

Deaths Related to Opioids and Other Drugs

Medical Examiner Office

Counties covered in this report:

- Allegan

Barry

Berrien

Calhoun

Cass

Grand Traverse

Kalamazoo

Leelanau

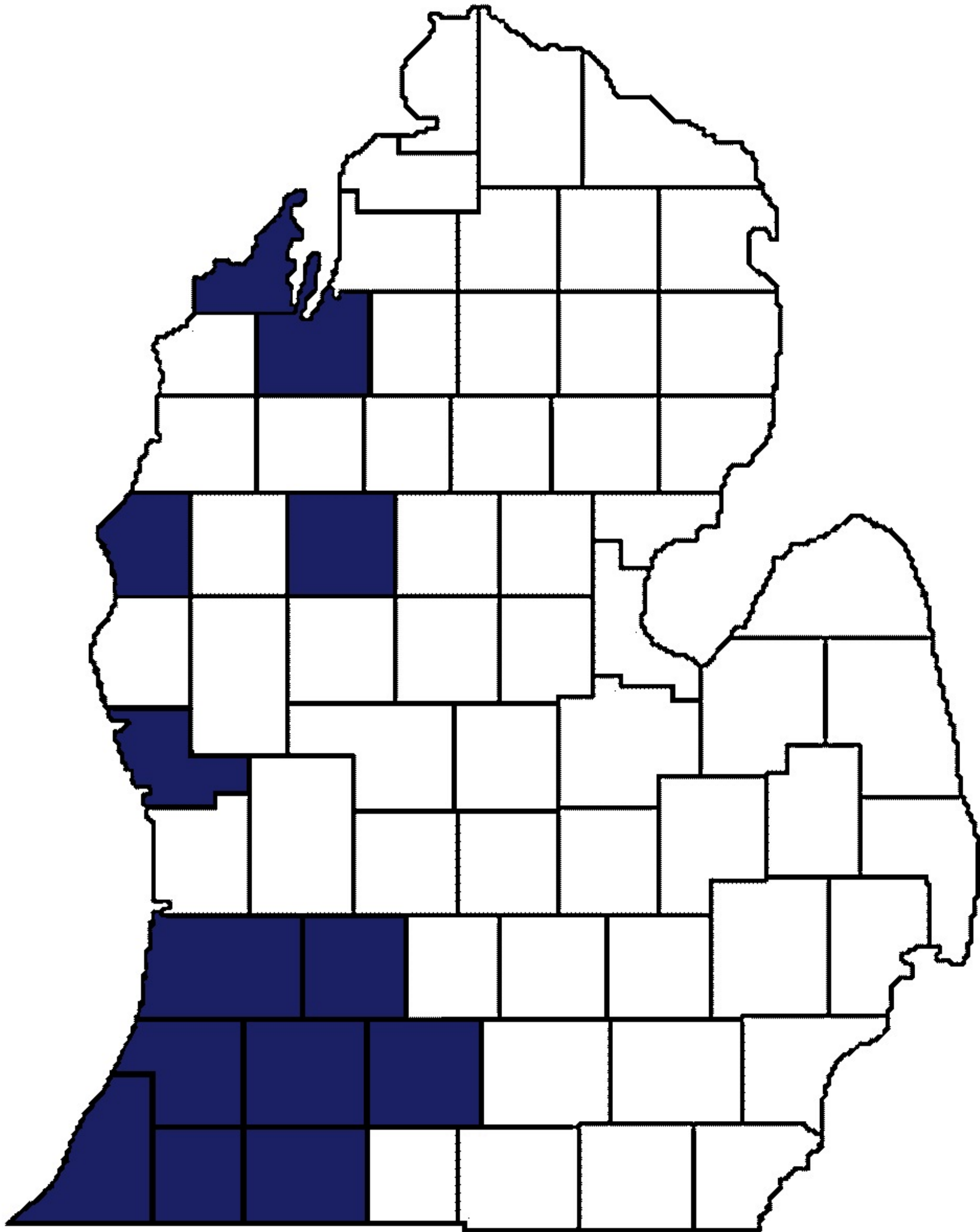
Mason

Muskegon

Osceola

St. Joseph

Van Buren



Purpose:

This data was collected from 13 counties served by the Office of the Medical Examiner (MEO) in the Department of Pathology at Western Michigan University Homer Stryker School of Medicine (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. Please note all data is preliminary in quarterly reports.

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, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

Total Drug-Related Deaths[†]

July to September, 2020

62 deaths

July to September, 2021

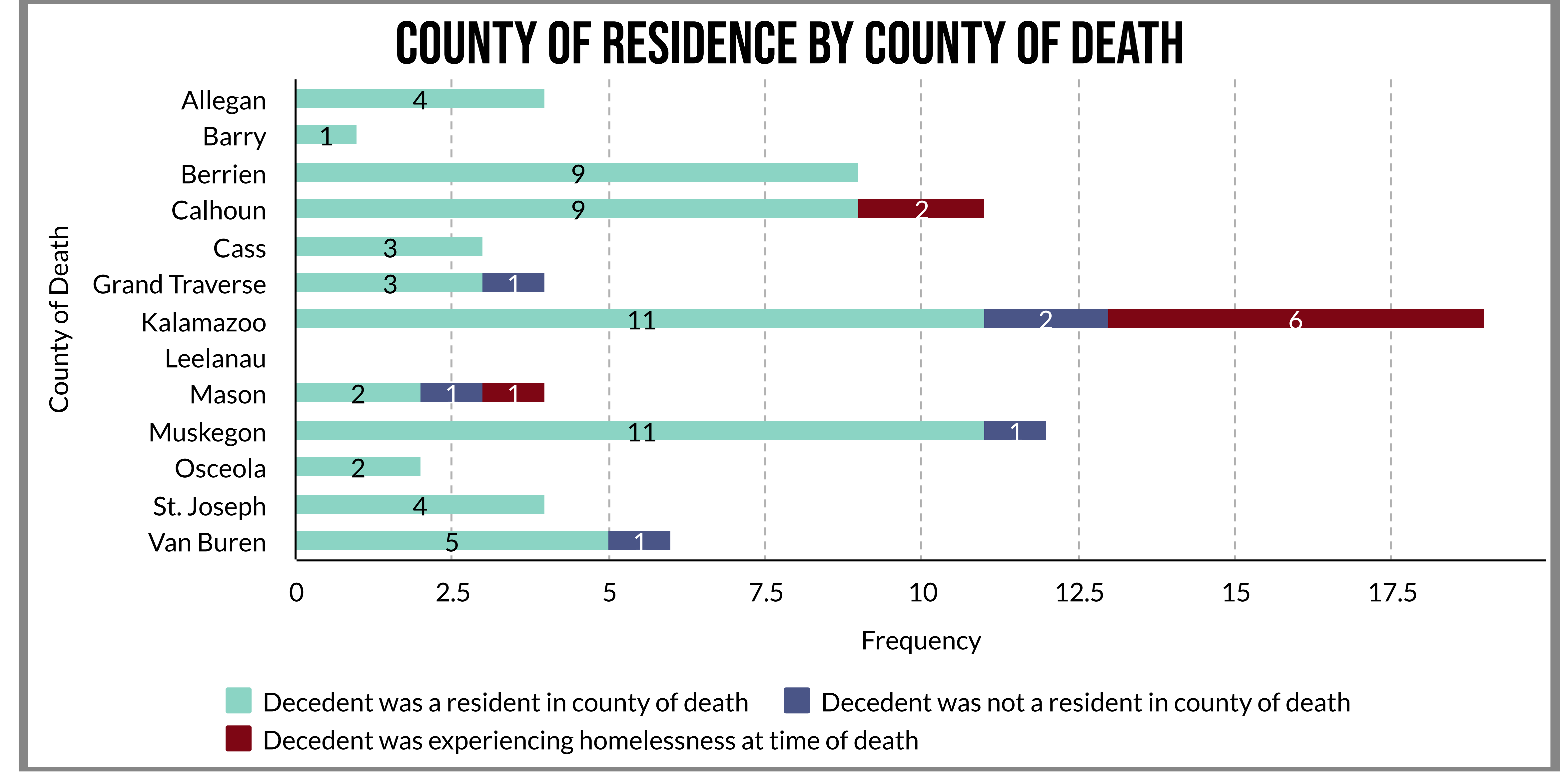
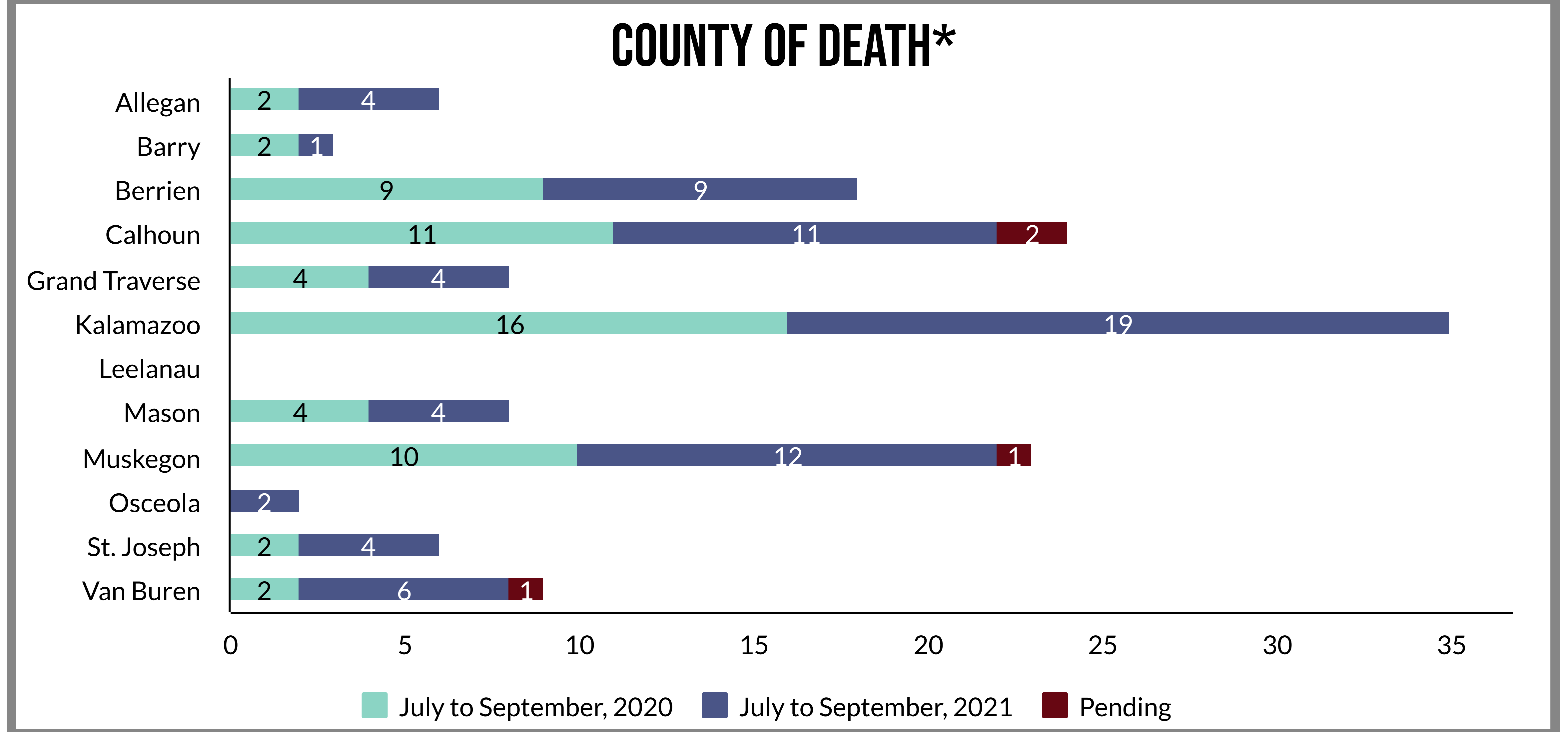
76 deaths*

Percent change

▲

23%

from Q2 2020 to 2021

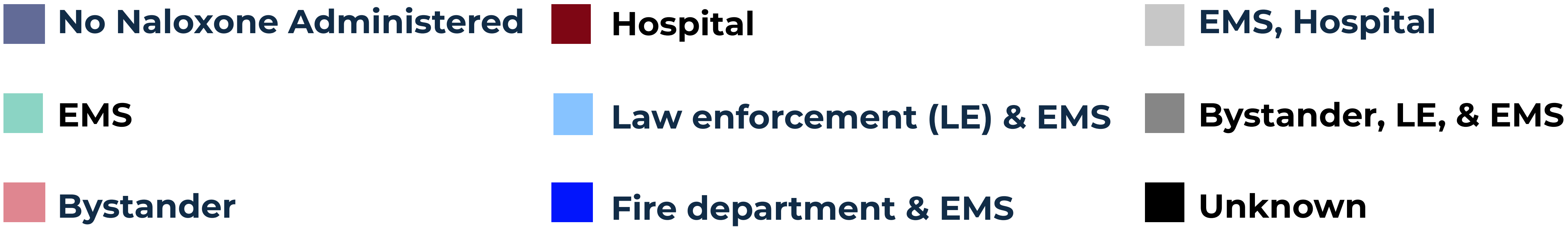


[†] There are 4 pending suspected drug-related deaths at the time of report being published.
* Deaths occurring in Cass County (n=3) are excluded where indicated by asterik only for accurate comparison to 2020.

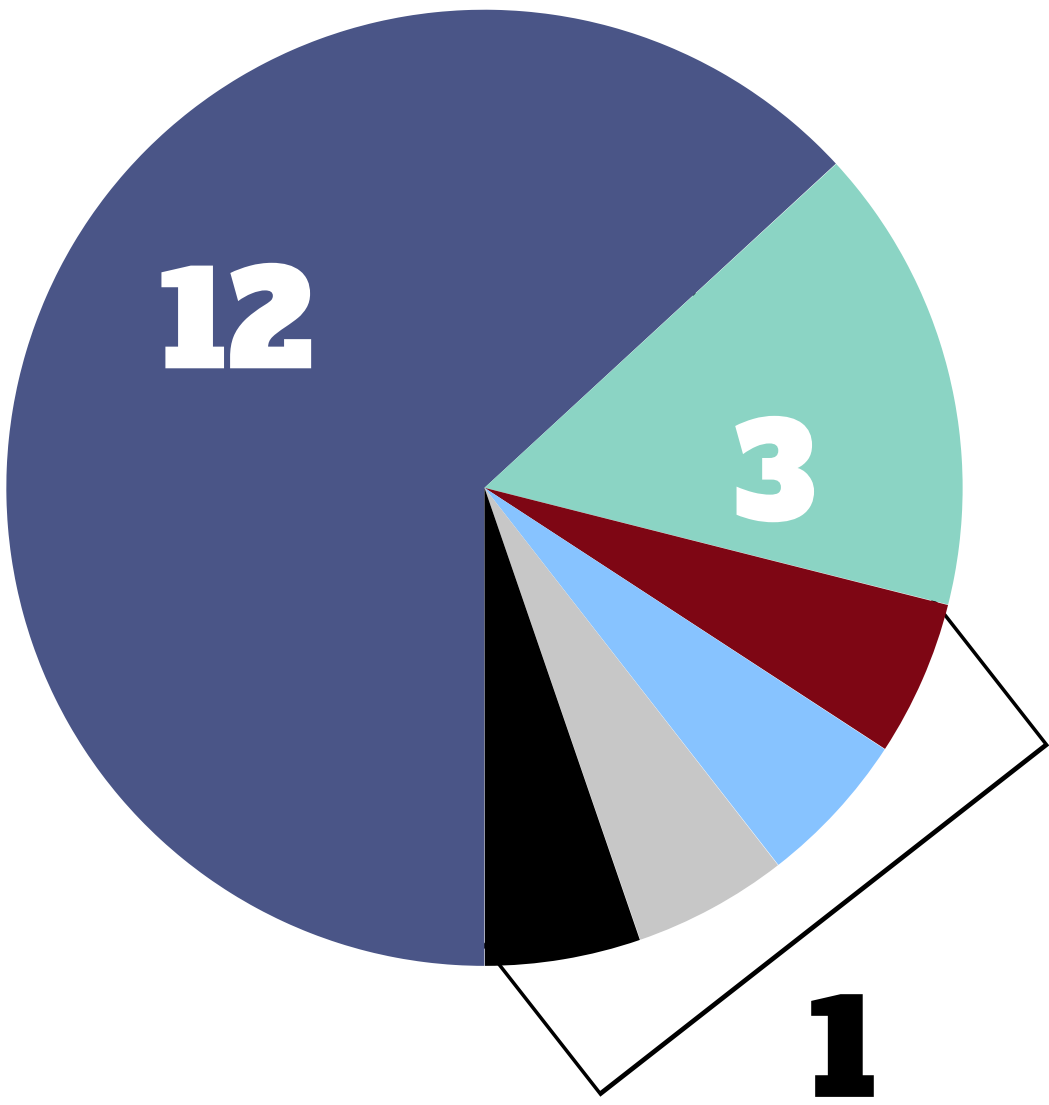
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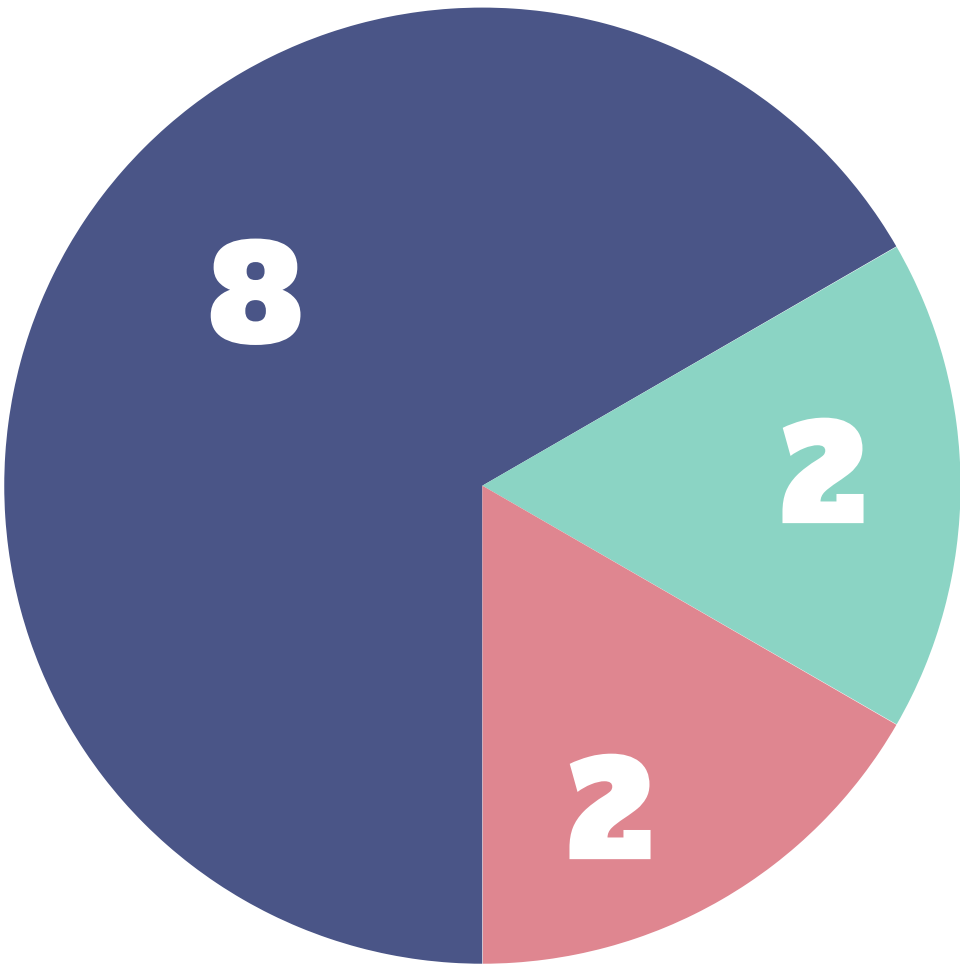
Naloxone Administration



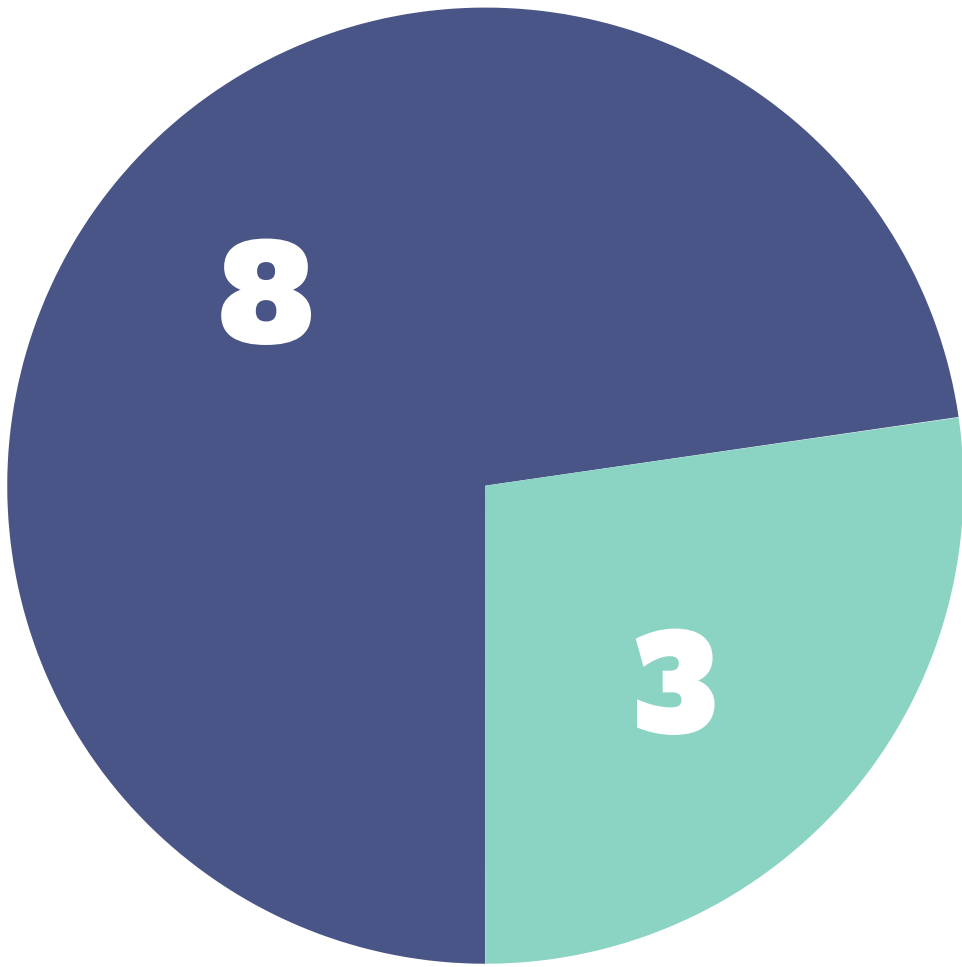
Kalamazoo (n=19)



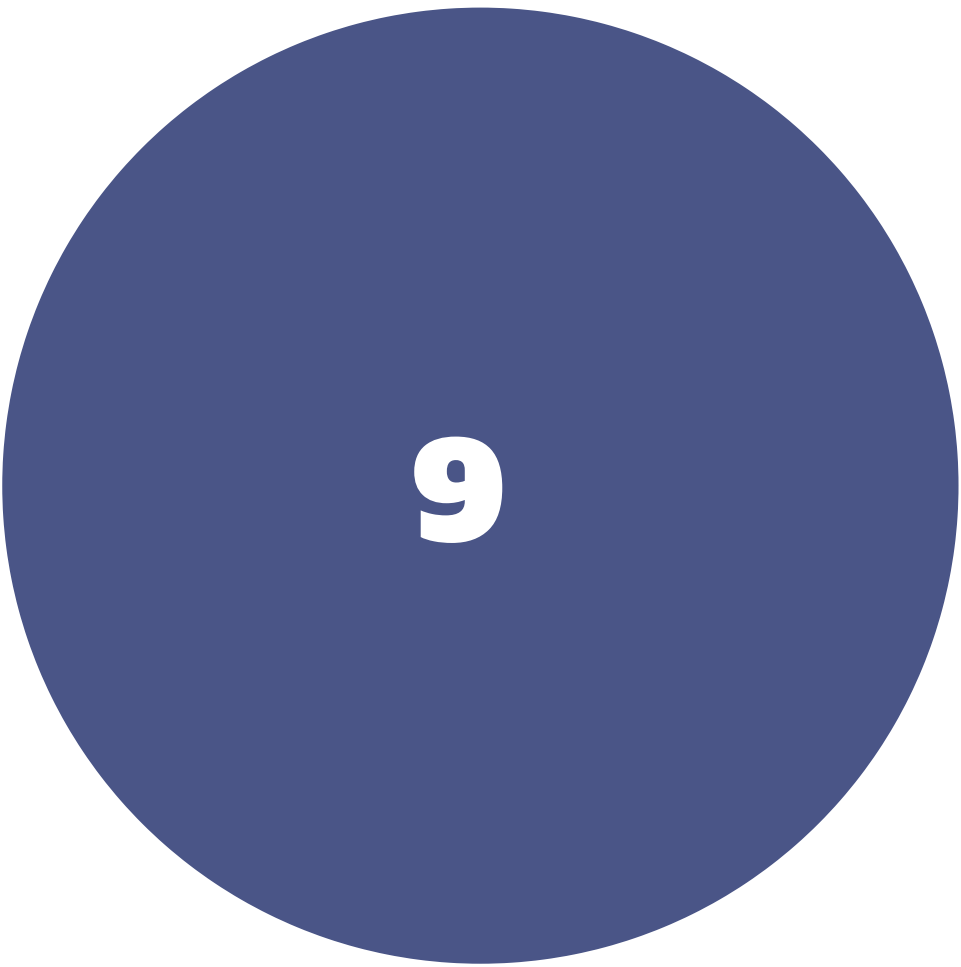
Muskegon (n=12)



Calhoun (n=11)



Berrien (n=9)



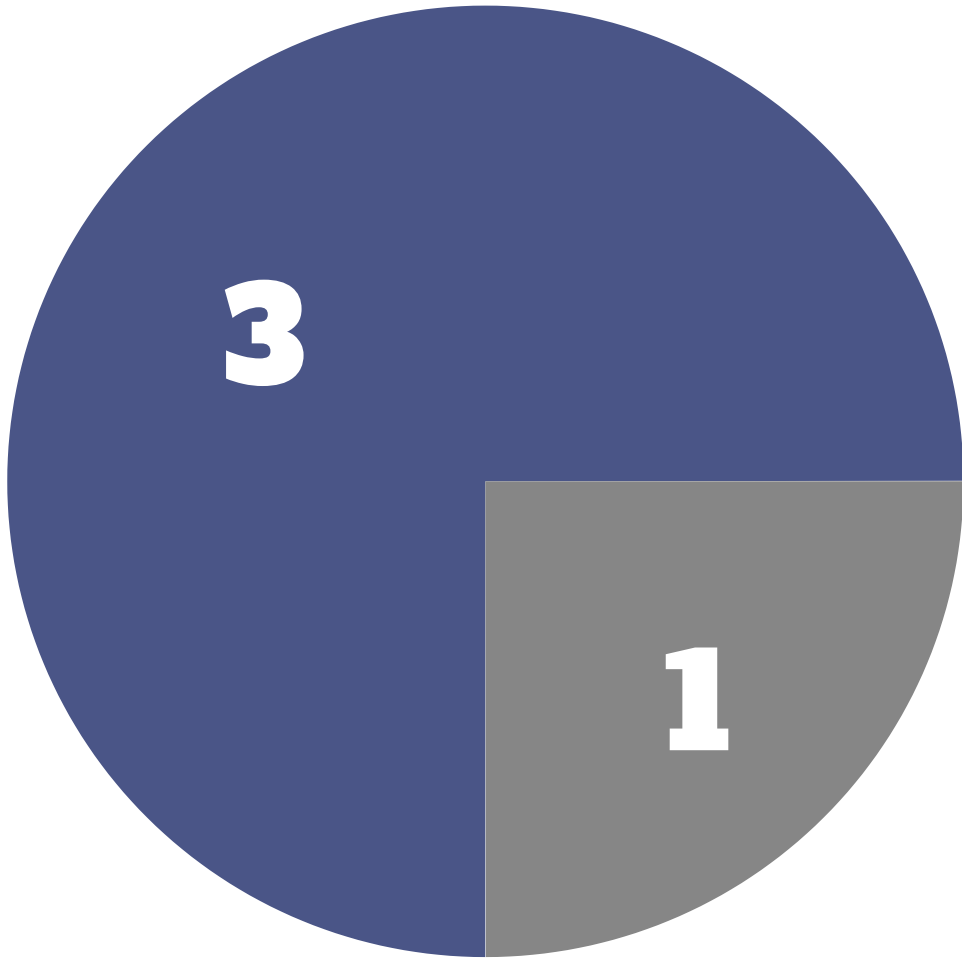
Van Buren (n=6)



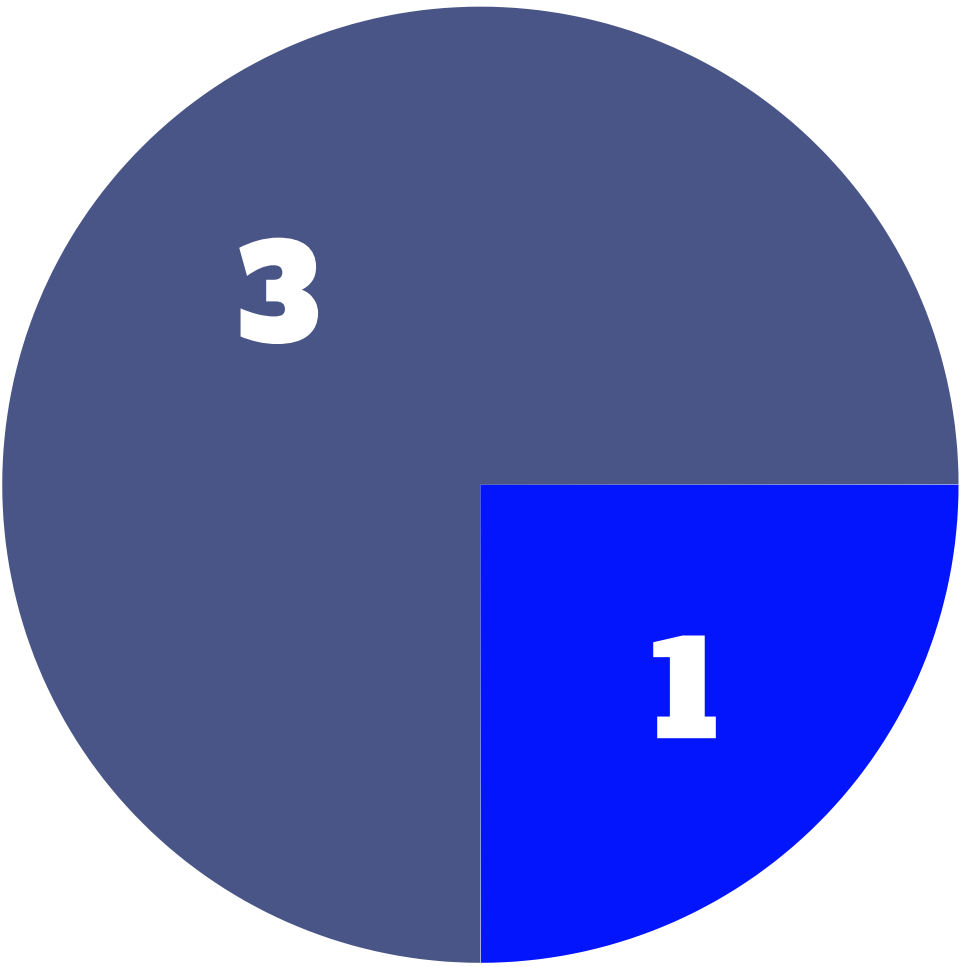
Allegan (n=4)



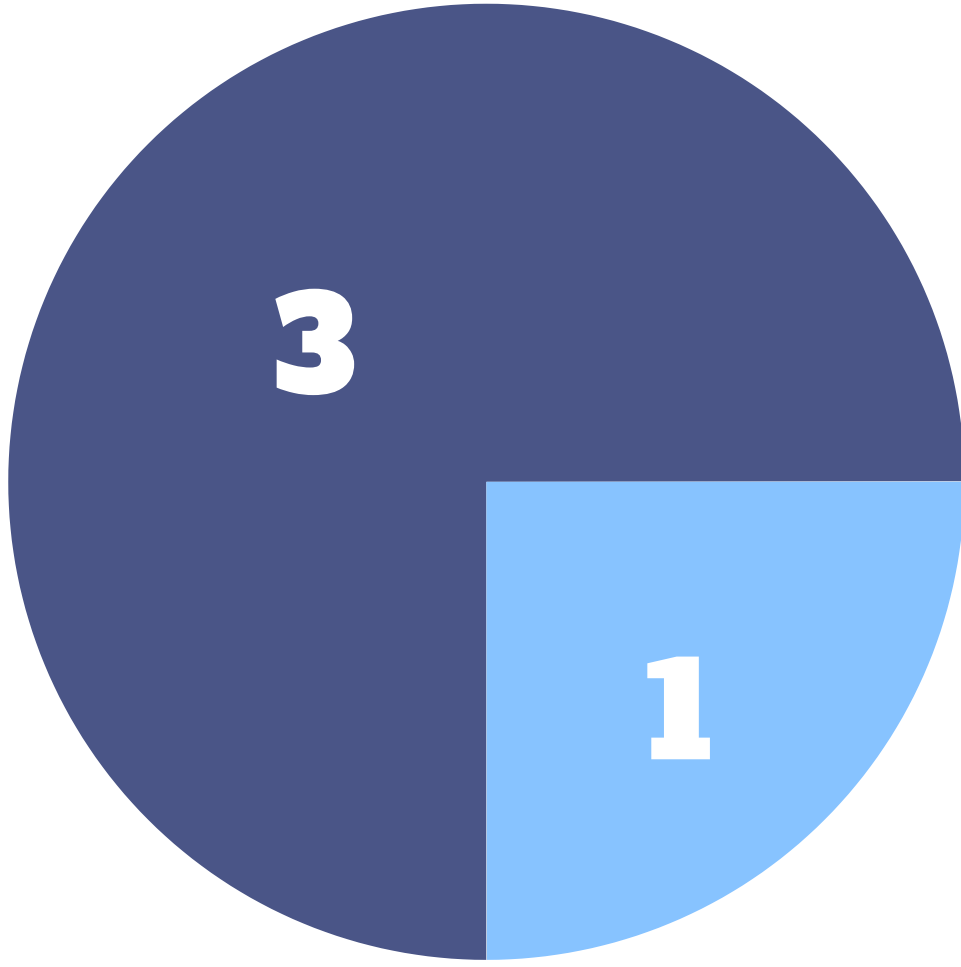
Grand Traverse (n=4)



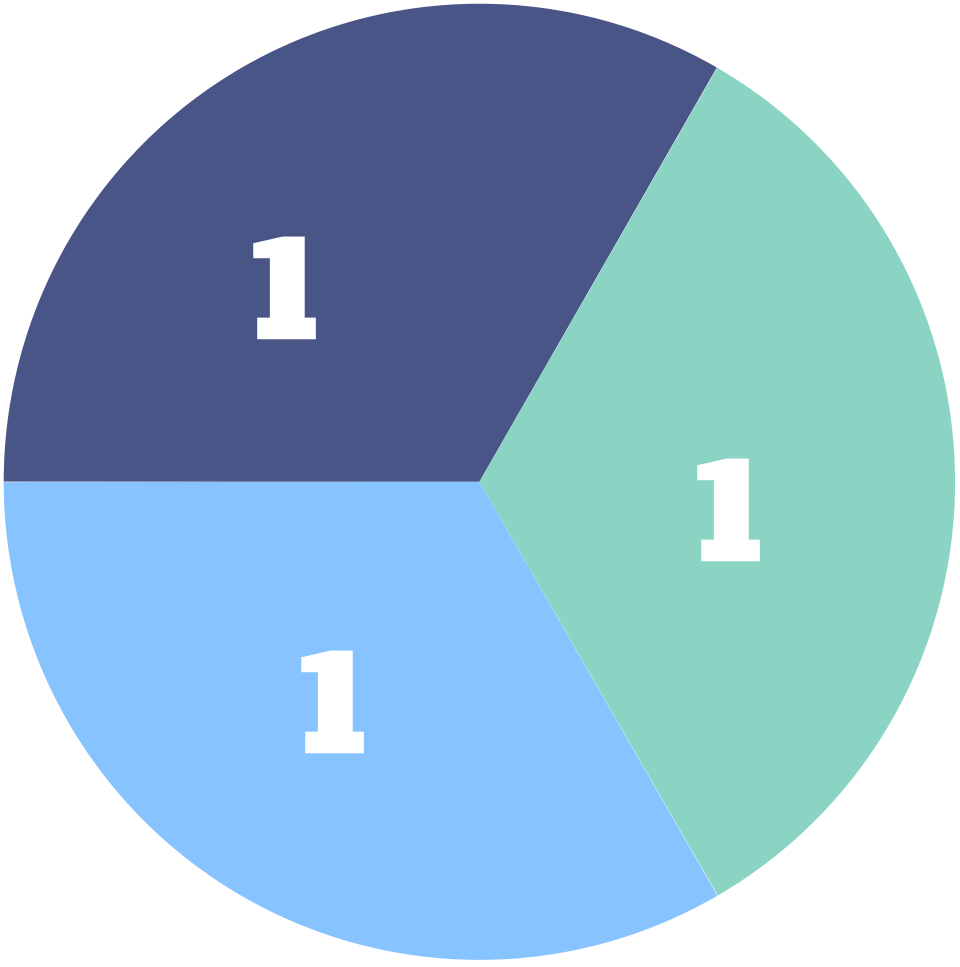
Mason (n=4)



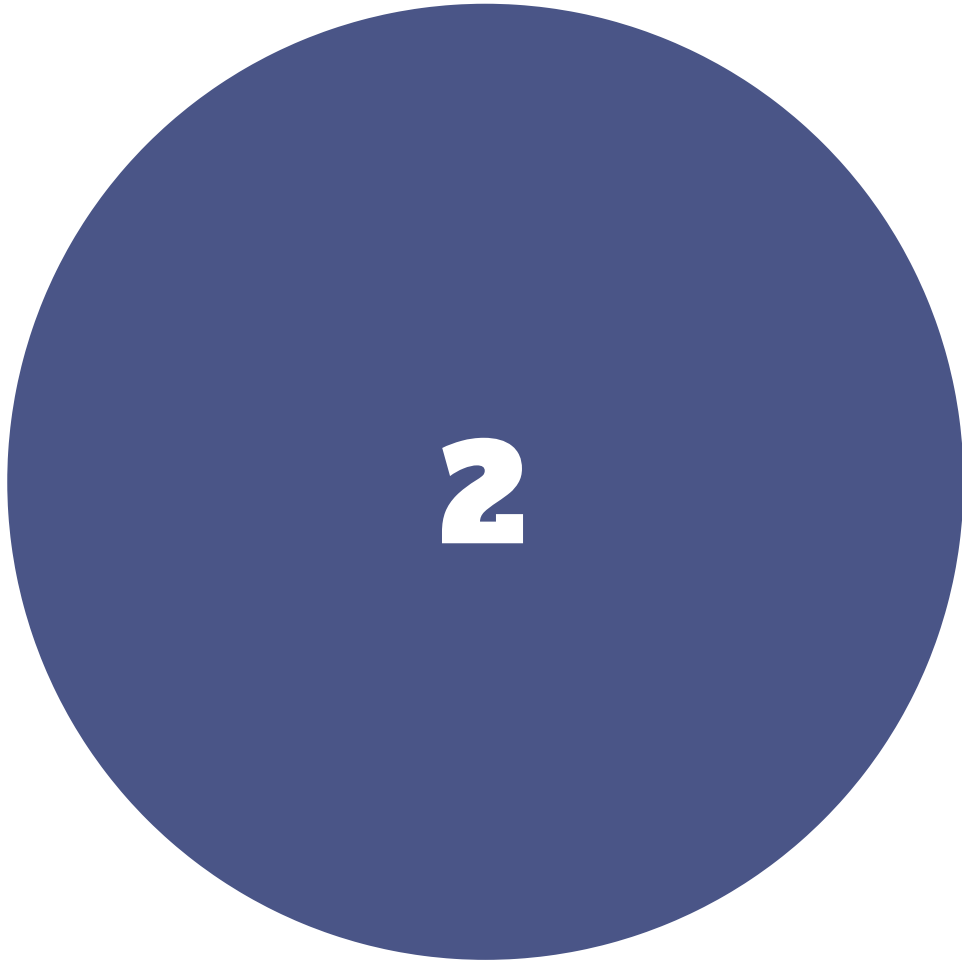
St. Joseph (n=4)



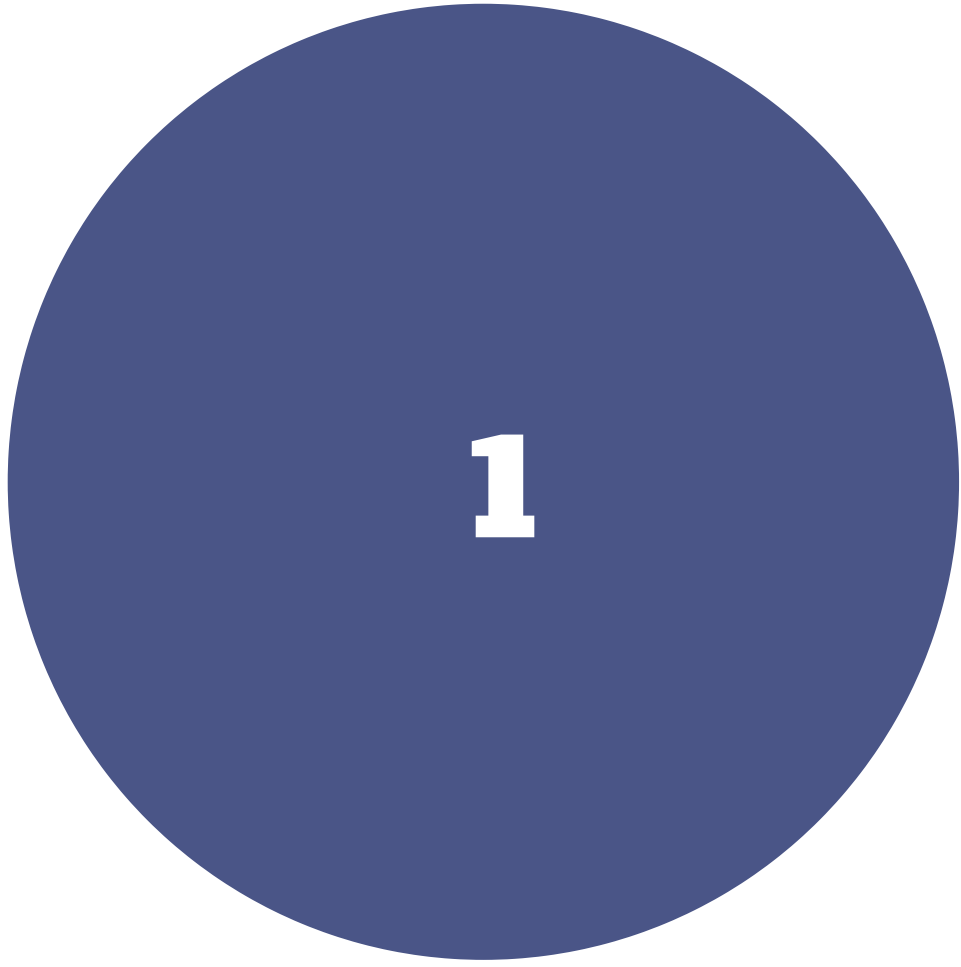
Cass (n=3)



Osceola (n=2)



Barry (n=1)



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Demographics

SEX

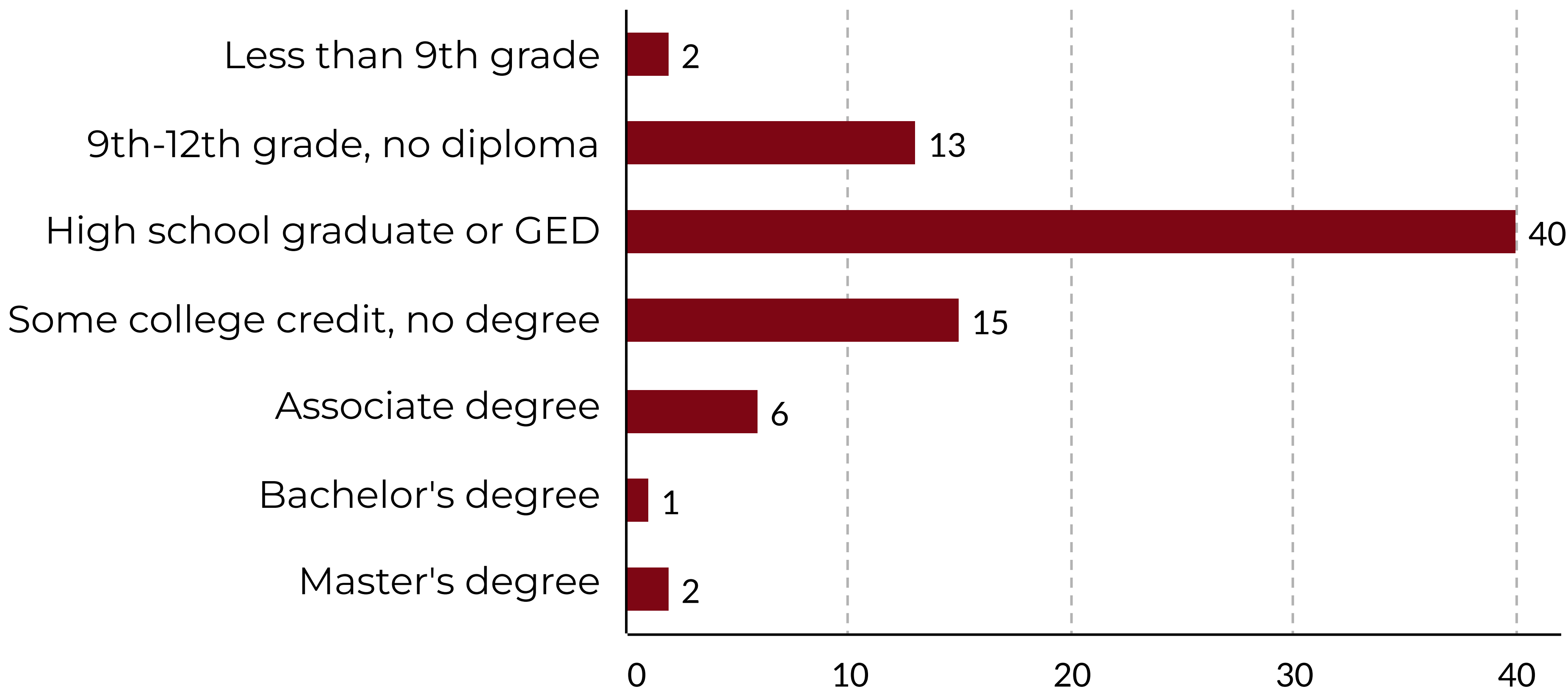


71%

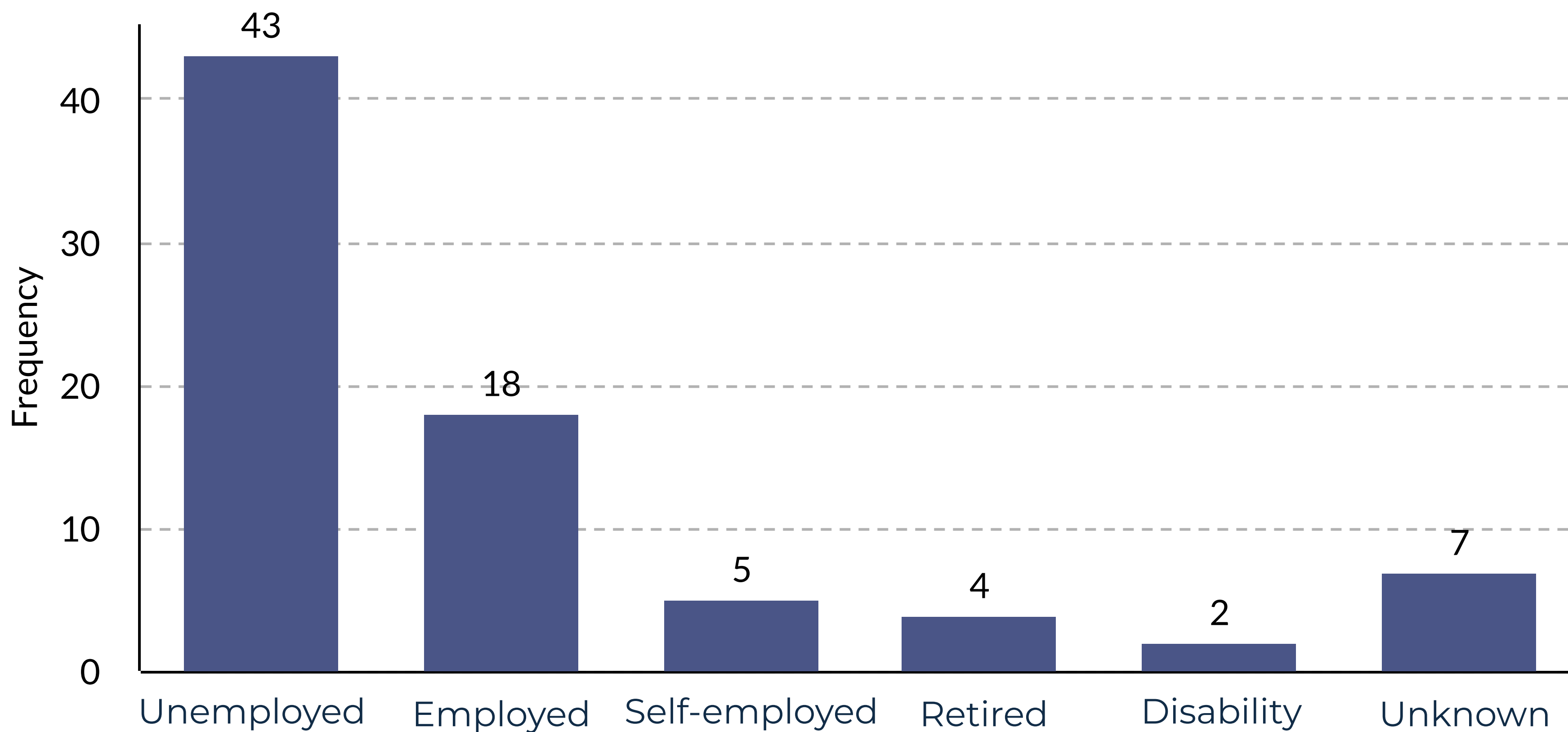


29%

DECEDENT'S HIGHEST LEVEL OF EDUCATION



DECEDENT'S EMPLOYMENT STATUS



AGE

Minimum Age

21 years

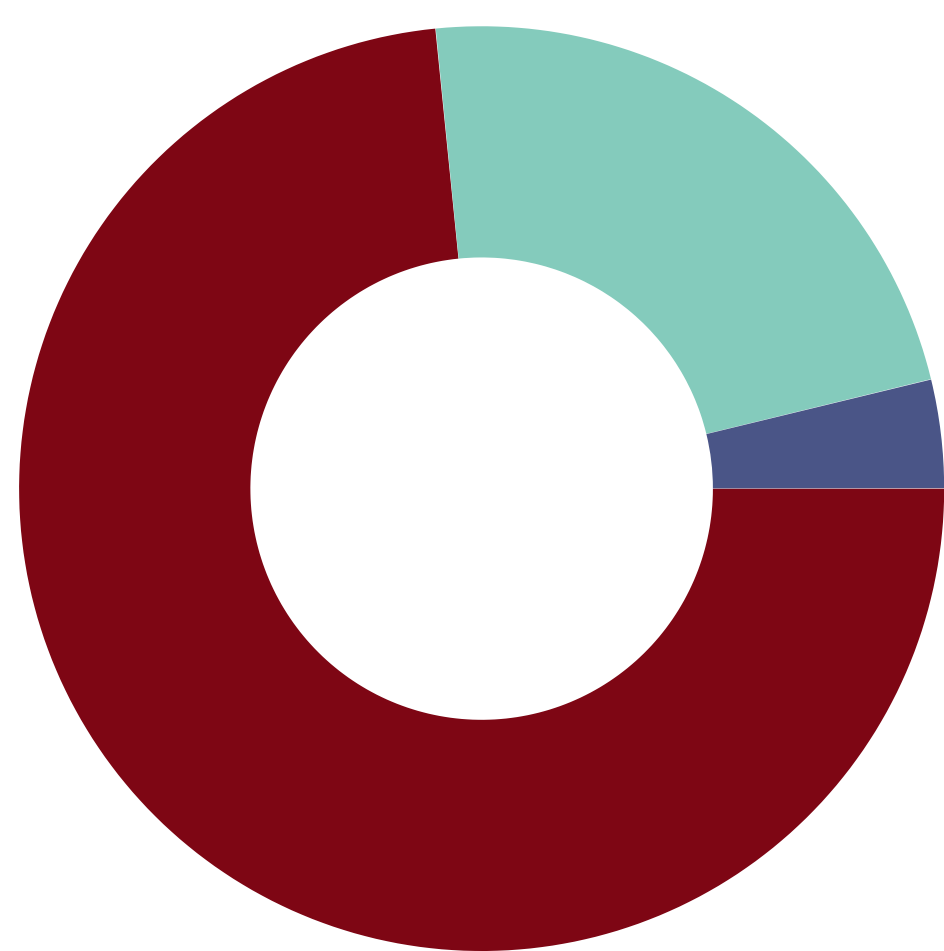
Maximum Age

71 years

Average Age

45 years

RACE

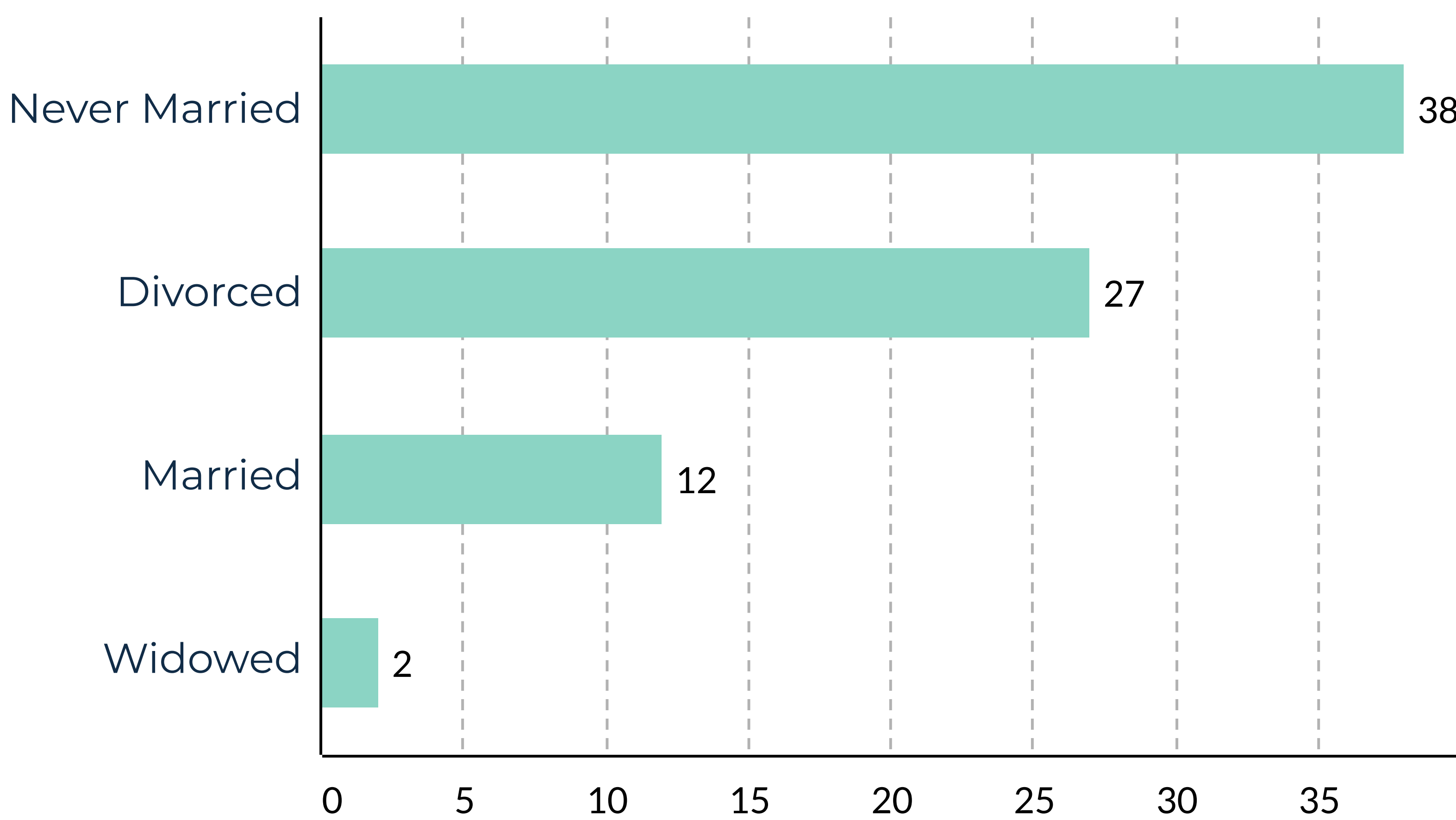


White (73%)

Black (23%)

Other (4%)

DECEDENT'S MARTITAL STATUS



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Health Factors

MOST PREVALENT AILMENTS*

Pain** (30%)

Hypertension (29%)

Lungs (24%)

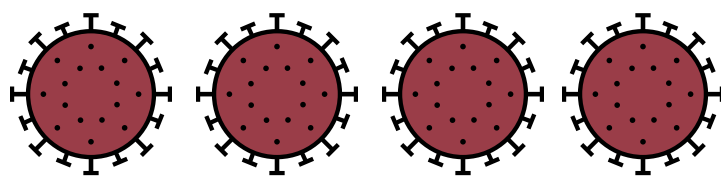
Diabetes (16%)

GERD (13%)

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

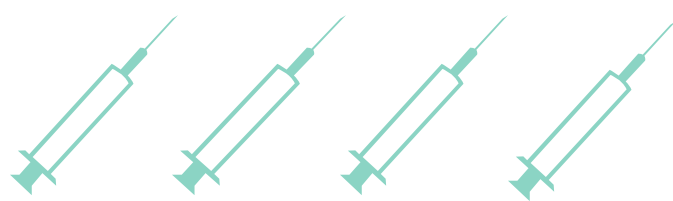
**Pain includes chronic pain (knee, back, etc.), neuropathy, arthritis, fibromyalgia and chronic migraines.

***Lungs includes asthma, COPD, and emphysema

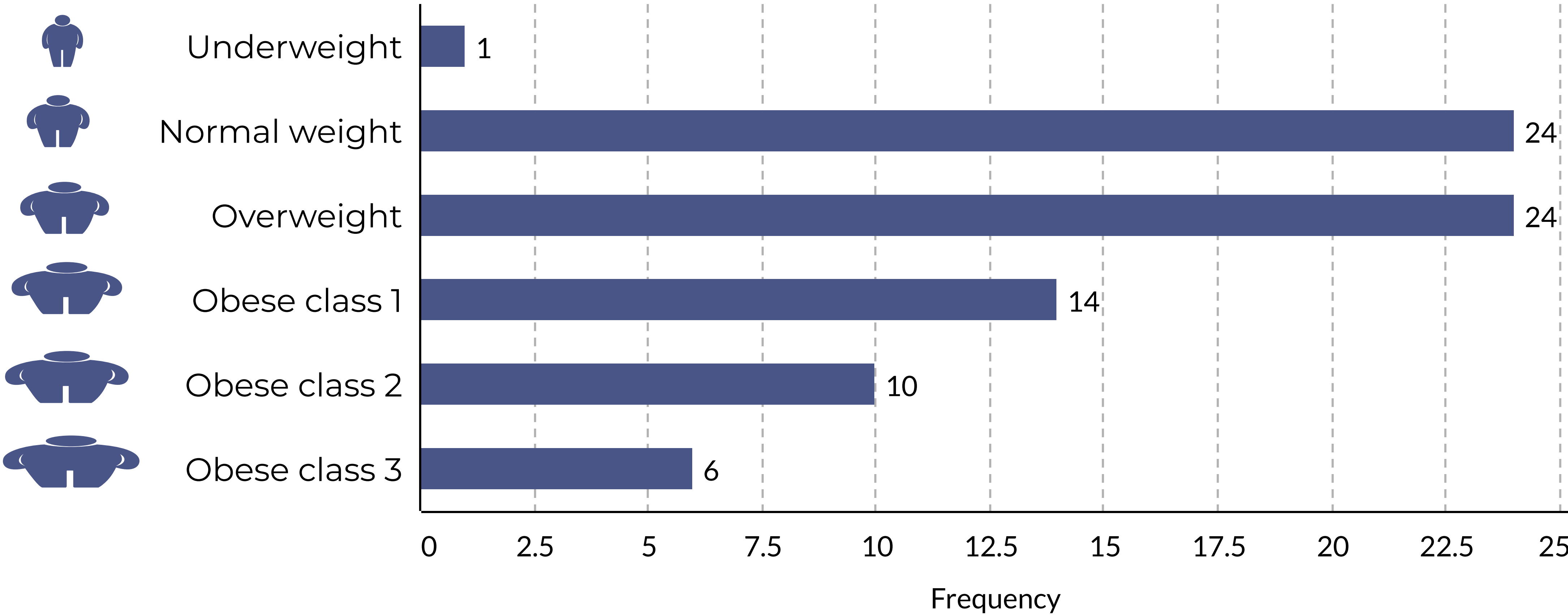


At least **10** decedents were **Hepatitis C** positive

At least **7** of these decedents were known to use **drugs intravenously**

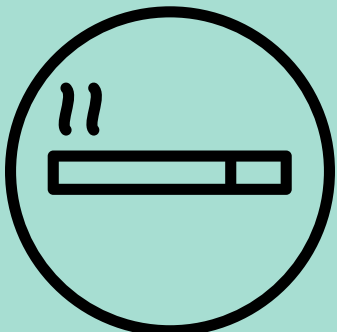


BODY MASS INDEX (BMI)



Decedent used tobacco

73%+



Decedent drank alcohol*

42%+



Decedent had a PCP

51%



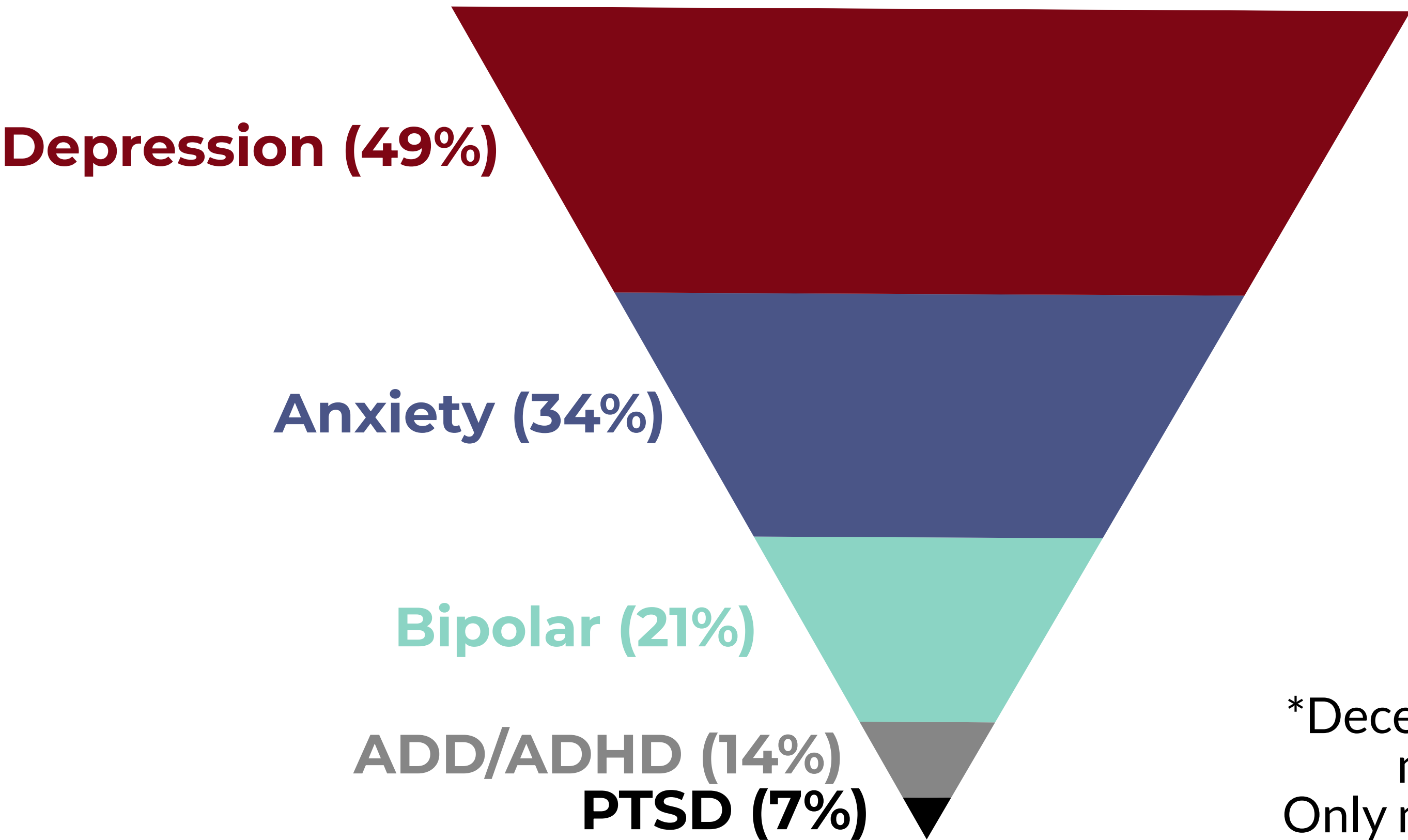
*Moderate to heavy use

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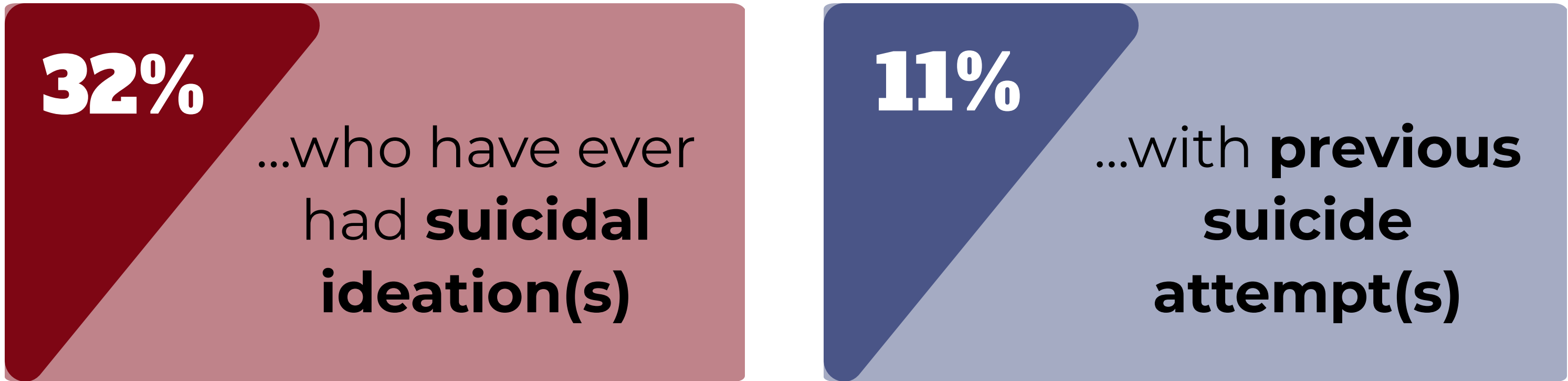
Mental Health Factors

MOST PREVALENT MENTAL ILLNESSES*

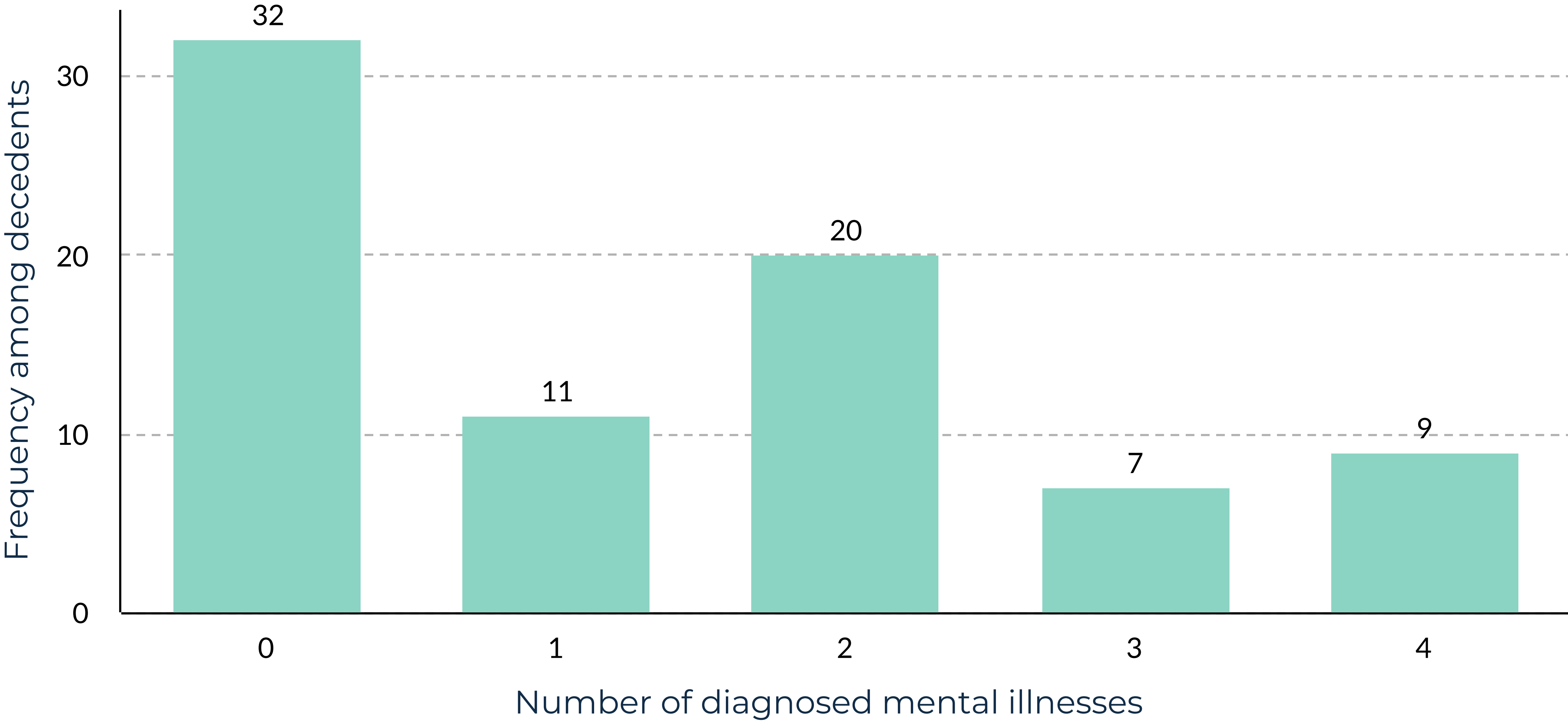


*Decedents may be represented in more than one category. Only mental illnesses diagnosed by a medical professional are included.

PERCENTAGE OF DECEDENTS...



NUMBER OF DIAGNOSED MENTAL ILLNESSES AMONG DECEDENTS



Deaths Related to Opioids and Other Drugs

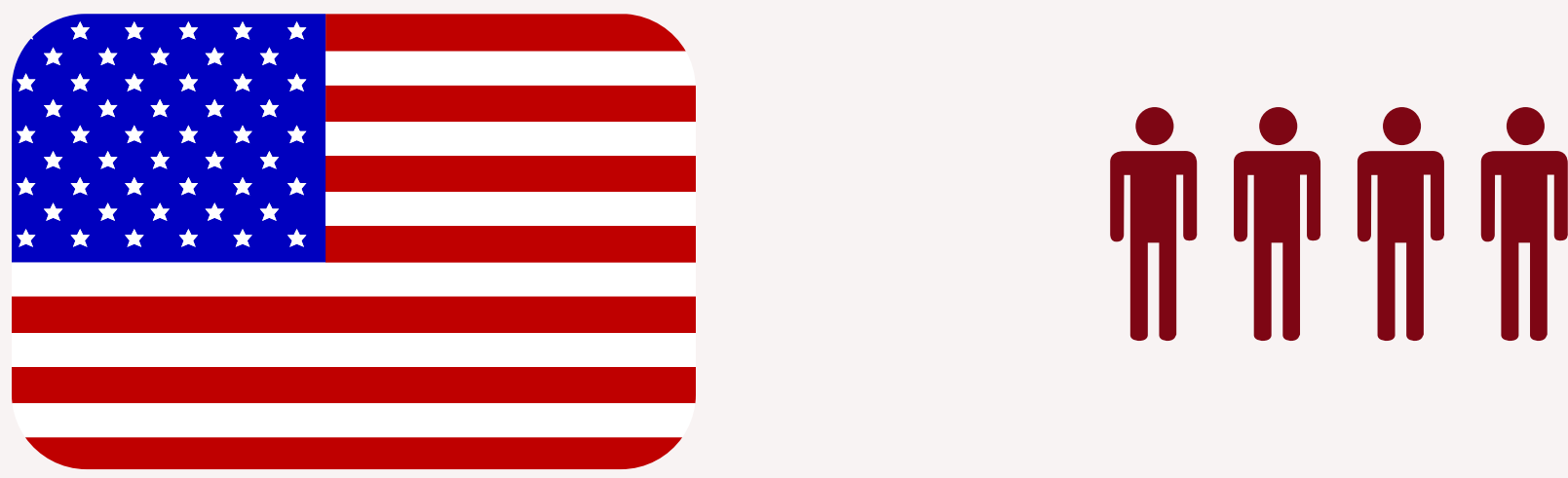
Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

Social Factors

DECEDENT WAS EXPERIENCING HOMELESSNESS AT TIME OF DEATH (13%)



DECEDENT WAS A VETERAN (5%)



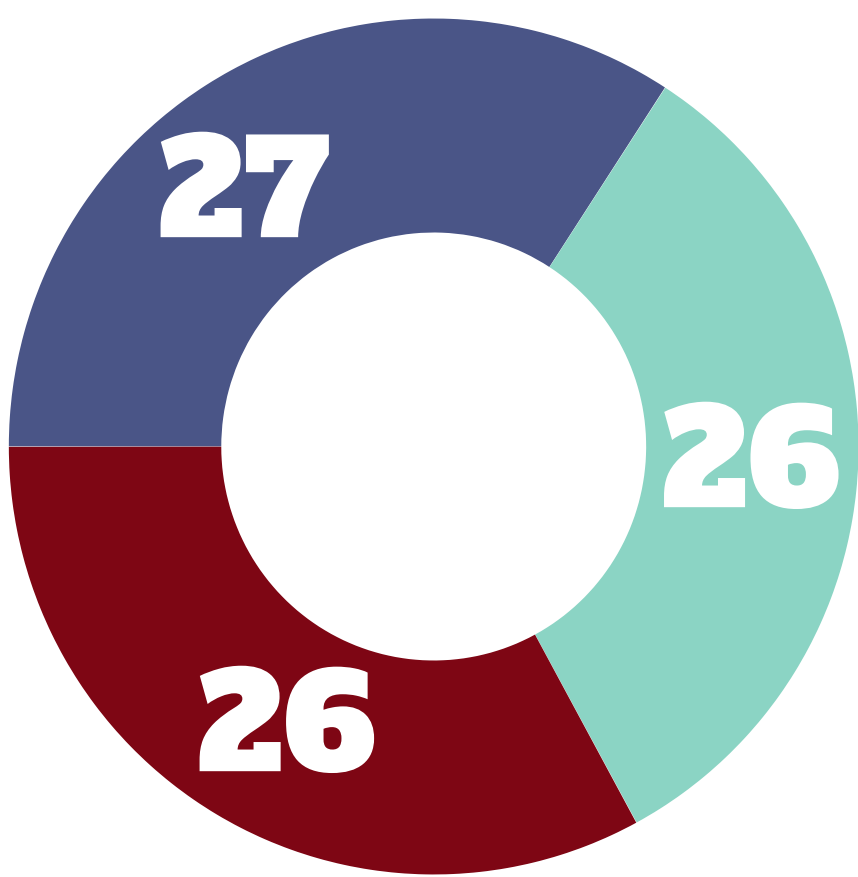
DECEDENT HAS EVER BEEN INCARCERATED (27%)



DECEDENTS EVER INCARCERATED WERE RELEASED IN PAST 2 MONTHS (10%)

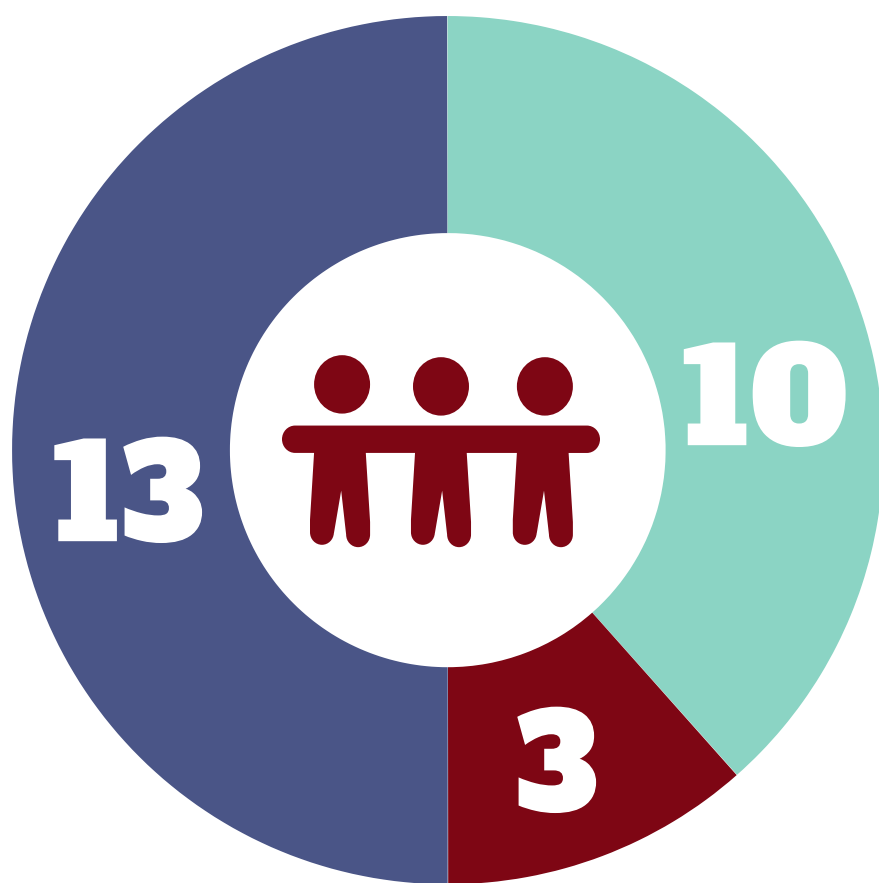


DECEDENT'S CHILD STATUS



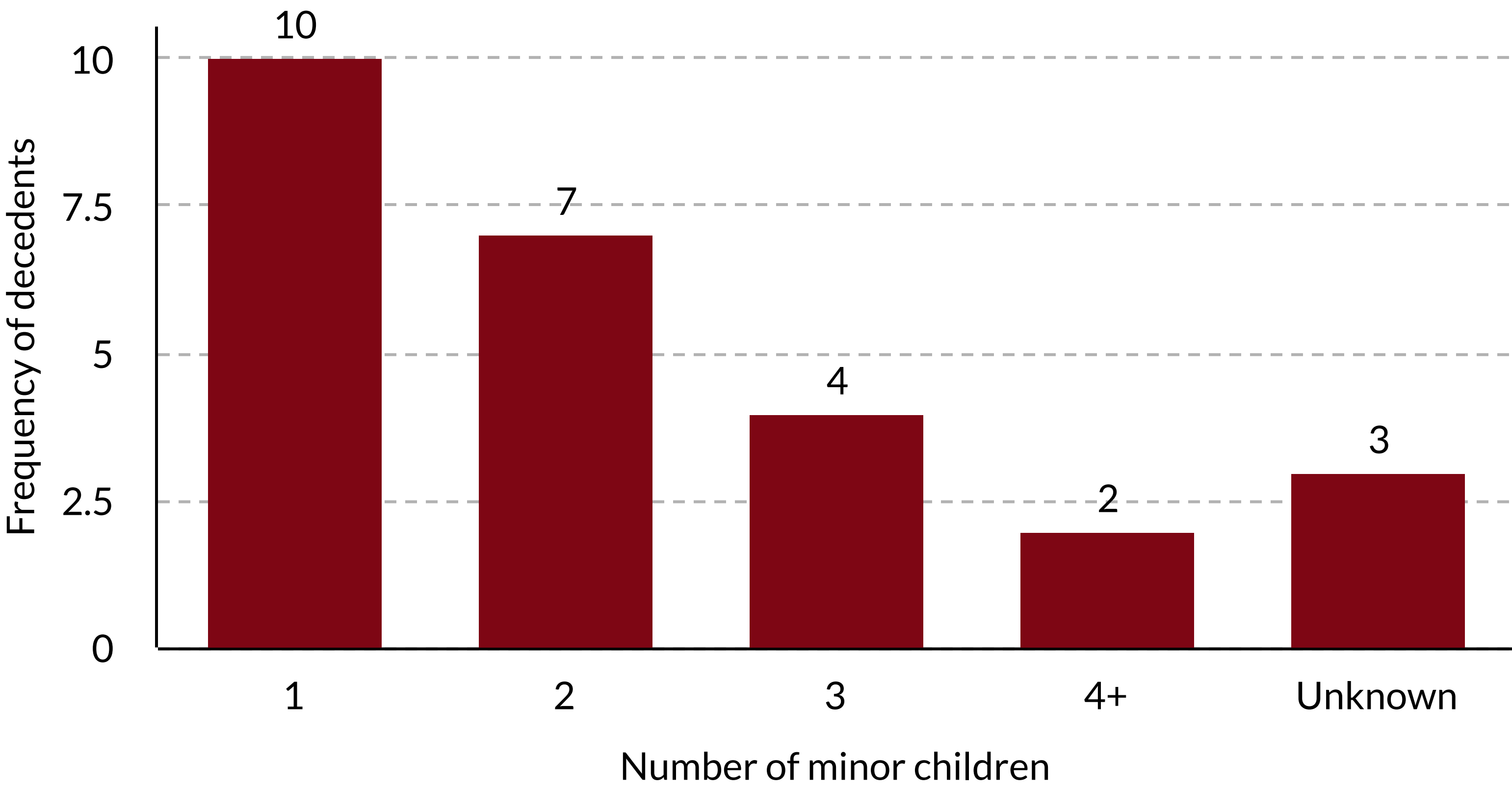
- Only adult children (34%)
- Minor child(ren) (33%)
- No children (33%)

EMPLOYMENT STATUS OF THOSE WITH MINOR CHILDREN



- Unemployed (50%)
- Employed (38%)
- Unknown (12%)

NUMBER OF MINOR CHILDREN



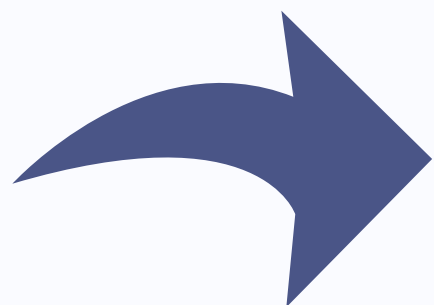
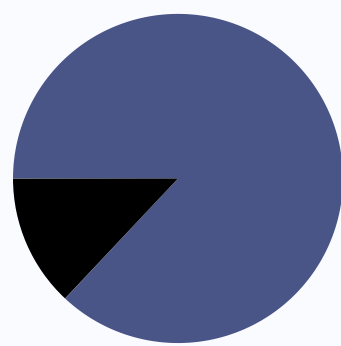
AT LEAST 6 DECEDENTS LIVED WITH THEIR MINOR CHILD(REN)

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Reported Substance Use History

At least **87%** of decedents were known to use or abuse substances



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



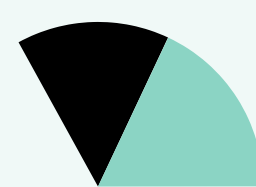
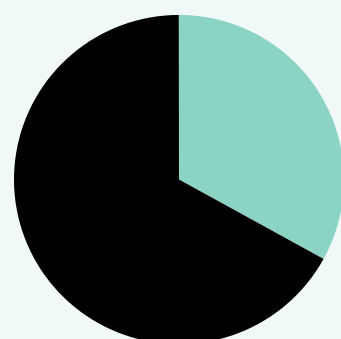
At least **37%** of decedents were prescribed an opioid in the past 2 years



At least **18%** of decedent's substance use started from a prescribed opioid



At least **33%** of decedents have had at least one overdose before their fatal overdose



At least **46%** of those decedents have had 2 or more overdoses before their fatal overdose

DECEDENT'S TYPICAL SUBSTANCE OF CHOICE[†]

60%
OPIOIDS

34%
METHAMPHETAMINE

32%
COCAINE/CRACK COCAINE

SUBSTANCES FOUND IN TOXICOLOGY RESULTS CONTRIBUTING TO DEATH[†]

77%
OPIOIDS

41%
METHAMPHETAMINE

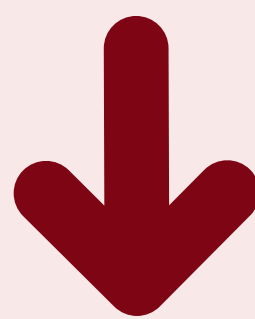
15%
COCAINE

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

DECEDENT WAS SUBSTANCE FREE IN THE PAST MONTH

33%

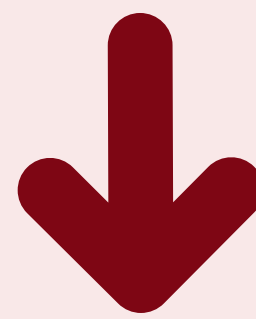
SUSPECTED REASONS FOR RELAPSE*



9%
LEFT JAIL/REHAB



27%
LIFE STRESS**



64%
UNKNOWN

*These factors were mentioned by those close to decedent (with substance use history n=69) 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 relationship termination, social pressure, homelessness, increased pain, and insecure housing.

Decedent has been to a substance use treatment clinic at least one time

25%

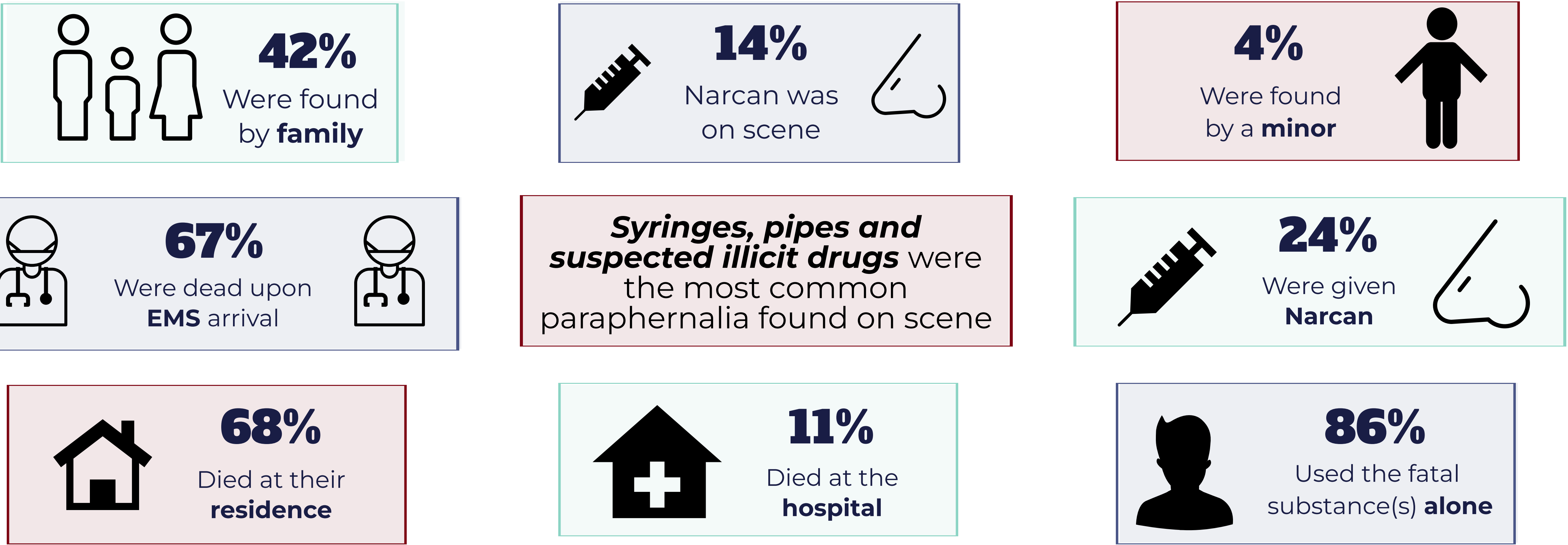
Decedent was receiving methadone, buprenorphine, naltrexone, or suboxone

8%

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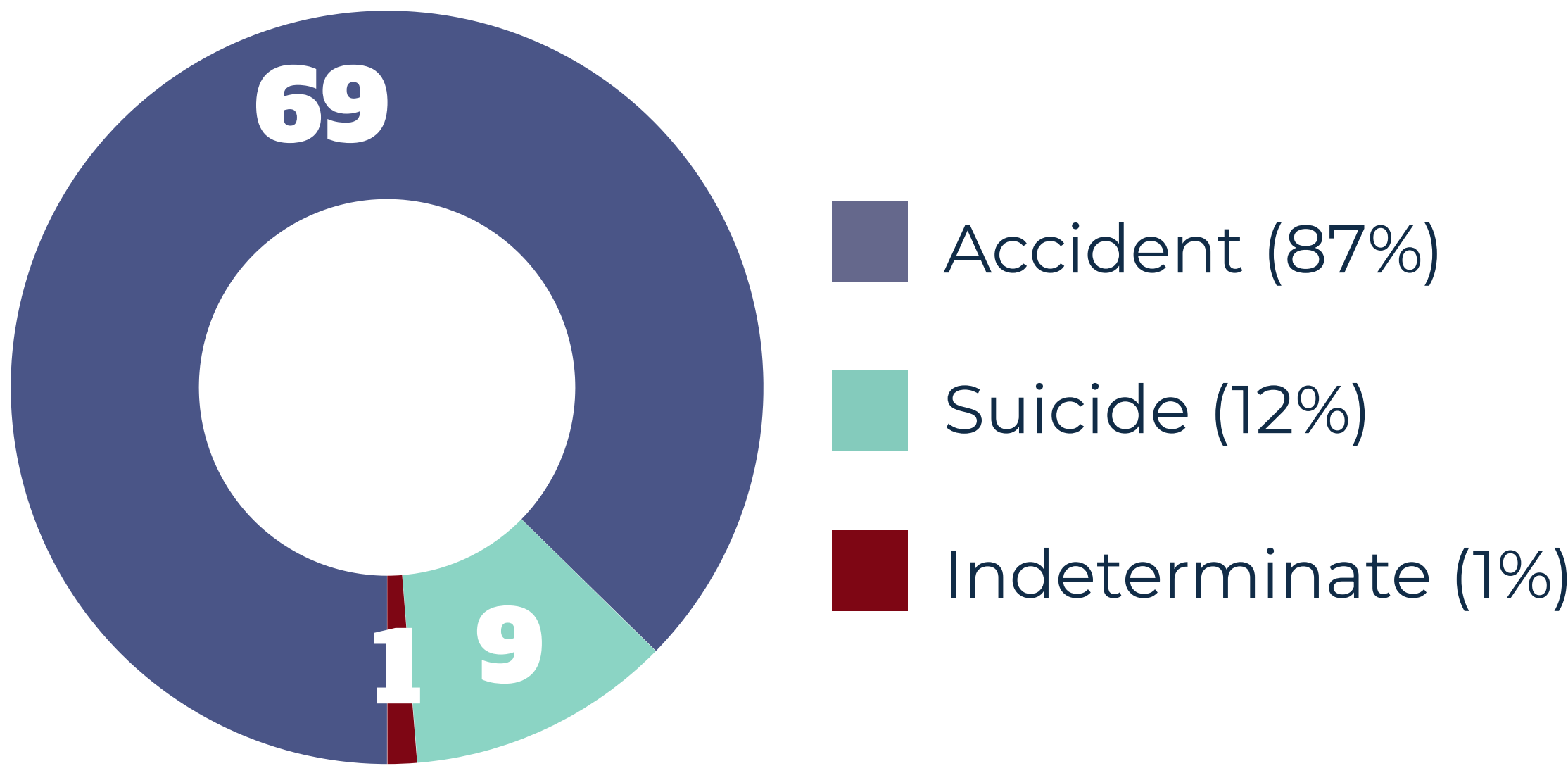
Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

Death Scene Findings

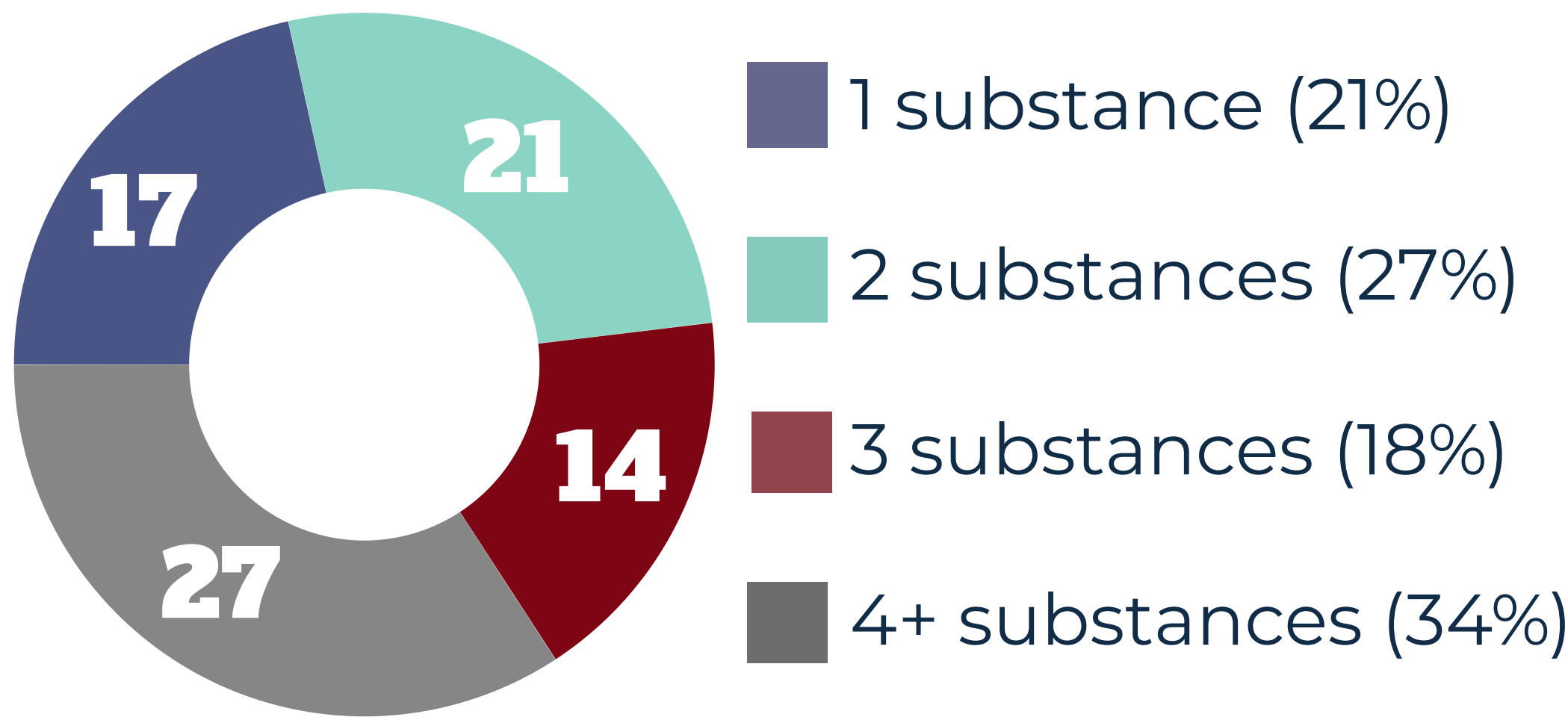


Autopsy and Toxicology Results

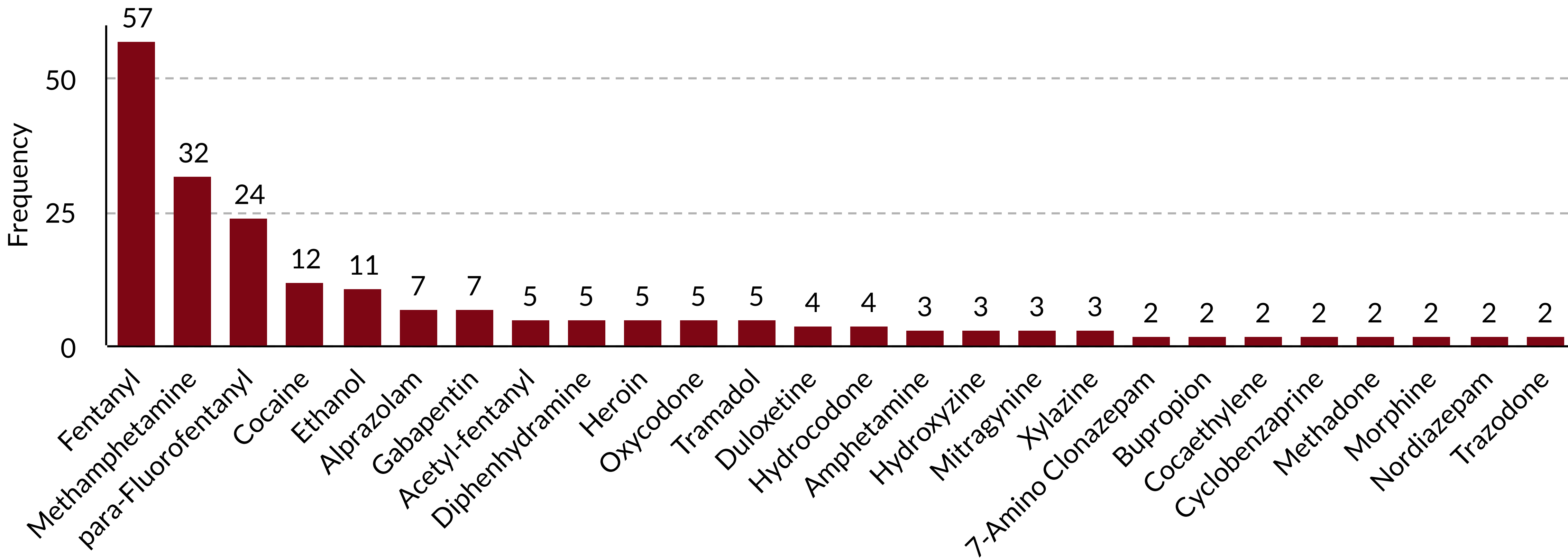
MANNER OF DEATH



NUMBER OF SUBSTANCES CONTRIBUTING TO DEATH



SUBSTANCES PRESENT IN TOXICOLOGY*



* Decedent may have had more than one drug in their toxicology result

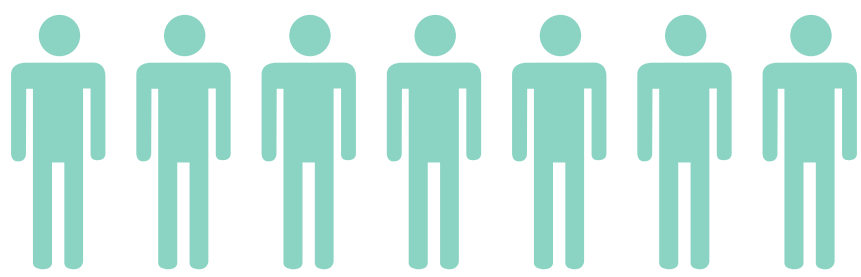
The following substances were found one time: sodium nitrite, clonazepam, 1,1-difluoroethane, diazepam, promethazine, carisoprodol, amlodipine, chlordiazepoxide, etizolam, amitriptyline, venlafaxine, ritalinic acid, methylphenidate, topiramate, mirtazapine, buprenorphine, citalopram/escitalopram, & fluoxetine

Deaths Related to Opioids and Other Drugs

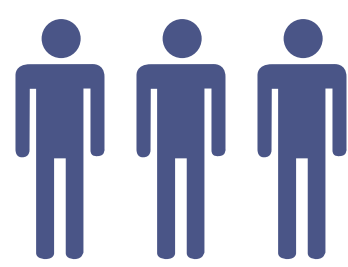
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Highlights

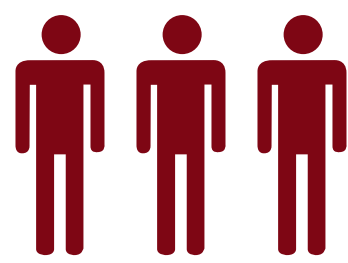
ADDITIONAL NALOXONE INFORMATION (N=19)*



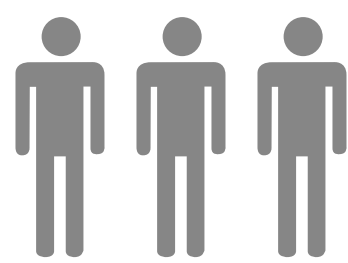
2 mg of Naloxone



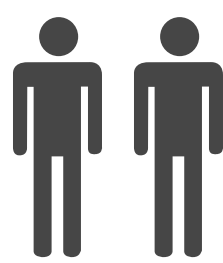
4 mg of Naloxone



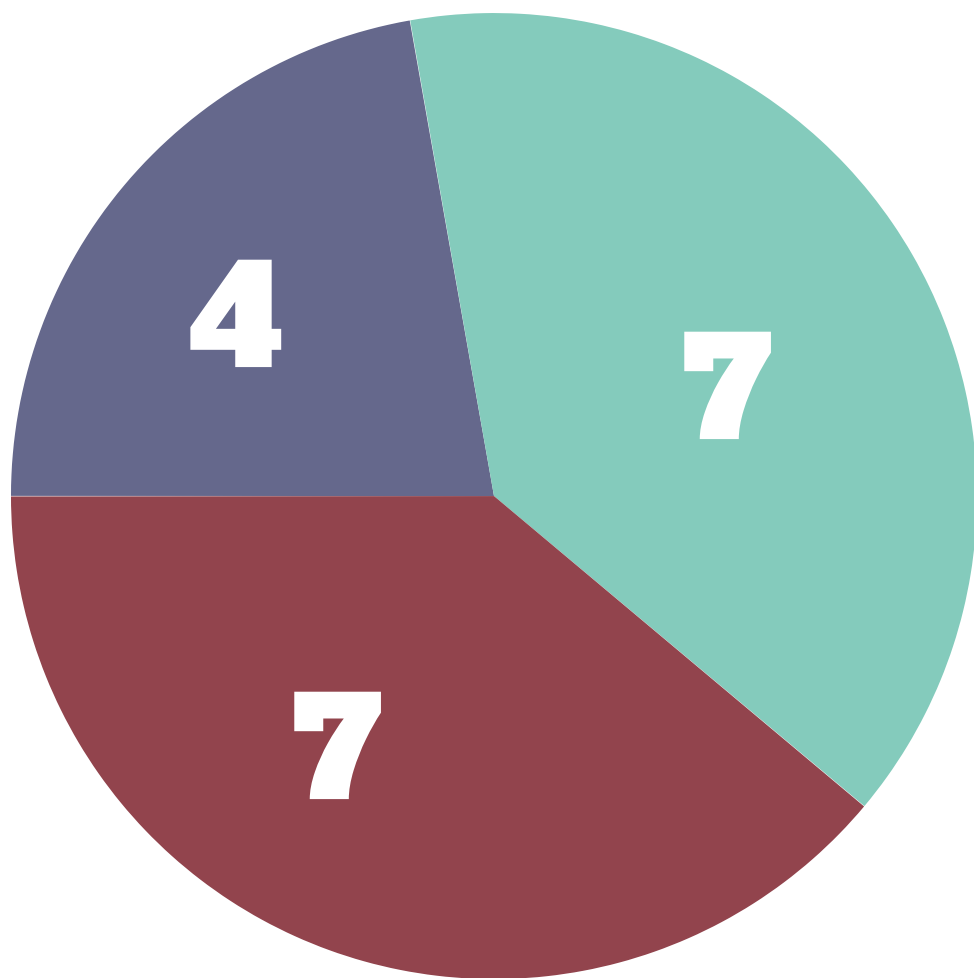
6 mg of Naloxone



8 mg of Naloxone



10 mg of Naloxone



- IV Naloxone
- Nasal Naloxone
- IV & Nasal Naloxone

*Unknown dosage and method of administration of Naloxone given to **one** decedent

POSITIONAL ASPHYXIA:

32% (20 of 63) of decedents with an opioid-related death were originally found in a potentially airway compromising position

These positions include finding decedent face down on the floor, bed, couch etc.

19% (3 of 16) of decedents who died of non-opioid substance(s) were originally found in a potentially airway compromising position

NOVEL DRUG: PARA-FLUOROFENTANYL (PFF)

- Analogue of fentanyl that's reportedly stronger than fentanyl
- Para-fluorofentanyl contributed to 0 deaths in 2018/2019
- Para-fluorofentanyl contributed to 4 deaths in 2020
- 24 instances of para-fluorofentanyl this quarter

SUBSTANCE COMBINATIONS

Benzodiazepines & Opioids

12 decedents had a benzodiazepine and an opioid in their toxicology report

2 decedents were prescribed that benzodiazepine and opioid

Heroin & Fentanyl

Heroin contributed to 4 deaths, all of these deaths also had fentanyl present

Xylazine & Fentanyl

Xylazine contributed to 3 deaths, all of these deaths also had fentanyl present

Methamphetamine & Opioids

23 decedents had methamphetamine and any opioid(s) in their toxicology report

22 decedents had methamphetamine and fentanyl in their toxicology report