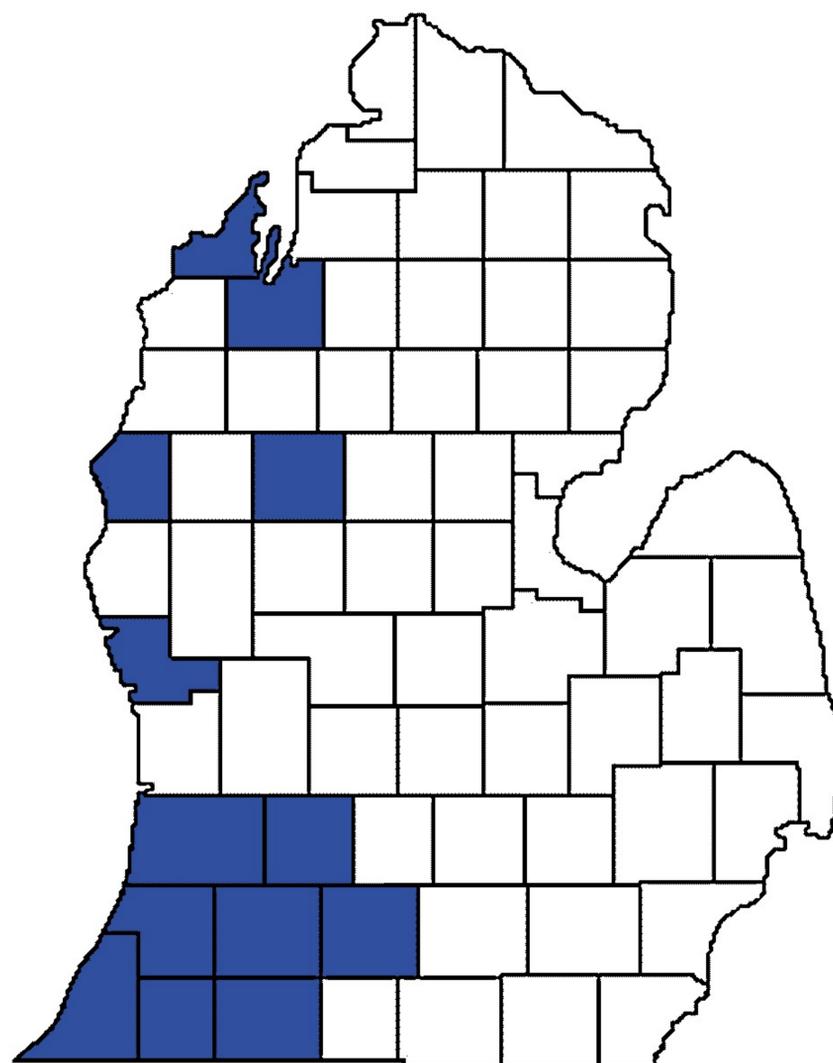


Deaths Related to Opioids and Other Drugs

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 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.

****This report is based on completed cases at the time of publication.****

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

January to March, 2020

61 deaths

January to March, 2021

69 deaths

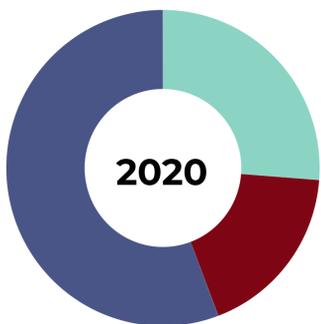
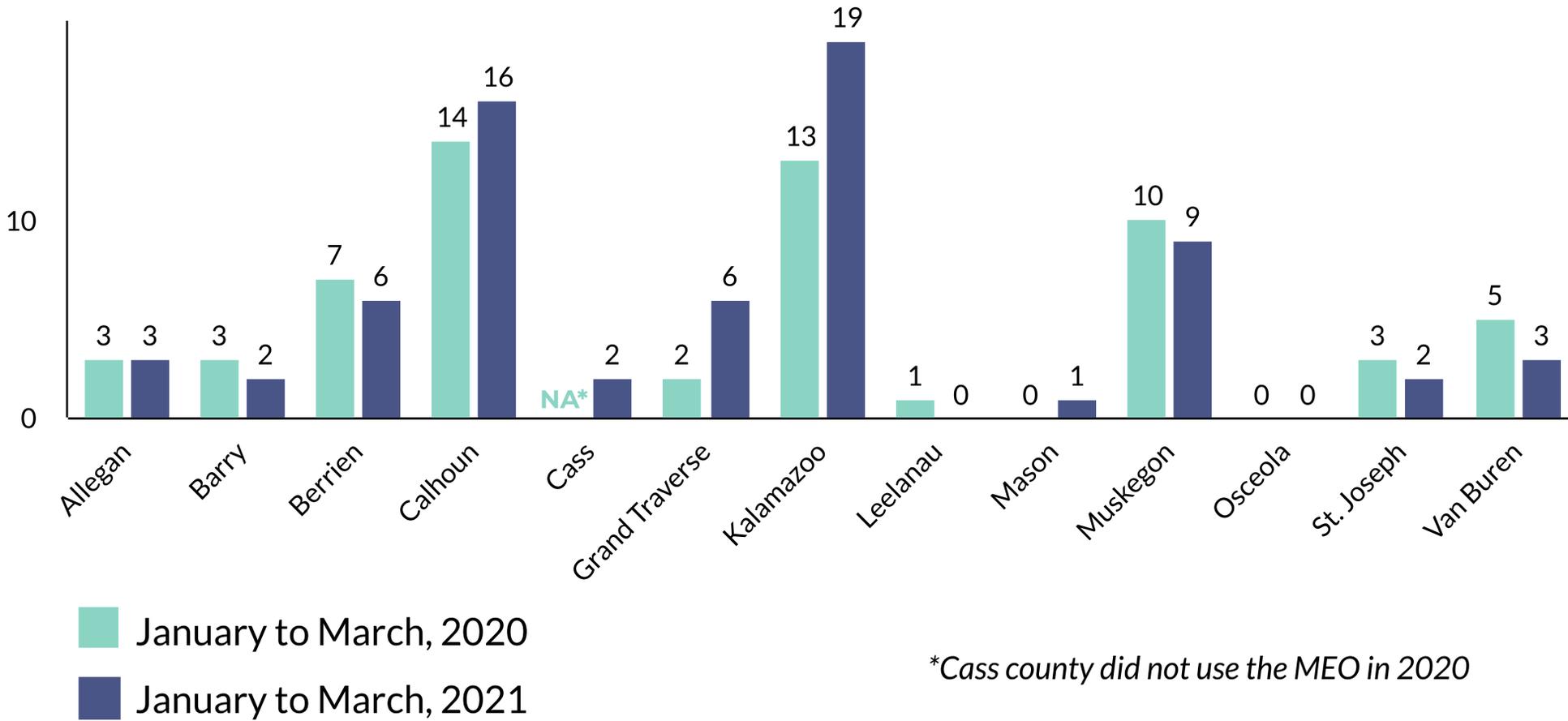
Percent change



13%

from 2020 to 2021

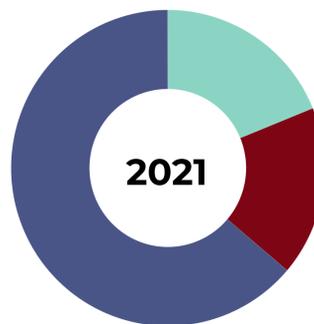
County of Death



➔ 34 opioid and non-opioid

➔ 16 opioid only

➔ 11 non-opioid only

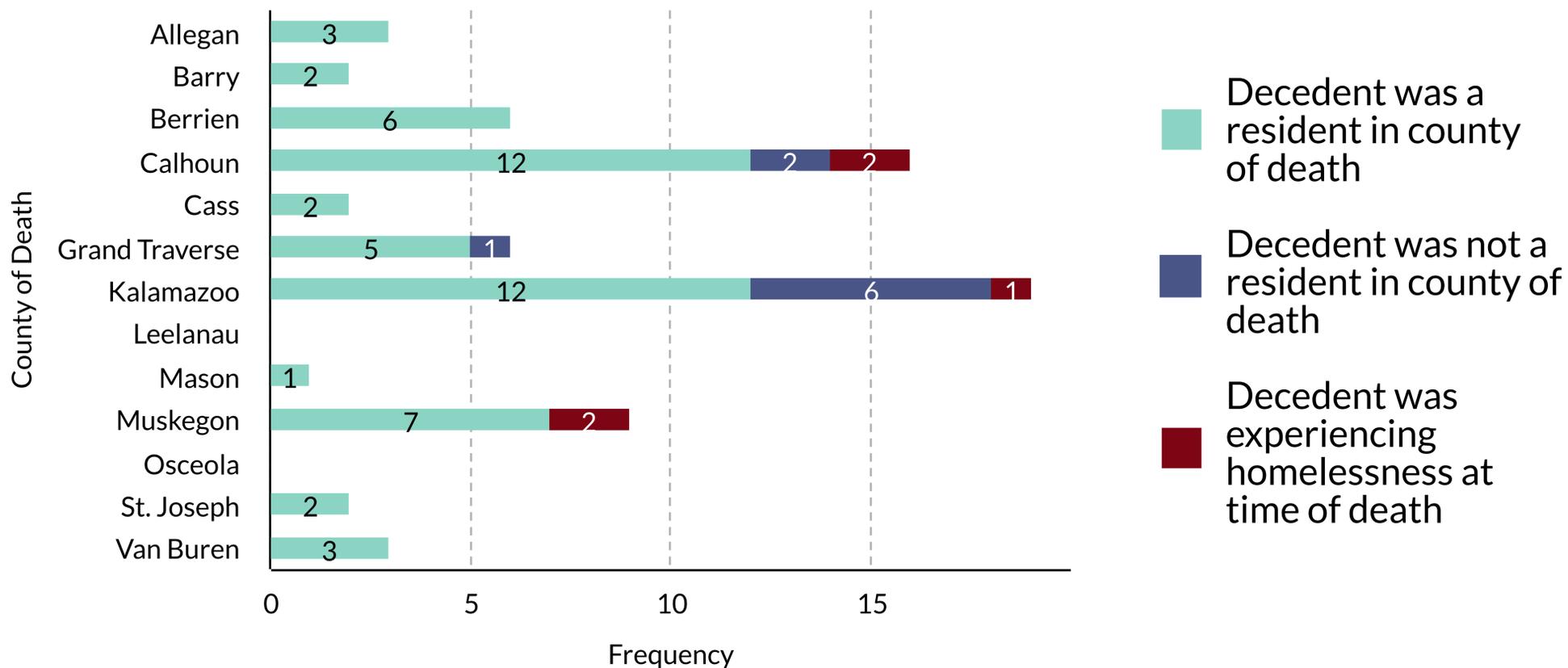


➔ 44 opioid and non-opioid

➔ 13 opioid only

➔ 12 non-opioid only

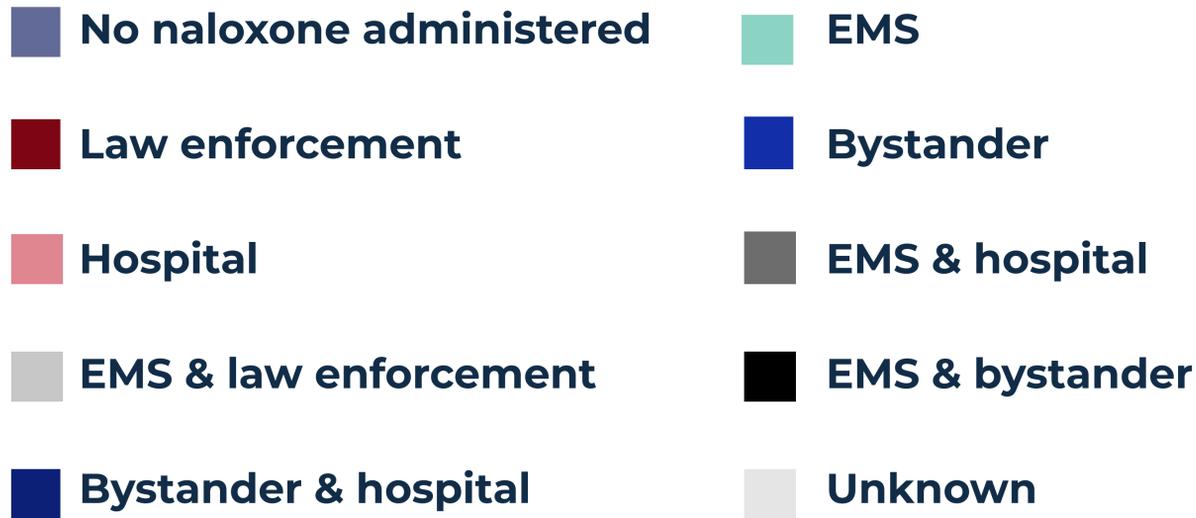
County of Residence by County of Death



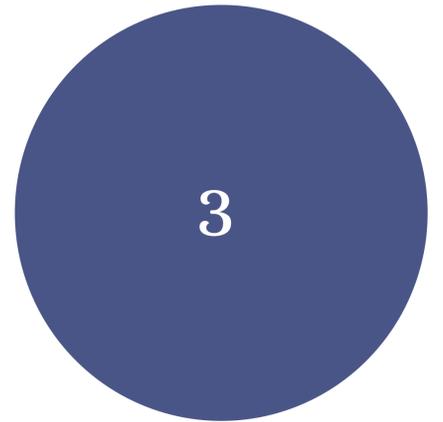
Deaths Related to Opioids and Other Drugs

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

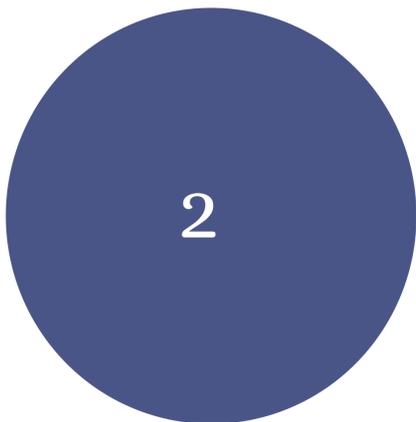
Naloxone Administration



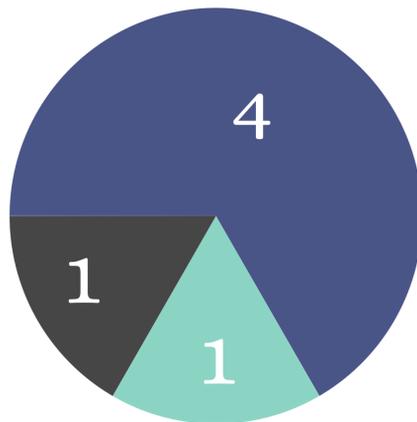
Allegan (n=3)



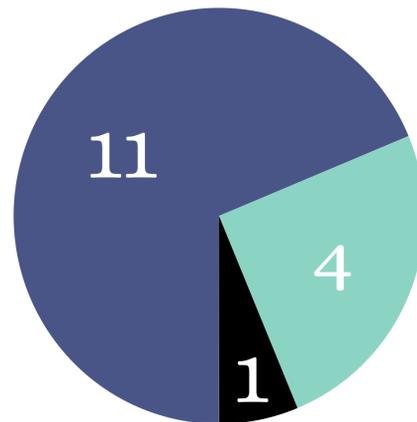
Barry (n=2)



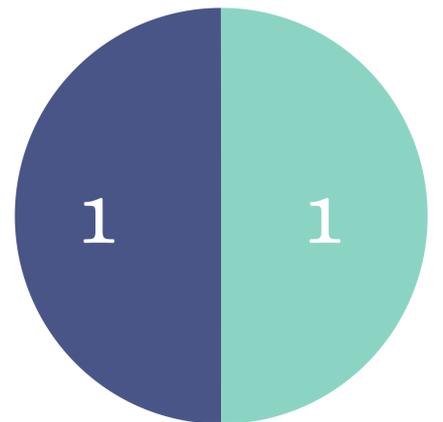
Berrien (n=6)



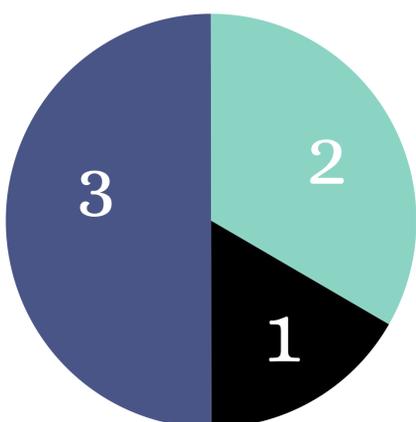
Calhoun (n=16)



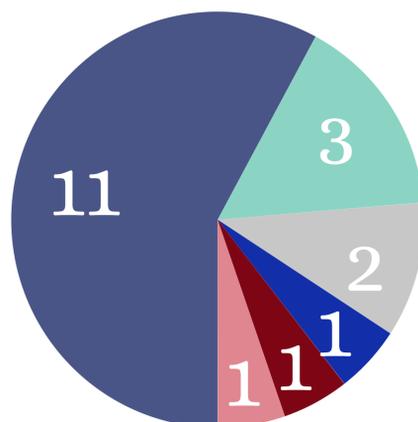
Cass (n=2)



Grand Traverse (n=6)



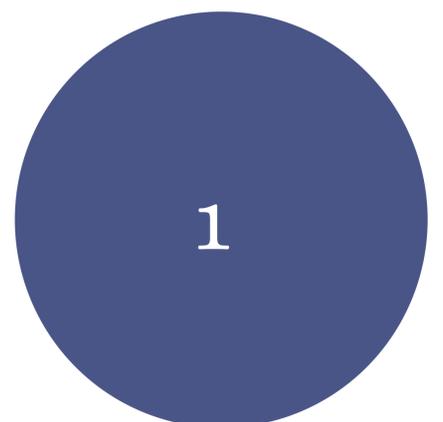
Kalamazoo (n=19)



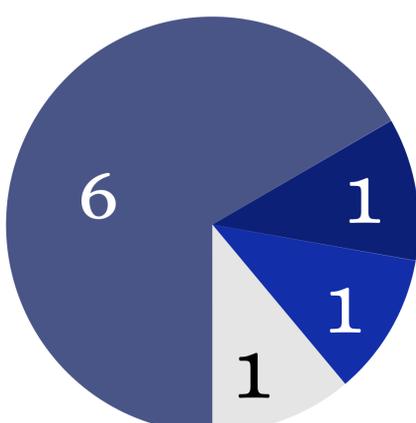
Leelanau (n=0)



Mason (n=1)



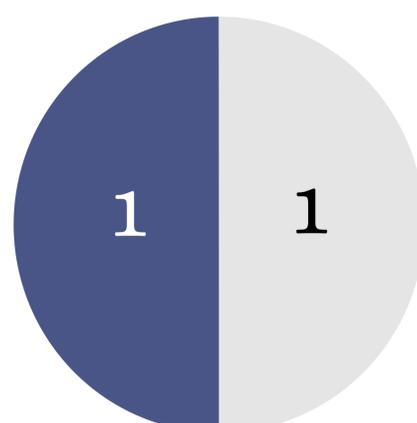
Muskegon (n=9)



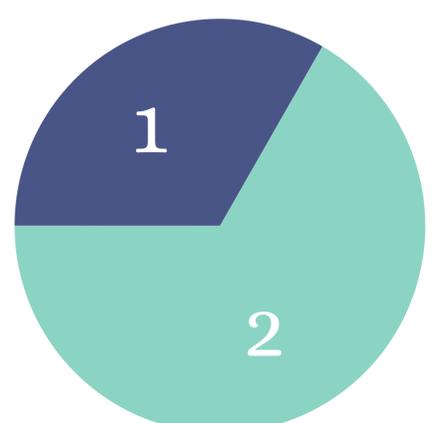
Osceola (n=0)



St. Joseph (n=2)



Van Buren (n=3)



Deaths Related to Opioids and Other Drugs

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

Demographics

Sex

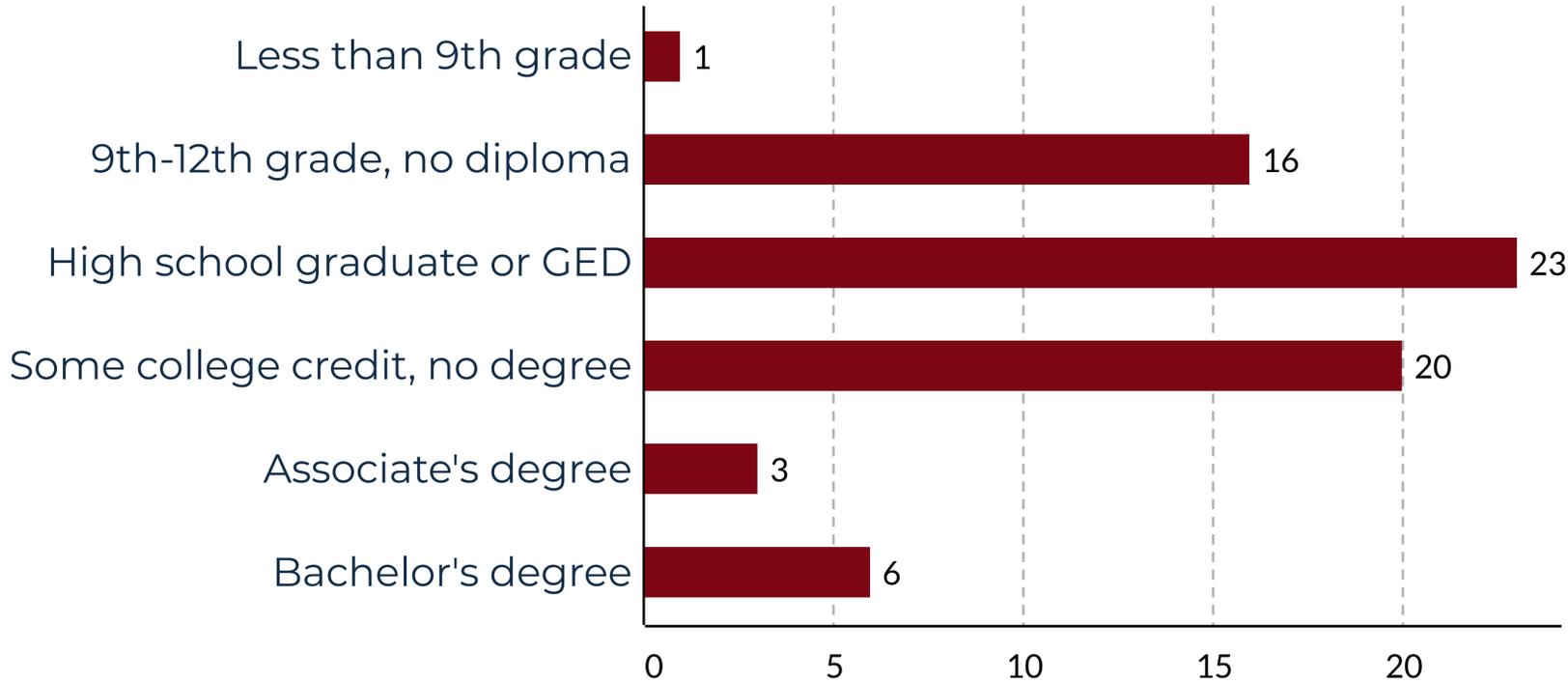


70%

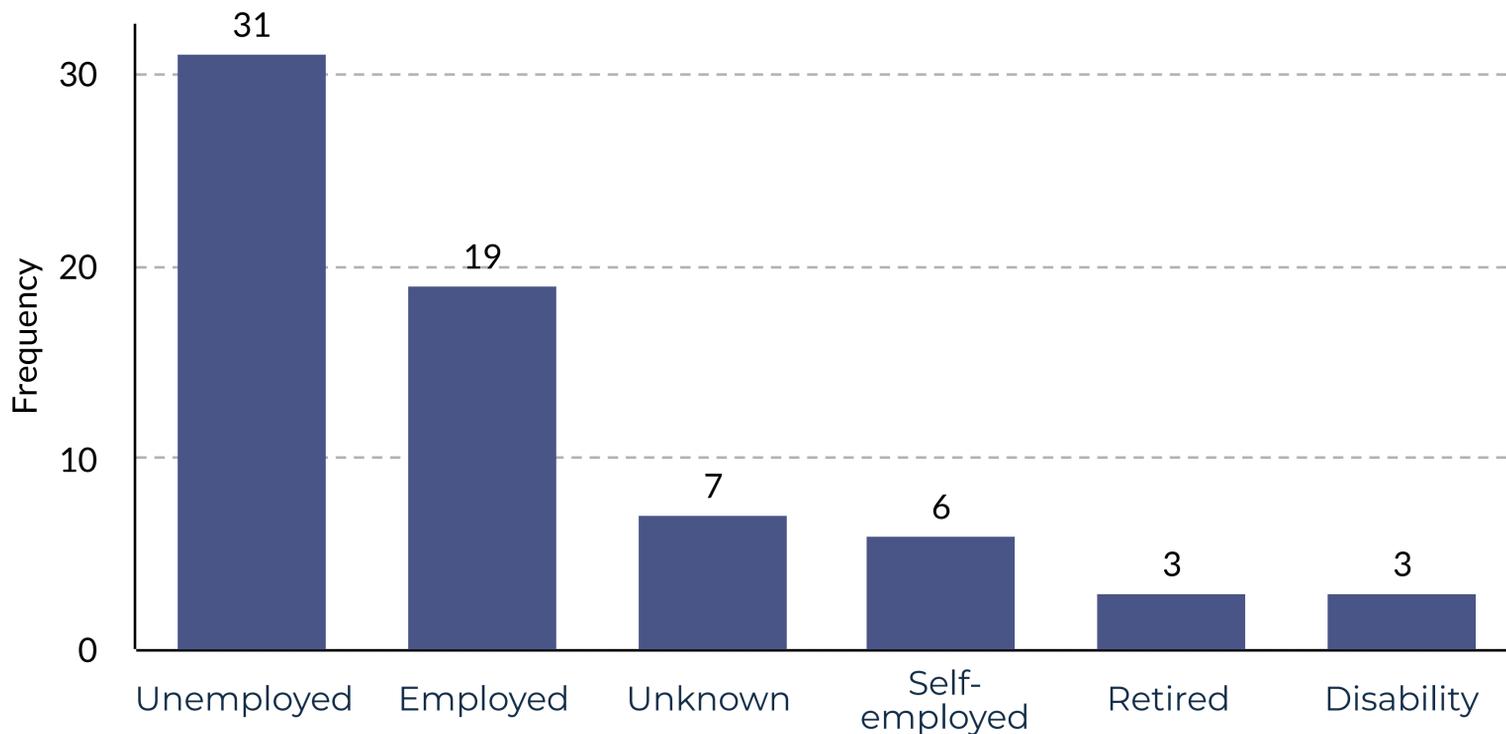


30%

Decedent's Highest Level of Education



Decedent's Employment Status



Age

Minimum Age

23 years

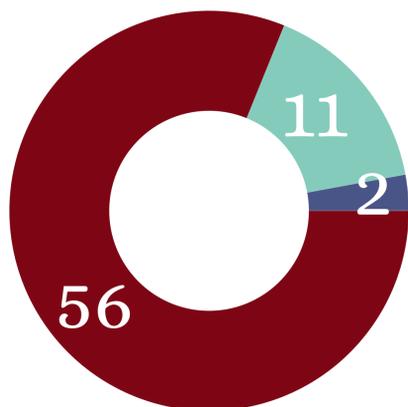
Maximum Age

68 years

Average Age

45 years

Race/Ethnicity

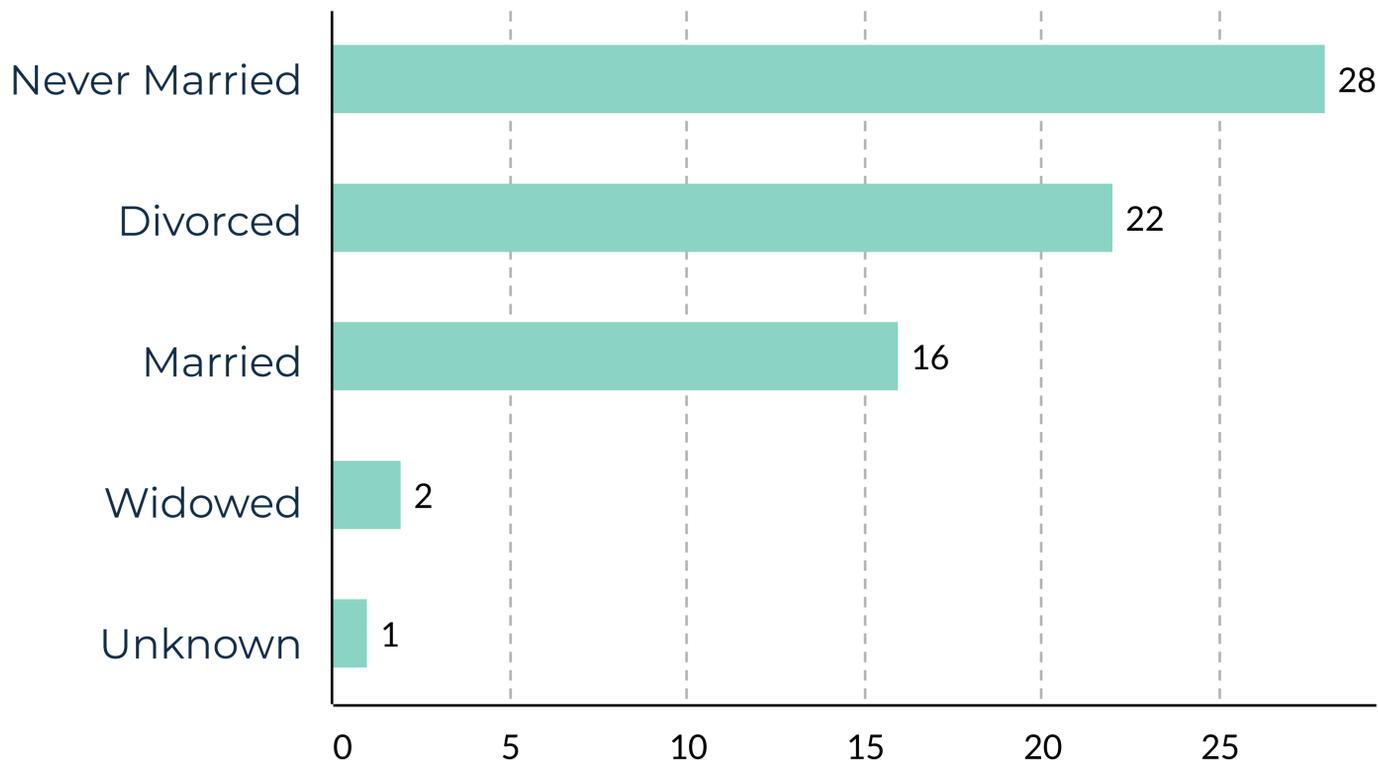


White (81%)

Black (16%)

Hispanic (3%)

Decedent's Marital Status

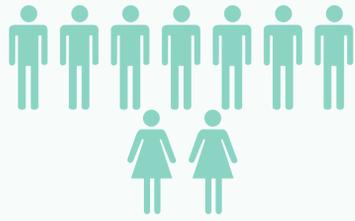


Deaths Related to Opioids and Other Drugs

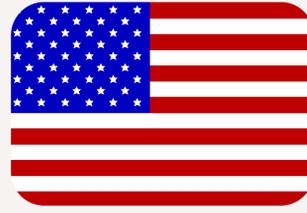
Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, Van Buren

Social Factors

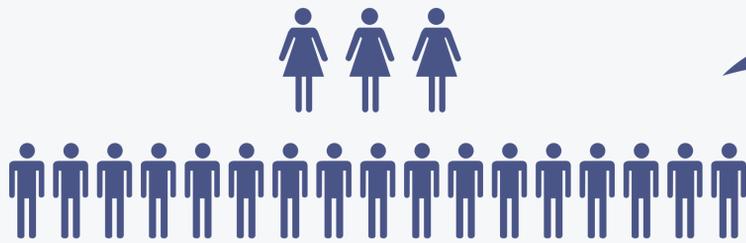
Decedent was experiencing homelessness at time of death (13%)



Decedent was a veteran (9%)



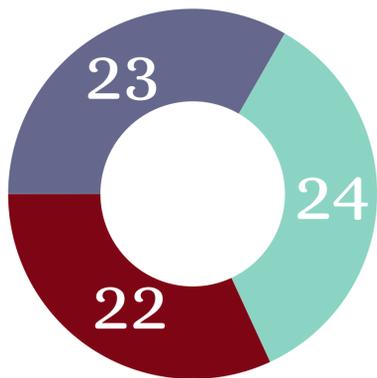
Decedent has ever been incarcerated (29%)



Decedents ever incarcerated were released in past 2 months (30%)

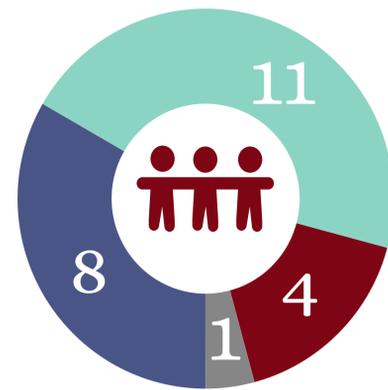


Decedent's Child Status



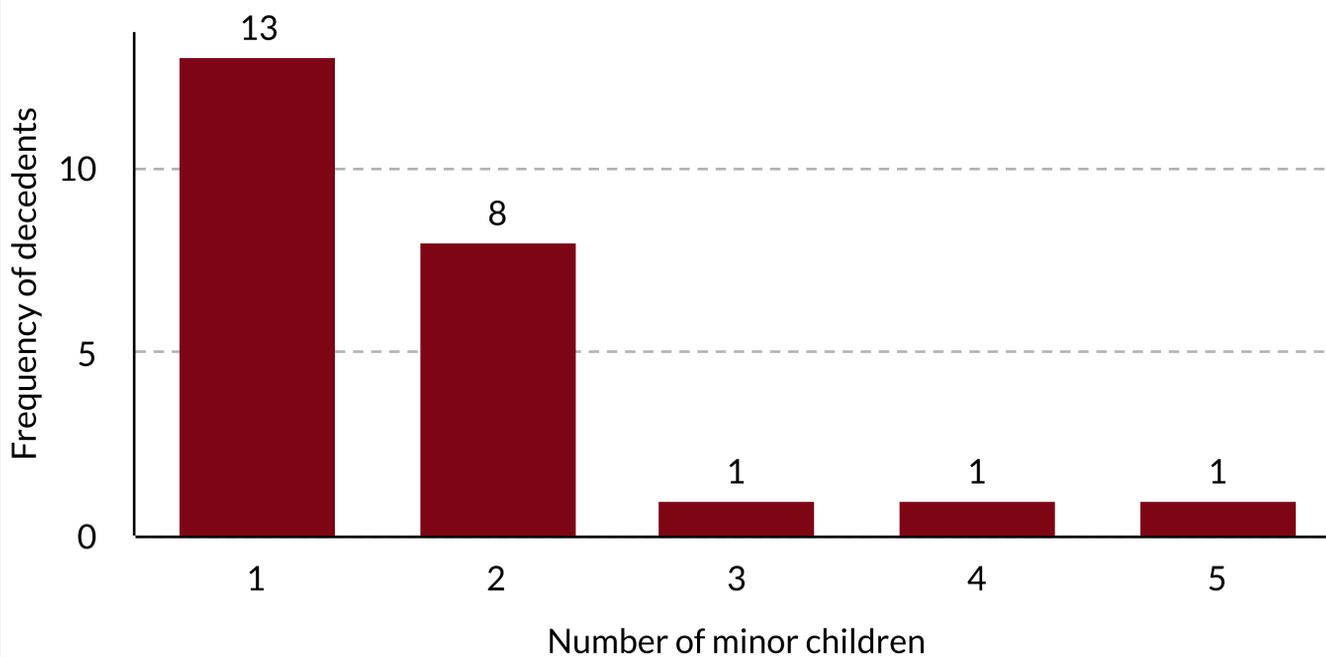
- Only adult children (33%)
- Minor child(ren) (35%)
- No children (32%)

Employment status of those with minor children



- Unemployed (33%)
- Employed (46%)
- Self-employed (17%)
- Unknown (4%)

Number of Minor Children



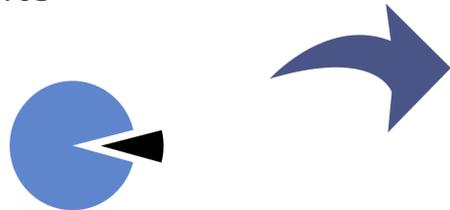
At least 7 decedents lived with their minor child(ren)

Deaths Related to Opioids and Other Drugs

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

Decedent's Substance Use History.

At least 93% of decedents were known to use or abuse substances



At least 42% of those decedents used substances intravenously



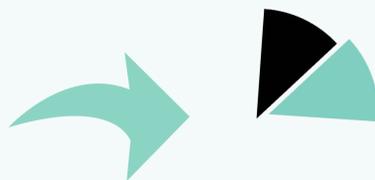
At least 32% of decedents were prescribed an opioid in the past 2 years



At least 14% of decedents substance use started from a prescribed opioid



At least 25% of decedents have had at least one overdose before their fatal overdose



At least 47% of those decedents have had 2 or more overdoses before their fatal overdose

Decedent's typical substance of choice †

45% HEROIN 35% COCAINE 43% METHAMPHETAMINE

Drugs found in toxicology results †

74% Fentanyl 42% METHAMPHETAMINE
15% HEROIN 7% COCAINE

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

Decedent was substance free in the past month **28%**

Suspected reasons for relapse*

33% Left jail/rehab 11% Life stress** 56% 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 and unemployment

Decedent has been to a substance rehabilitation clinic at least one time **17%**

Decedent was prescribed, buprenorphine, methadone, naloxone, naltrexone, or suboxone **10%**

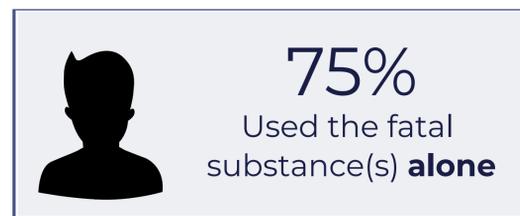
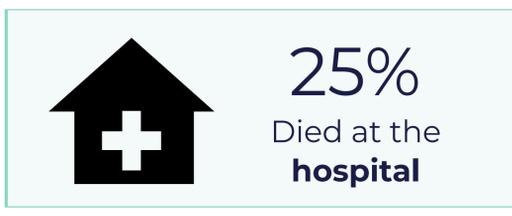
Deaths Related to Opioids and Other Drugs

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

Death Scene Findings

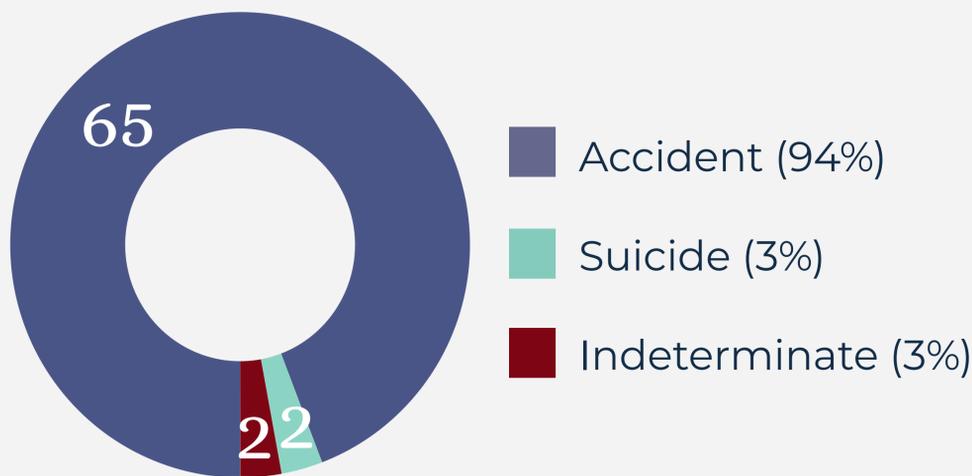


Syringes and suspected illicit drugs were the most common paraphernalia found on scene

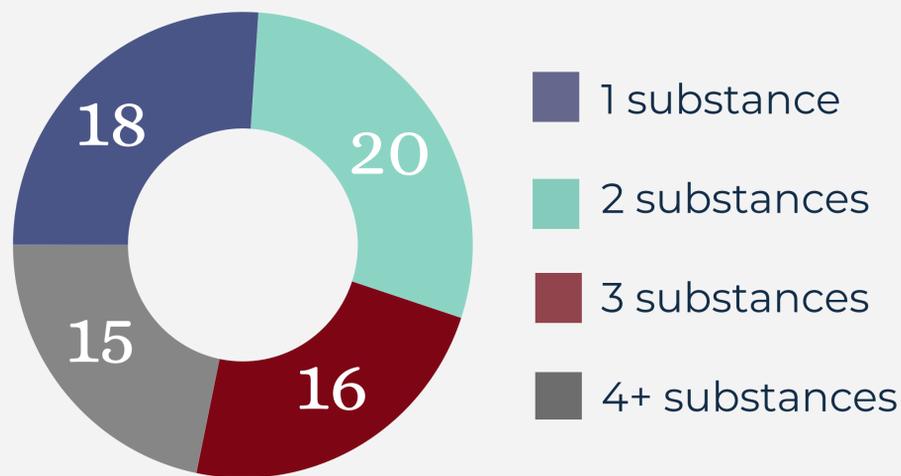


Autopsy and Toxicology Results

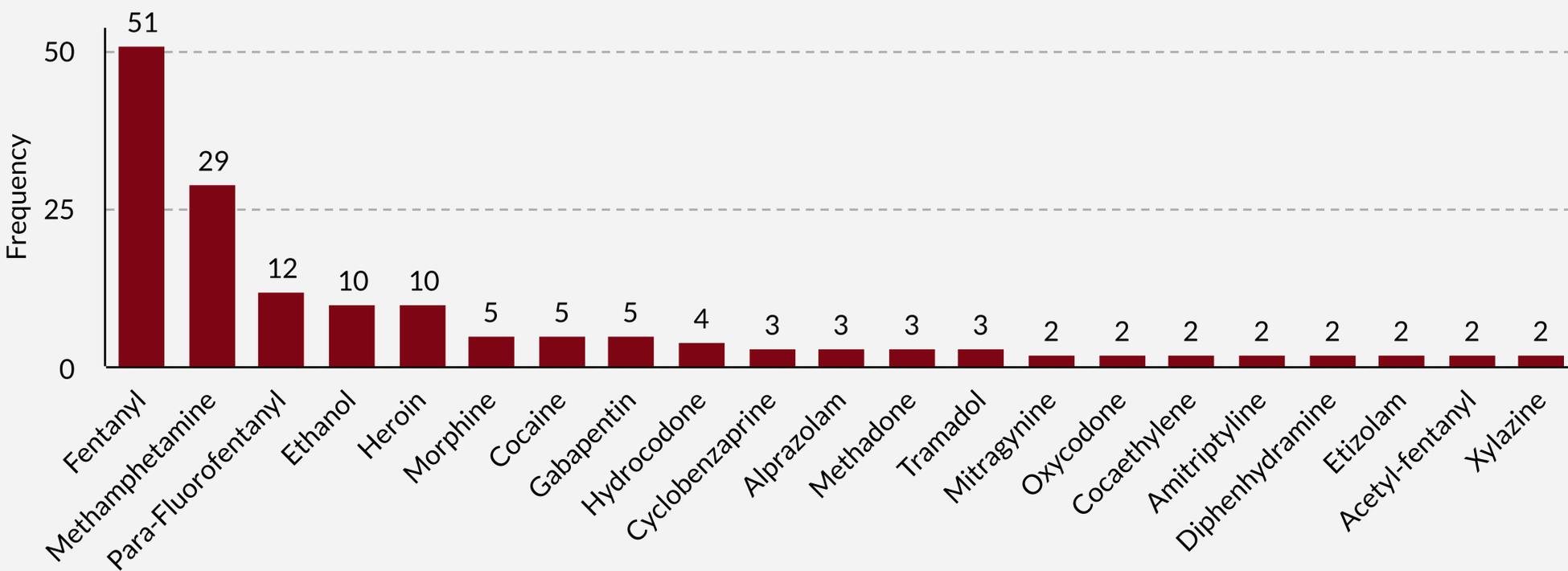
Manner of Death



Number of substances contributing to death



Substances Present in Toxicology[†]



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

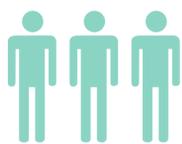
The following substances were found one time: Chloroethane, citalopram, topiramate, trazodone, orphenadrine, mirtazapine, ethylene glycol, diazepam, hydroxyzine, amphetamine, nordiazepam, 7-amino clonazepam, & fluoxetine

Deaths Related to Opioids and Other Drugs

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

Highlights

Additional Naloxone Information



1 dose of Naloxone



2 doses of Naloxone



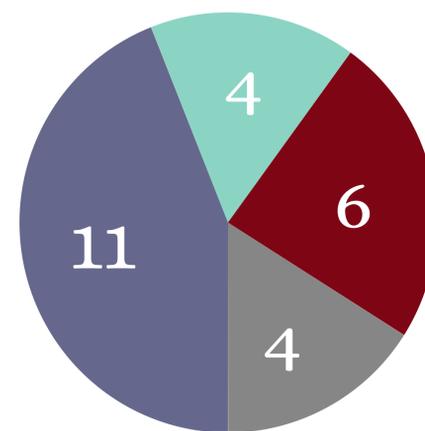
3 doses of Naloxone



4 doses of Naloxone



5 doses of Naloxone



- IV Naloxone
- Nasal Naloxone
- IV & Nasal Naloxone
- Unknown

Three decedents were given extensive resuscitative efforts (CPR, epinephrine, AED shock) but were **not given Naloxone**. Unknown dosage of Naloxone given to seven decedents.

Positional Asphyxia:

21% (12 of 57) of decedents with an opioid-related death were originally found in a **potentially airway asphyxiating position**

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

8% (1 of 12) 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
- Four deaths due to para-fluorofentanyl in 2020
- Ten deaths due to para-fluorofentanyl in first 3 months of 2020

Substance combinations

Benzodiazepines & Opioids

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

0 decedents were prescribed that benzodiazepine and opioid

Heroin & Fentanyl

Heroin contributed to 10 deaths, all 10 of these deaths also had fentanyl present

Xylazine & Fentanyl

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

Methamphetamine & Opioids

4 decedents had methamphetamine and heroin in their toxicology report

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