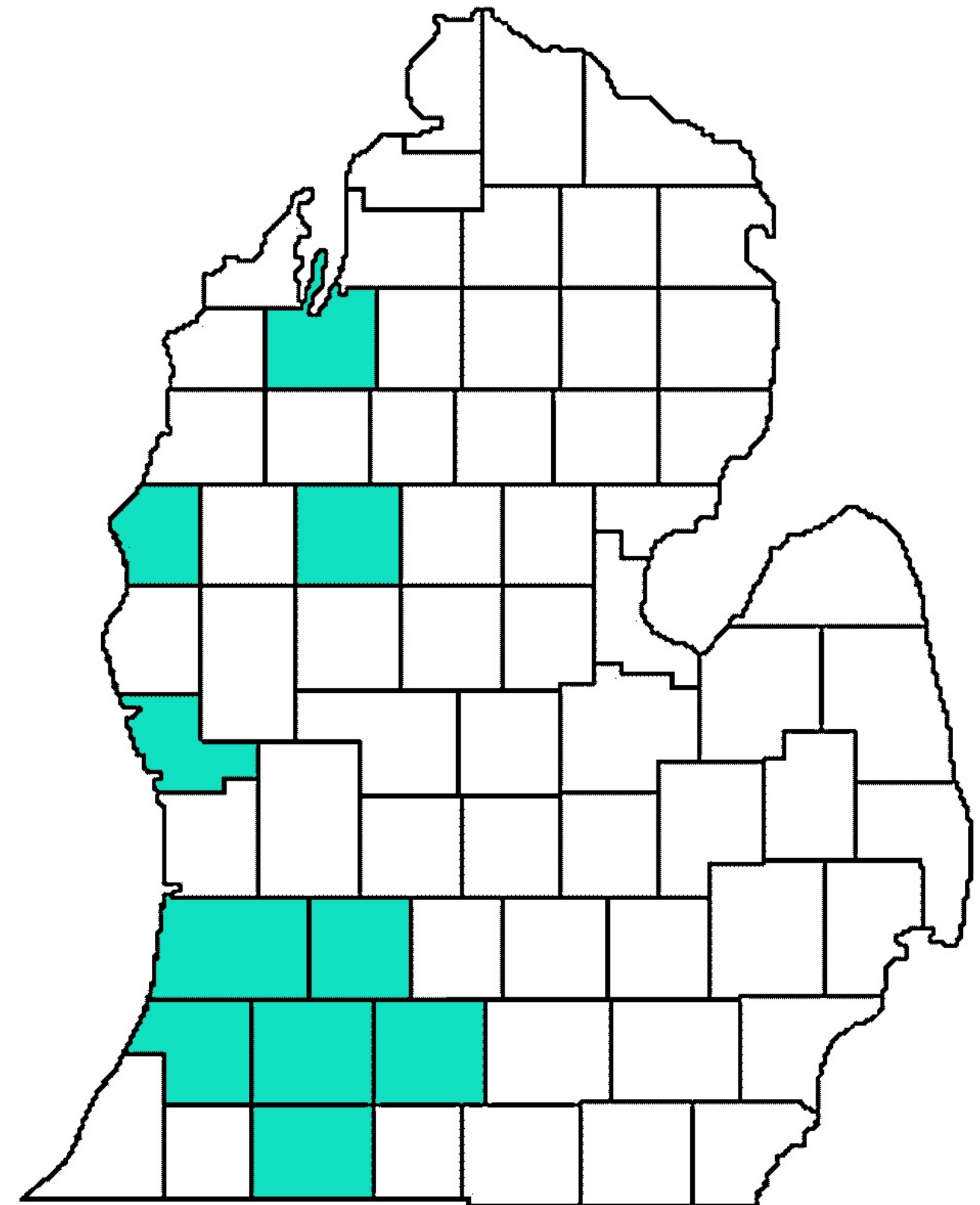


# Deaths Related to Opioids and Other Drugs

Medical Examiner Office

## Counties covered in this report:

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



### Purpose:

This data was collected from 10 counties served by the Office of the Medical Examiner in the Department of Pathology at WMed in 2018 and 2019 (Leelanau did not have any overdose deaths in 2018 or 2019 so they are excluded from this report). Data includes deaths where drugs were the immediate cause of death. This report is meant to provide historical data to those involved in efforts to reduce the number of drug-related deaths.

**Sources:** All data was extracted from a Medical Examiner database, law enforcement (LE) and EMS reports, death certificates, toxicology reports, and autopsy reports.

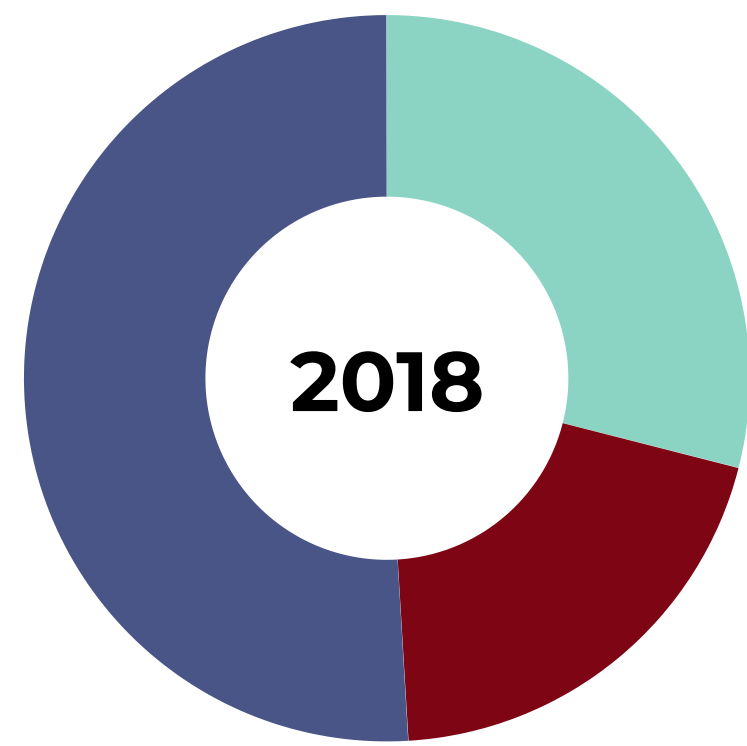
Please contact Chloe Bielby for additional information at [chloe.bielby@med.wmich.edu](mailto:chloe.bielby@med.wmich.edu)

# Deaths Related to Opioids and Other Drugs

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

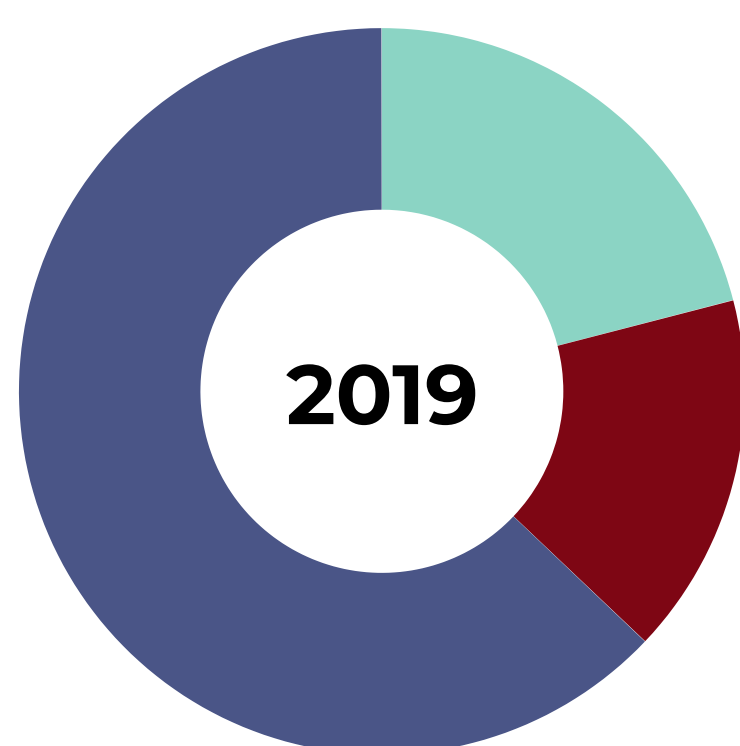
## Total Drug-Related Deaths

2018  
**214 deaths**



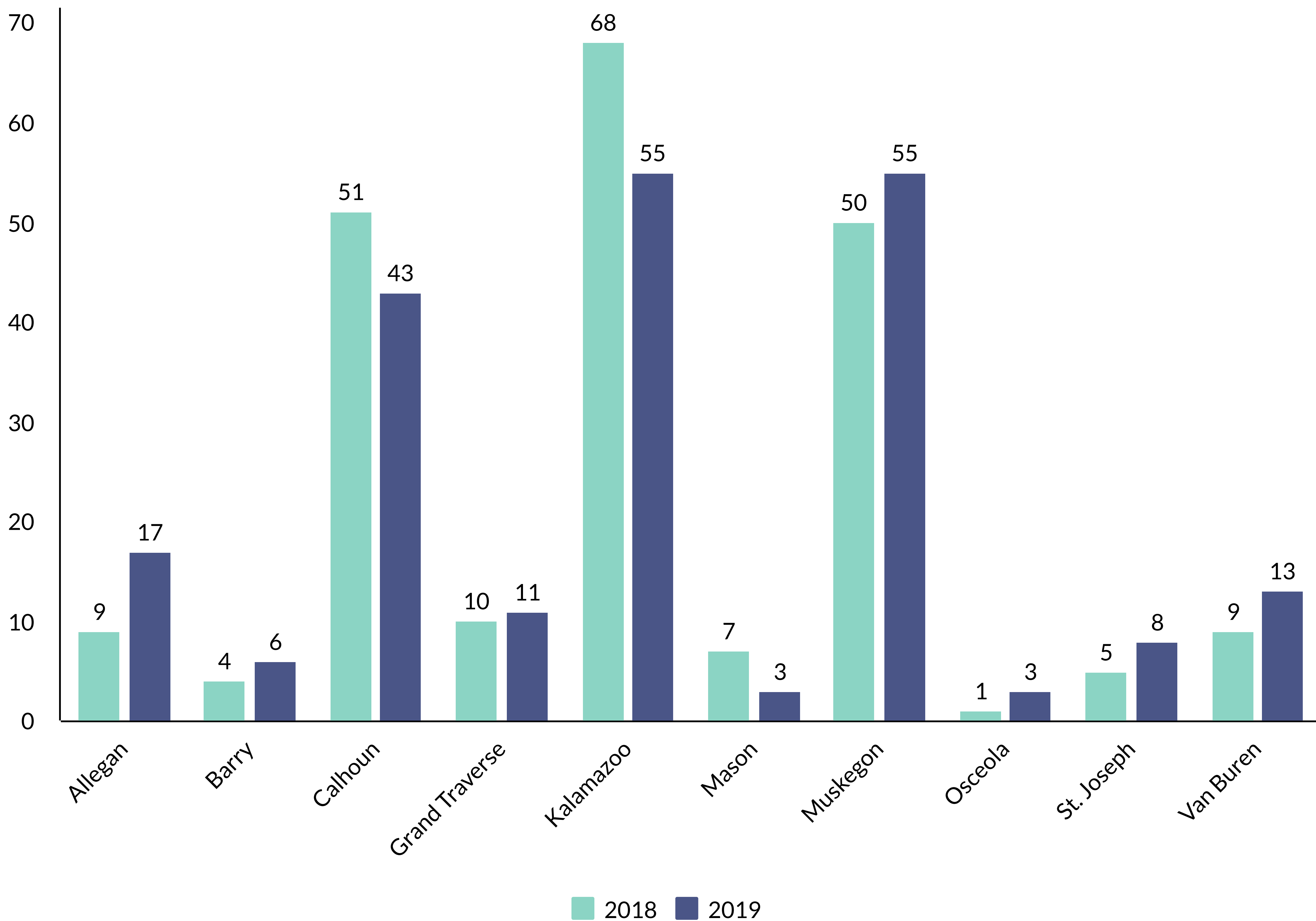
- ➔ 109 opioid and non-opioid
- ➔ 62 opioid only
- ➔ 43 non-opioid only

2019  
**214 deaths**



- ➔ 126 opioid and non-opioid
- ➔ 29 opioid only
- ➔ 59 non-opioid only

### County of Death



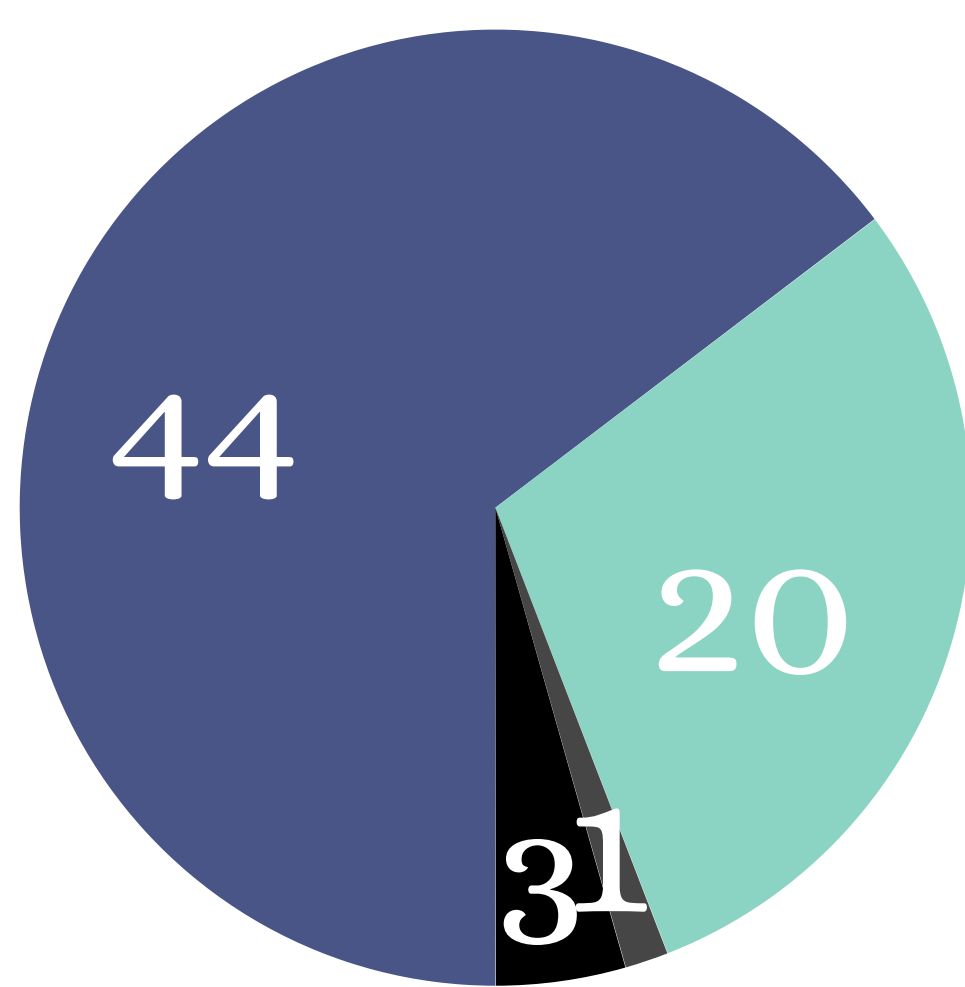
# Deaths Related to Opioids and Other Drugs

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

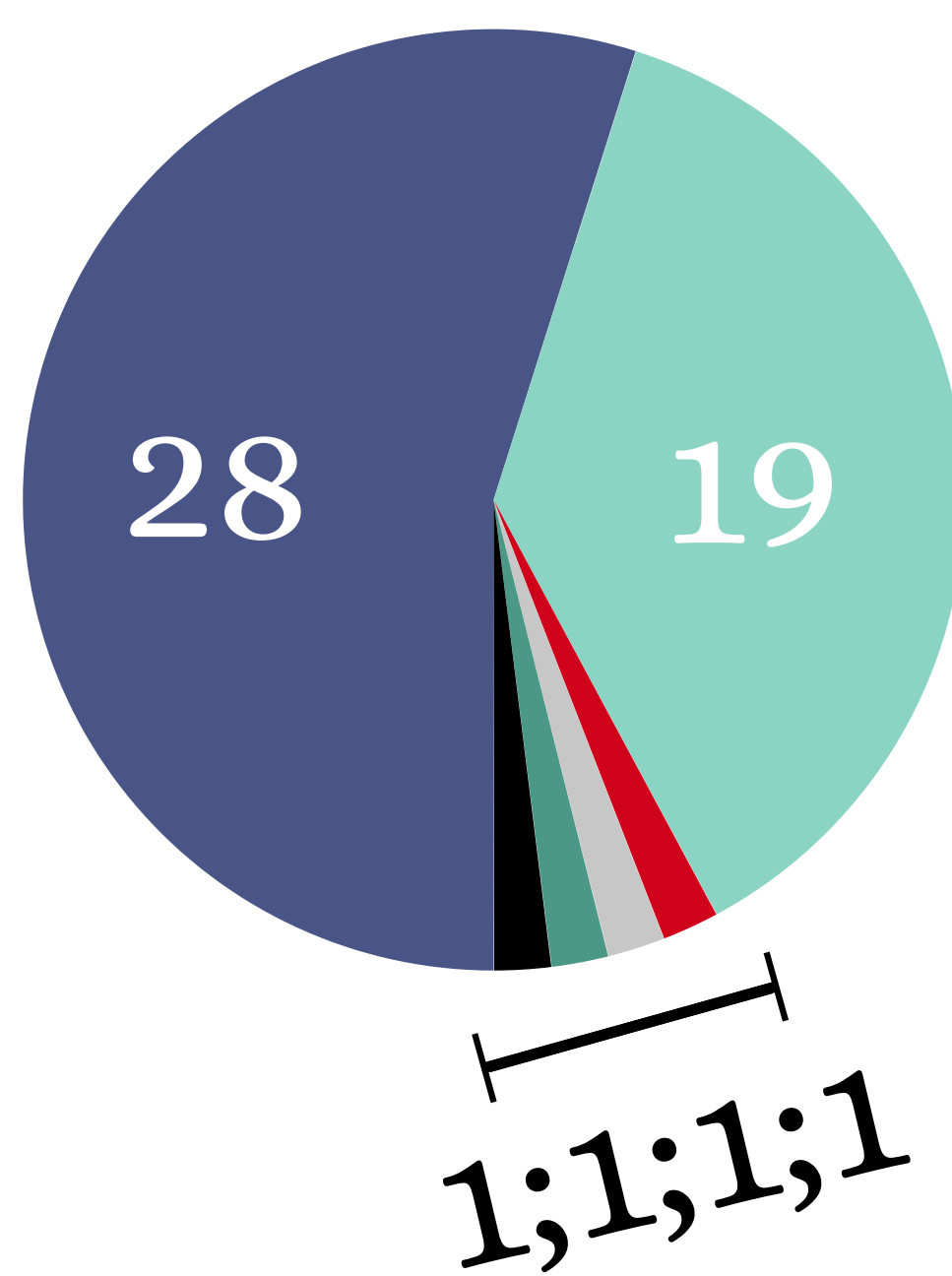
## Naloxone Administration (2018)



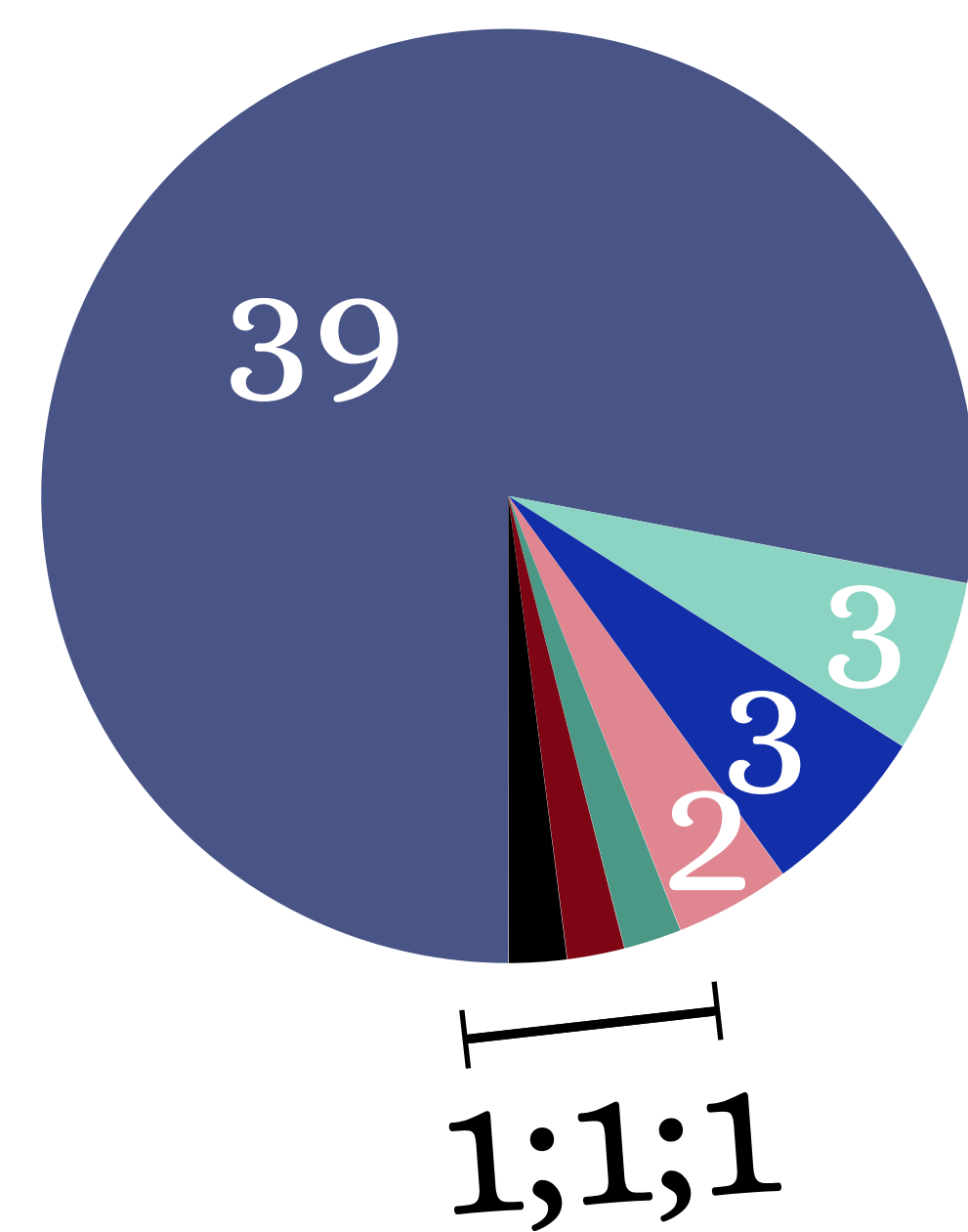
Kalamazoo (n=68)



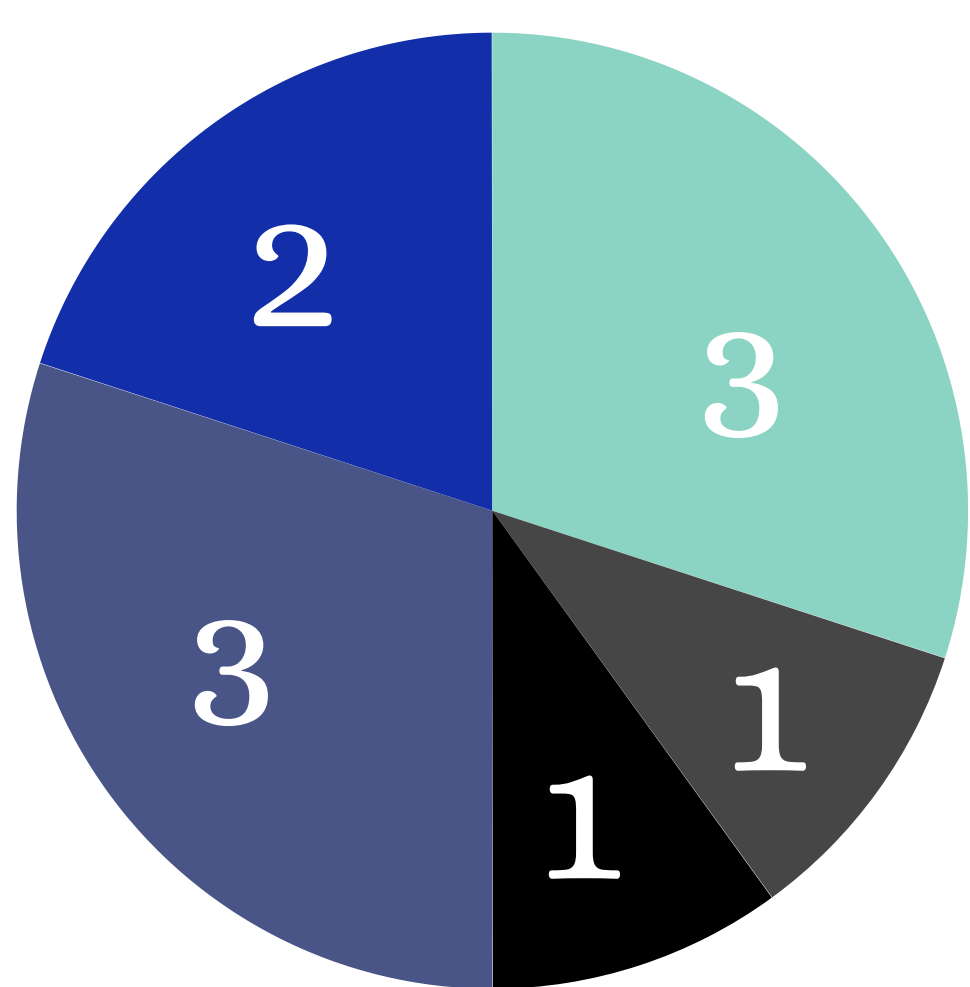
Calhoun (n=51)



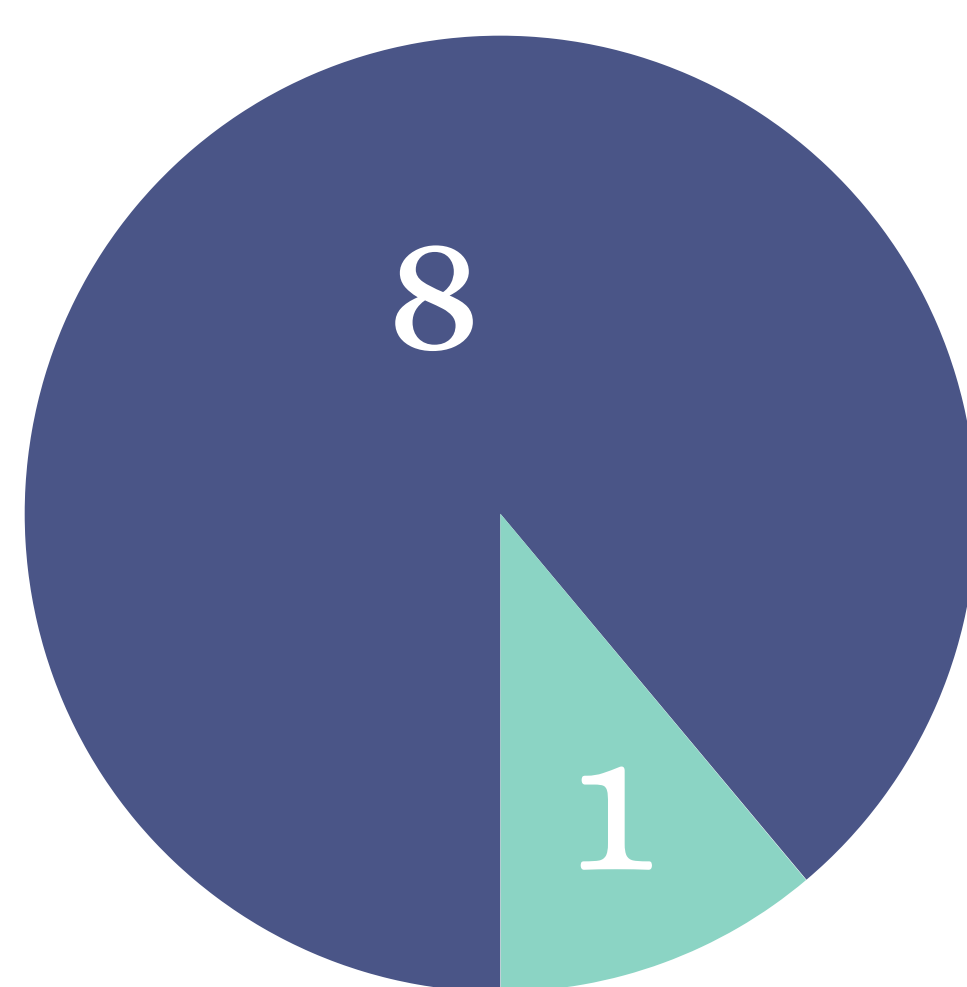
Muskegon (n=50)



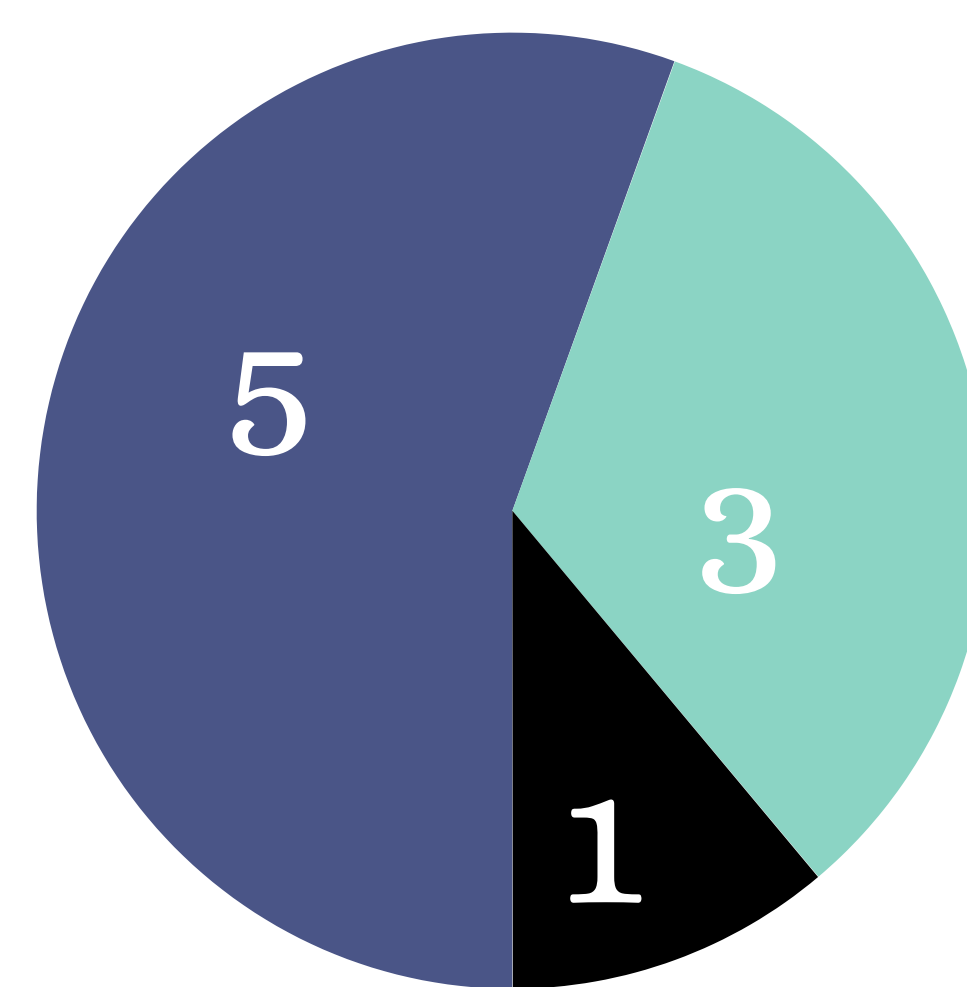
Grand Traverse (n=10)



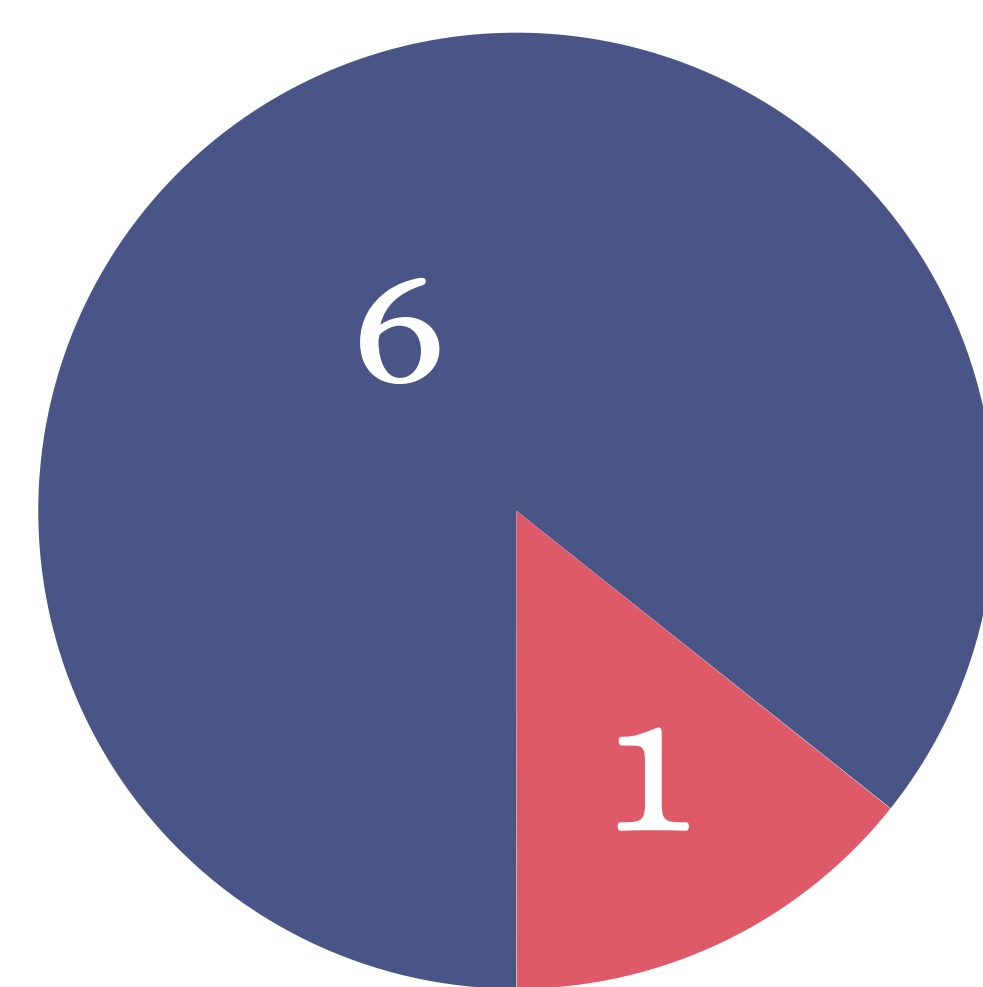
Allegan (n=9)



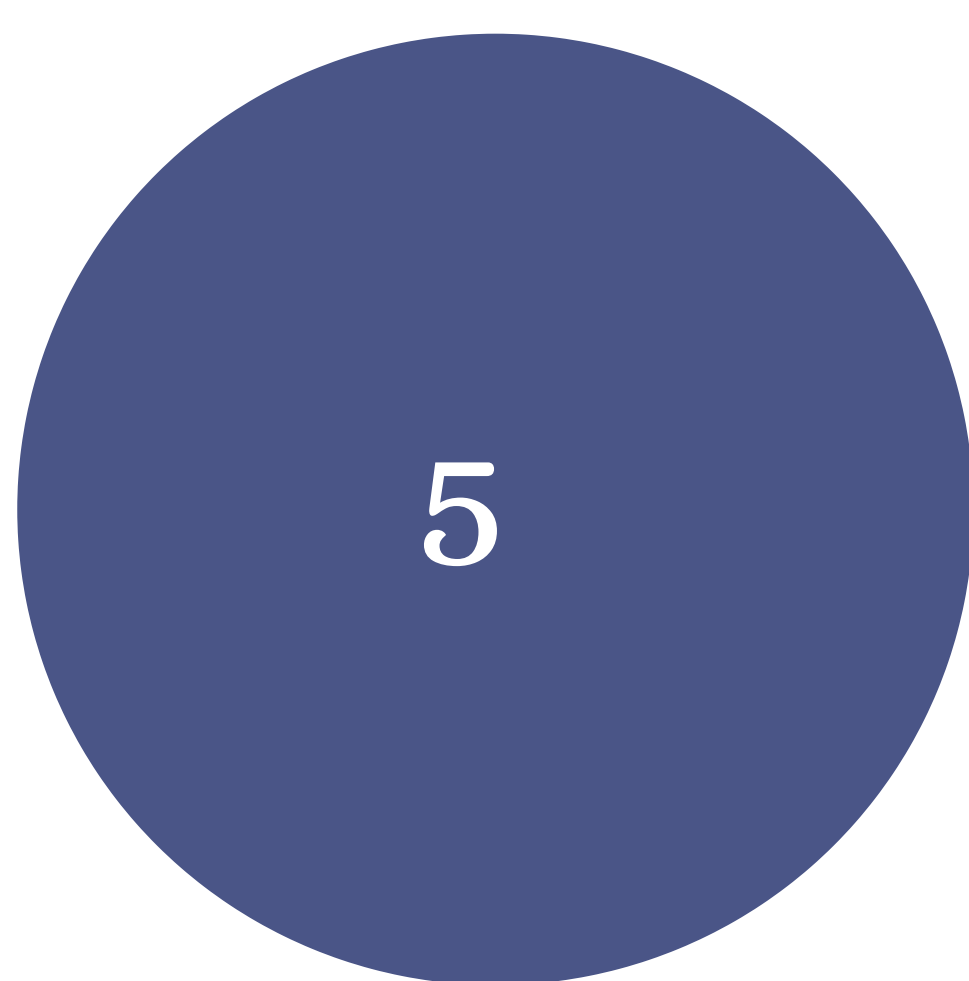
Van Buren (n=9)



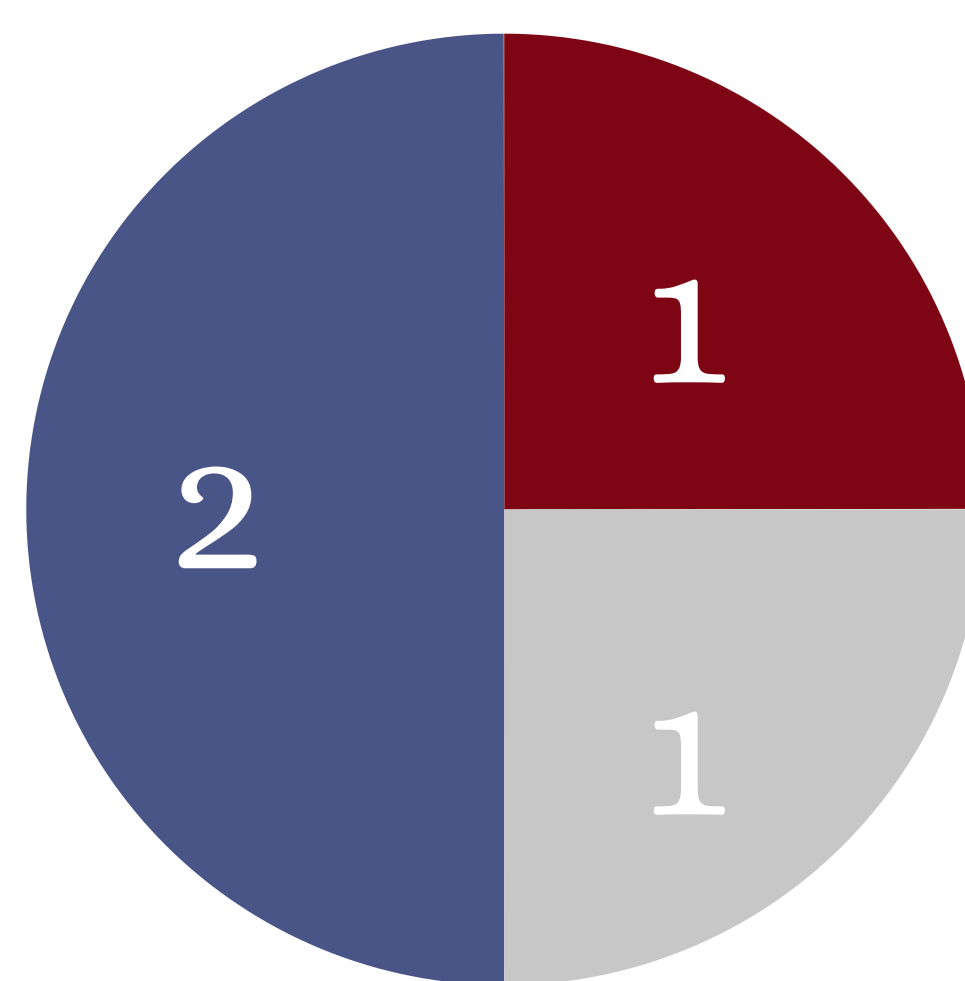
Mason (n=7)



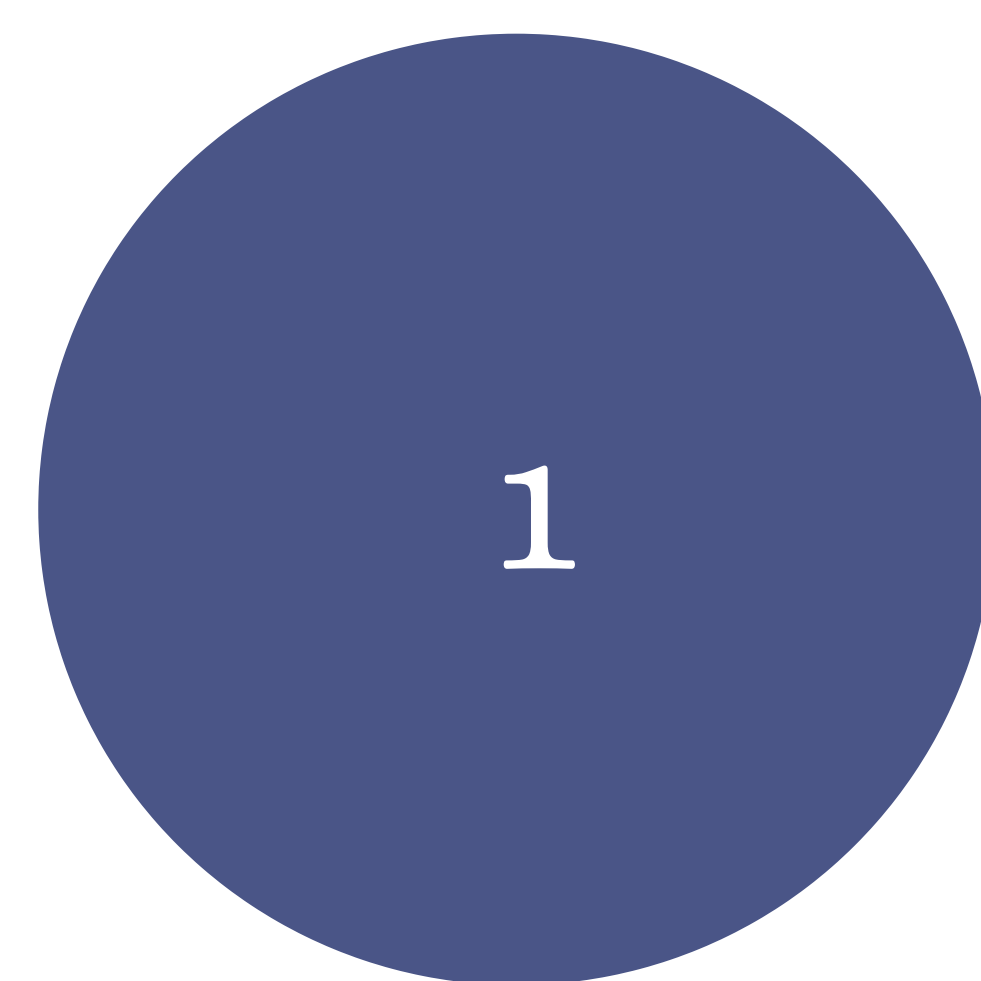
St. Joseph (n=5)



Barry (n=4)



Osceola (n=1)

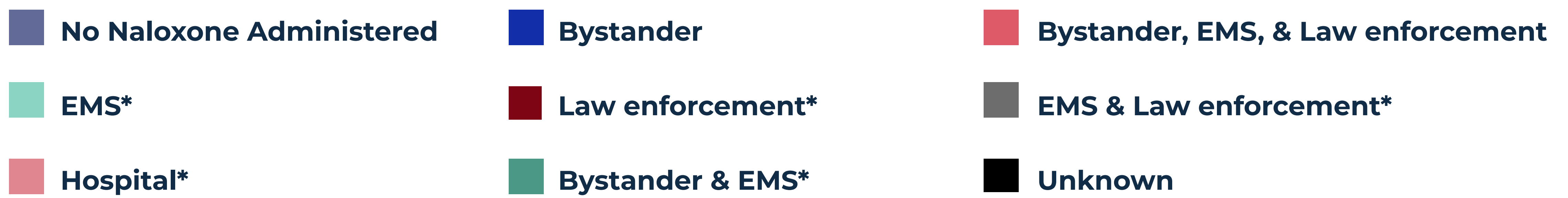




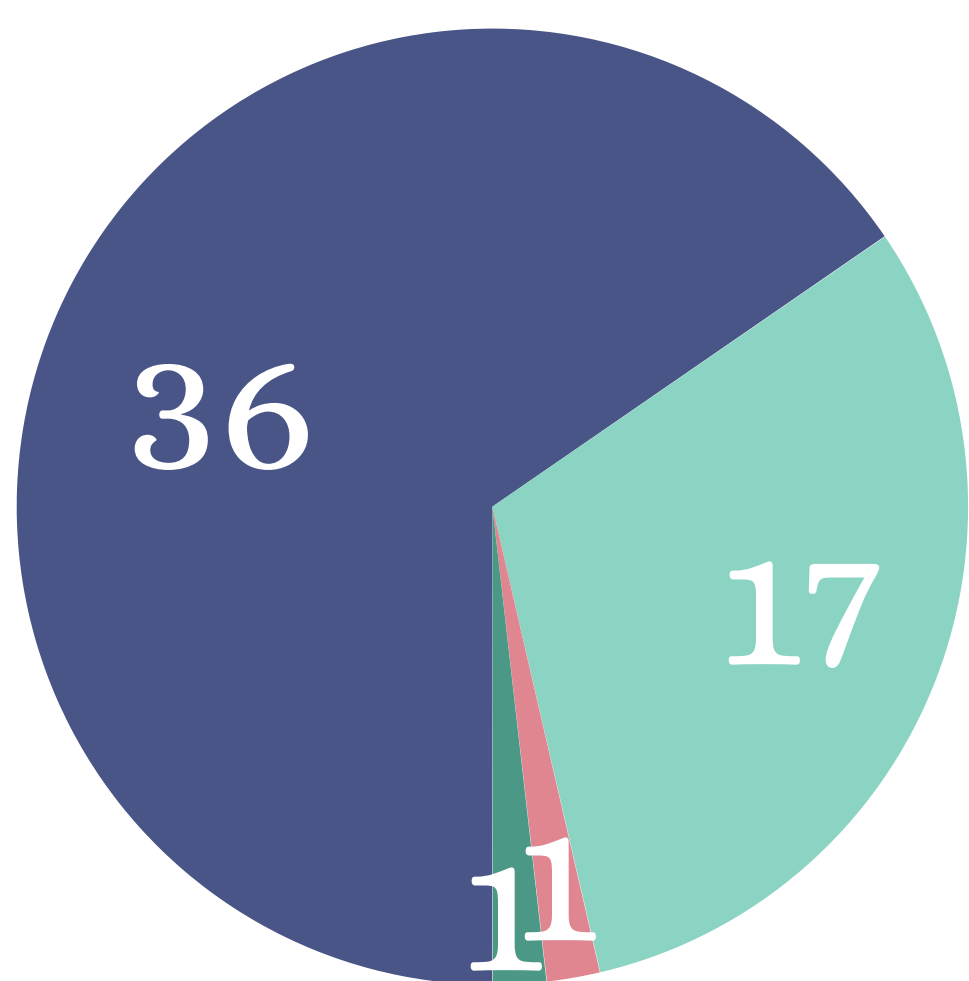
# Deaths Related to Opioids and Other Drugs

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

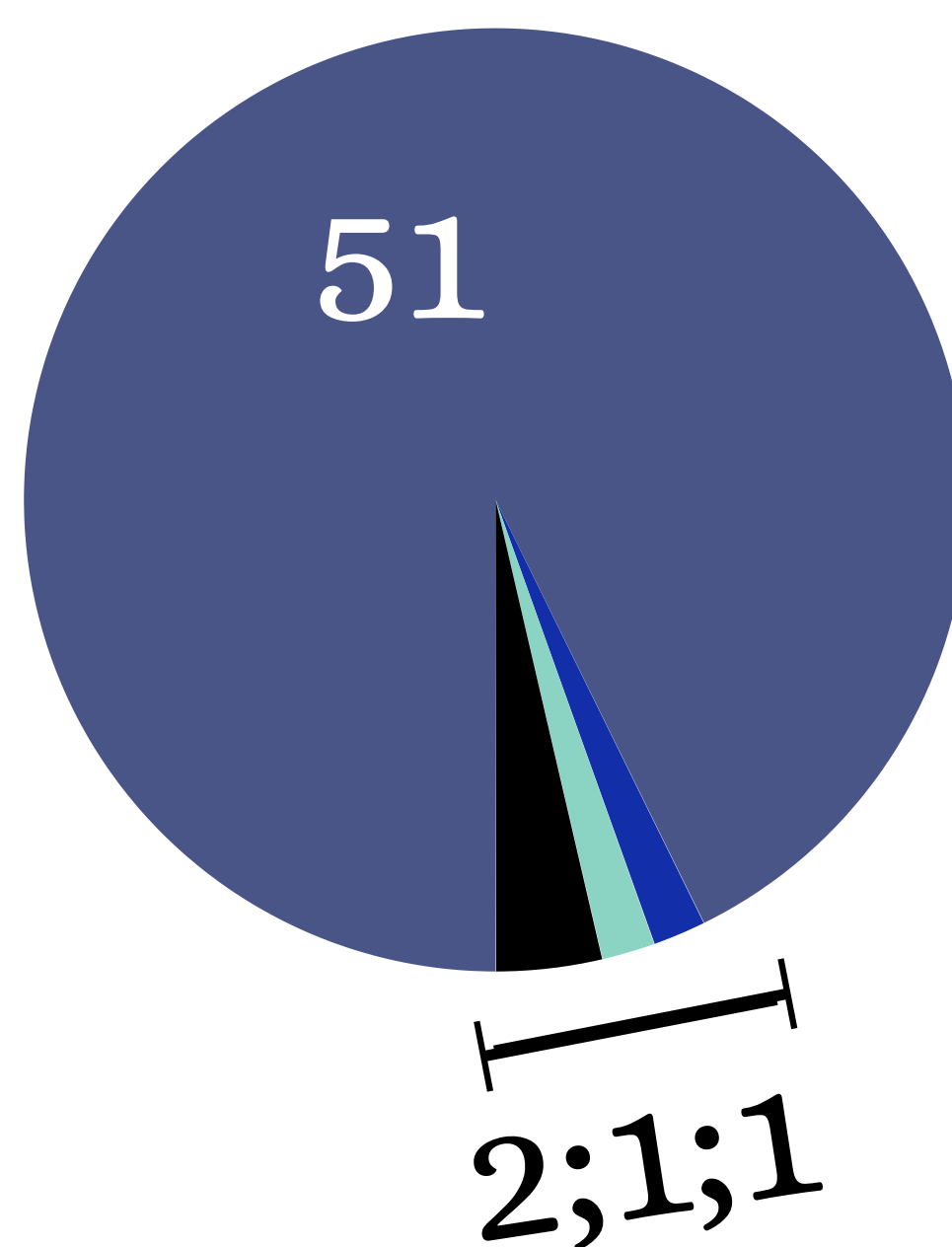
## Naloxone Administration (2019)



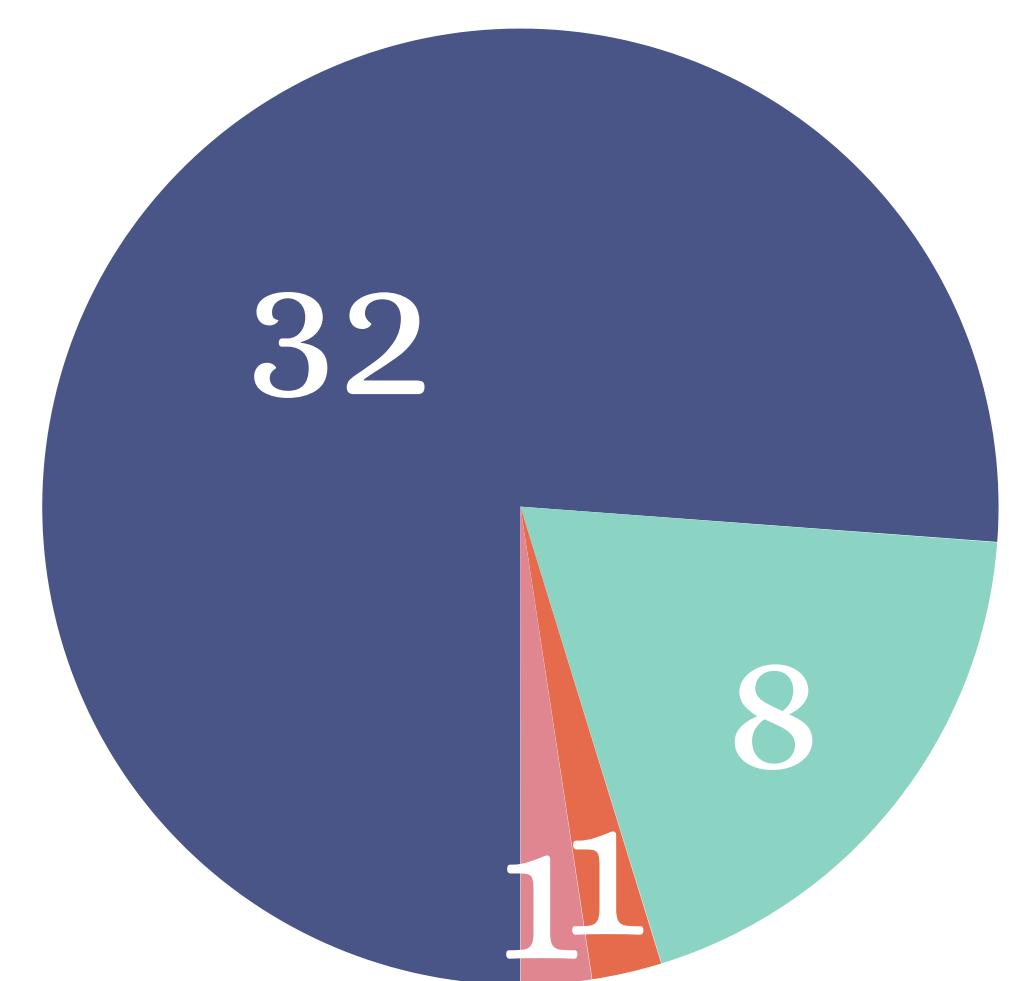
Kalamazoo (n=55)



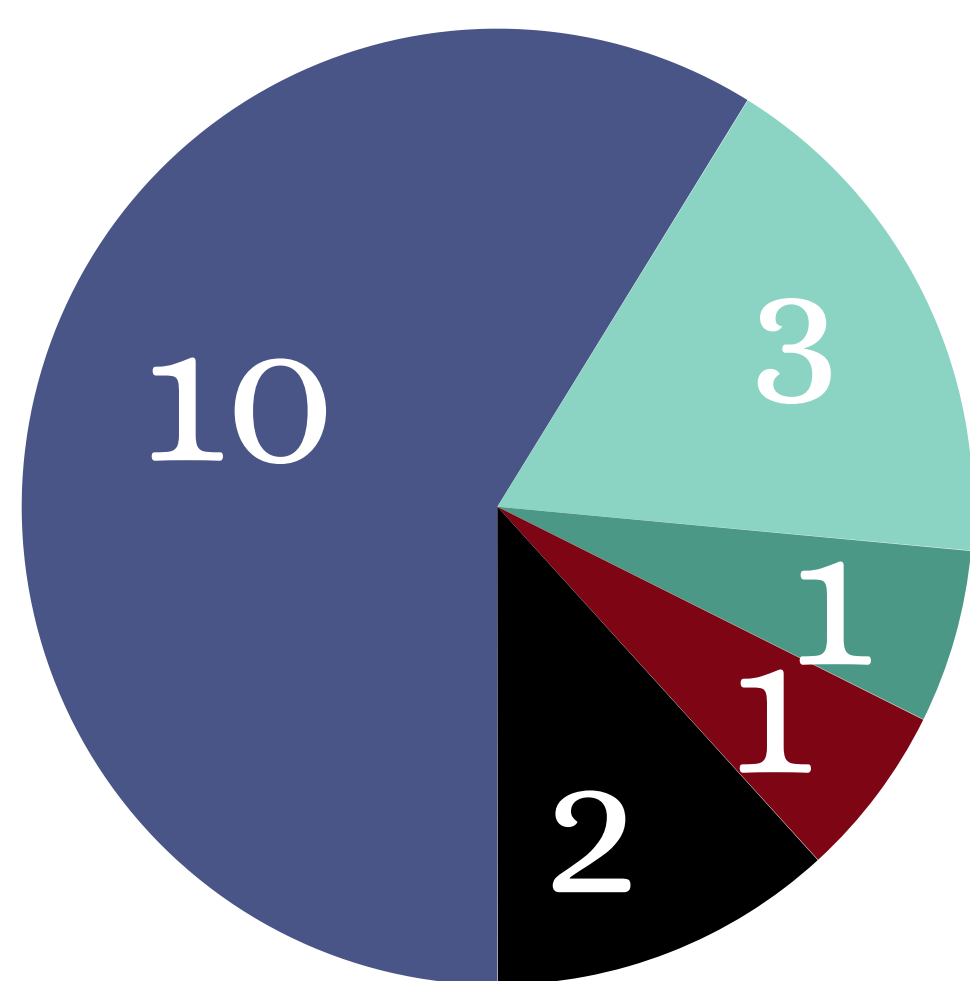
Muskegon (n=55)



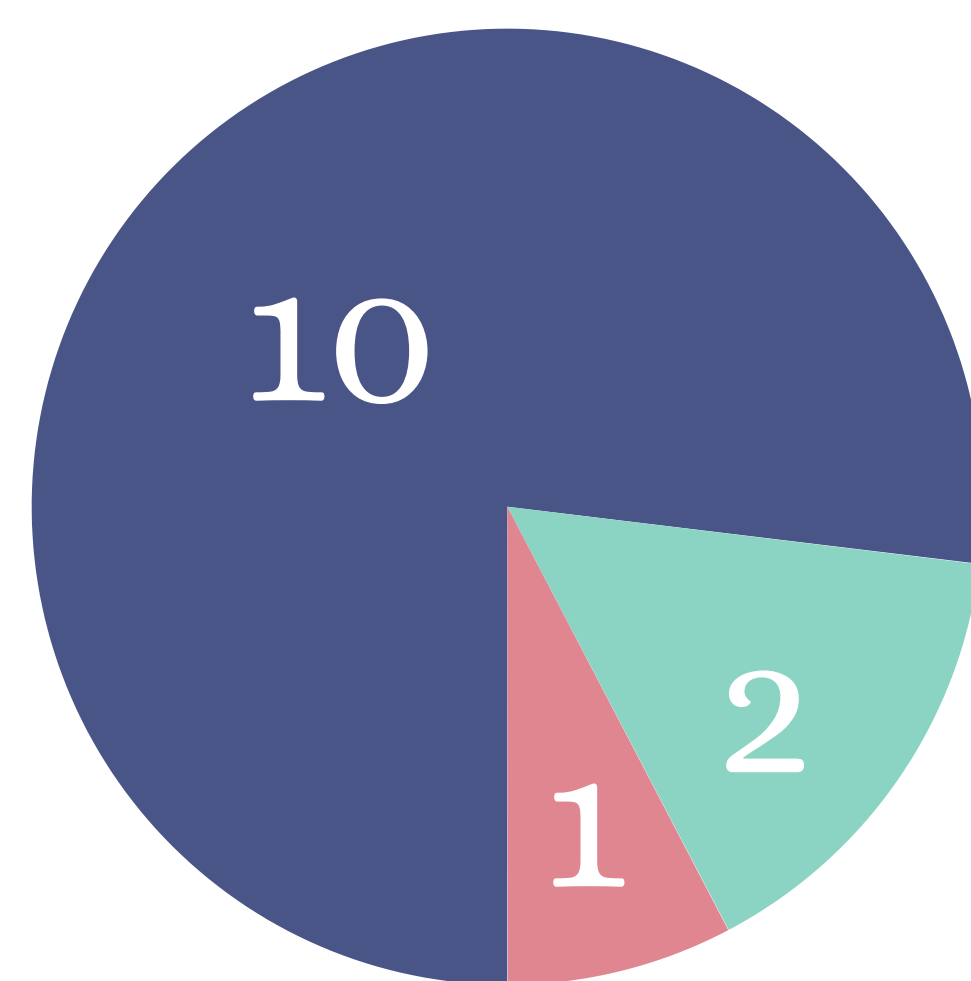
Calhoun (n=43)



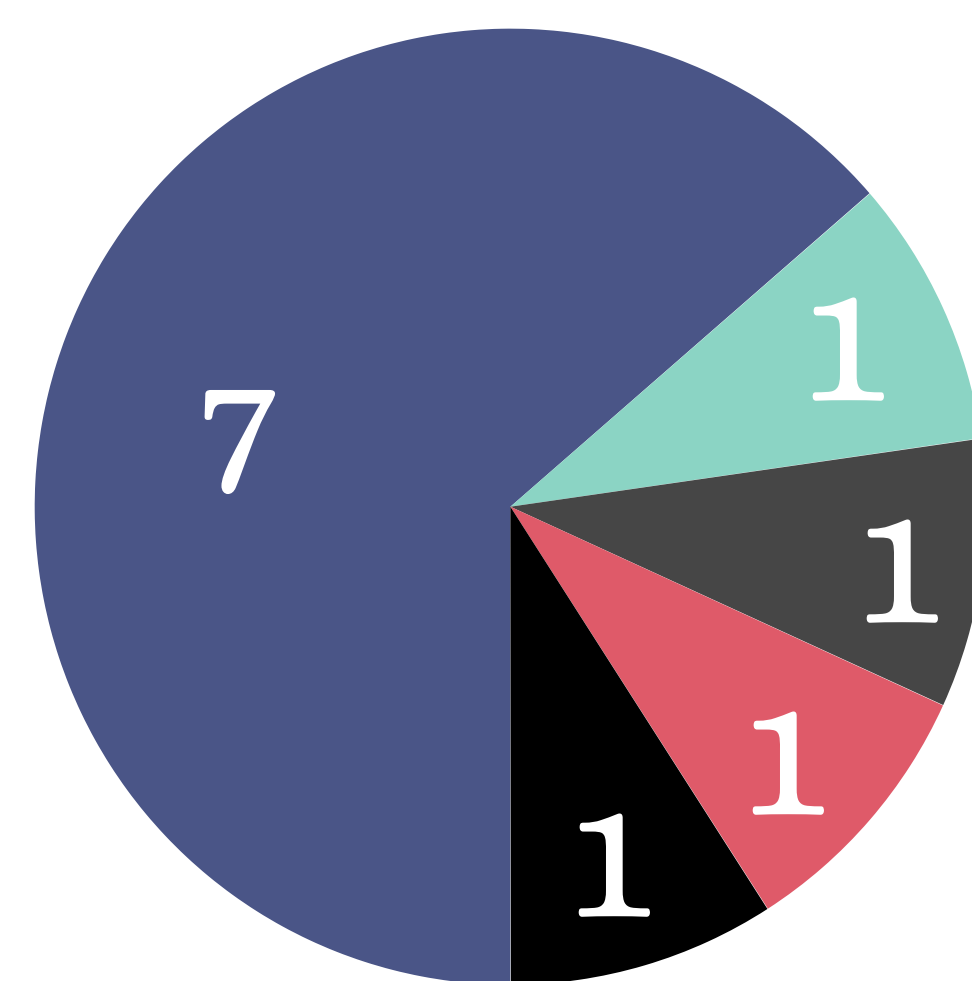
Allegan (n=17)



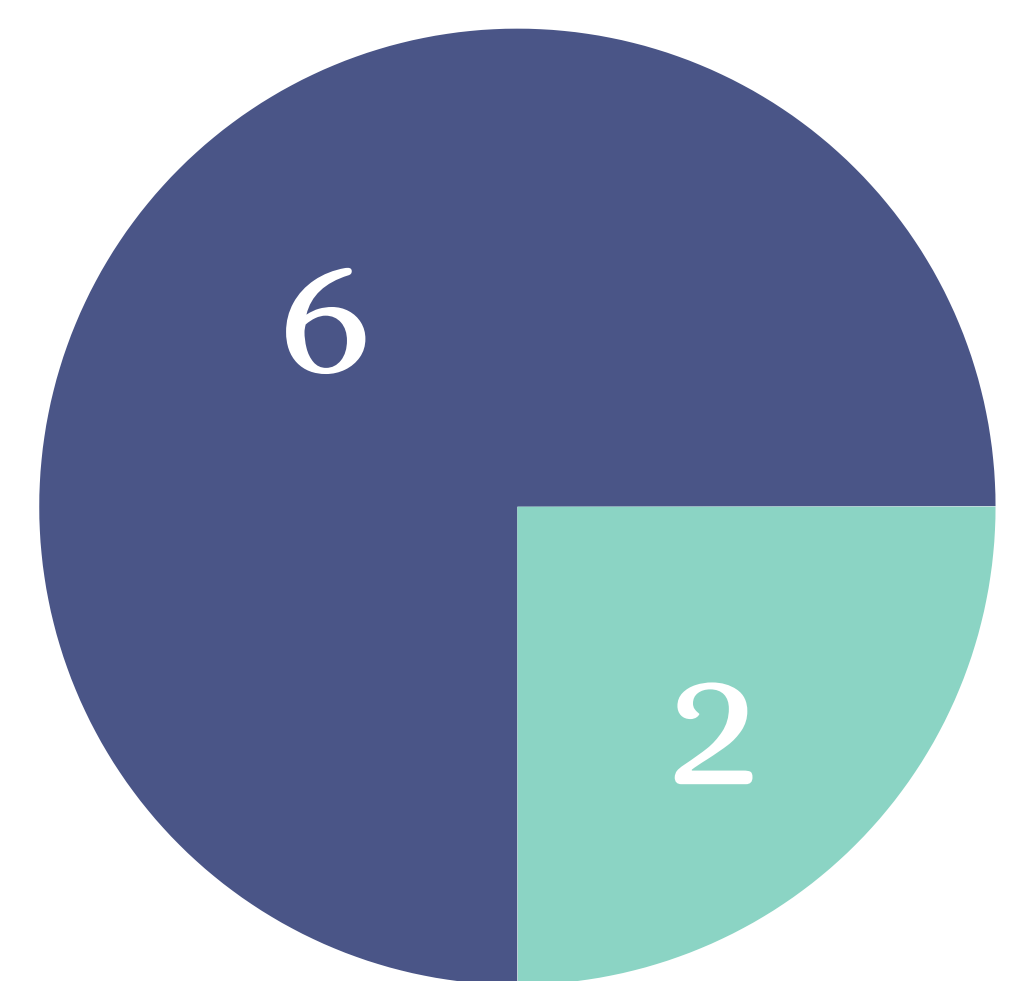
Van Buren (n=13)



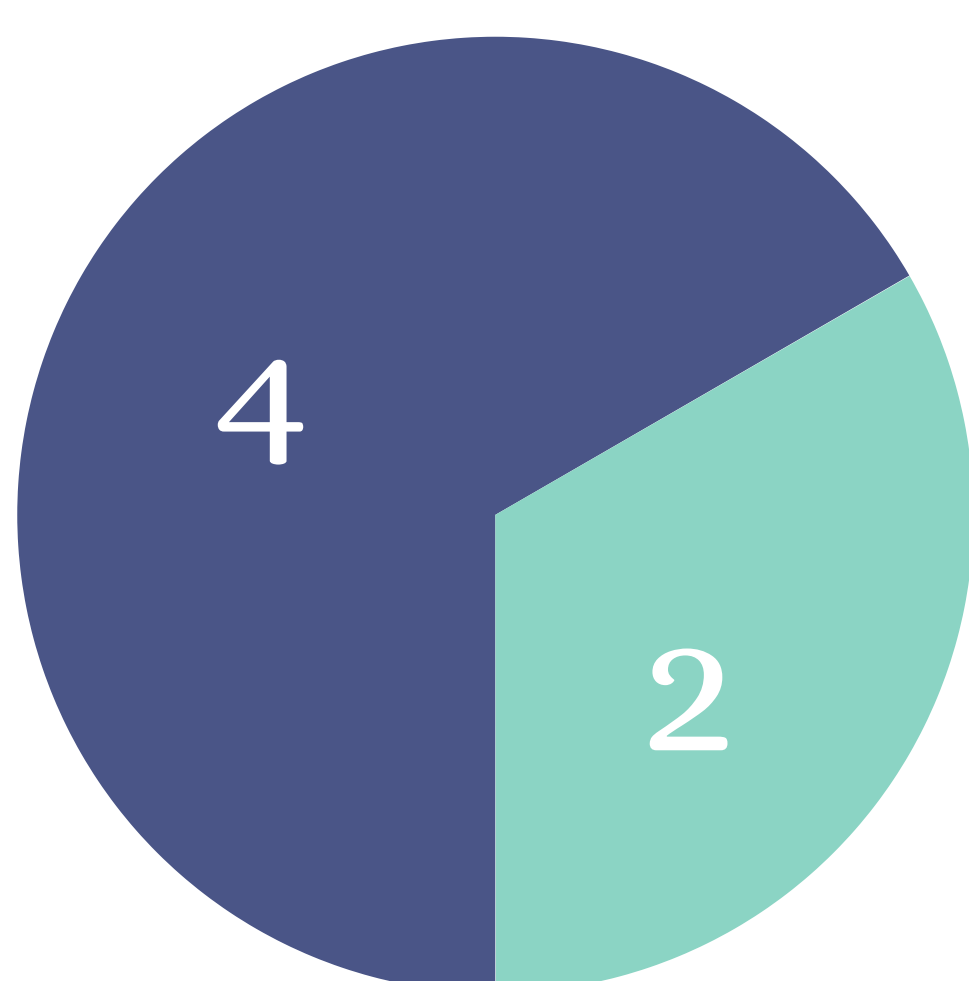
Grand Traverse (n=11)



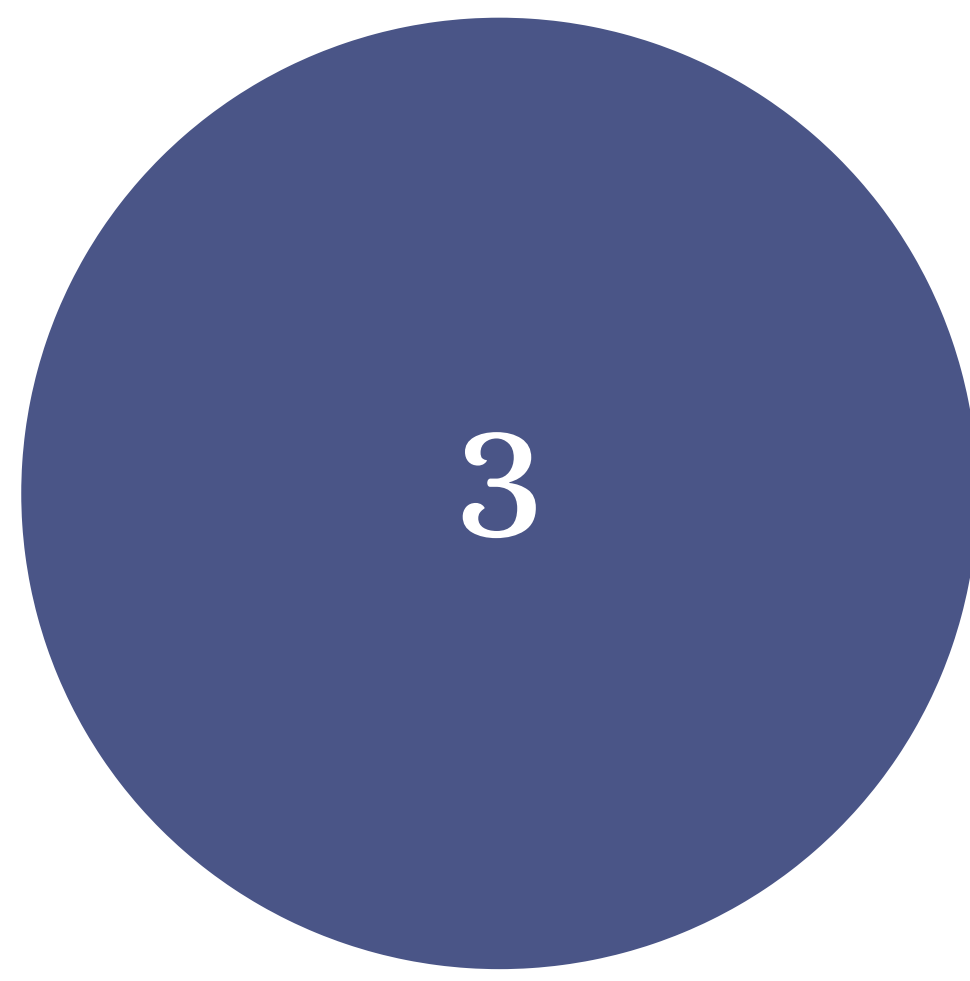
St. Joseph (n=8)



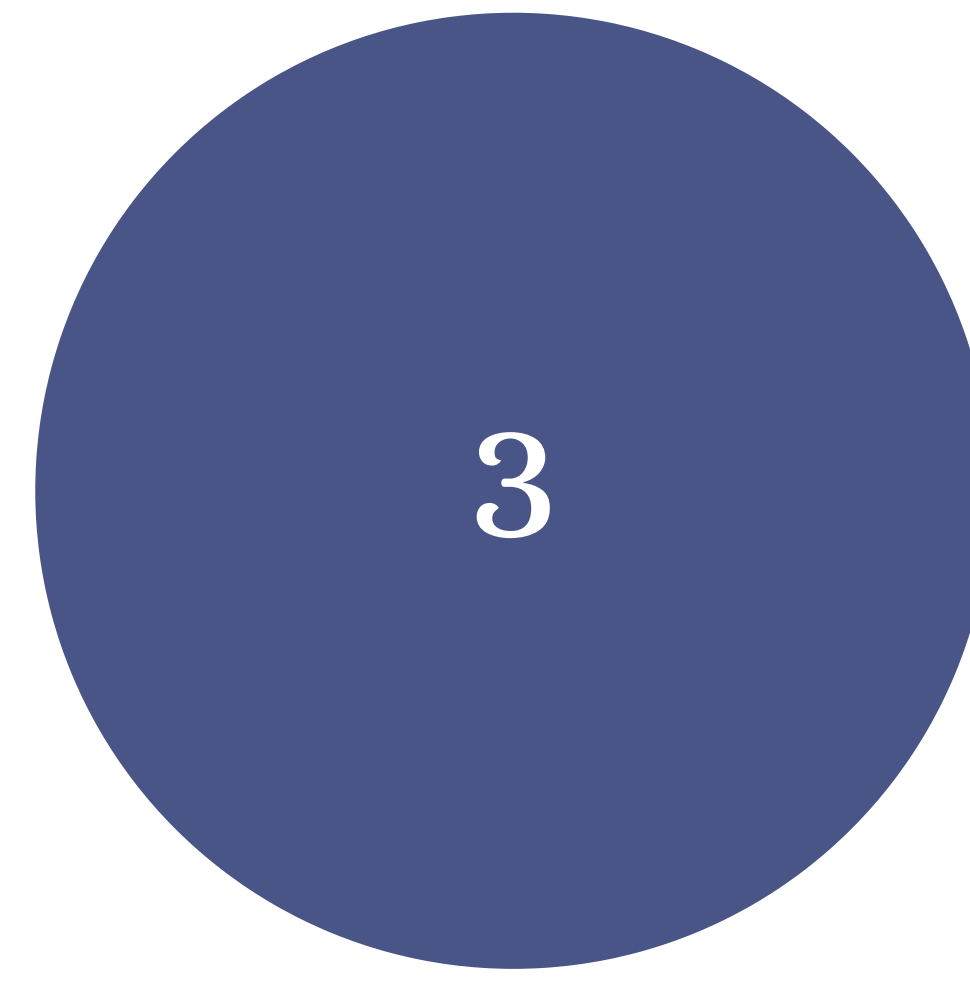
Barry (n=6)



Mason (n=3)



Osceola (n=3)



# Deaths Related to Opioids and Other Drugs

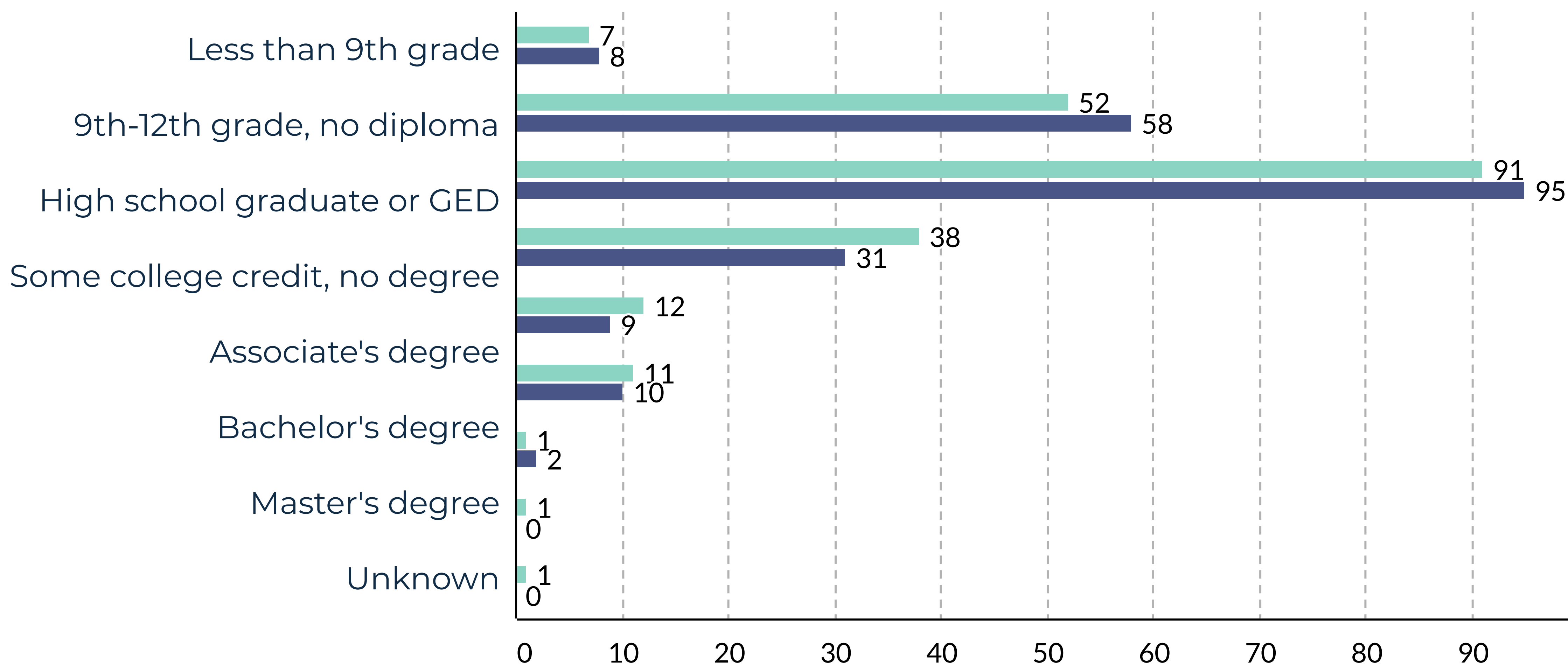
Allegan, Barry, Calhoun, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

2018

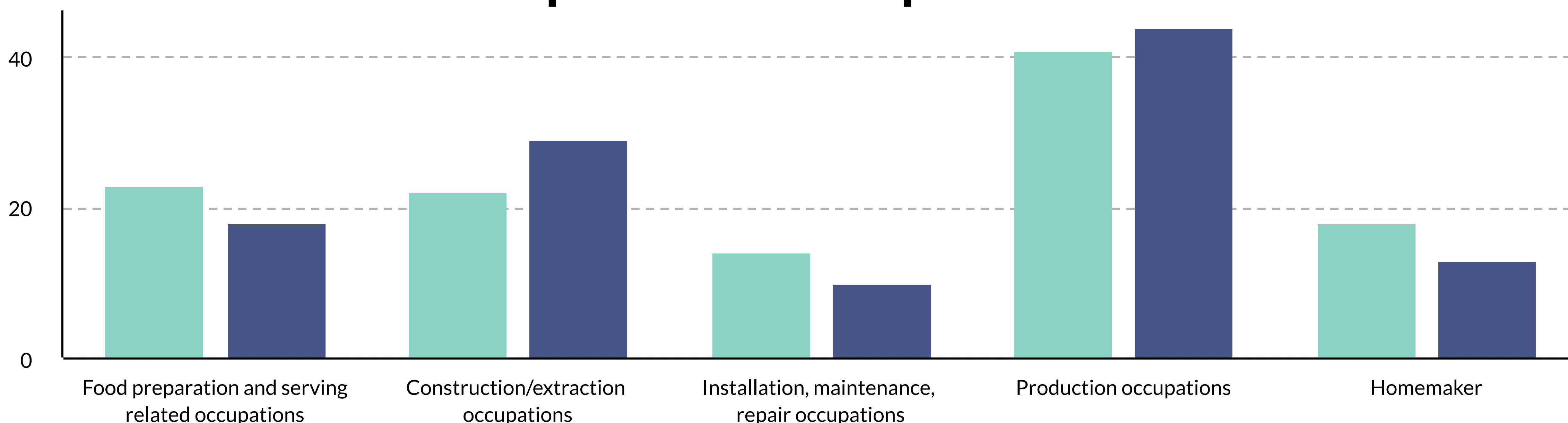
## Demographics

2019

### Decedent's Highest Level of Education

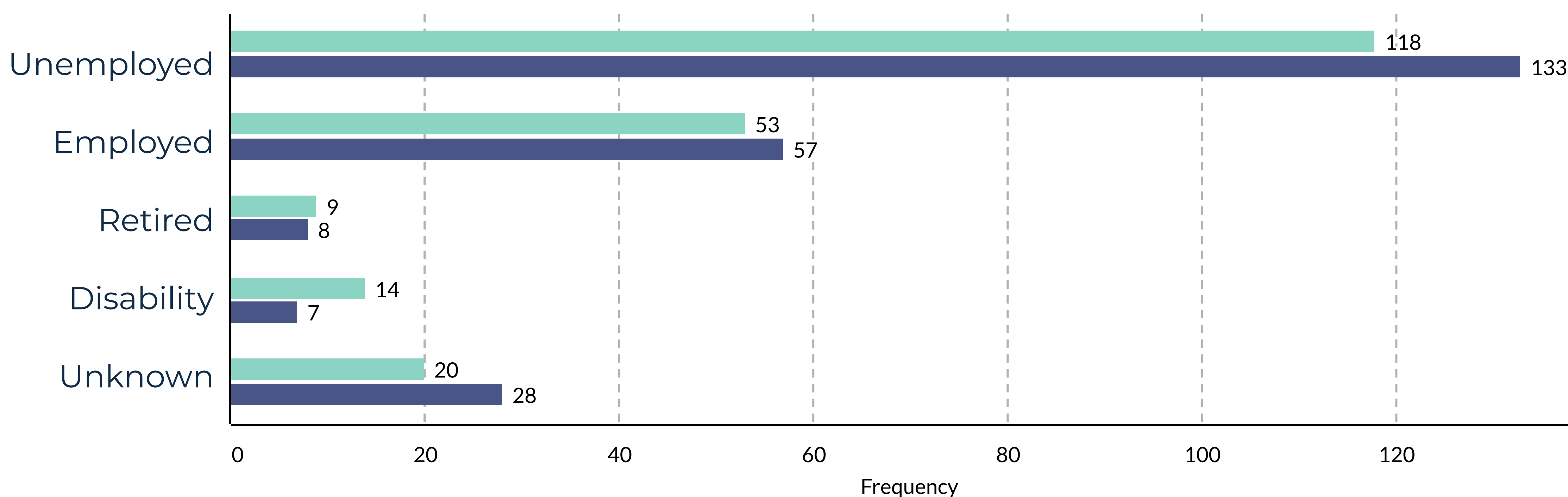


### Top 5 Usual Occupations\*



\*Based on death certificate occupation/industry and coded into Standard Occupational Classification System (SOC)

### Decedent's Employment Status



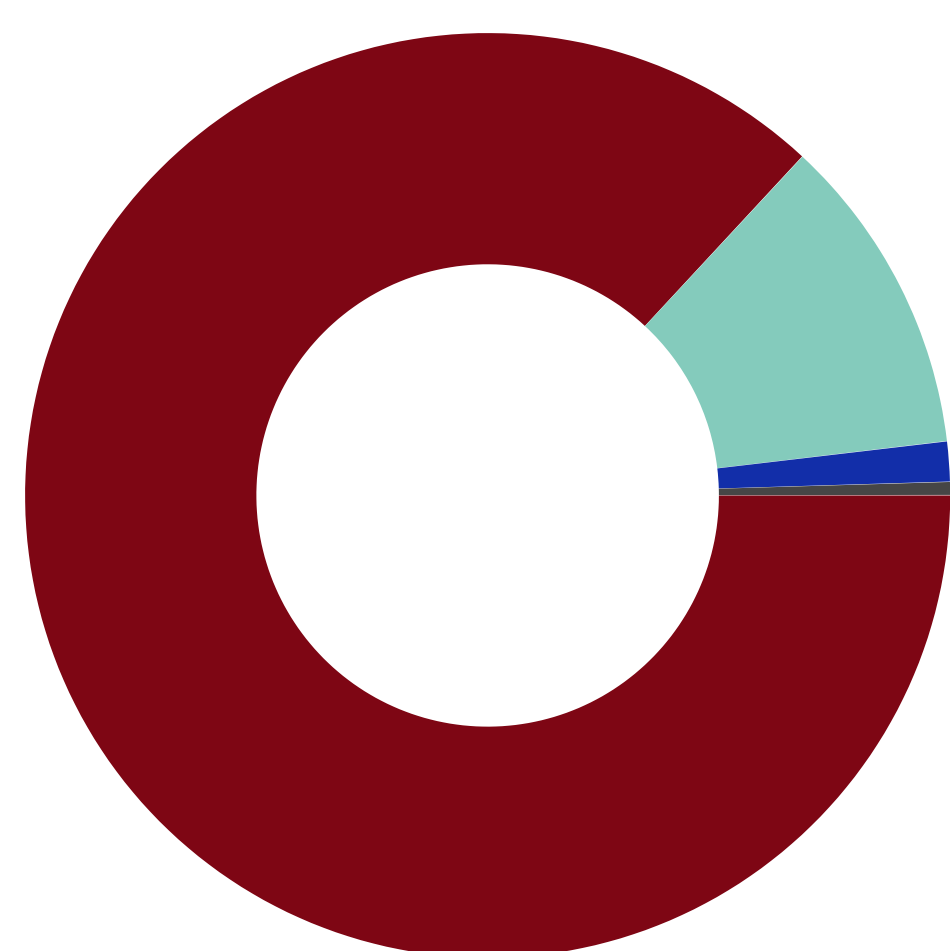
# Deaths Related to Opioids and Other Drugs

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

## Demographics cont.

### 2018

#### Race



- White (87%)
- Black (11%)
- American Indian/Alaskan Native (1%)
- Unknown (<1%)

#### Age

**Minimum Age**  
19 years

**Maximum Age**  
84 years

**Average Age**  
42 years

**Decedents ever incarcerated were released in past 2 months (10%)**



#### Sex



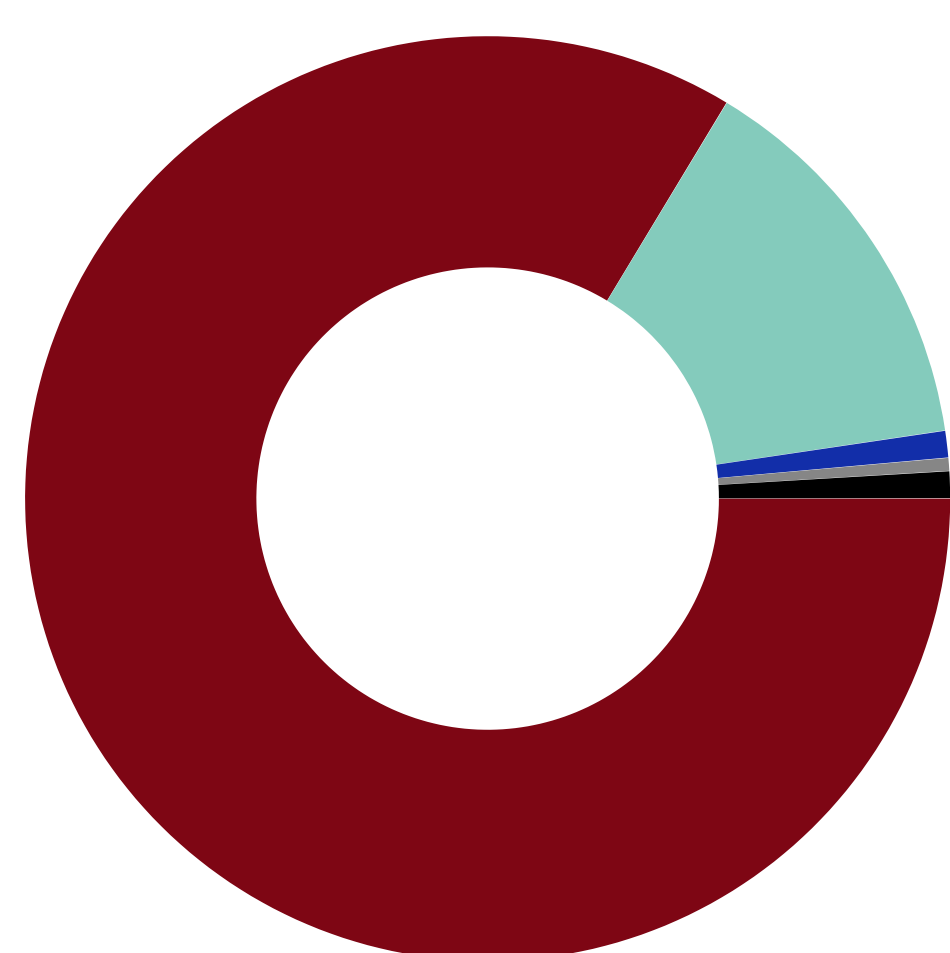
64%



36%

### 2019

#### Race



- White (84%)
- Black (14%)
- American Indian/Alaskan Native (14%)
- Asian (<1%)
- Unknown (1%)

#### Age

**Minimum Age**  
15 years

**Maximum Age**  
86 years

**Average Age**  
43 years

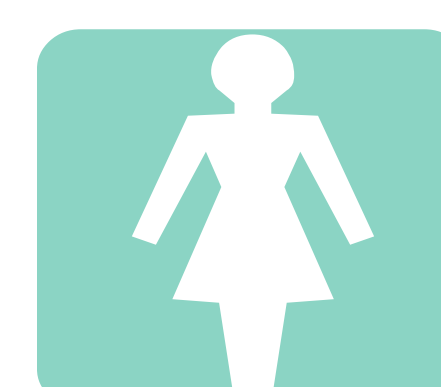
**Decedents ever incarcerated were released in past 2 months (9%)**



#### Sex



69%



31%



# Deaths Related to Opioids and Other Drugs

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

## Decedent's Substance Use History.

### 2018

### 2019

**At least 85%** of decedents were known to use or abuse substances

**At least 84%** of decedents were known to use or abuse substances

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

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

#### Decedent's typical substance(s) of choice

55%  
HEROIN

30%  
COCAINE

20%  
METHAMPHETAMINE

#### Decedent's typical substance(s) of choice

43%  
HEROIN

21%  
COCAINE

23%  
METHAMPHETAMINE

† Decedent may have had more than one substance of choice

† Decedent may have had more than one substance of choice

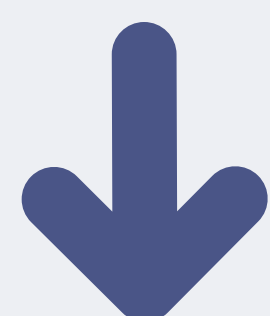
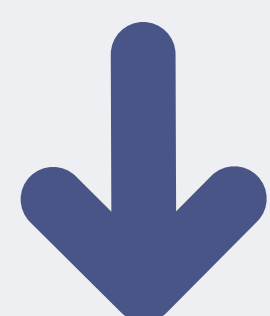
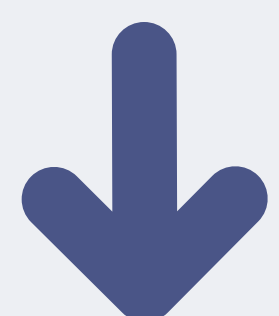
**Decedent was reportedly substance free in the past month\***

23%

**Decedent was reportedly substance free in the past month**

26%

#### Suspected reasons for relapse\*



39%

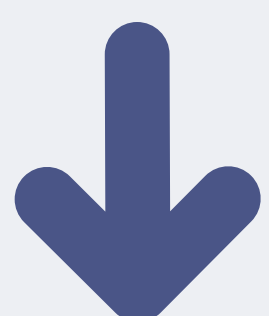
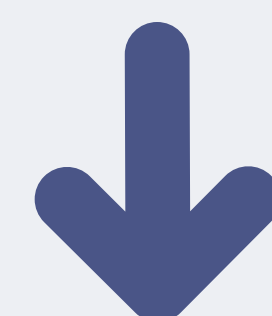
29%

32%

Left jail/rehab

Life stress\*\*

Unknown



37%

24%

39%

Left jail/rehab

Life stress\*\*

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 social influences, changes within the family, and issues accessing treatment.

\*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.

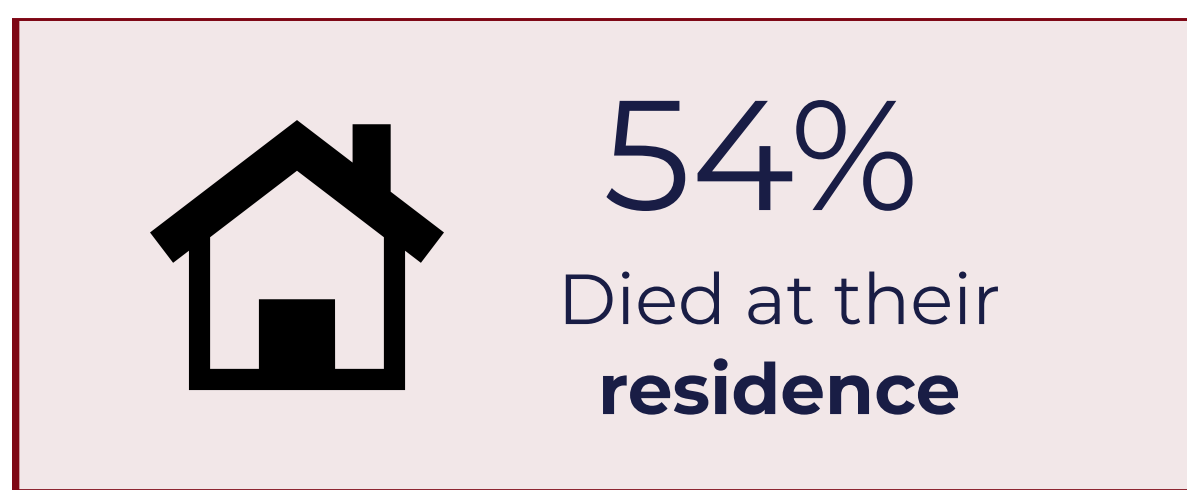
\*\*Life stress includes social influences, changes within the family, and injuries.

# Deaths Related to Opioids and Other Drugs

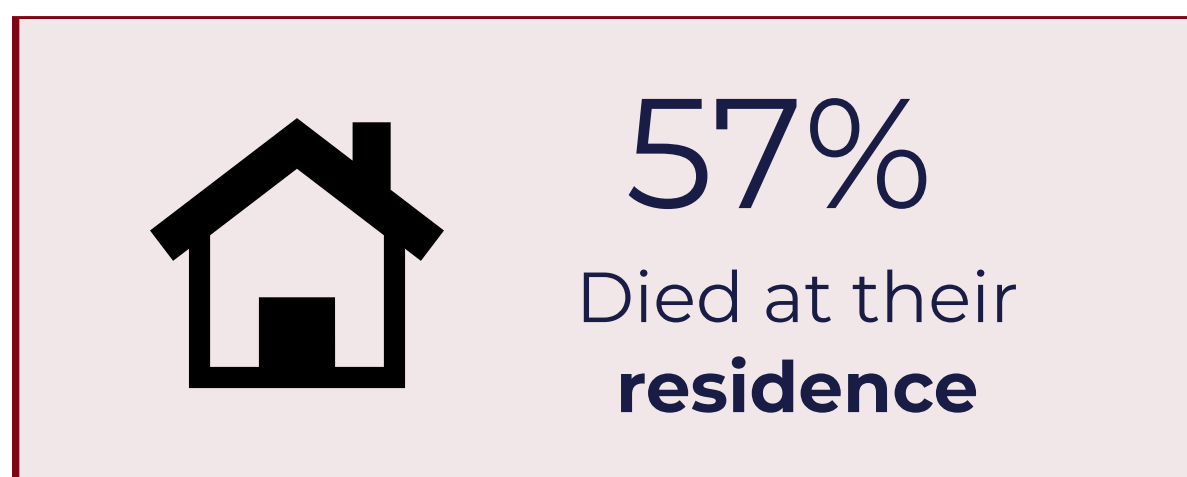
Allegan, Barry, Calhoun, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

## Death Scene Findings

### 2018



### 2019



## Autopsy and Toxicology Results

### 2018

#### Manner of Death

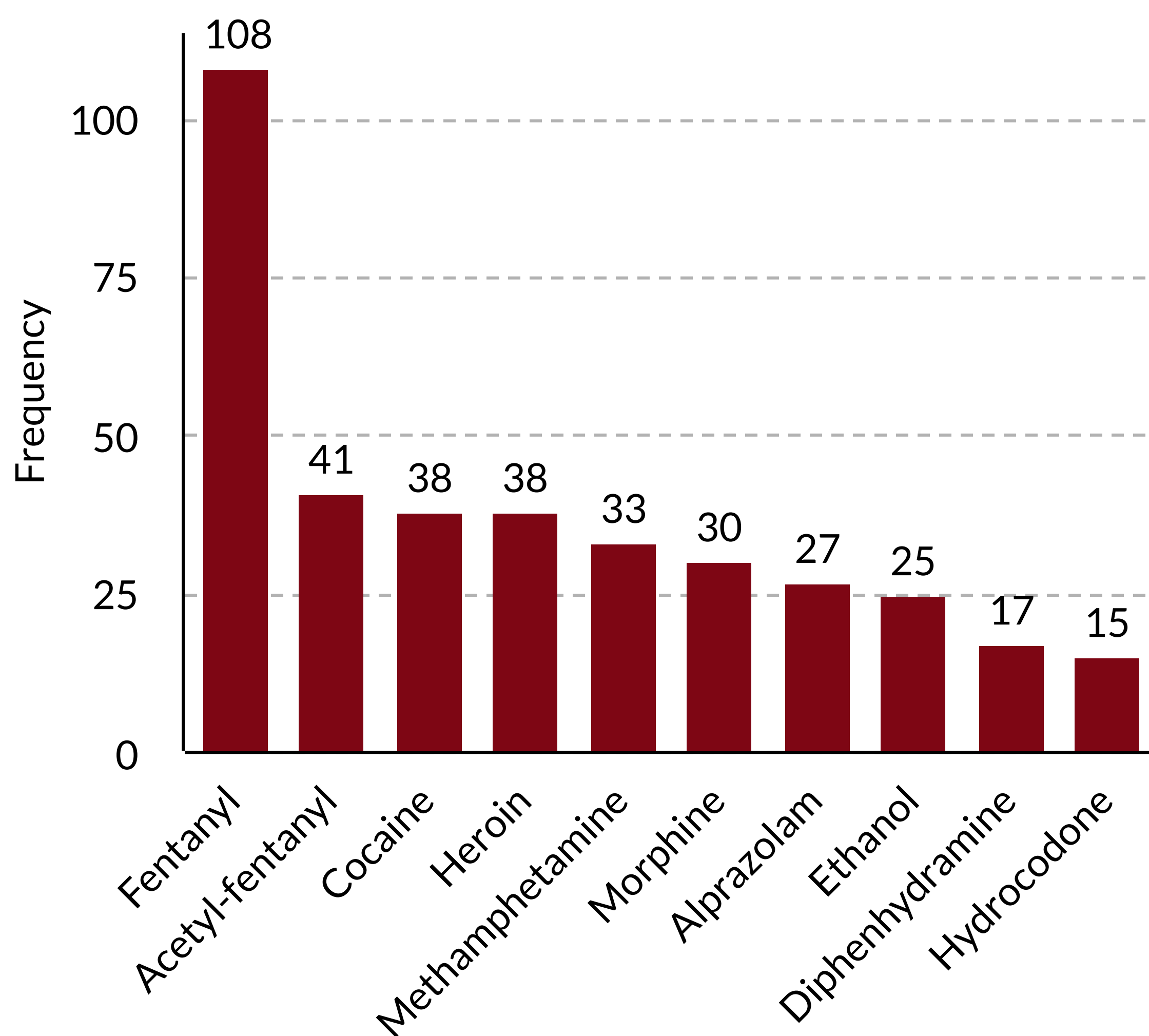


### 2019

#### Manner of Death



#### 10 Most Common Substances Contributing to Death



#### 10 Most Common Substances Contributing to Death

