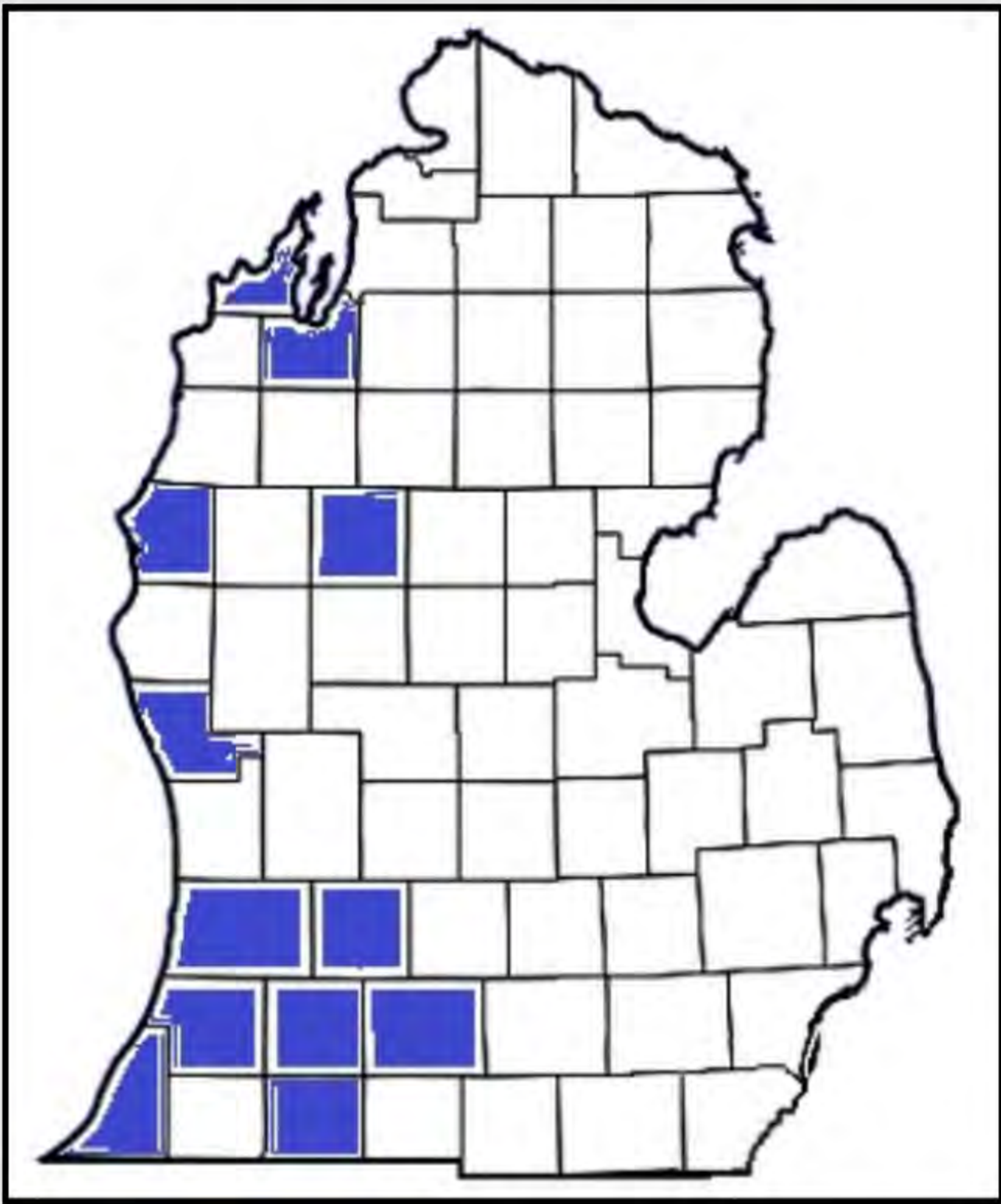


Deaths Related to Opioids and Other Drugs

WMed 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:

Naloxone Administration by EMS, Health Factors, Mental Health Factors, Social Factors, and Decedent Drug History.

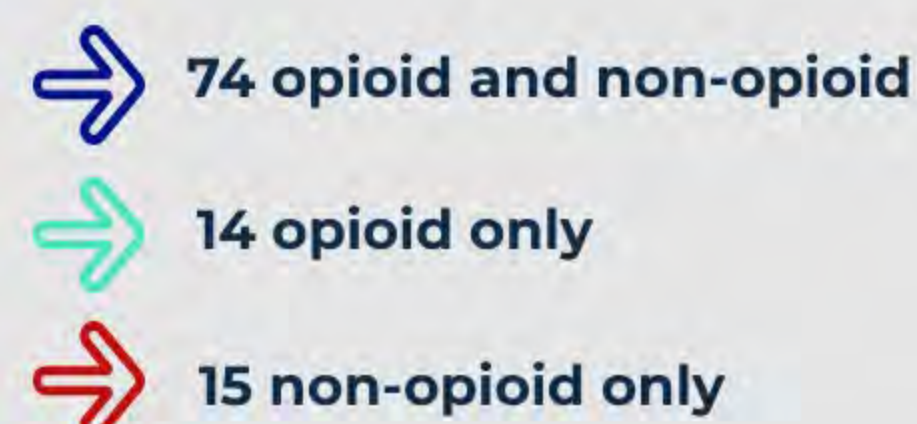
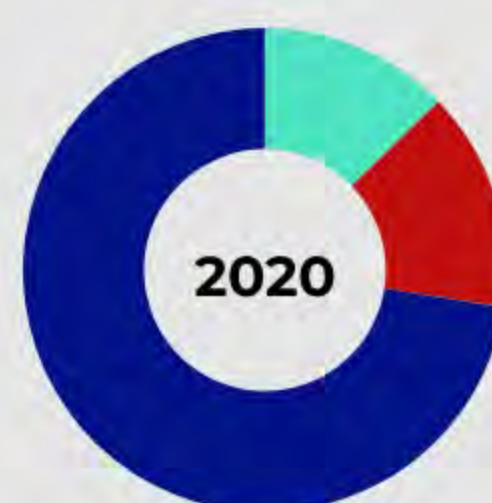
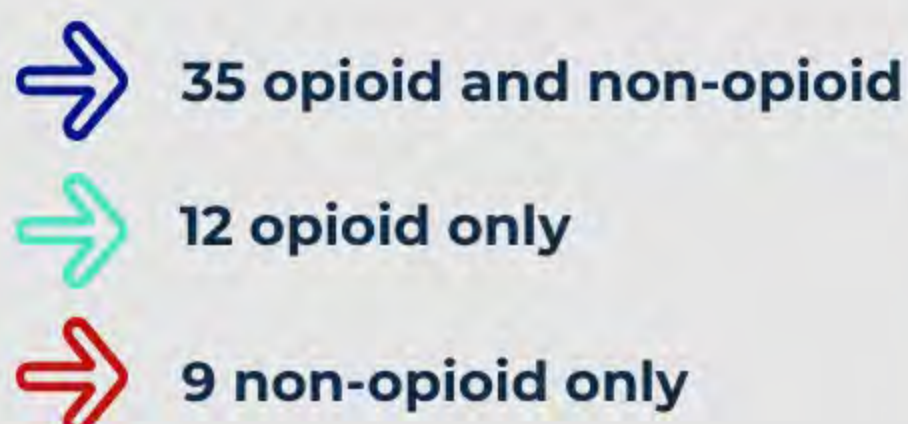
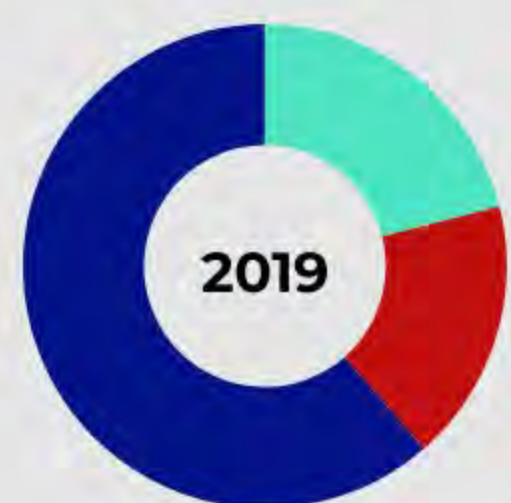
Sources: All data was found in Medical Examiner database, law enforcement and EMS reports, death certificates, obituaries, STORM (Swift Toxicology of Overdose-Related Mortalities) results, toxicology reports, and autopsy reports.

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

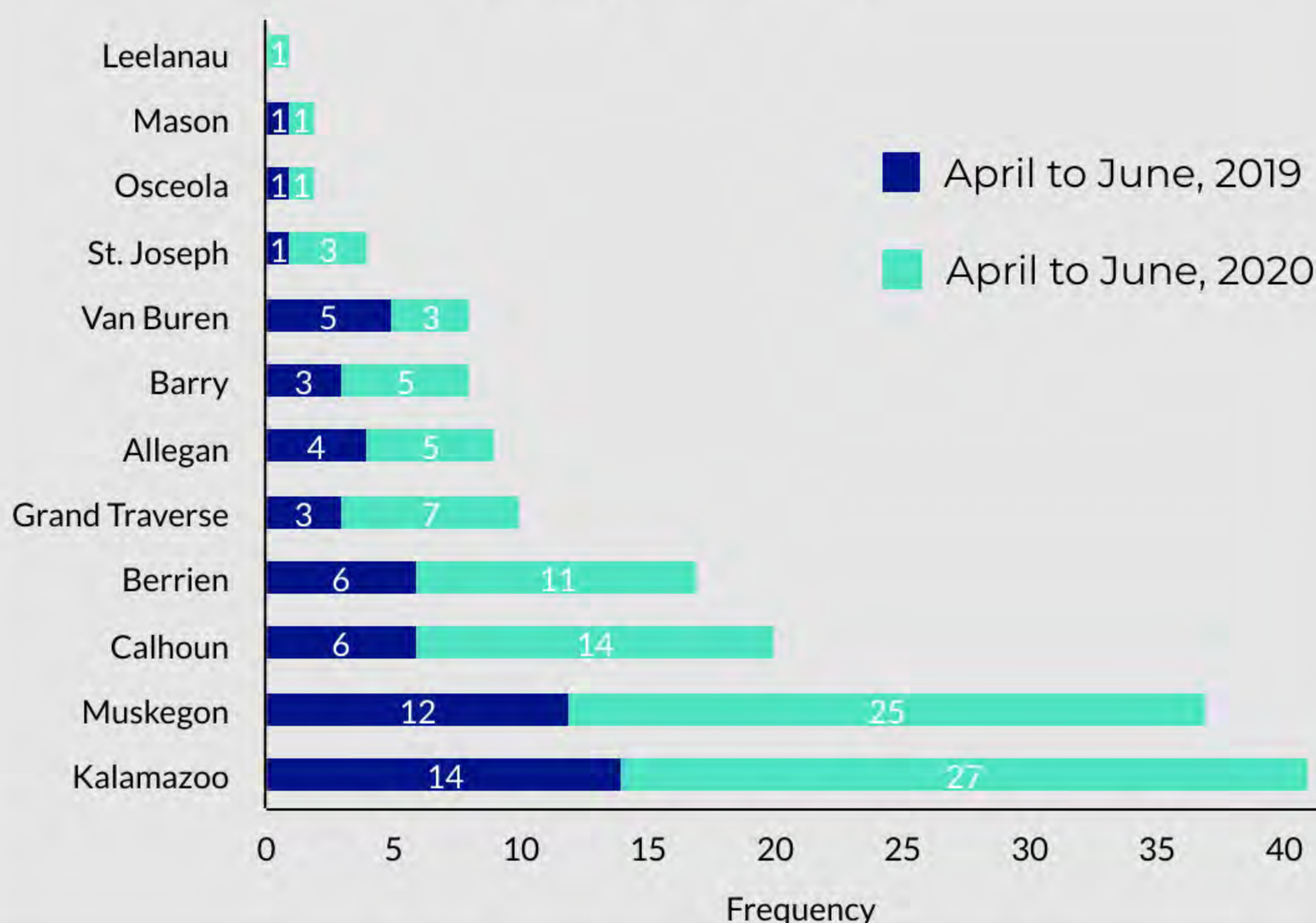
Deaths Related to Opioids and Other Drugs

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

Total Drug-Related Deaths



County of Death



April to June, 2019

56 deaths

April to June, 2020

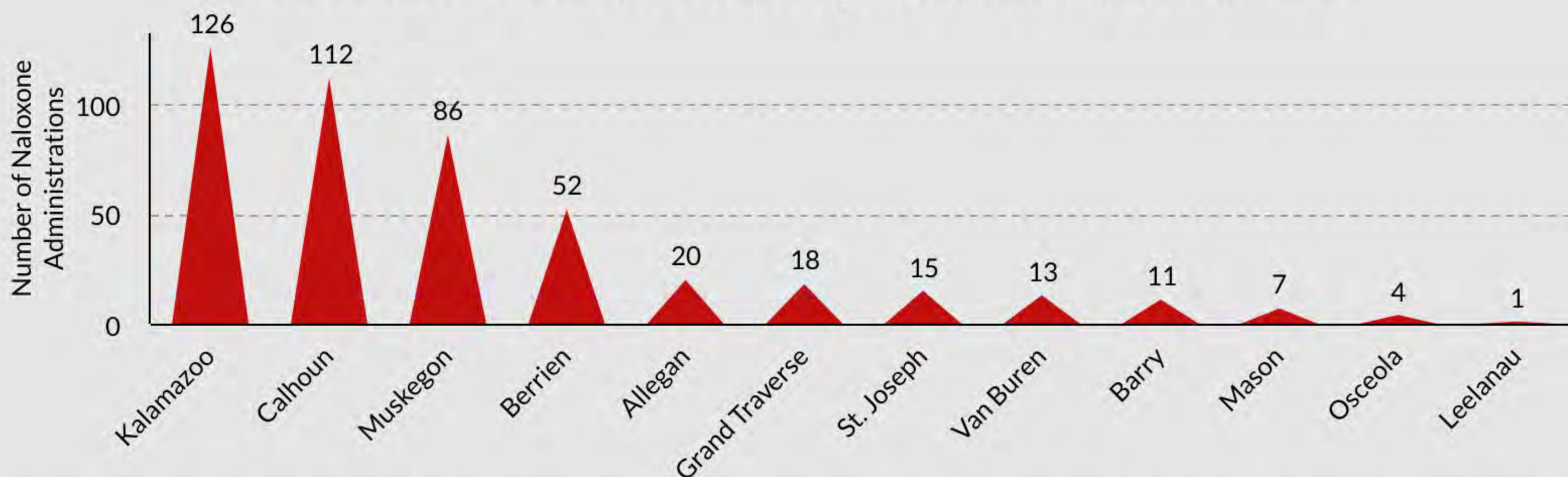
103 deaths

Drug-related deaths increased

84%

from 2019 to 2020

Total Naloxone Administrations by EMS, Fatal and Non-Fatal*



*Graphs indicate an estimated number of suspected overdoses with EMS intervention occurring in each county. Data includes suspected fatal and non-fatal overdoses. Data is from the System of Overdose Surveillance at the University of Michigan and is intended for those in public health and public safety.

Deaths Related to Opioids and Other Drugs

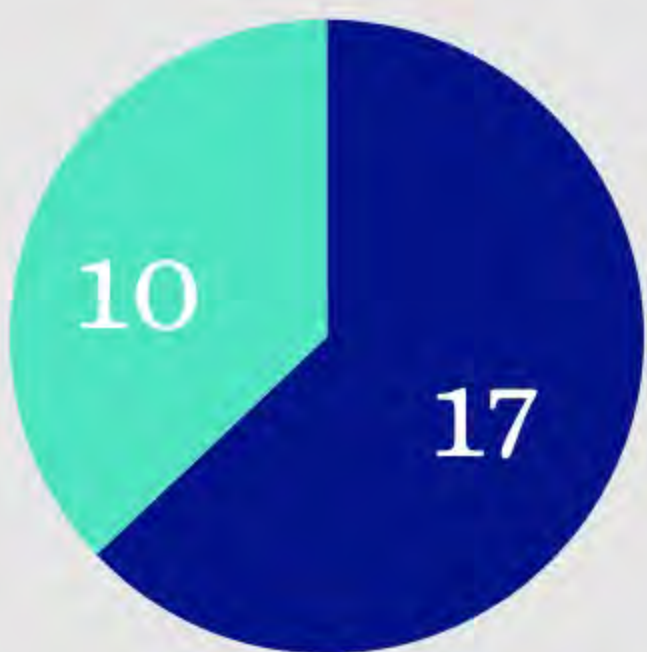
Allegan, Barry, Berrien, Calhoun, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

Confirmed Fatal Overdoses by Narcan Administration

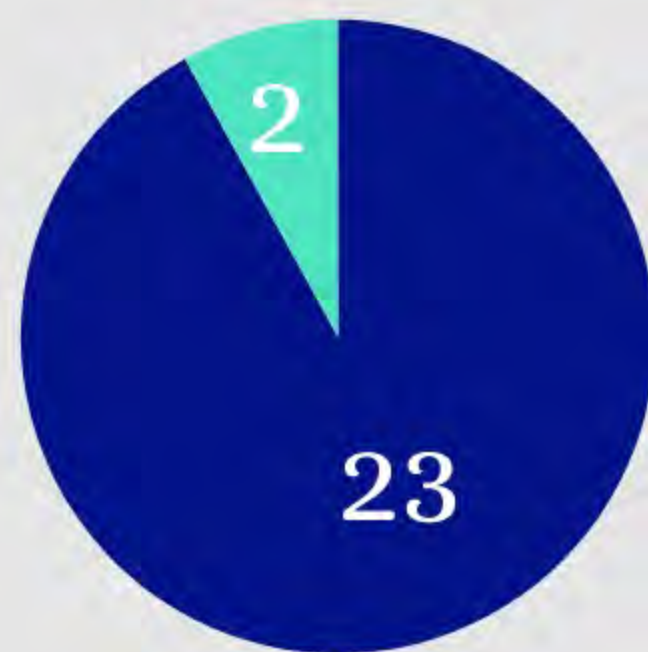
Confirmed fatal overdose administered Narcan

Confirmed fatal overdoses not administered Narcan

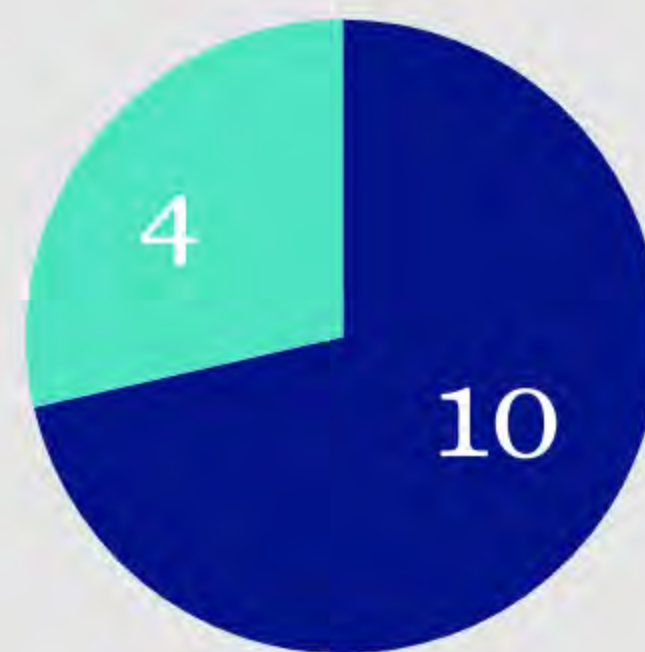
Kalamazoo (n=27)



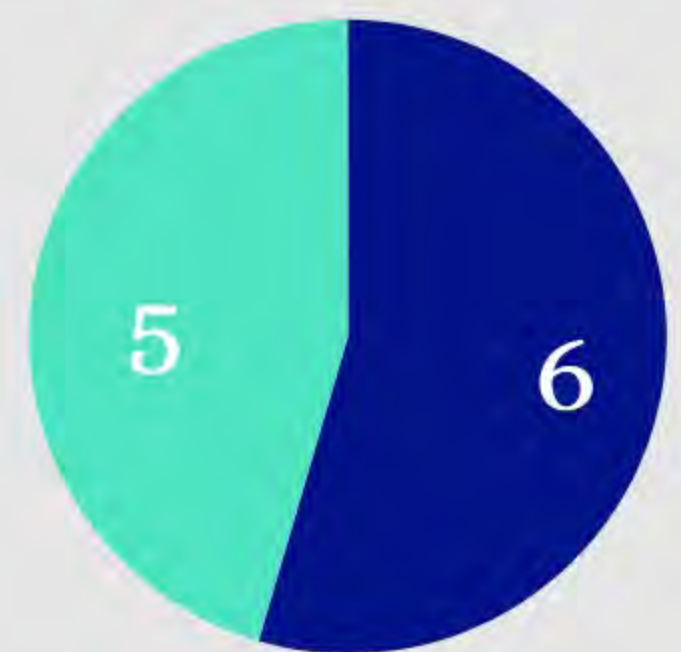
Muskegon (n=25)



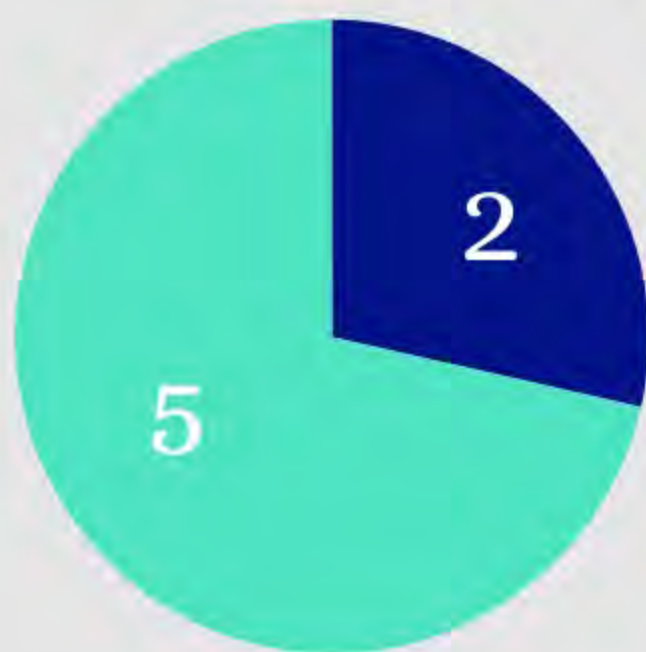
Calhoun (n=14)



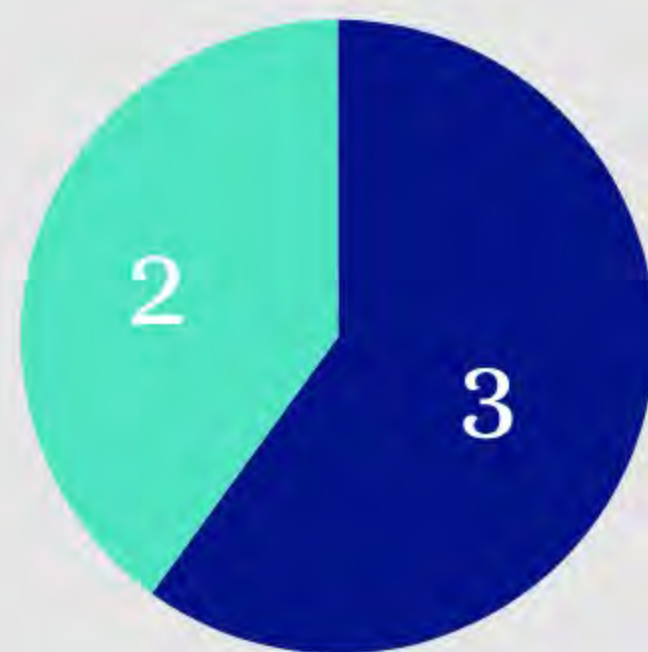
Berrien (n=11)



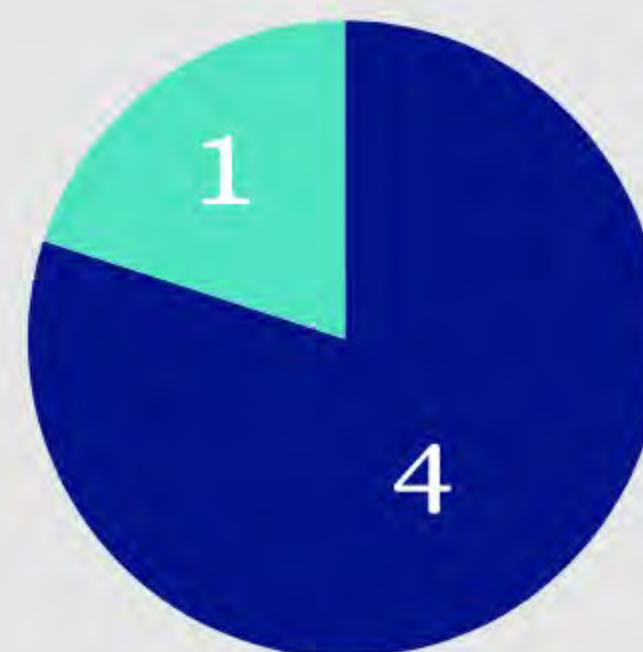
Grand Traverse (n=7)



Allegan (n=5)



Barry (n=5)



Van Buren (n=3)



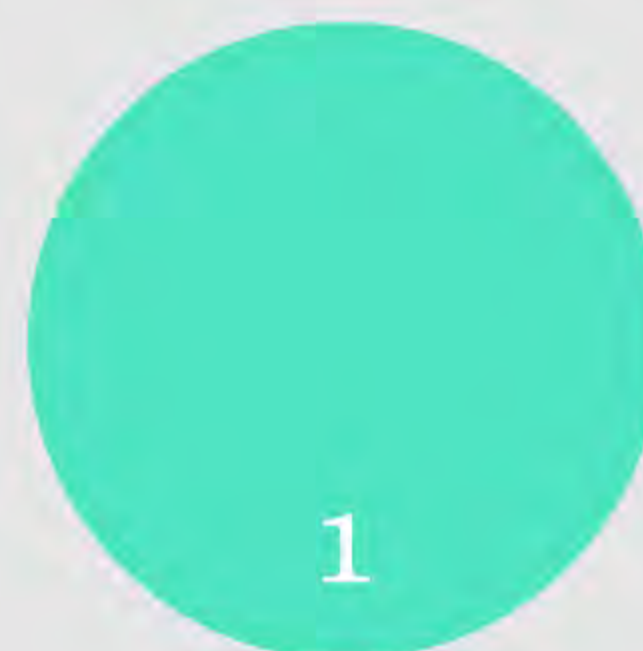
St. Joseph (n=3)



Osceola (n=1)



Mason (n=1)



Leelanau (n=1)



Deaths Related to Opioids and Other Drugs

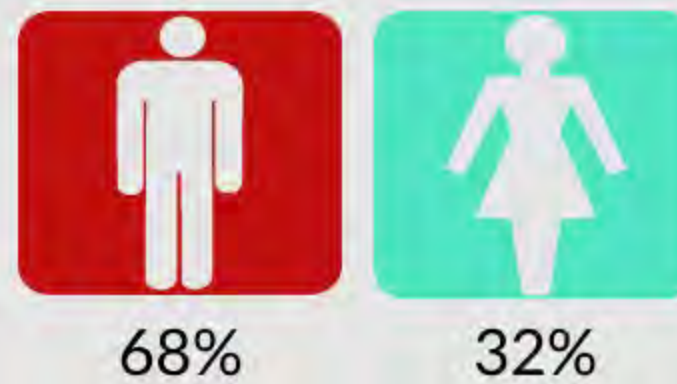
Allegan, Barry, Berrien, Calhoun, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

Demographics

Race



Sex



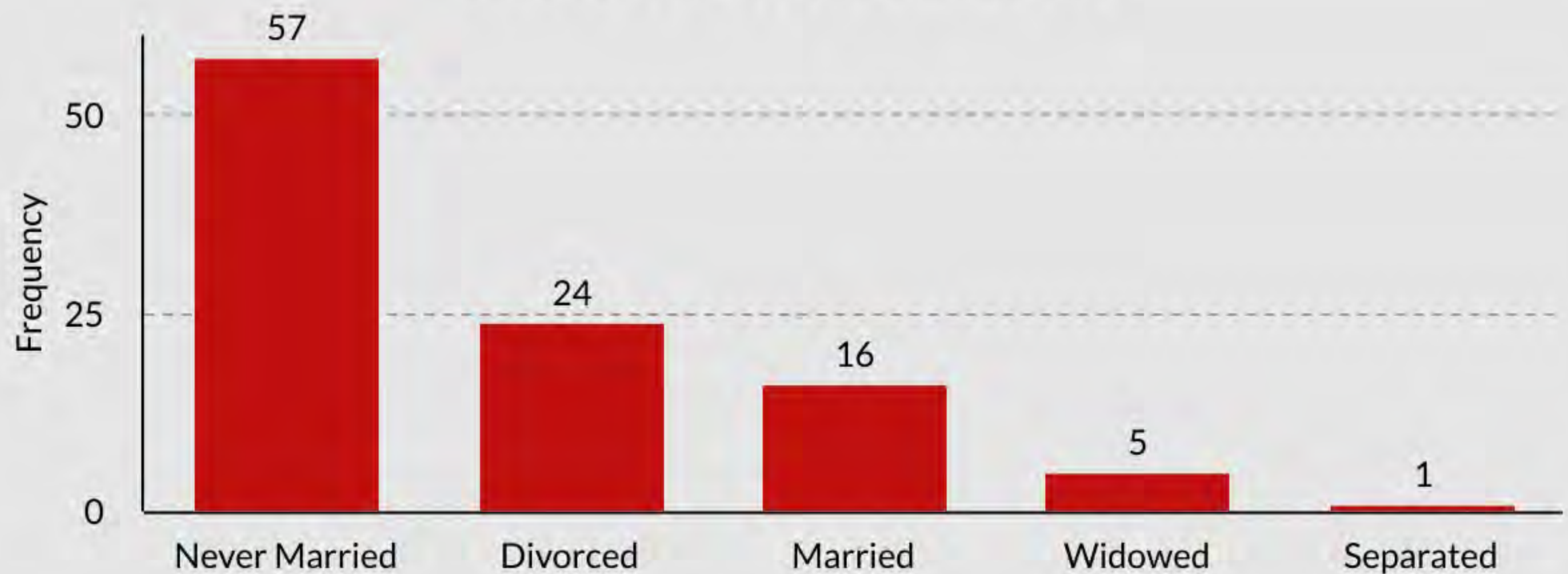
Ethnicity



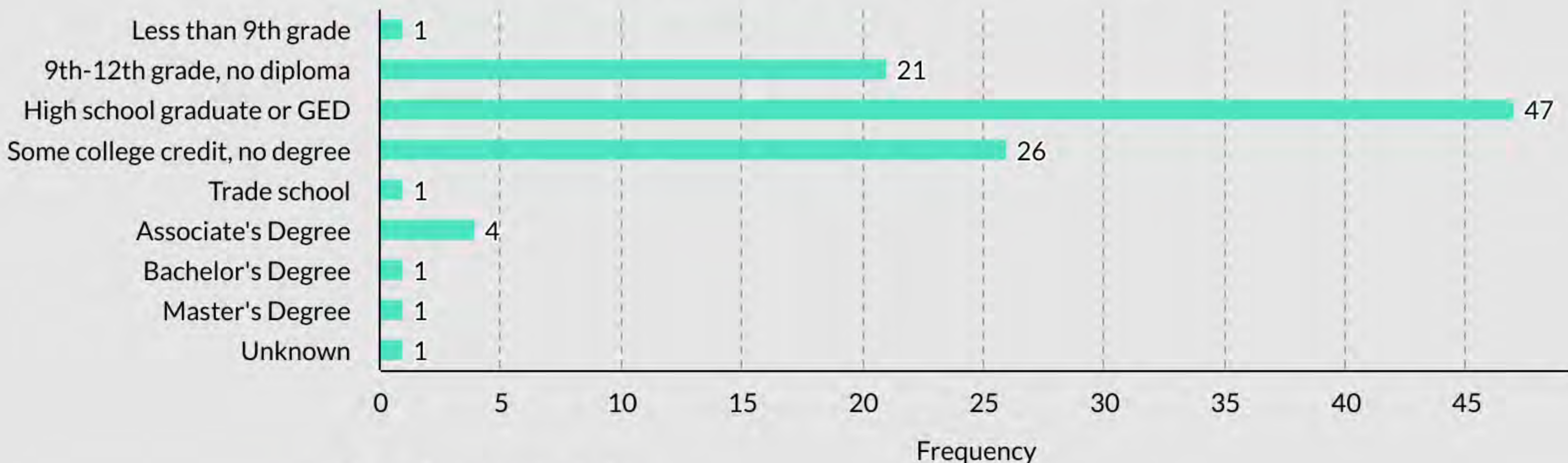
Age



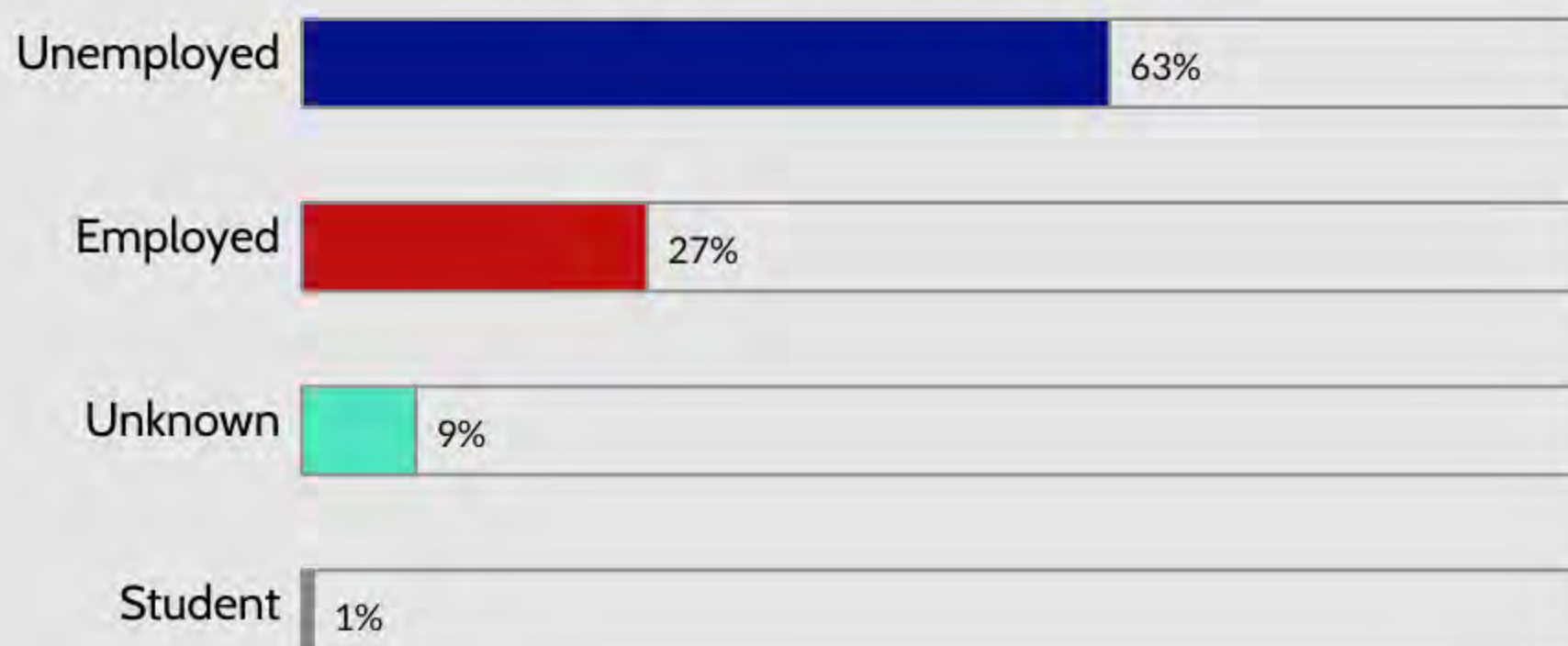
Decedent's Marital Status



Decedent's Highest Level of Education



Employment status



Number of decedents who were unemployed or furloughed due to COVID-19 (8)

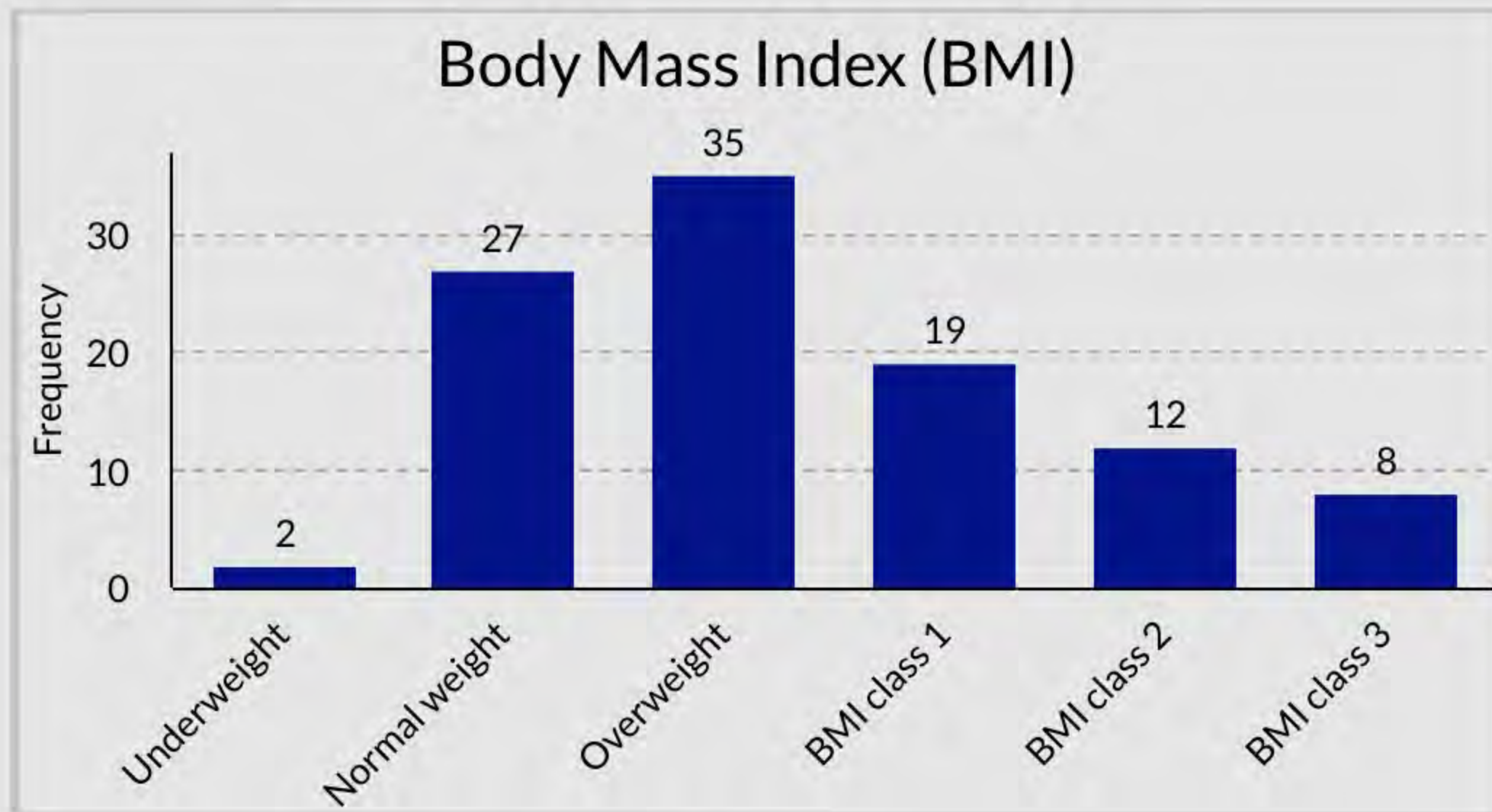
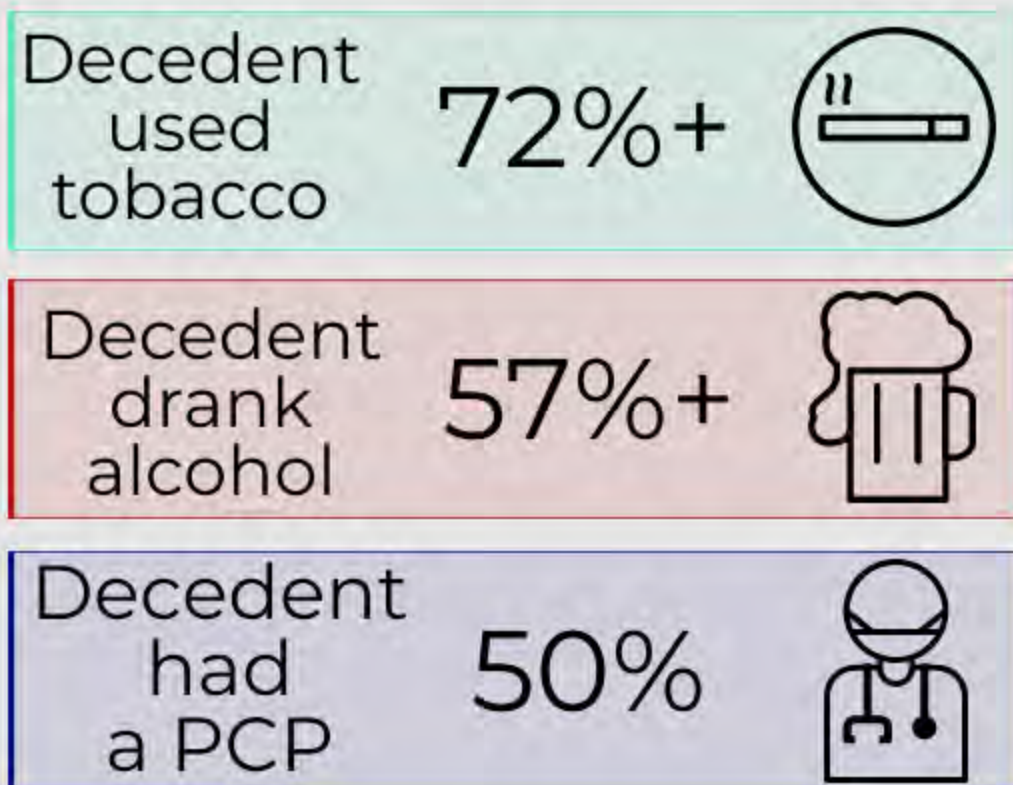
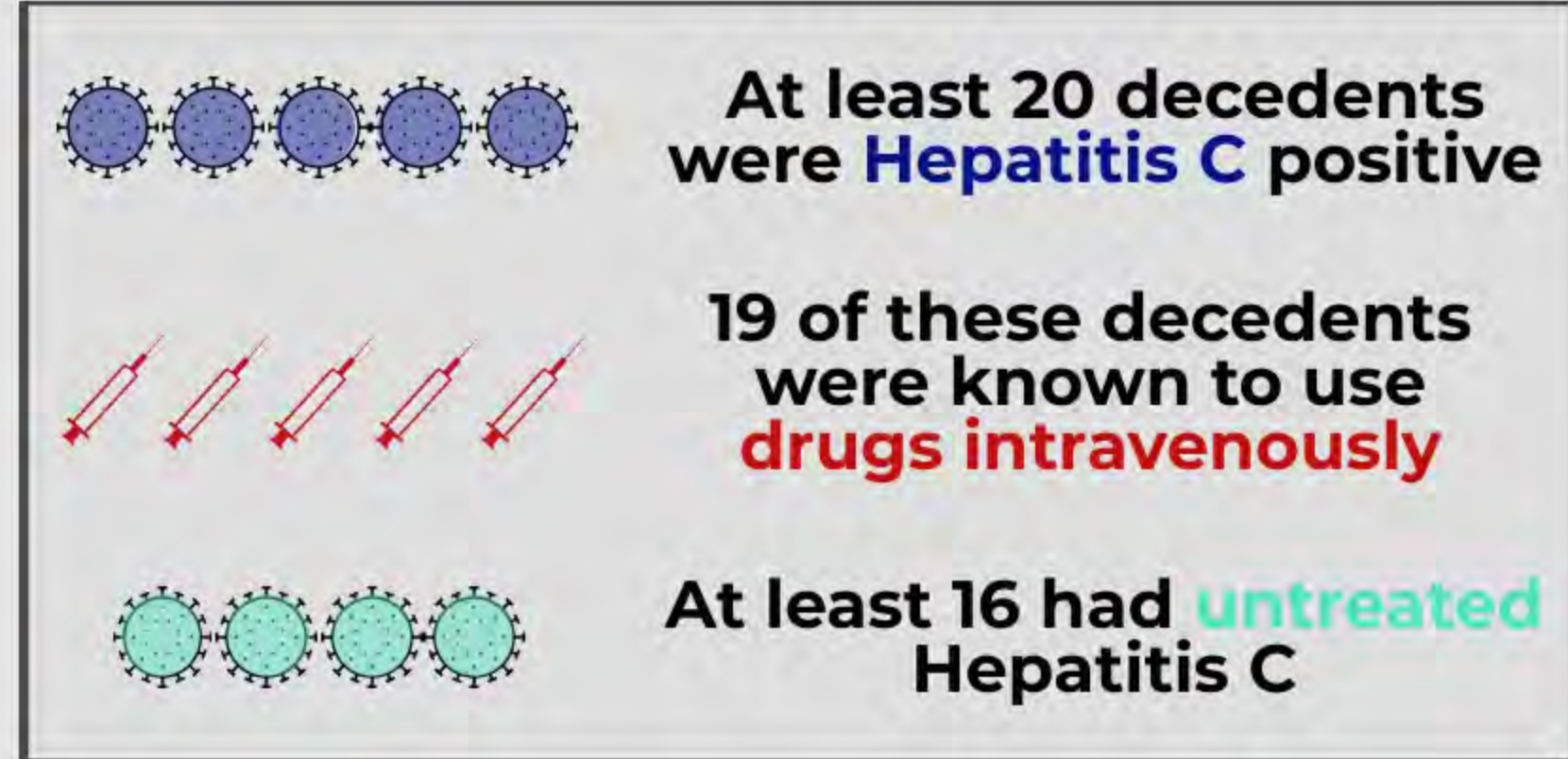
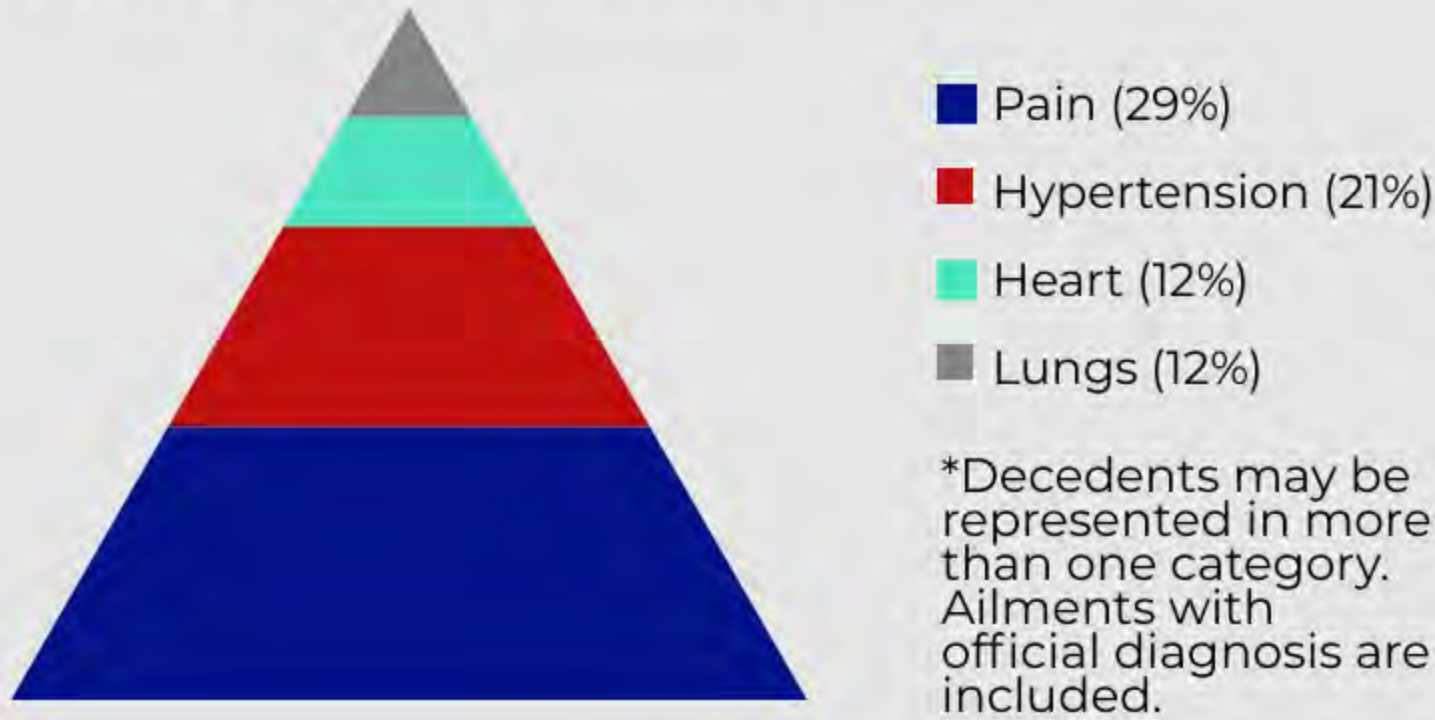


Deaths Related to Opioids and Other Drugs

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

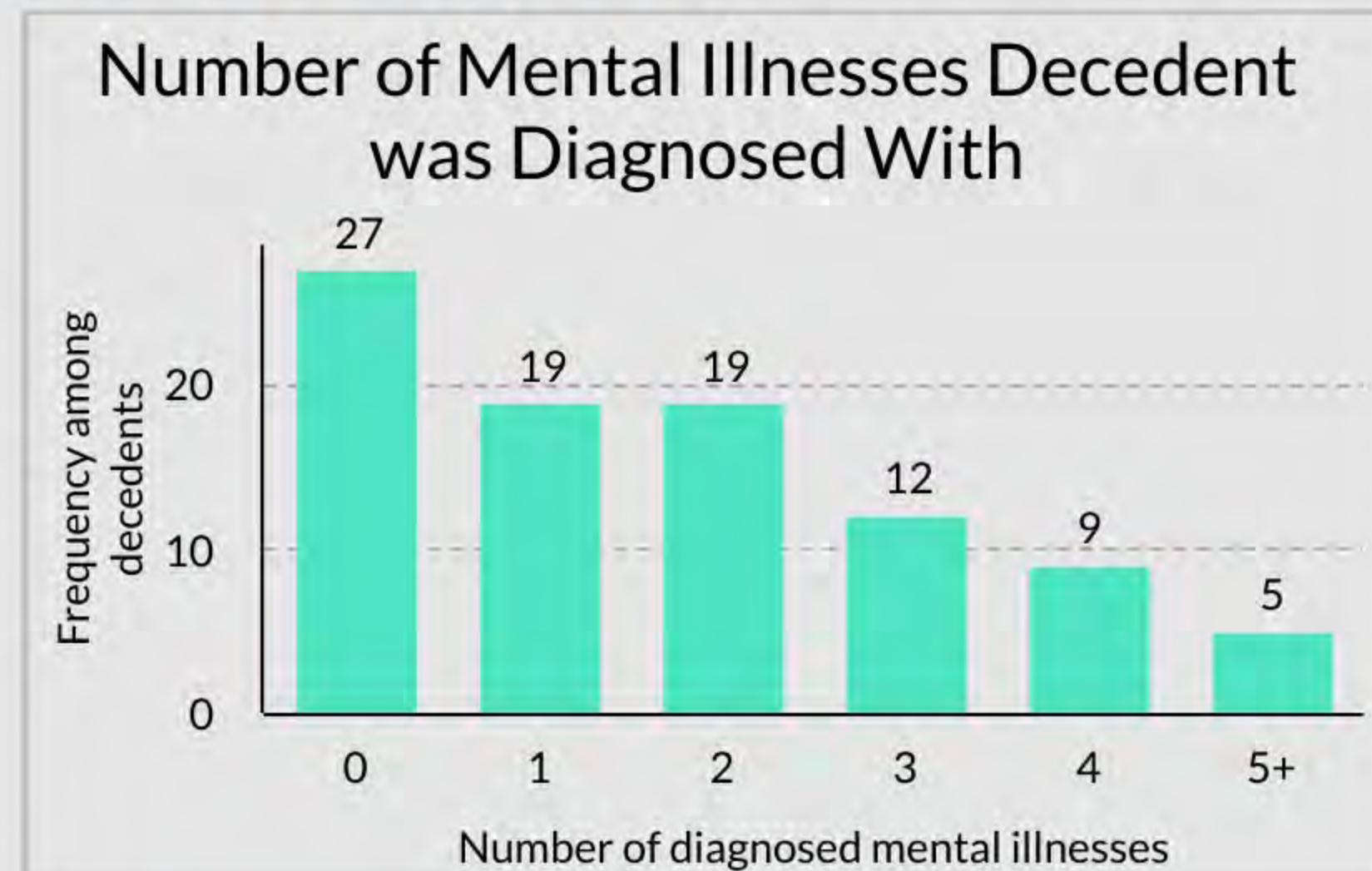
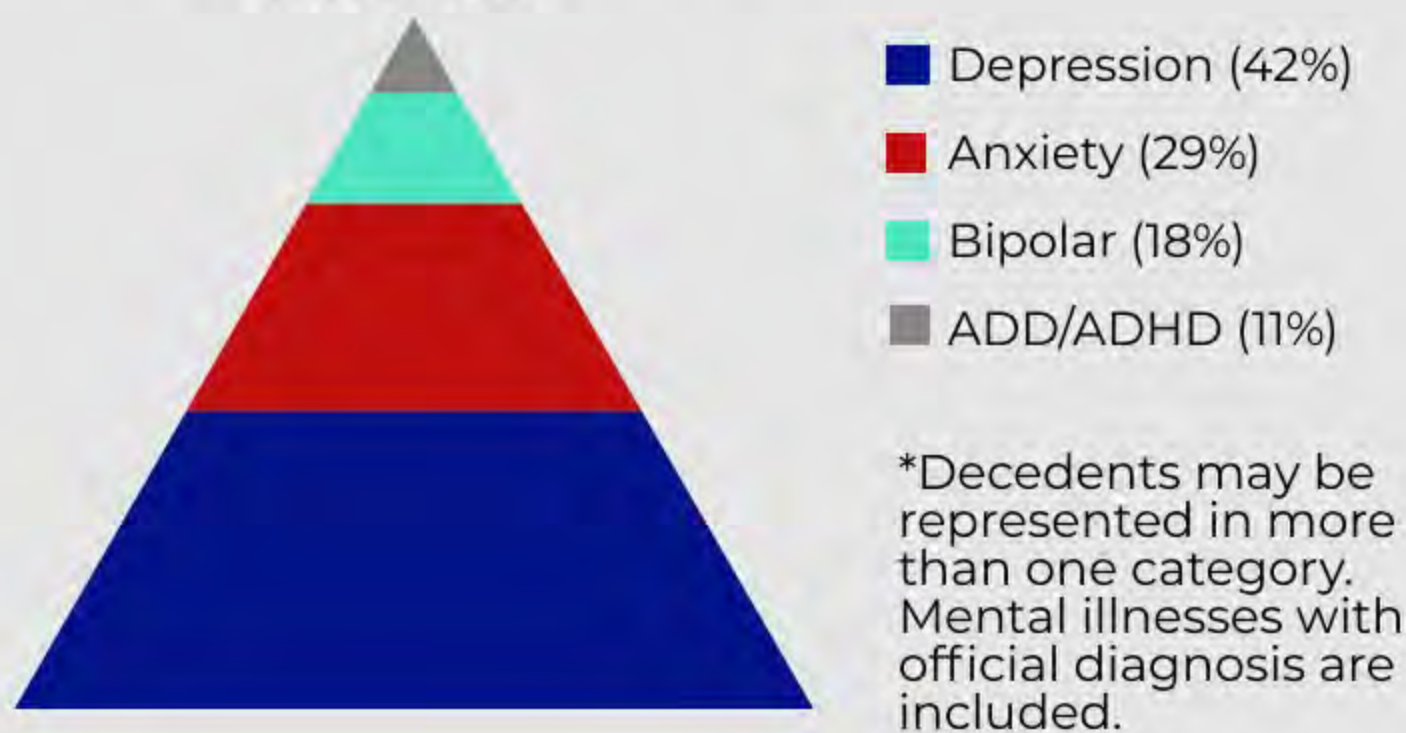
Health Factors

Most common ailments*



Mental Health Factors

Most common mental illnesses*



Percentage of decedents who have ever had **suicidal ideation** **16%**

Percentage of decedents with **previous suicide attempts** **13%**

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 was experiencing homelessness at time of death (12%)



Decedent was a veteran (8%)



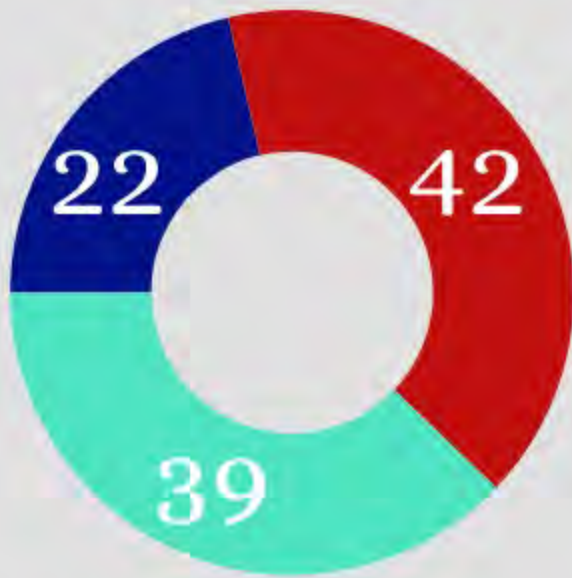
Decedent has ever been incarcerated (32%)



Decedents ever incarcerated were released in past 2 months (21%)

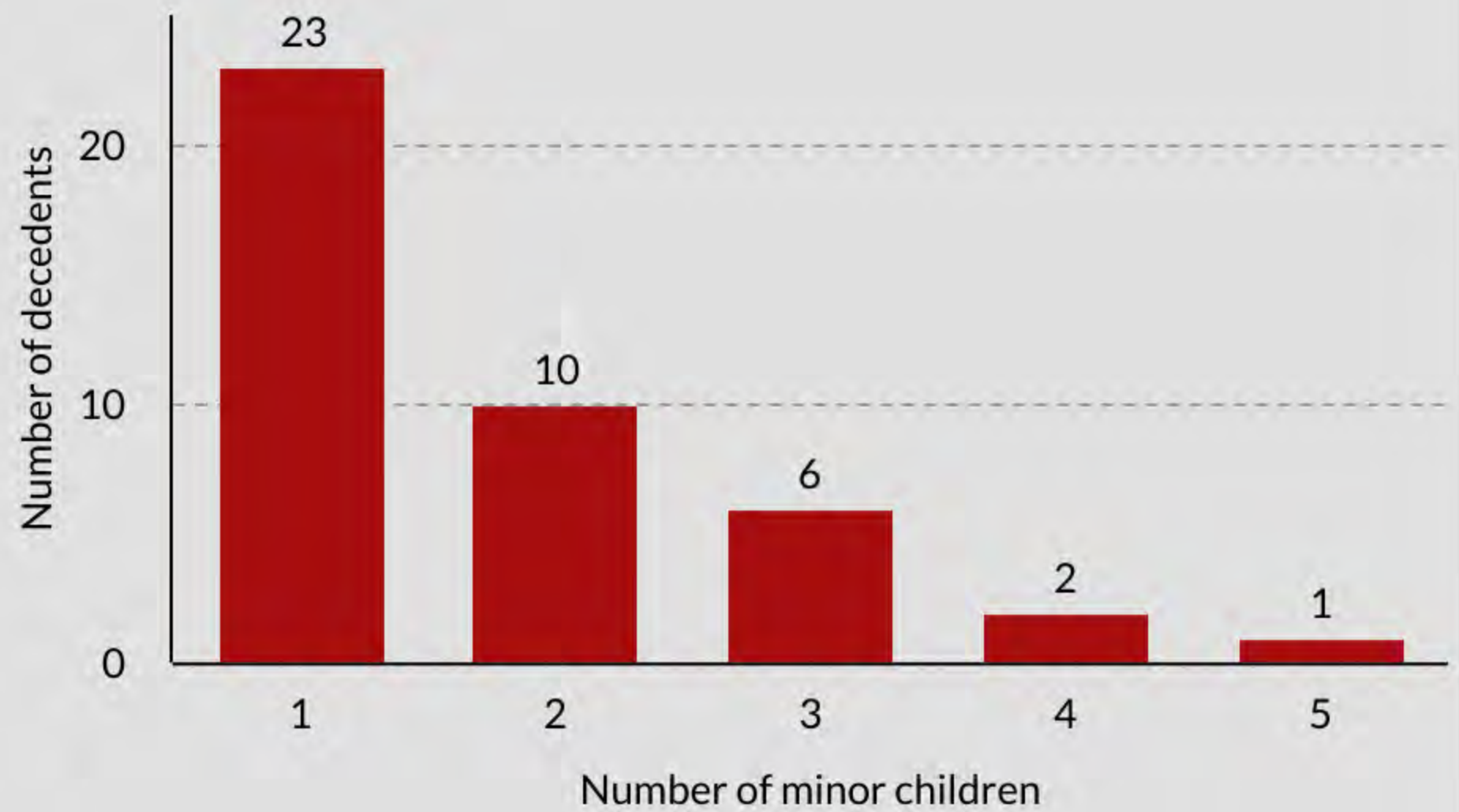


Decedent's Child Status



- All adult children (21%)
- At least one minor child (41%)
- No children (38%)

Number of Minor Children



Employment Status of those with Minor Children



- Unemployed (73%)
- Employed (22%)
- Unknown (5%)

7 decedents lived with their minor child(ren) at time of death



Deaths Related to Opioids and Other Drugs

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

Decedent's Drug History

At least 89% of decedents were known to use or abuse drugs



At least 64% of those decedents used their drugs intravenously



R_x

At least 47% of decedents were prescribed an opioid in the past 2 years



At least 54% of those decedents' drug use started from the prescribed opioid

At least 40% of decedents have had at least one overdose before their fatal overdose



At least 66% of those decedents have had 2 or more overdoses before their fatal overdose



Decedent's typical drug of choice[†]

65%
HEROIN

35%
METHAMPHETAMINE

35%
COCAINE

Drugs found in toxicology results[†]

76%
Fentanyl

40%
METHAMPHETAMINE

19%
HEROIN

17%
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 6 months

36%

Suspected reasons for relapse*



35%
Left a rehabilitation clinic or jail



27%
Life stress**



38%
Unknown/Other

*These factors were mentioned by those close to decedent (with past drug-use) for why they may have begun to use drugs again after a period of sobriety ranging from a few months to years.

**Life stress includes a recent fight with a significant other, losing their job, paranoia regarding COVID-19, and loss of a friend.

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

38%

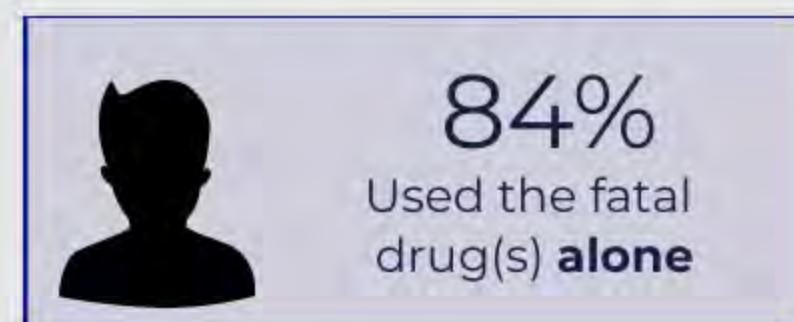
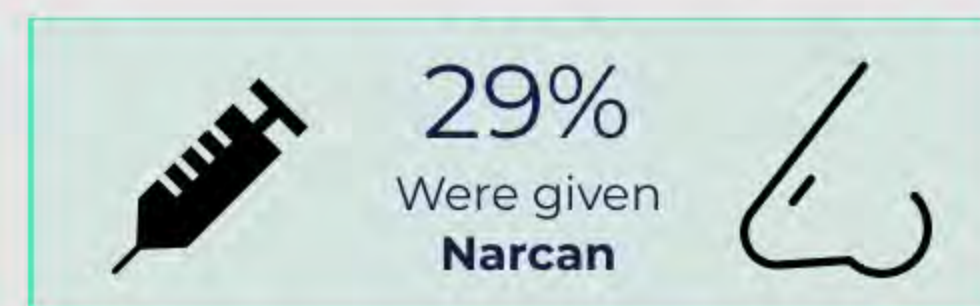
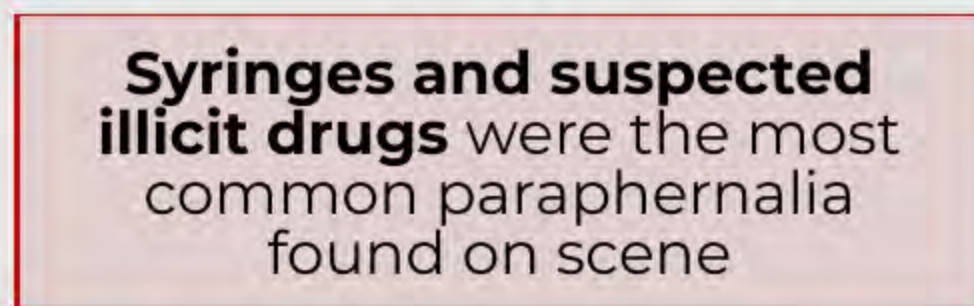
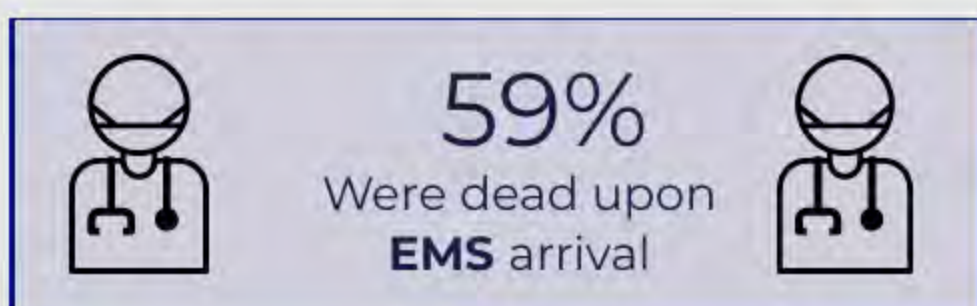
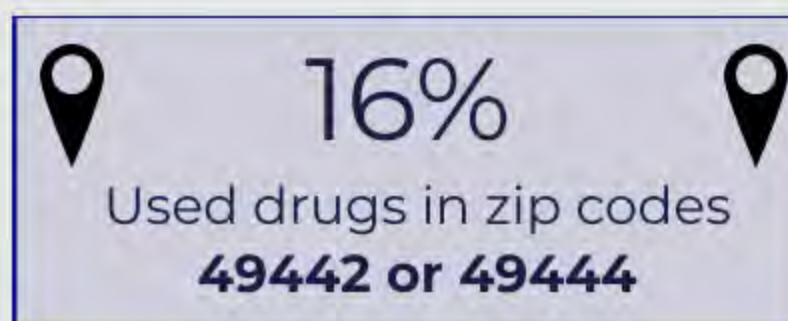
Decedent had someone close to them die from an overdose

10%

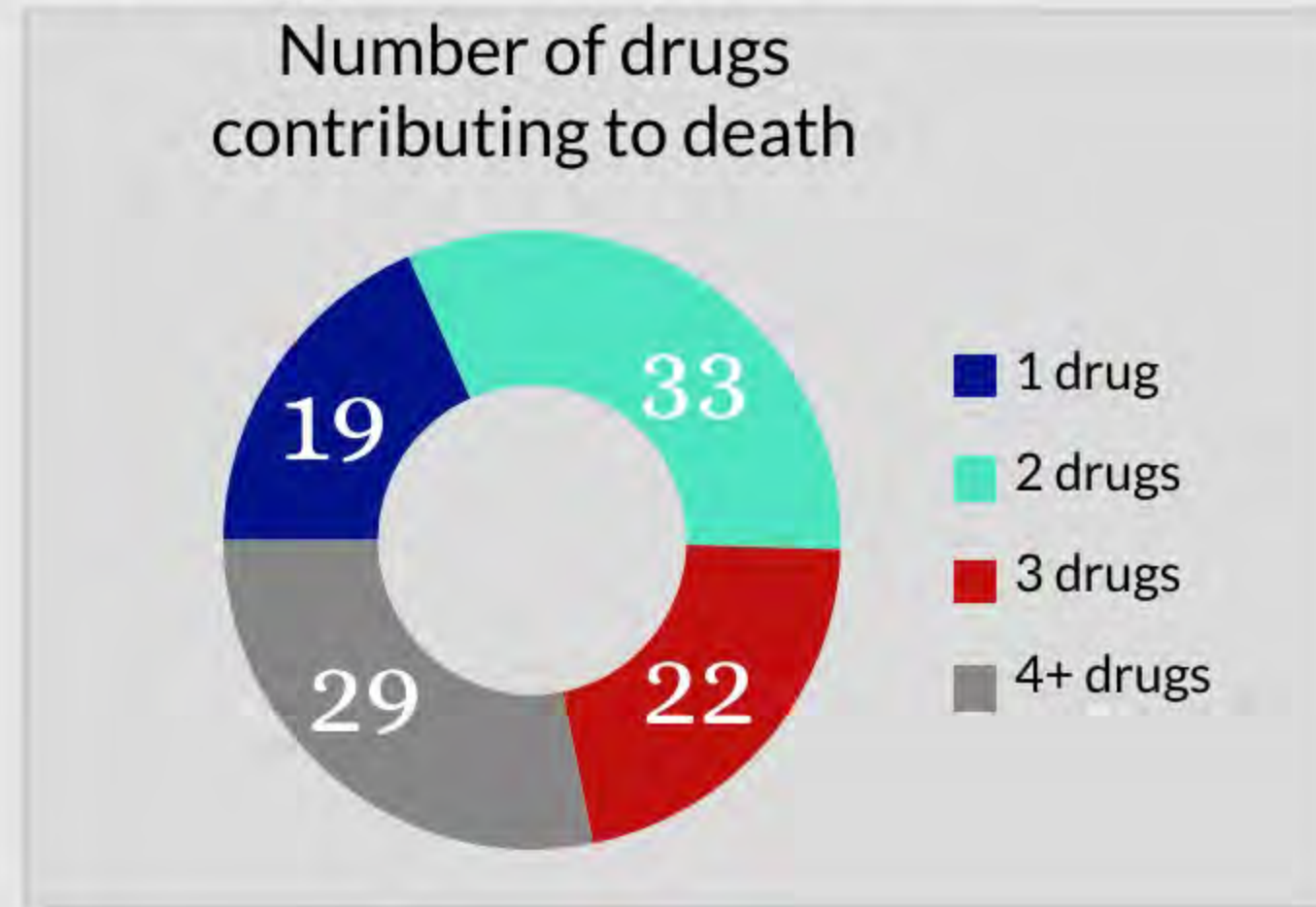
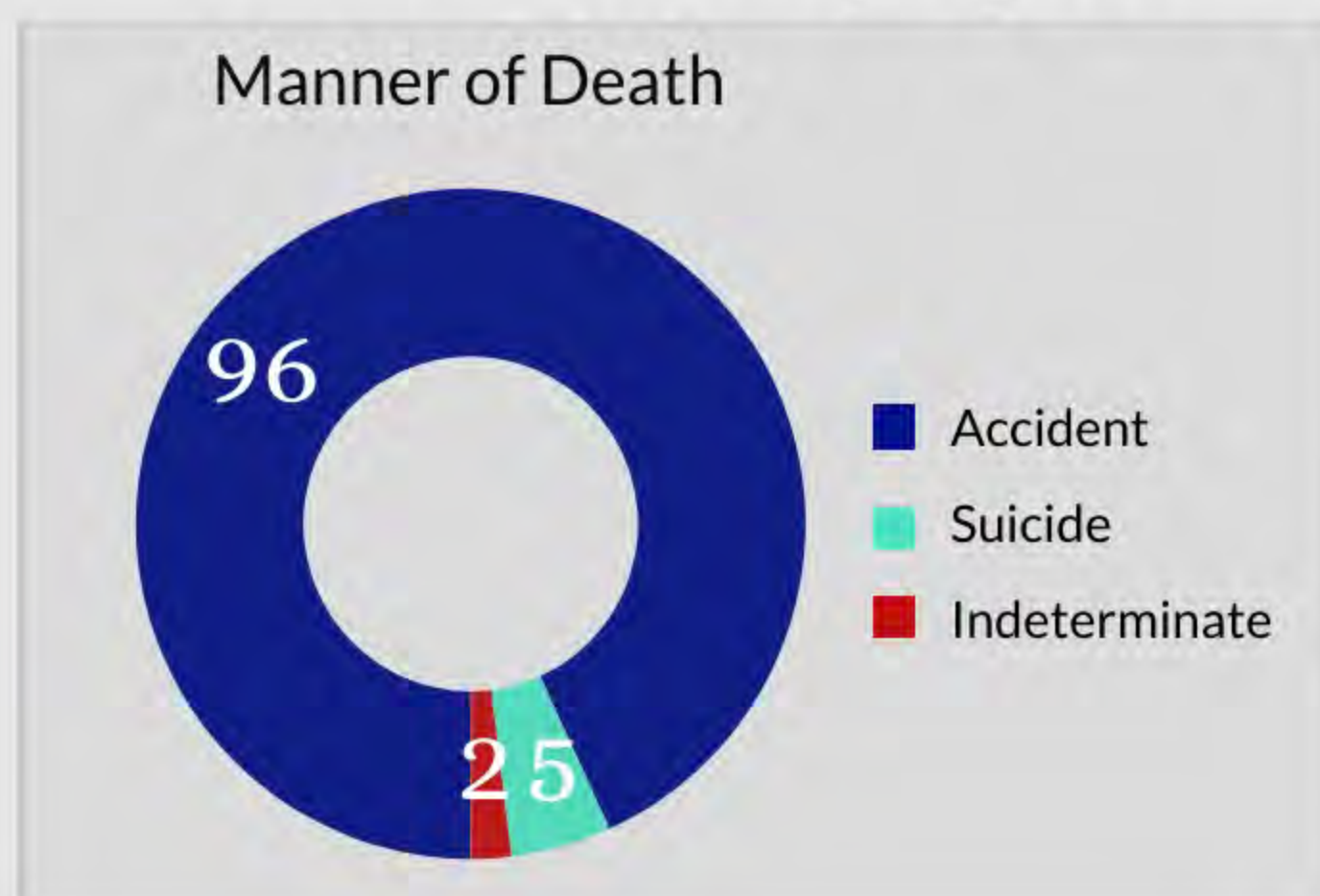
Deaths Related to Opioids and Other Drugs

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Death Scene Findings



Autopsy and Toxicology Results



Highlights

Drug Related Deaths 2018-2020

January to June

| Year | 2018 | 2019 | 2020 |
|-----------------------------|------|------|------|
| Total drug deaths | 110* | 104 | 164 |
| Deaths per 100,000** | 11.0 | 10.4 | 16.3 |

*Berrien county is not included in 2018.

**2018 population estimates used for 2018; 2019 population estimates used for 2019 & 2020.

Methamphetamine and Opioids

One study found there to be a **2.8 fold increase** in overdose when injecting both methamphetamine and heroin versus only injecting heroin. Using both methamphetamine and heroin at the same time puts the body into a **state of confusion**. Researchers also found that those who inject methamphetamine and heroin together are more likely to **share syringes**.¹

11 decedents had **methamphetamine and heroin** in their toxicology report

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

¹Al-Tayyib, A., Koester, S., Langeegger, S., & Raville, L. (2017). Heroin and methamphetamine injection: an emerging drug use pattern. Substance use & misuse, 52(8), 1051-1058.