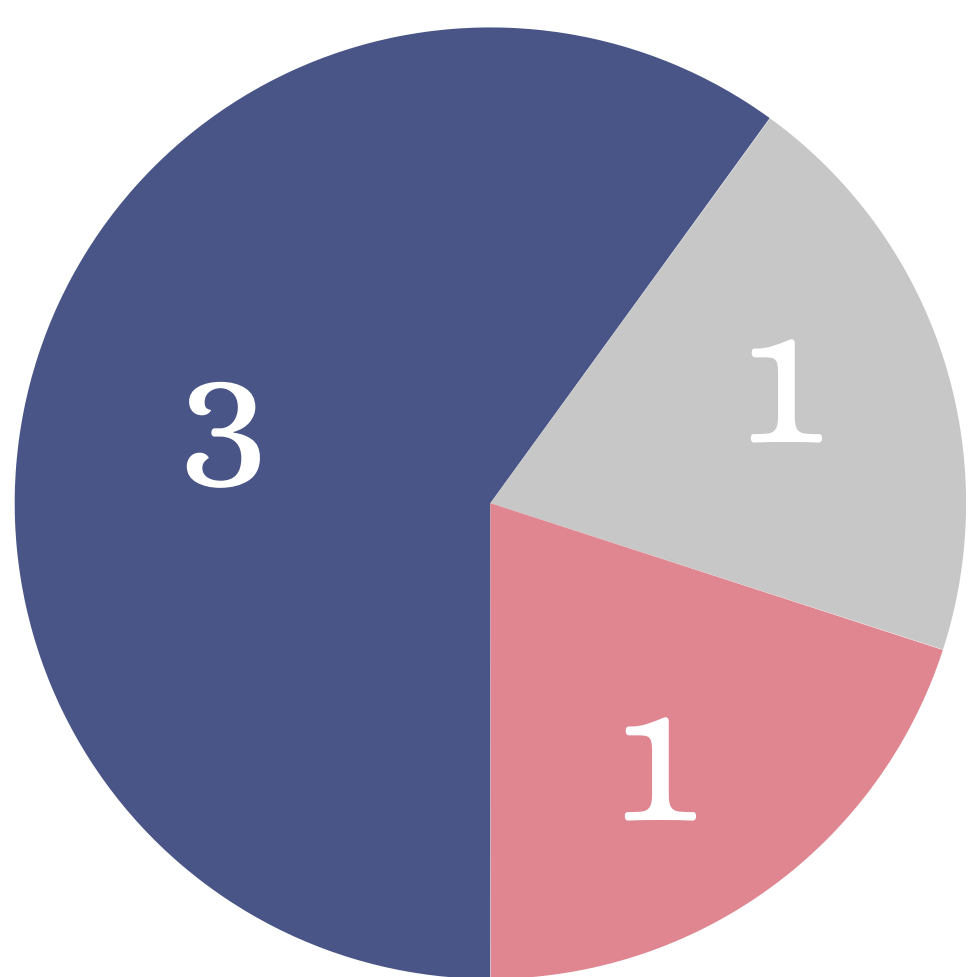
Muskegon (n=12)



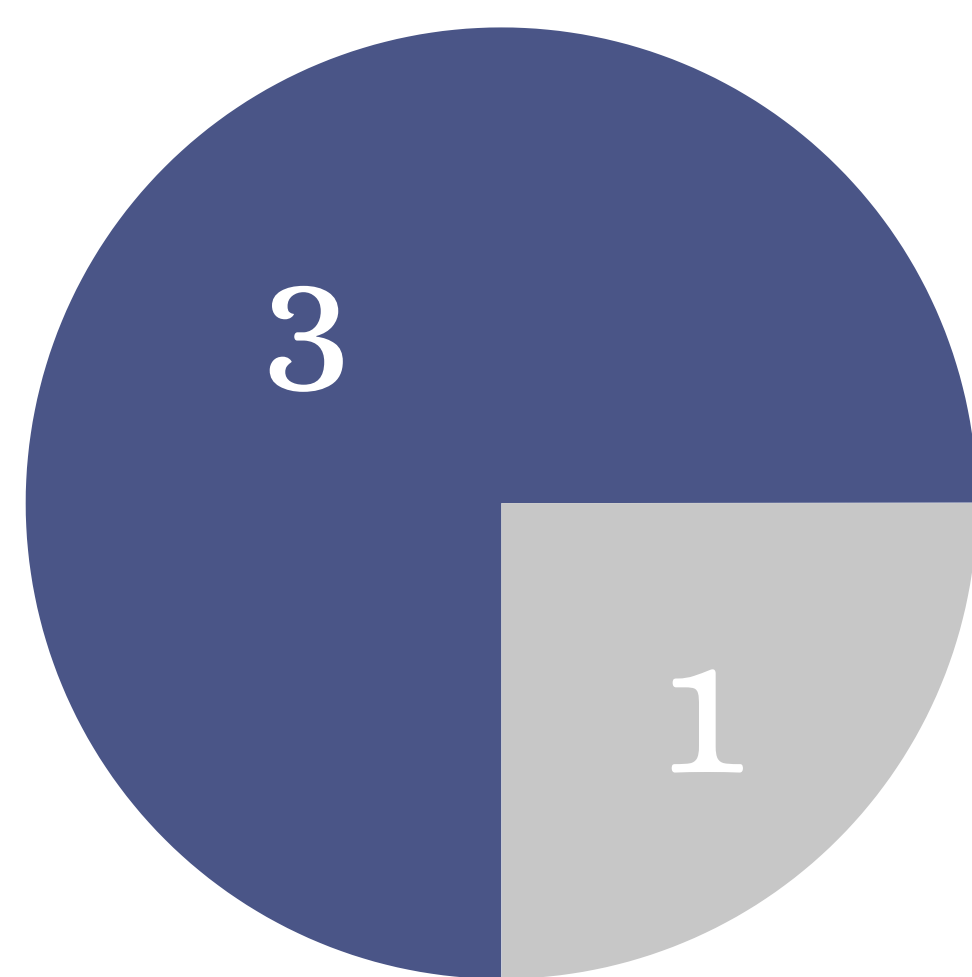
Berrien (n=7)



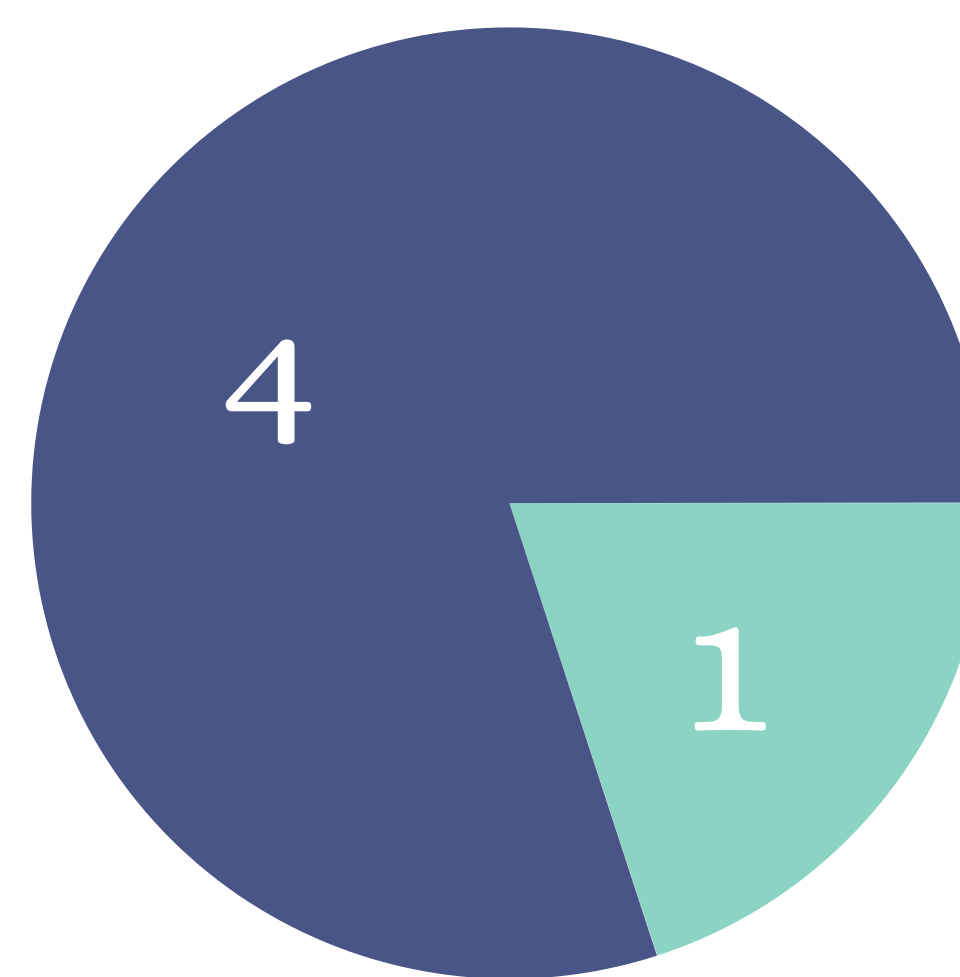
Grand Traverse (n=5)



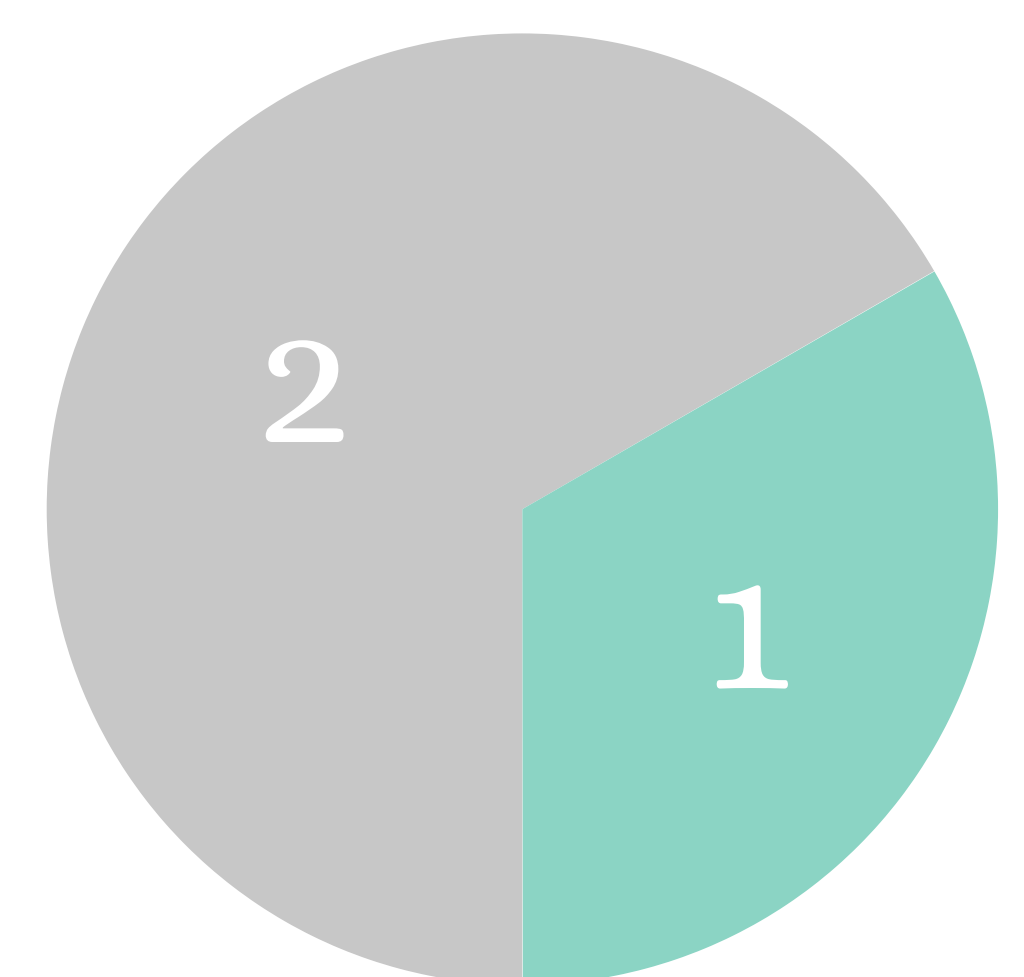
Allegan (n=4)



Van Buren (n=5)



St. Joseph (n=3)



Barry (n=0)



Leelanau (n=0)



Mason (n=0)



Osceola (n=0)



Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

Demographics

Sex

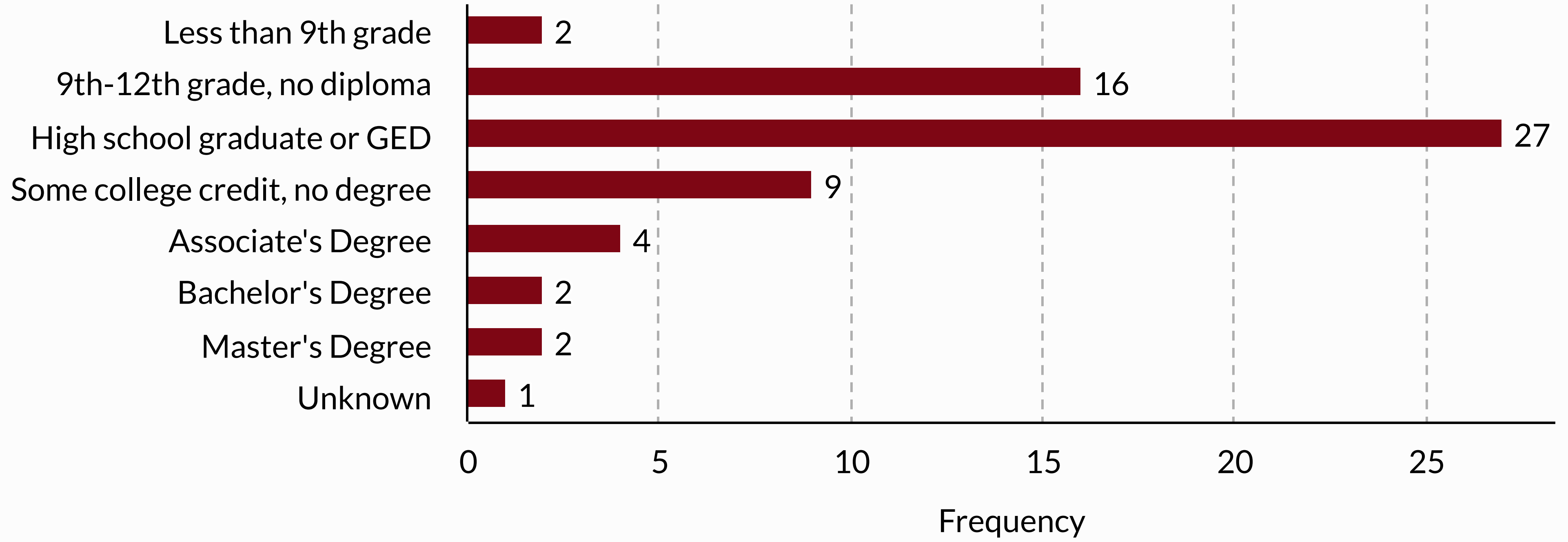


77%

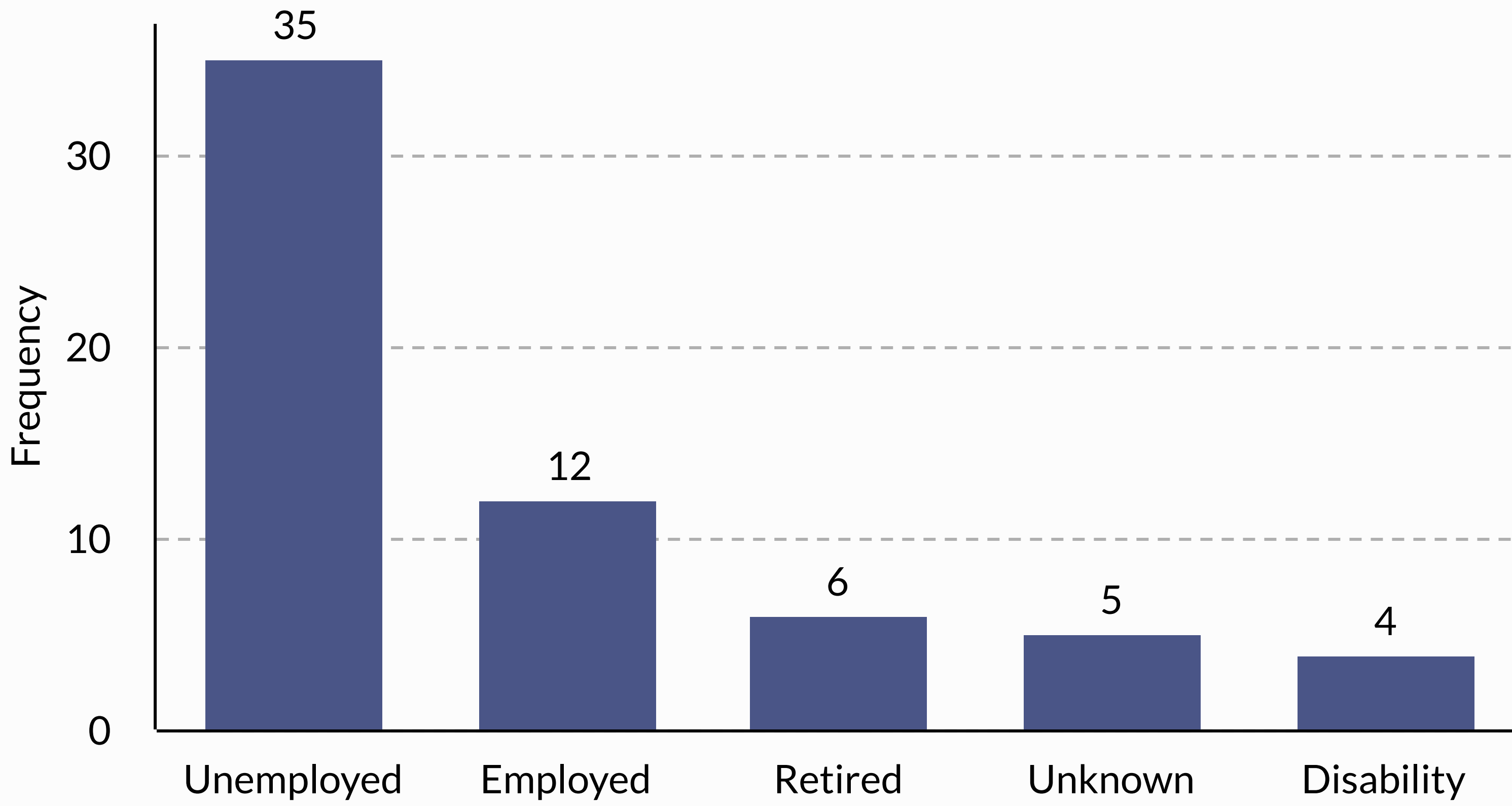


23%

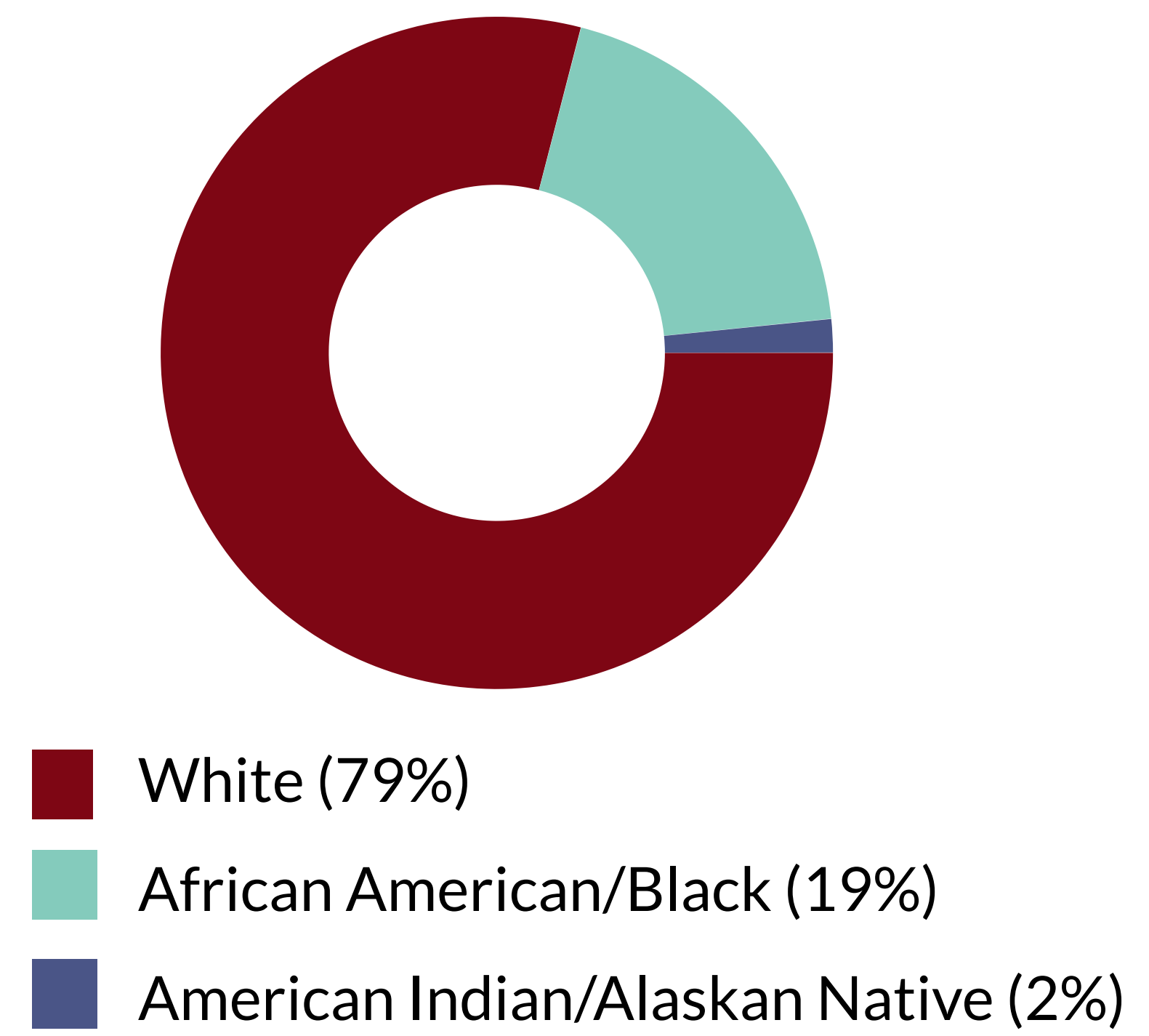
Decedent's Highest Level of Education



Decedent's Employment Status



Race



Age

Minimum Age

18 years

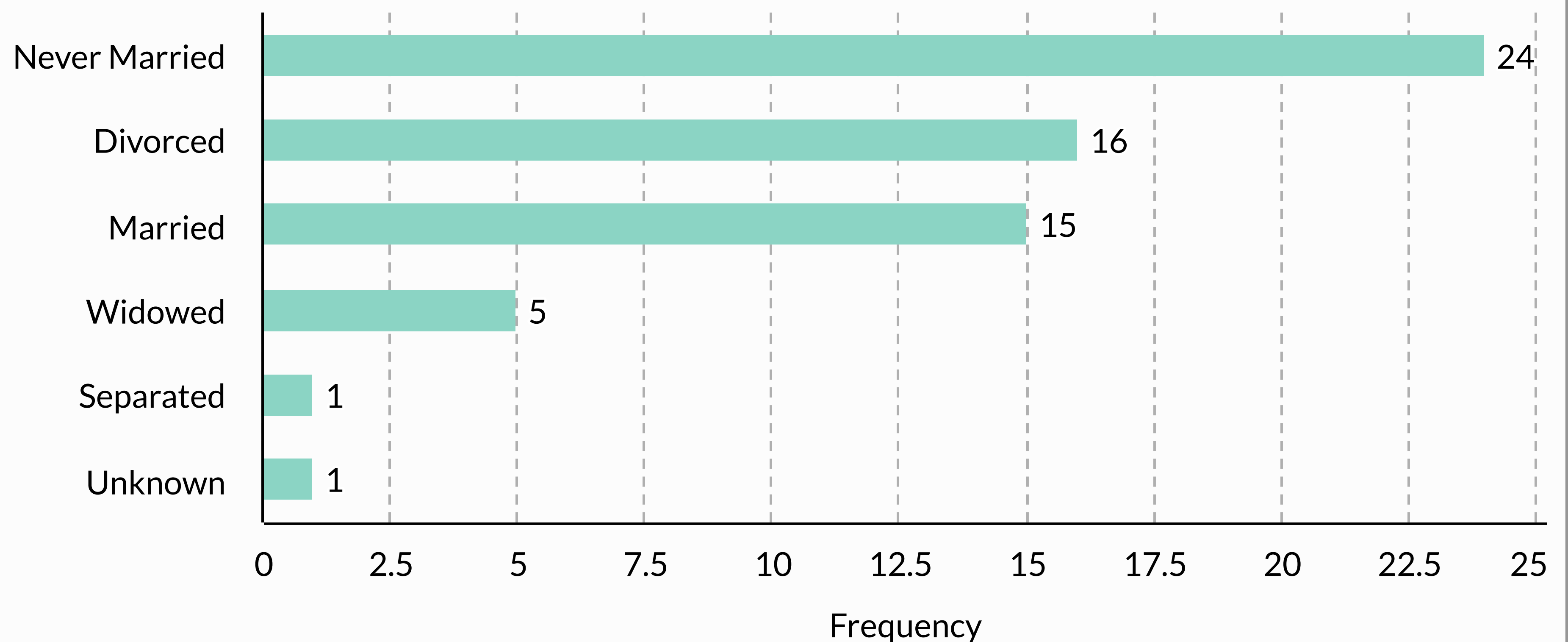
Maximum Age

69 years

Average Age

44 years

Decedent's Marital Status

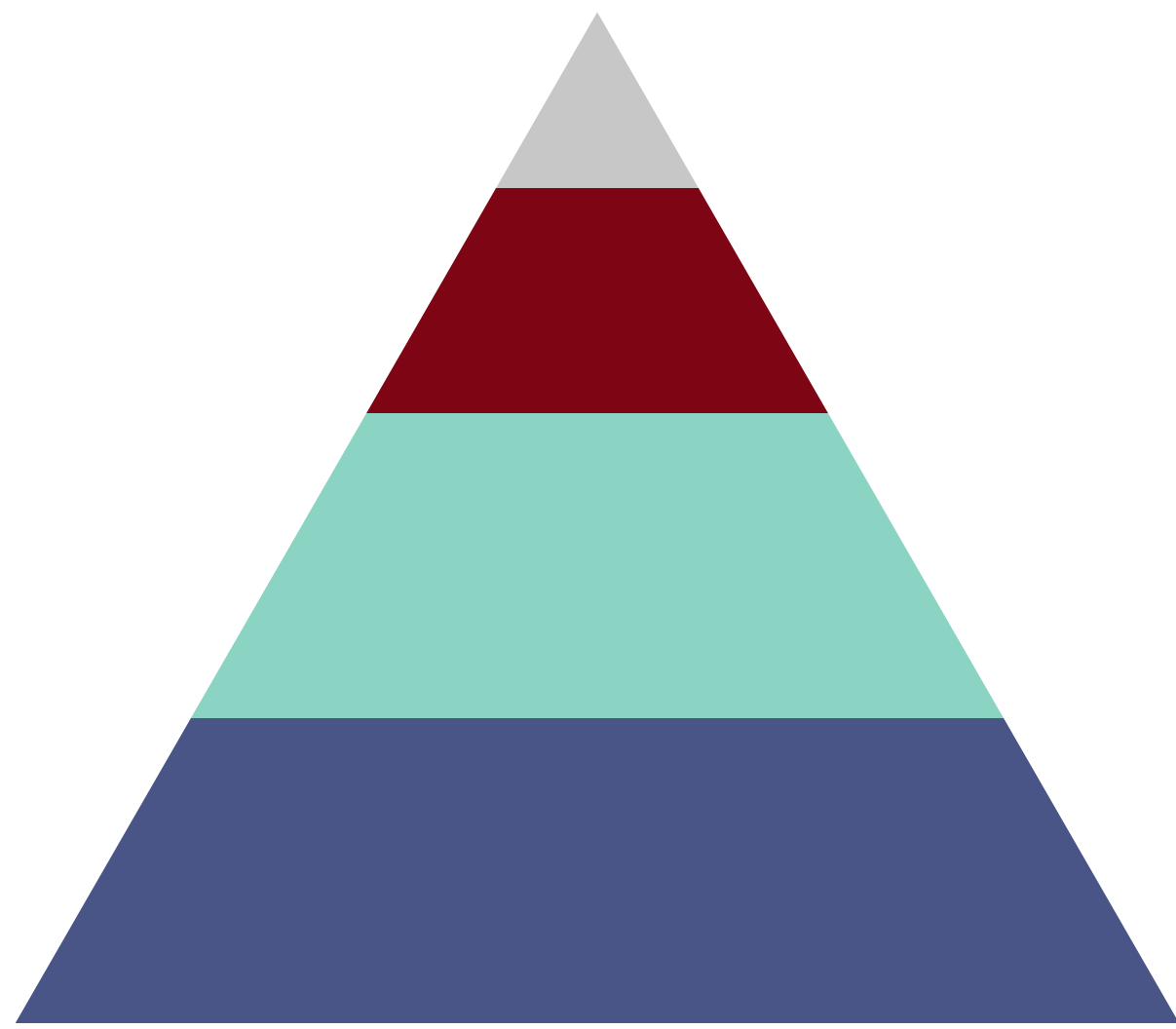


Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

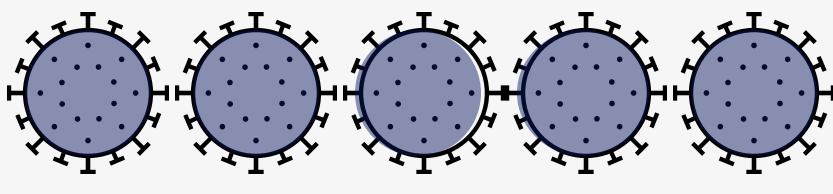
Health Factors

Most common ailments*

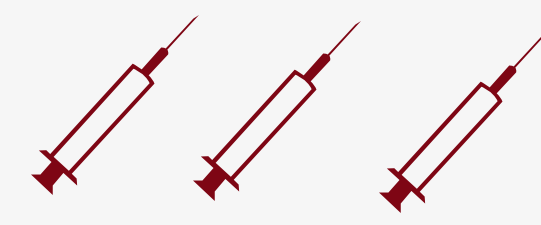


- Hypertension (31%)
- Chronic Pain (31%)
- Lungs (23%)
- GERD (18%)

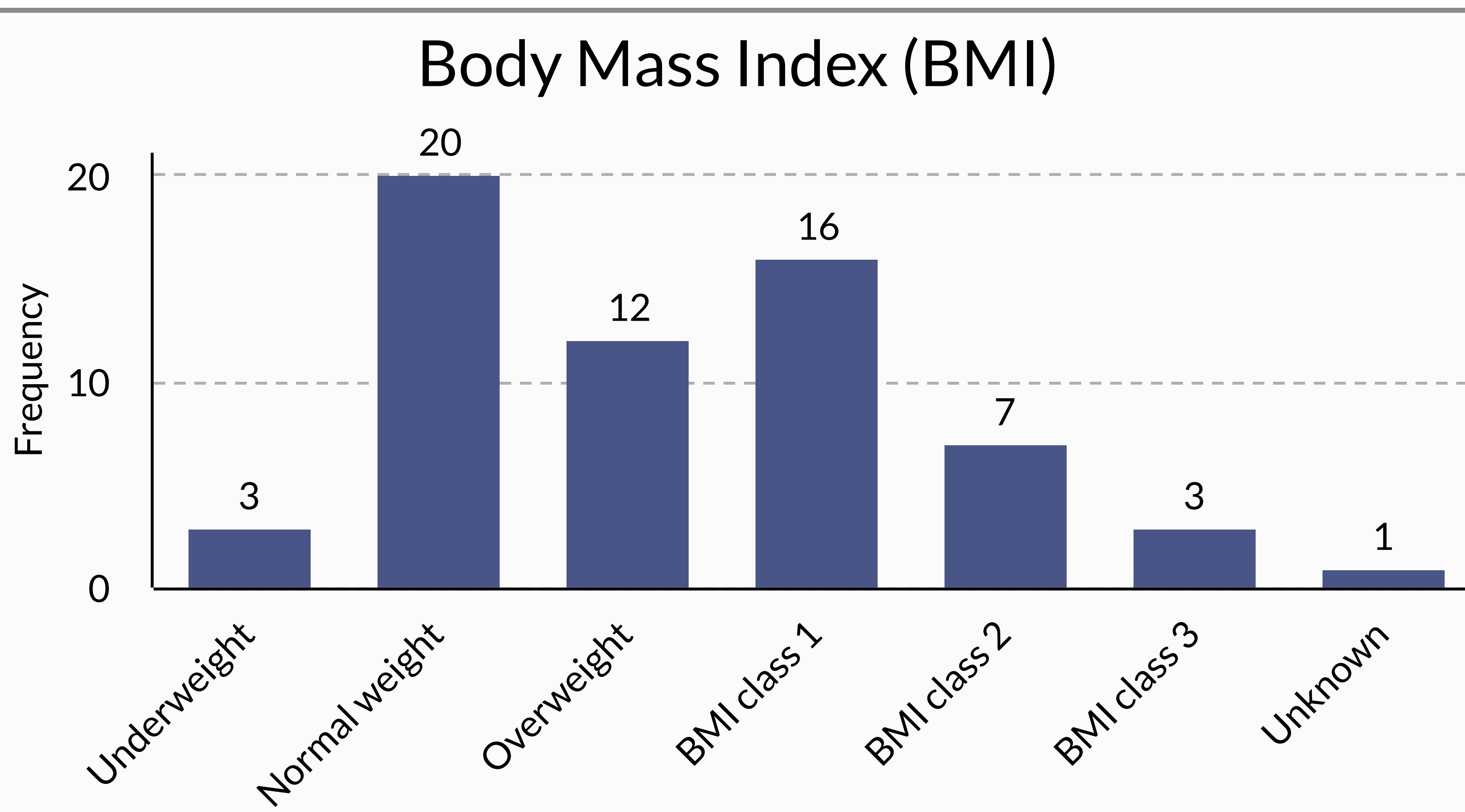
*Decedents may be represented in more than one category. Only ailments with official diagnosis are included.

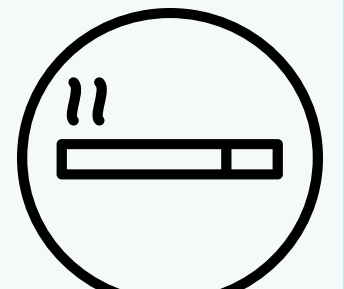



At least 13 decedents were Hepatitis C positive




At least 7 of these decedents were known to use substances intravenously



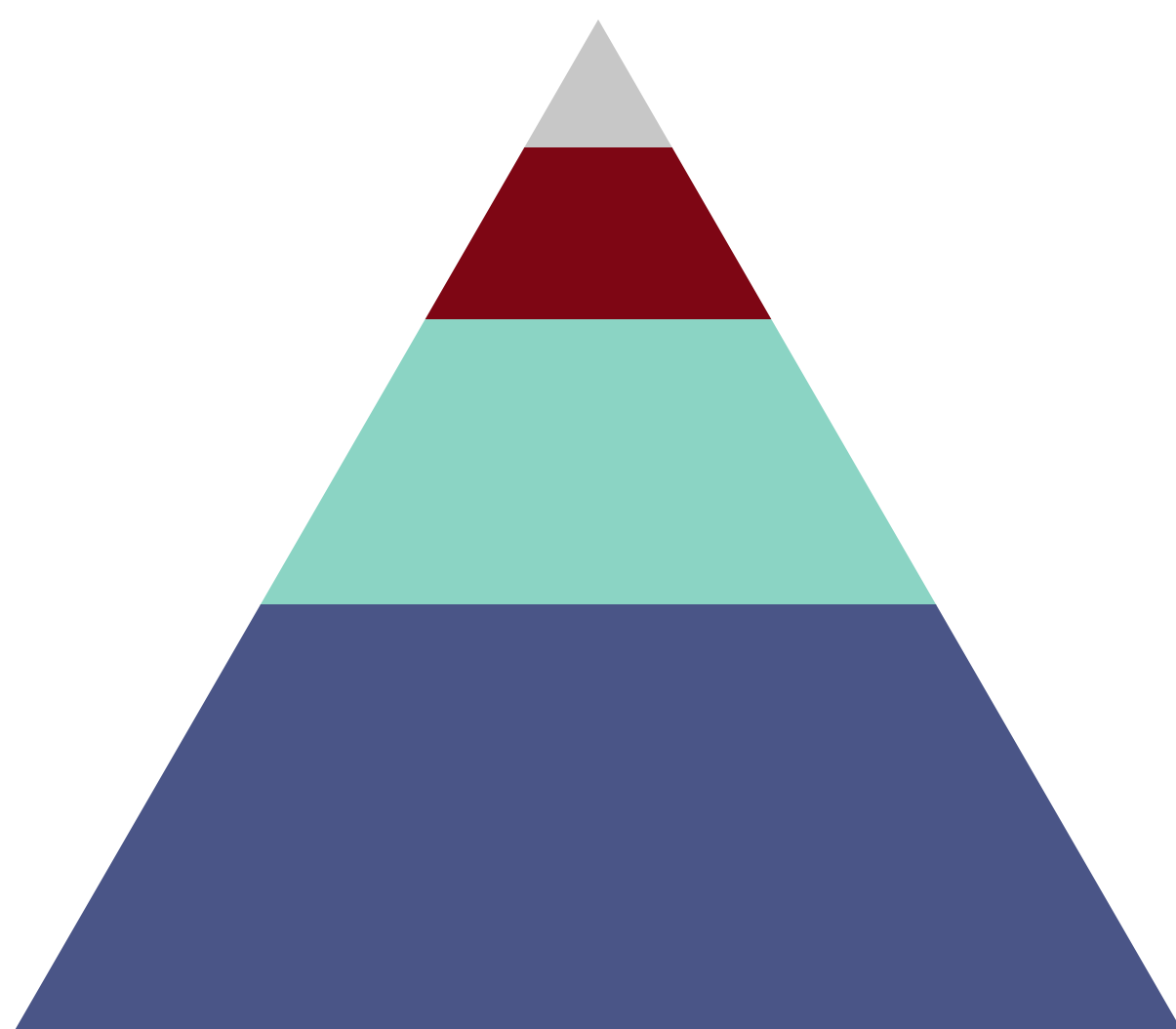
Decedent used tobacco **76%+** 

Decedent drank alcohol **68%+** 

Decedent had a PCP **42%** 

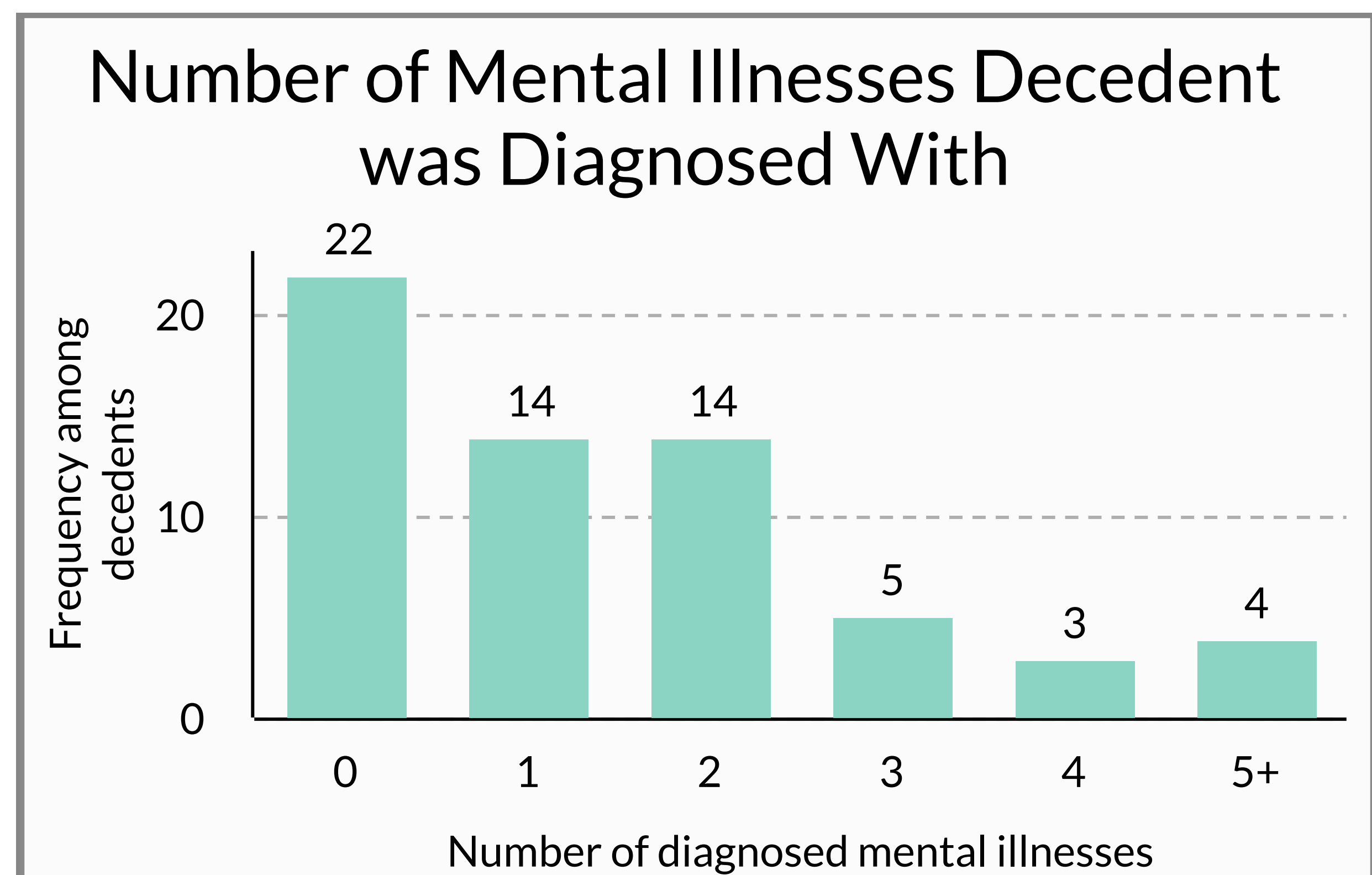
Mental Health Factors

Most common mental illnesses*



- Depression (48%)
- Anxiety (32%)
- Bipolar (19%)
- ADD/ADHD (15%)

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



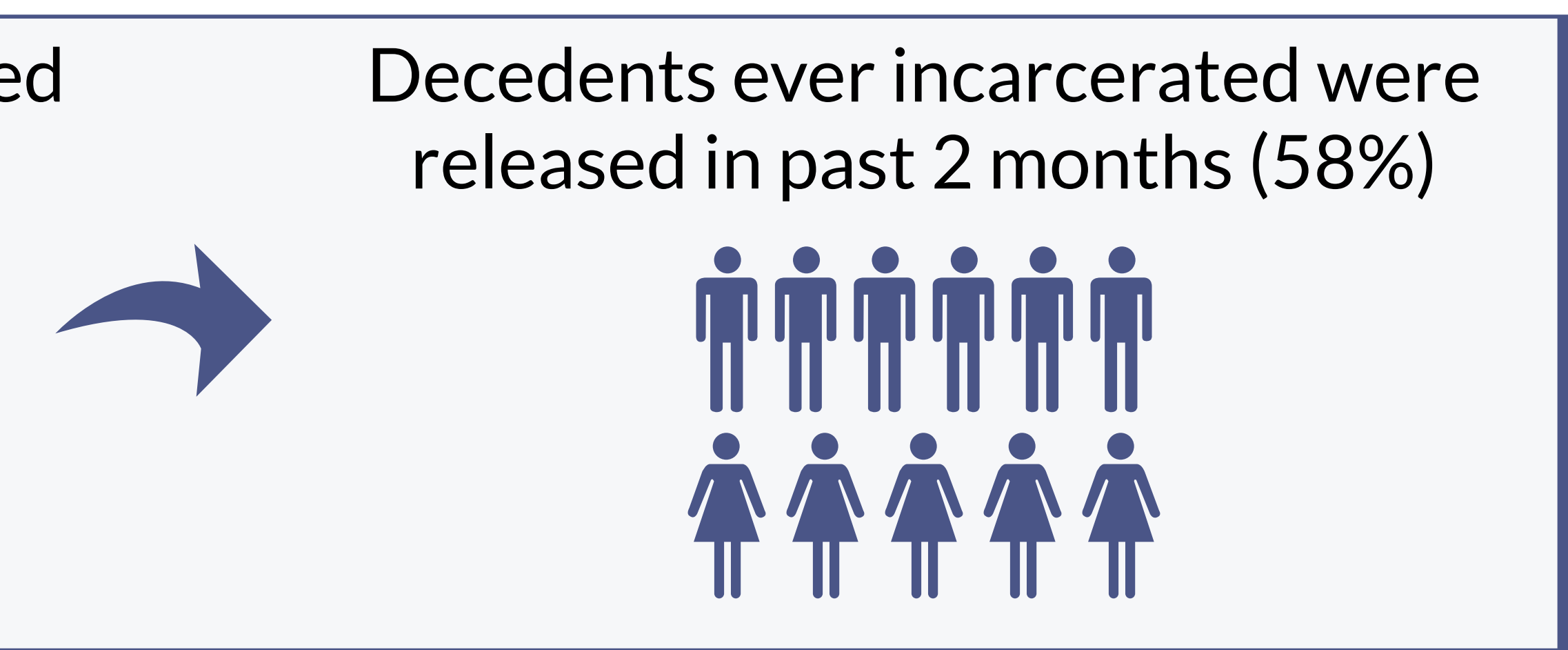
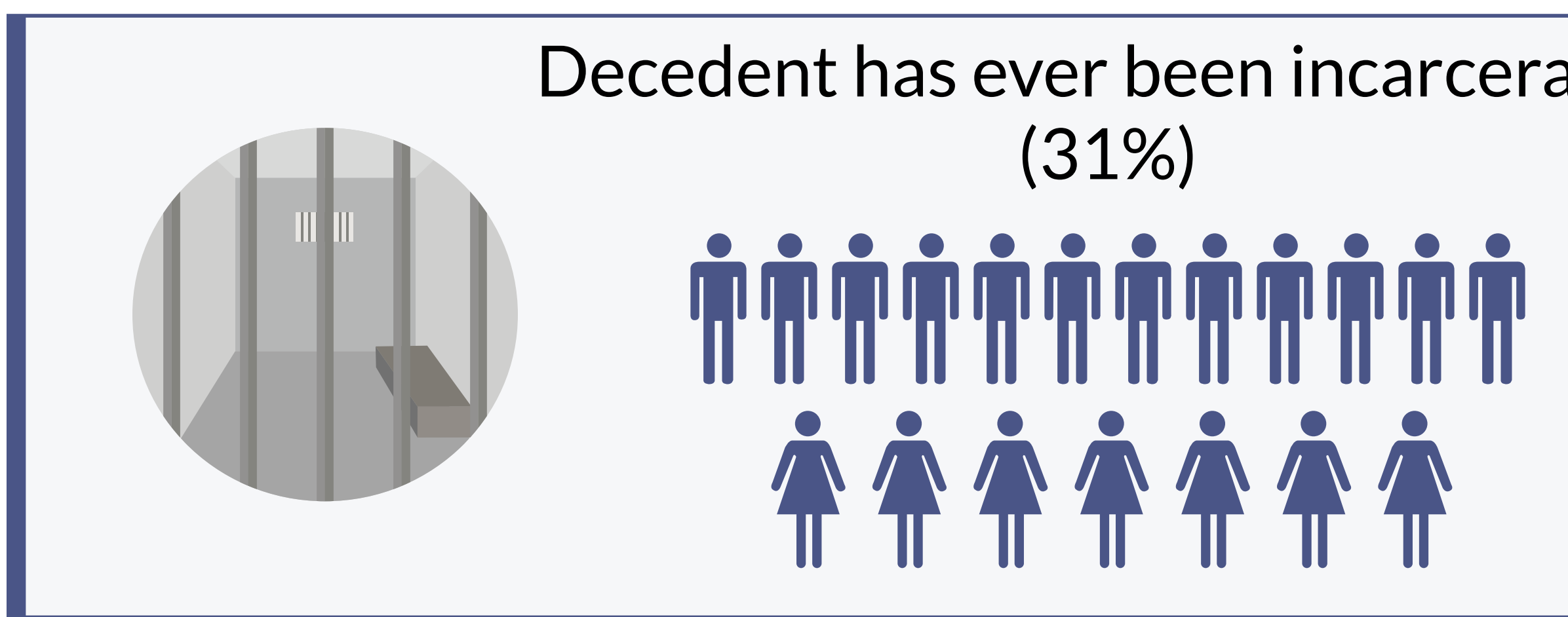
Percentage of decedents who have ever had **suicidal ideation** **23%**

Percentage of decedents with **previous suicide attempts** **18%**

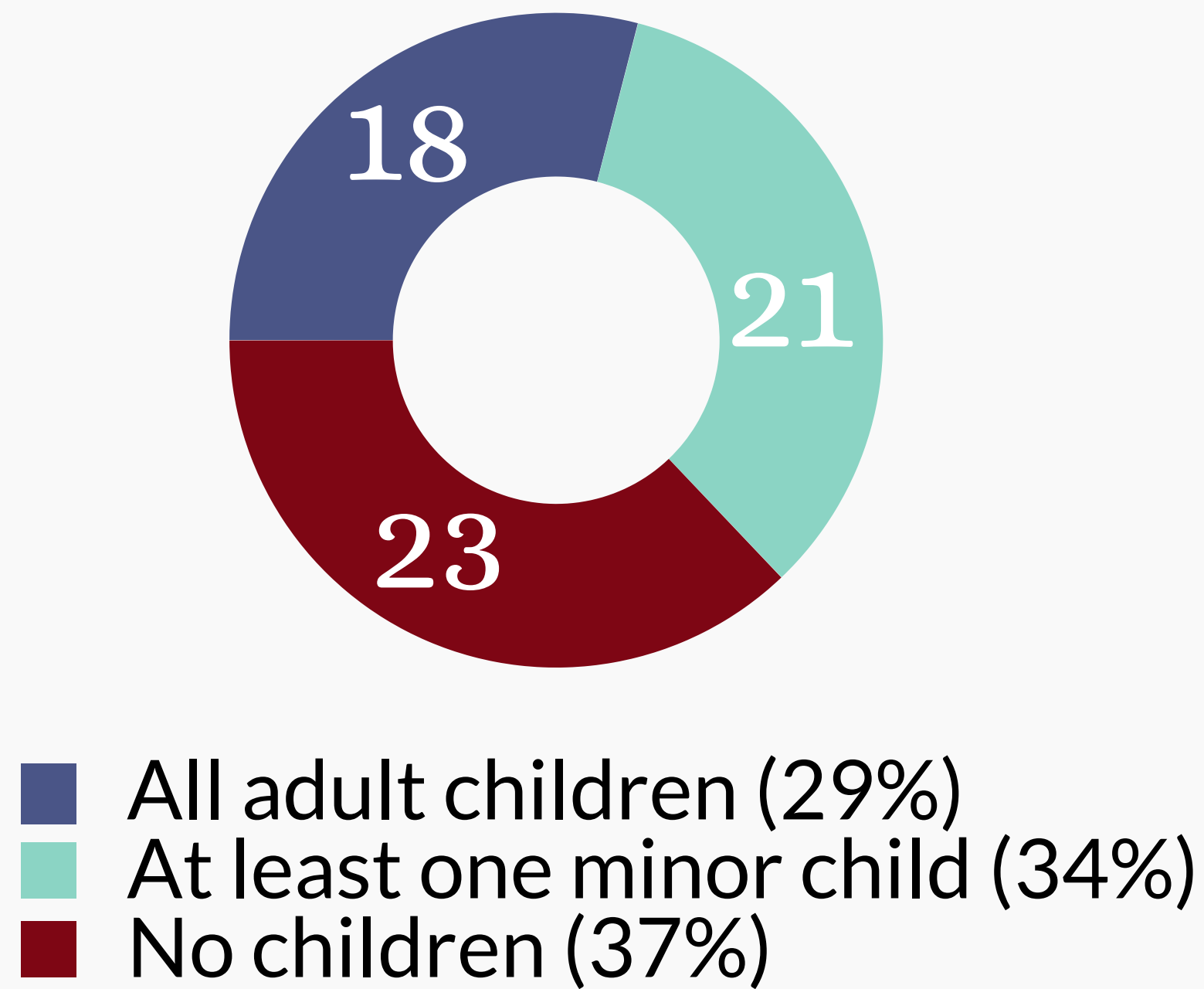
Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

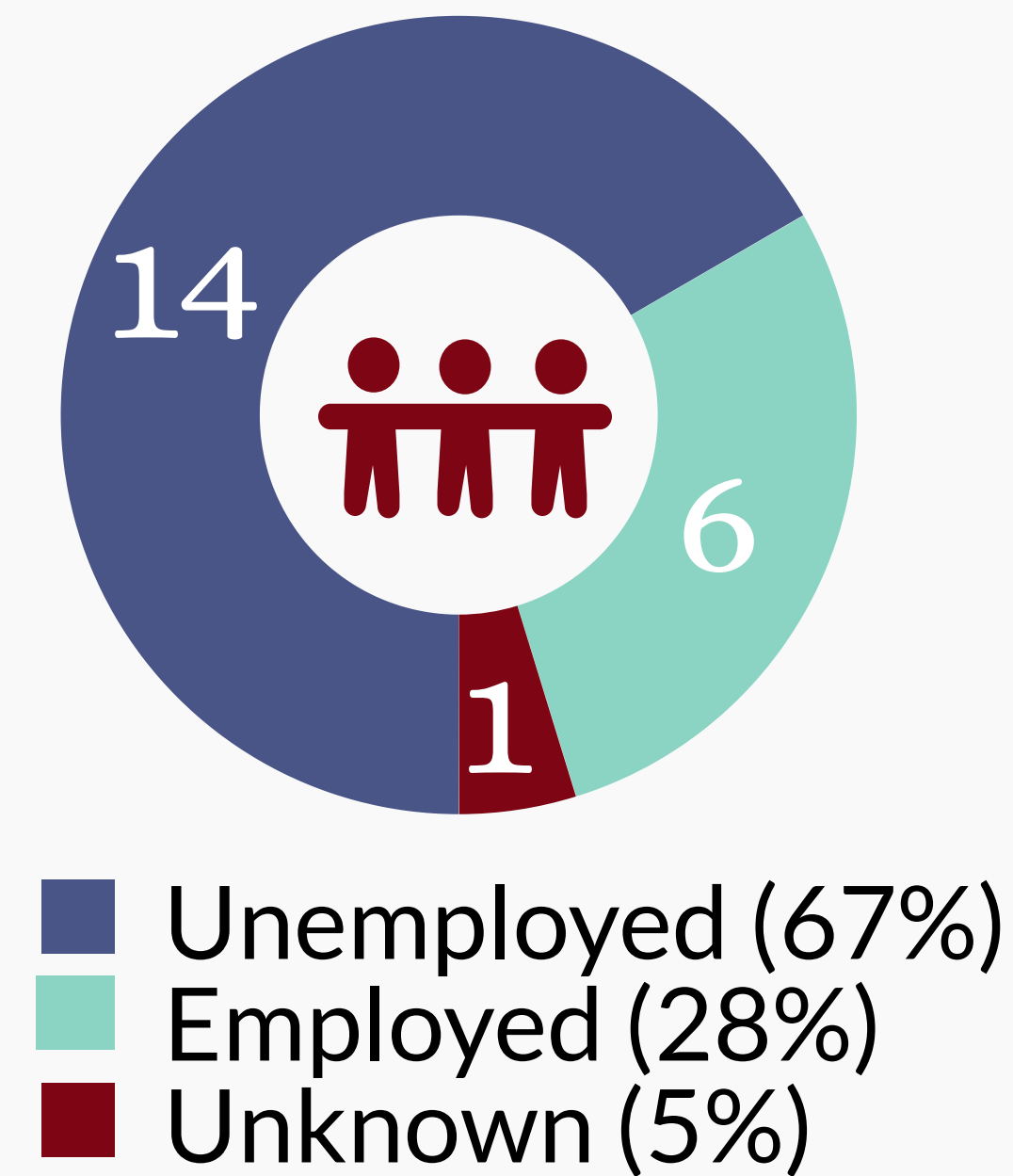
Social Factors



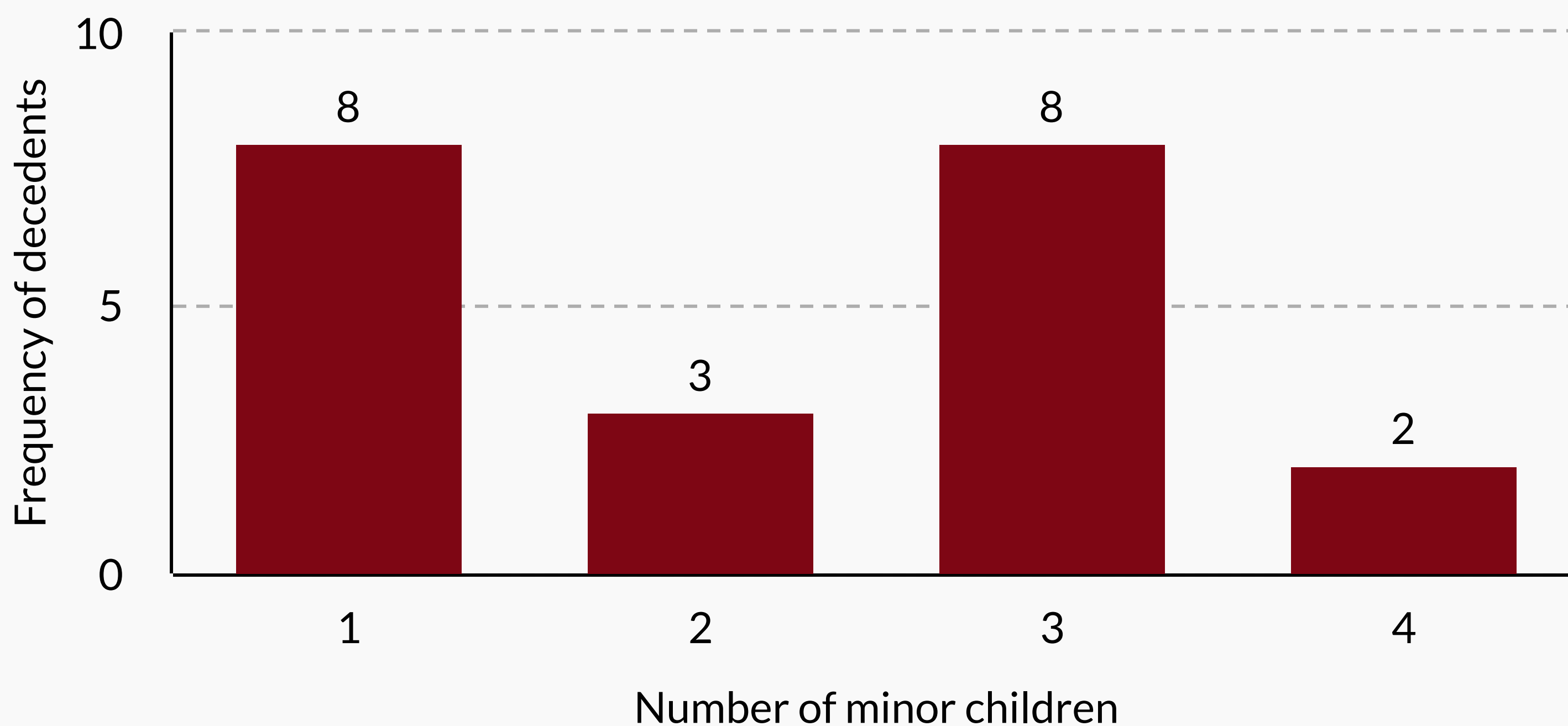
Decedent's Child Status



Employment Status of those with Minor Children



Number of Minor Children

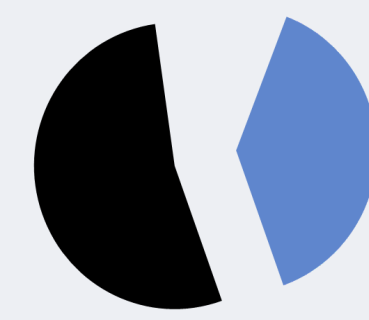
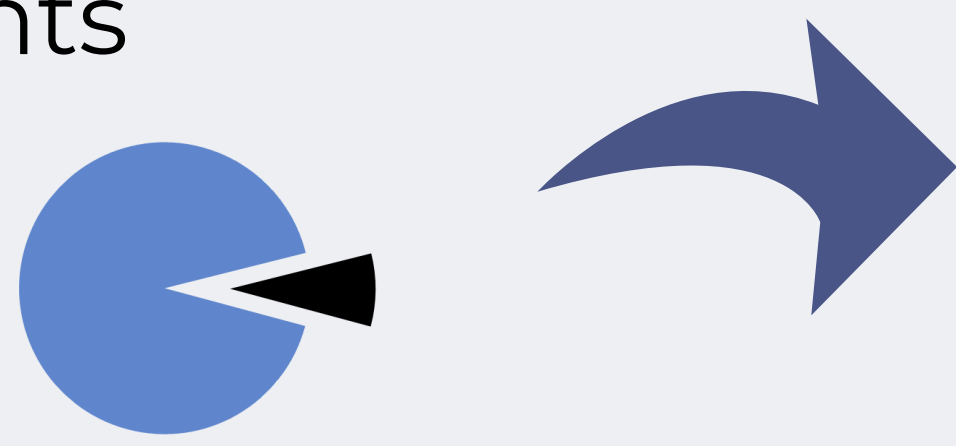


Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

Decedent's Substance Use History

At least **92%** of decedents were known to use or abuse substances



At least **42%** of those decedents used substances intravenously



At least **39%** of decedents were prescribed an opioid in the past 2 years



At least **10%** of decedents substance use started from a prescribed opioid



At least **44%** of decedents have had at least one overdose before their fatal overdose



At least **59%** of those decedents have had 2 or more overdoses before their fatal overdose

Decedent's typical substance of choice

53% HEROIN 45% COCAINE 35% METHAMPHETAMINE

Drugs found in toxicology results[†]

76% Fentanyl 37% METHAMPHETAMINE
8% HEROIN 15% COCAINE

[†] Decedent may have had more than one drug of choice and more than one drug in their toxicology result

Recently sober in the past month

32%

Suspected reasons for relapse*

20% Left jail/rehab
25% Life stress**
55% Unknown

*These factors were mentioned by those close to decedent (with substance use history) for why they may have begun to use substances again after a period of being substance free ranging from a few months to years.

**Life stress includes the death of a loved one, a traumatic accident, and job loss.

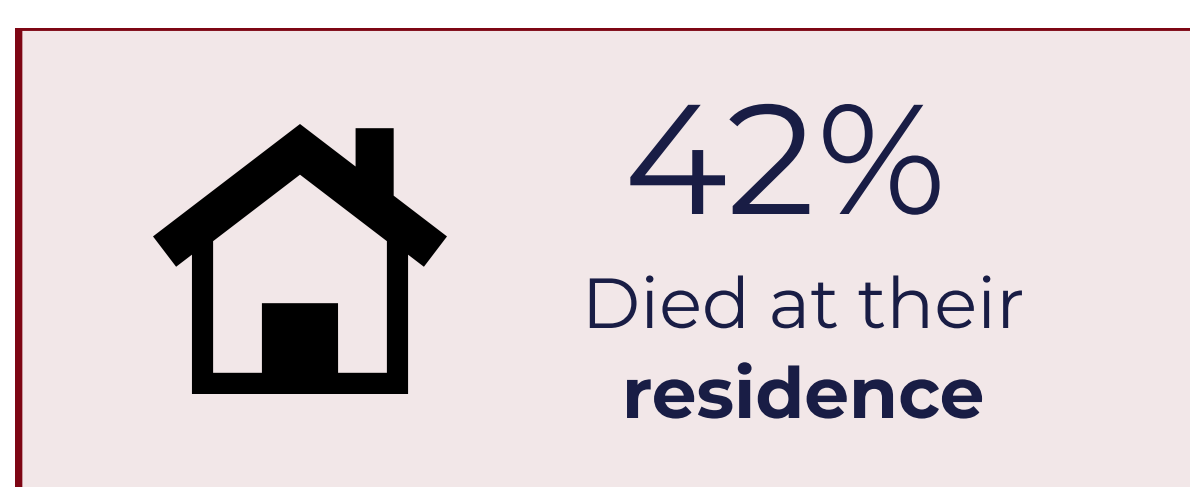
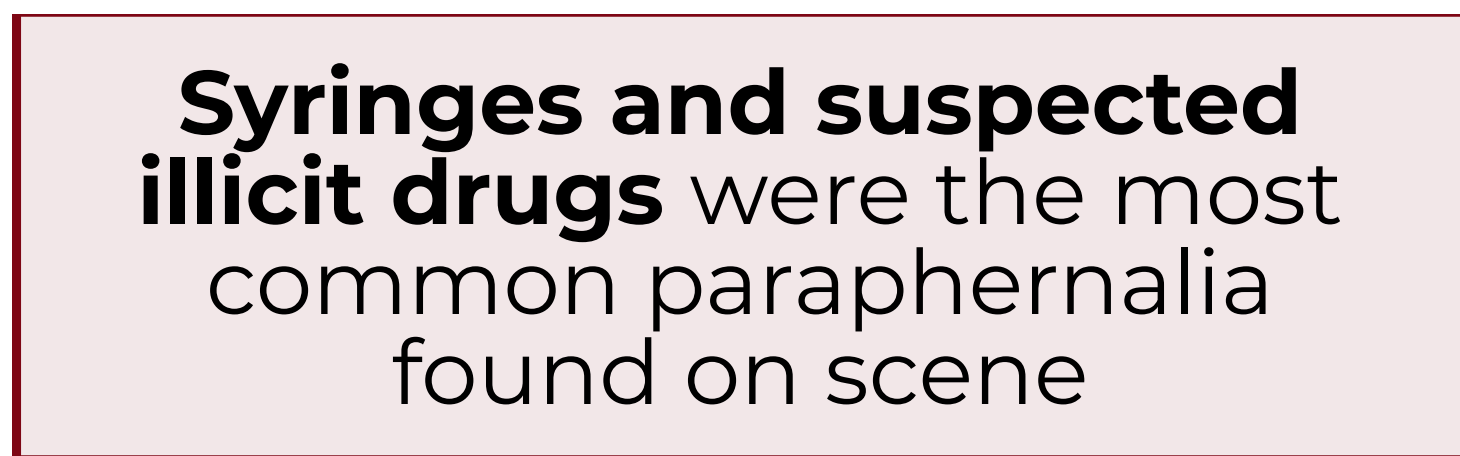
Decedent has been to a substance rehabilitation clinic at least one time 35%

Decedent was receiving a form of MAT 15%

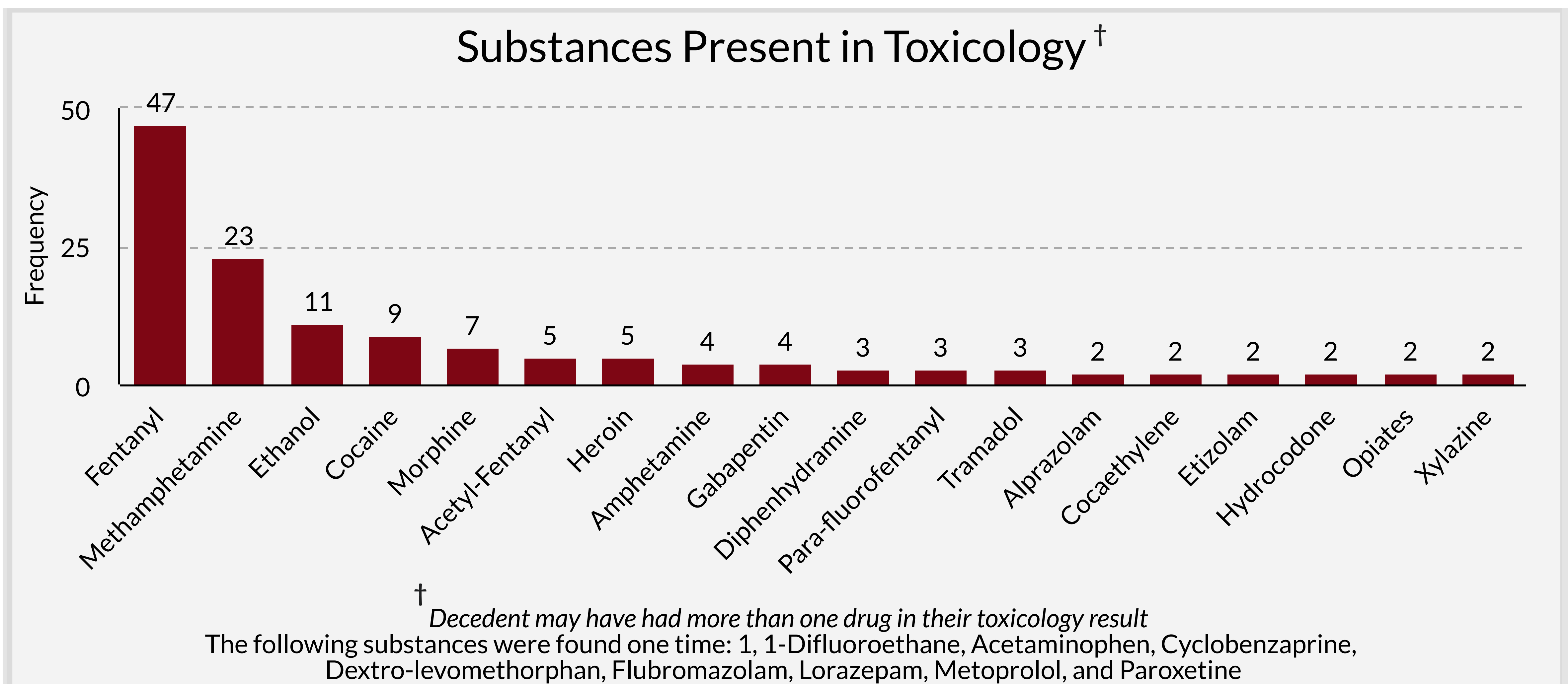
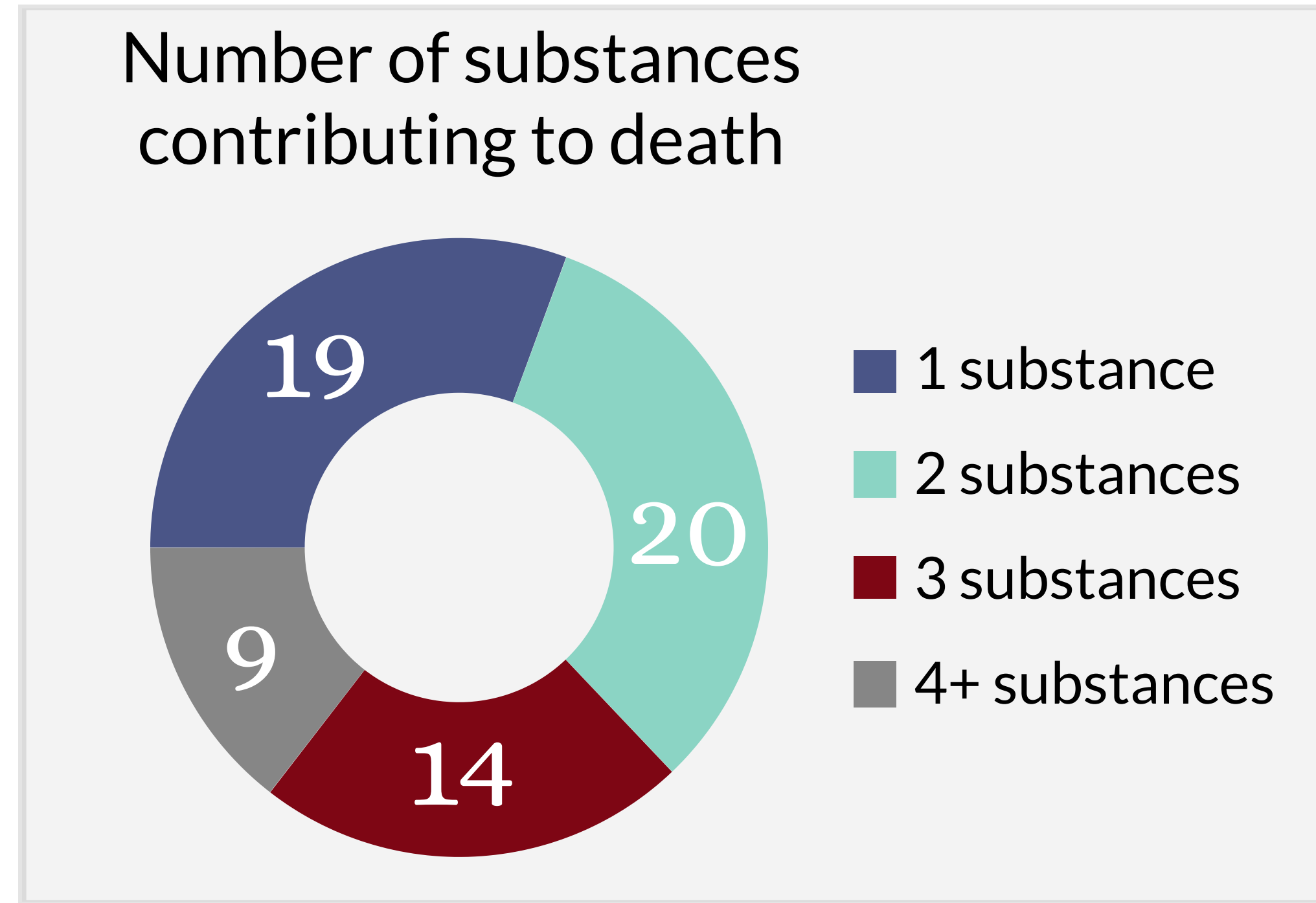
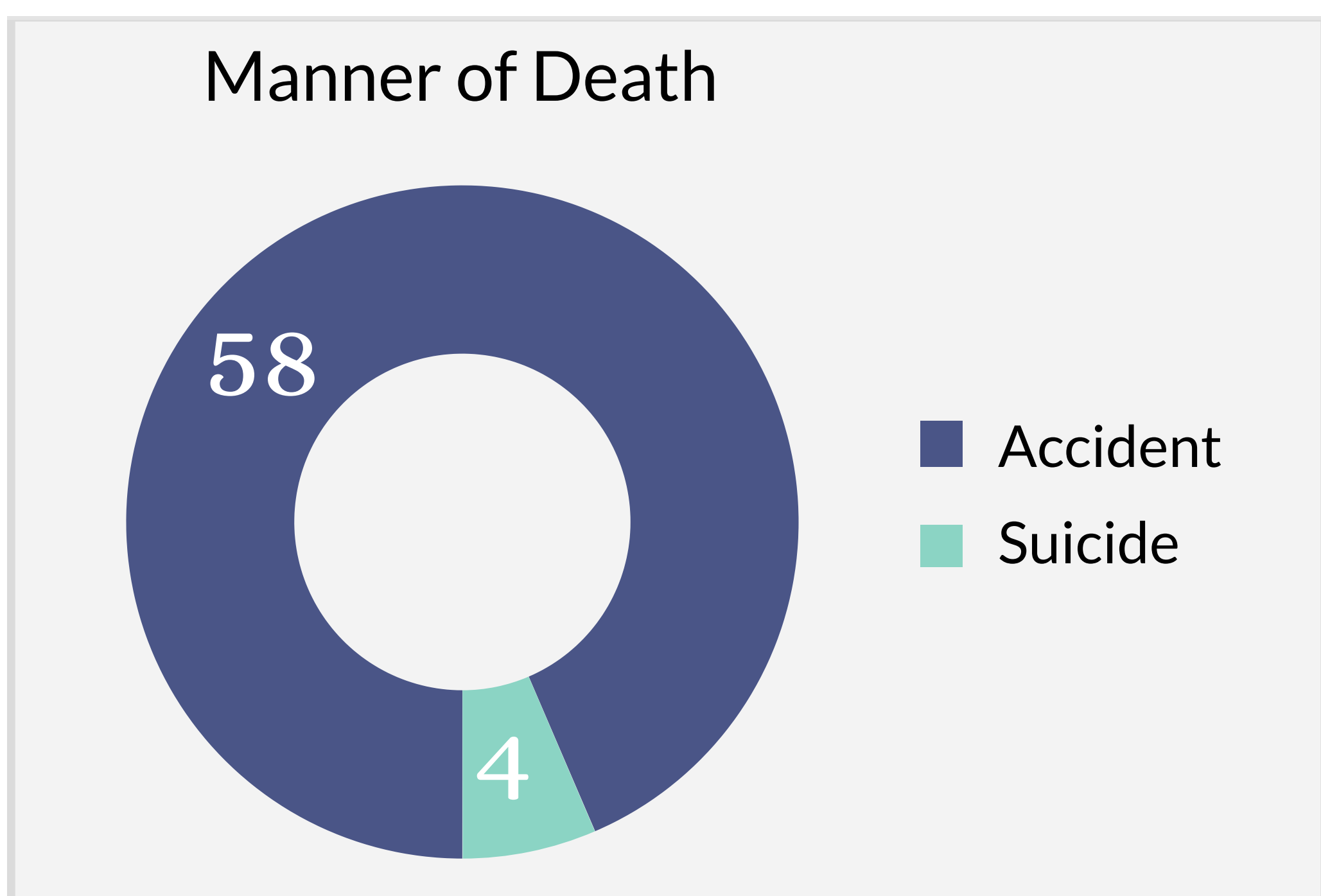
Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

Death Scene Findings



Autopsy and Toxicology Results

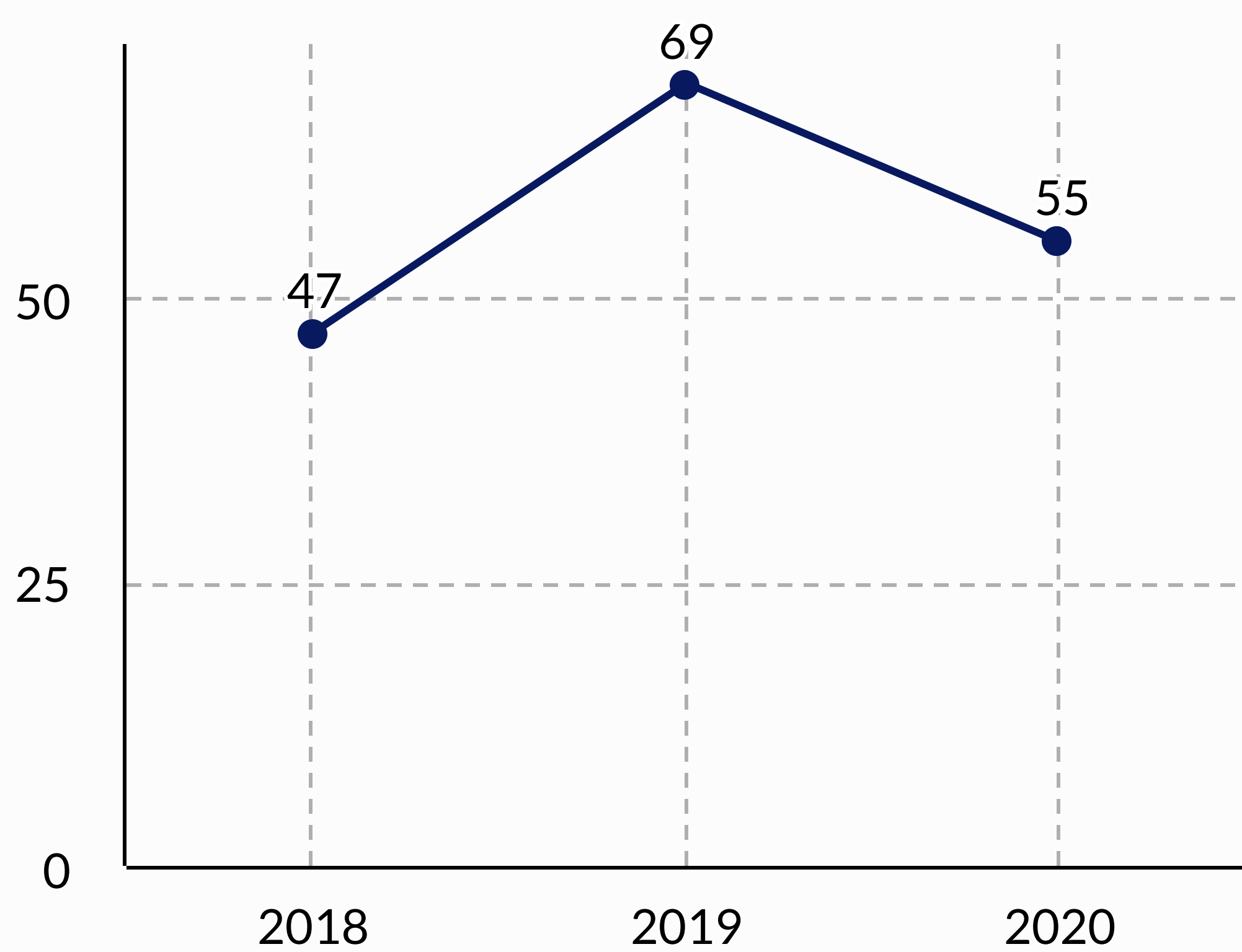


Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

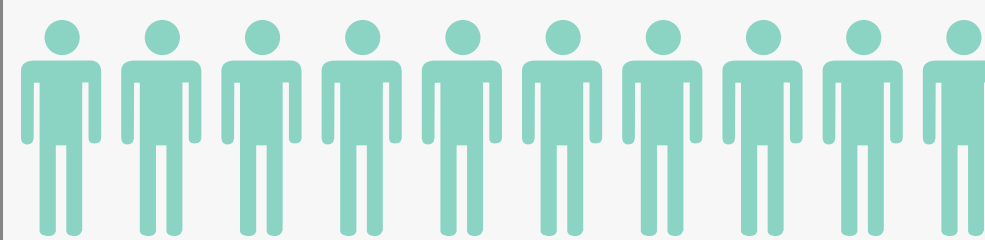
Highlights

Number of drug-related fatalities by year, October to December*



*Berrien county data excluded; Berrien did not use this MEO in 2018

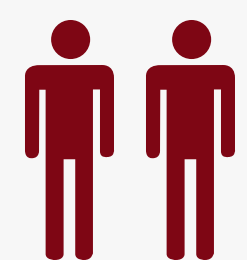
Additional Naloxone Information



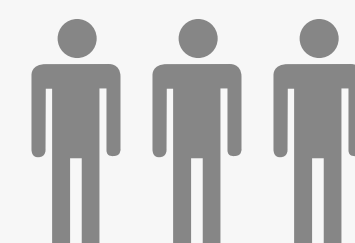
1 dose of Naloxone



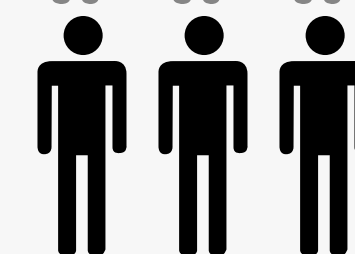
2 doses of Naloxone



3 doses of Naloxone



4 doses of Naloxone



5 doses of Naloxone

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

Unknown dosage of Naloxone given to six decedents.

Positional Asphyxia:

19% (10 of 52) of decedents with an opioid-related death were originally found in a **potentially airway asphyxiating position**

These positions include finding decedent found on the floor, bed, or on another surface

0% (0 of 10) of decedents who died of non-opioid substance(s) were originally found in a **potentially airway asphyxiating position**

Novel drug: **Para-Fluorofentanyl**

- Analogue of fentanyl
- Zero deaths due to para-fluorofentanyl in 2018/2019
- All three appearances occurred in Muskegon
- Continuing to increase in frequency in 2021

Substance combinations

Heroin & Fentanyl

Heroin contributed to 5 deaths, all 5 of these deaths also had fentanyl present

Methamphetamine & Opioids

2 decedents had methamphetamine and heroin in their toxicology report

18 decedents had methamphetamine and opioid(s) (including heroin) in their toxicology report

Xylazine & Fentanyl

Xylazine contributed to 2 deaths, both of these deaths also had fentanyl present