

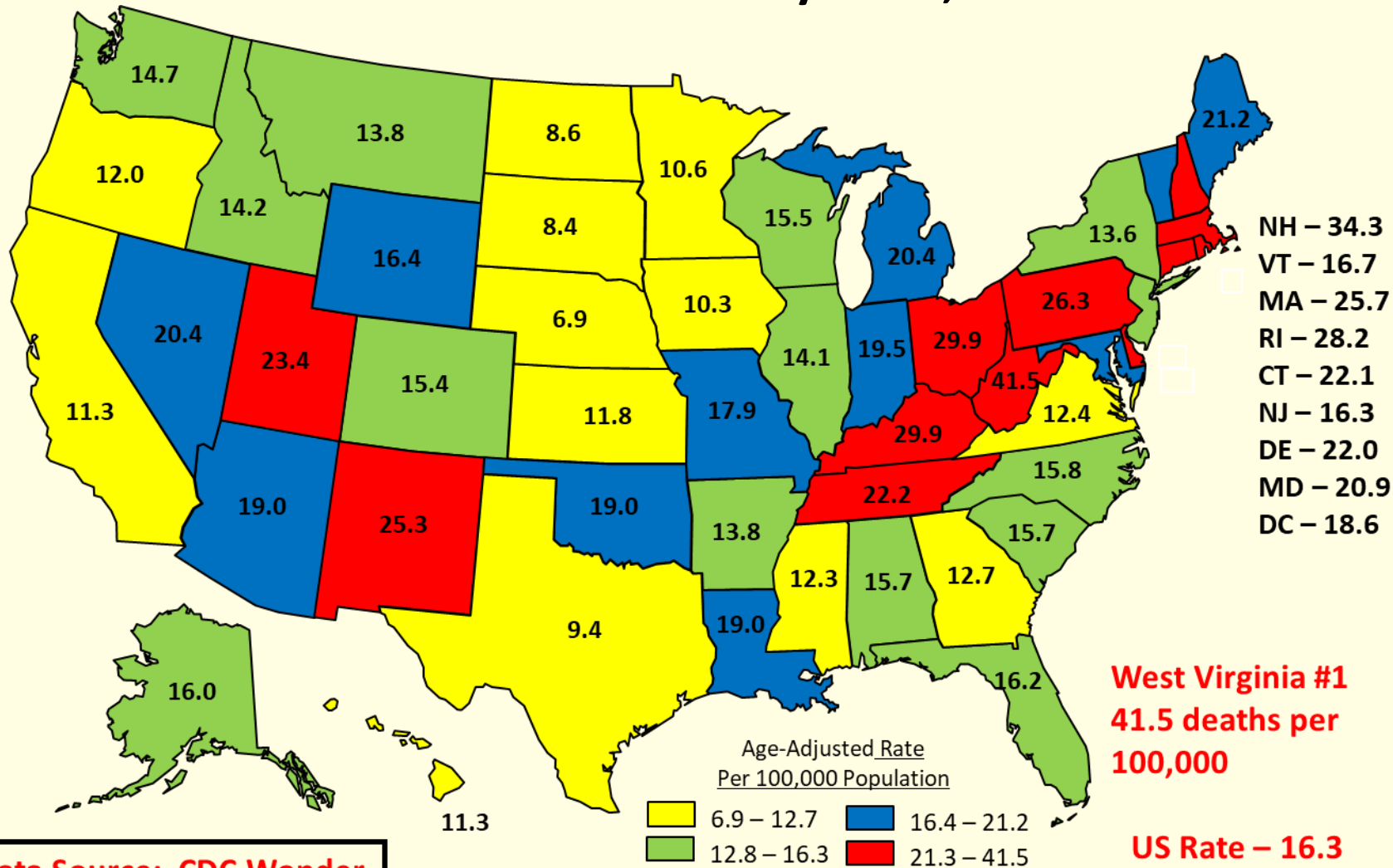
2016 West Virginia Overdose Fatality Analysis: Healthcare Systems Utilization, Risk Factors, and Opportunities for Intervention

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Bureau for Public Health
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Drug Overdose Rates by State

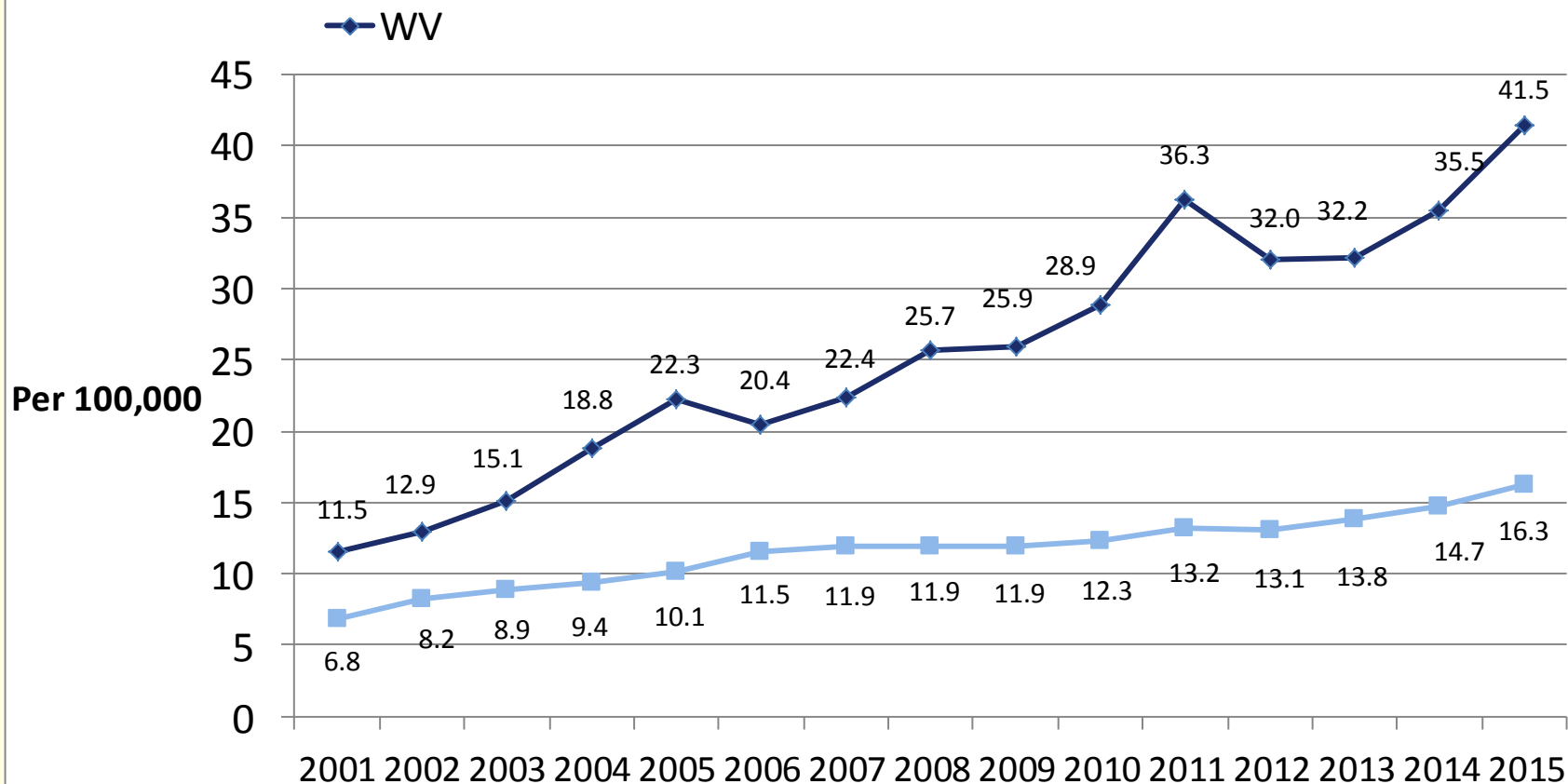
US Resident Overdose Deaths by State, 2015



Data Source: CDC Wonder

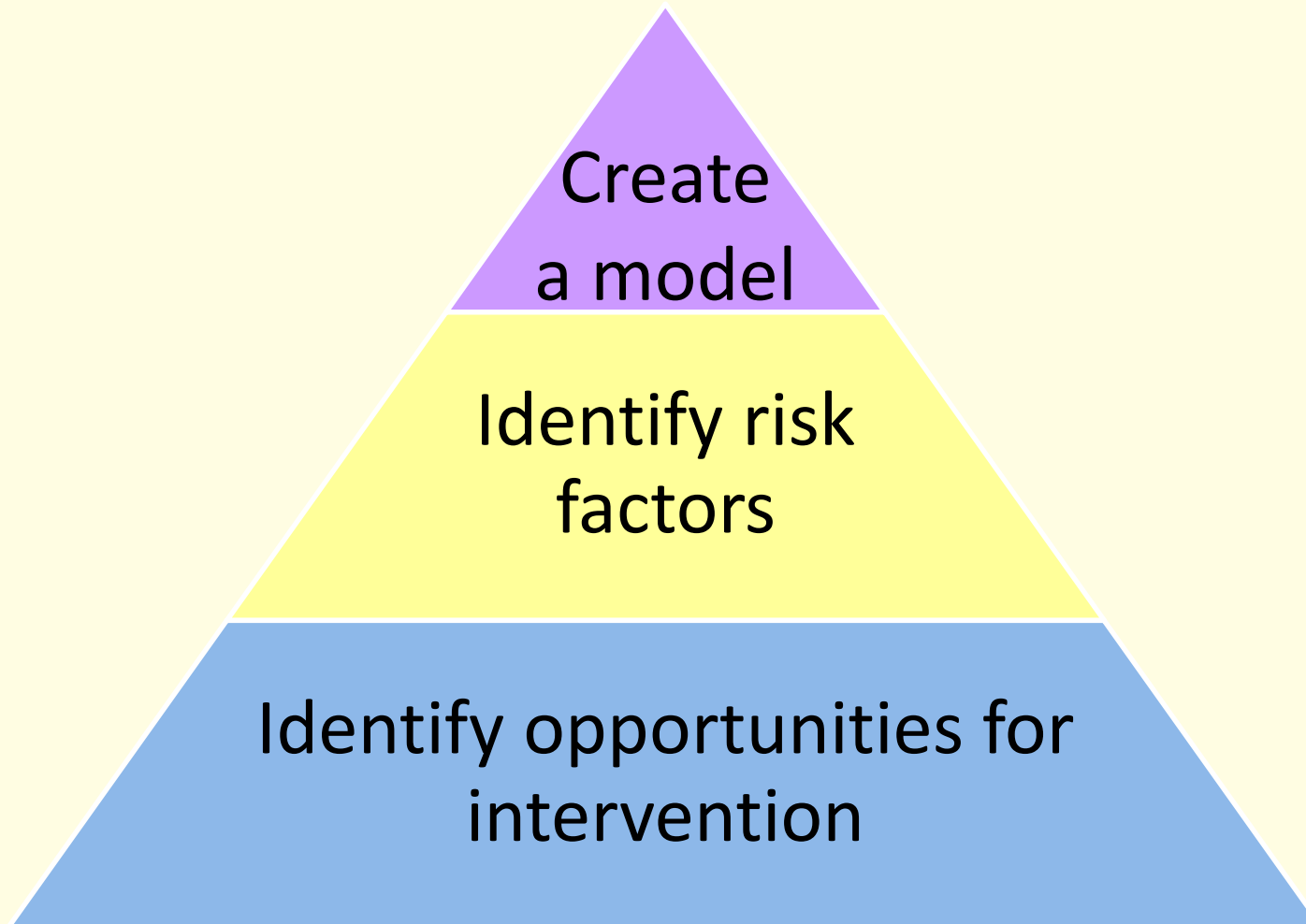
West Virginia vs. United States

2001-2015 Resident Drug Overdose Mortality Rate West Virginia and United States

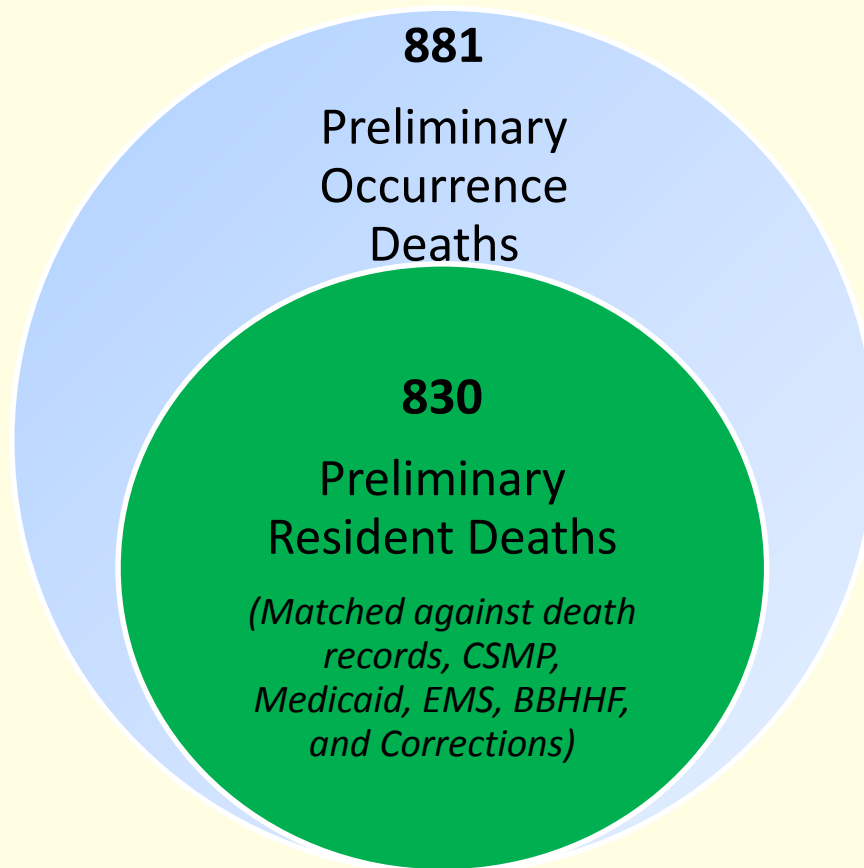


Data Source: WV Health Statistics Center, Vital Surveillance System and CDC Wonder.
Rates are adjusted by age to the 2000 US Standard Million.

Purpose



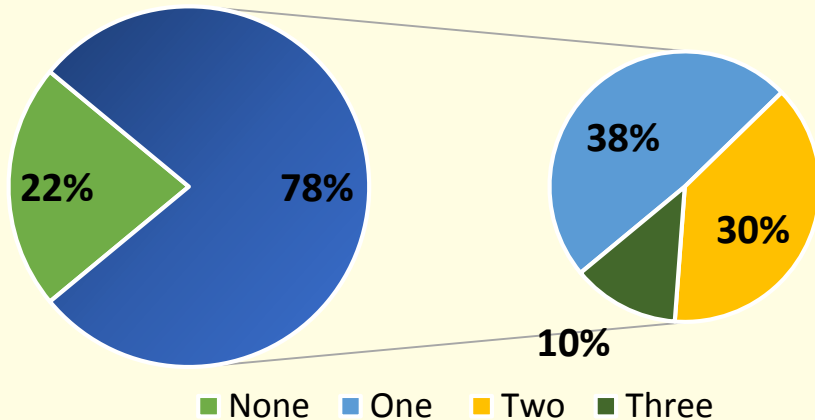
Methods



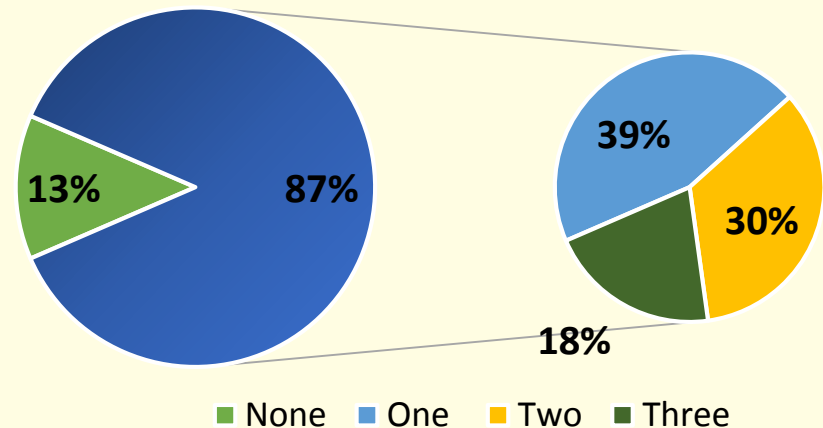
Interactions with Health Systems

- **81%** of decedents interacted with one or more systems.
- Just under **40%** of decedents interacted with only one system.

Males: Interactions with Healthcare Systems



Females: Interactions with Healthcare Systems

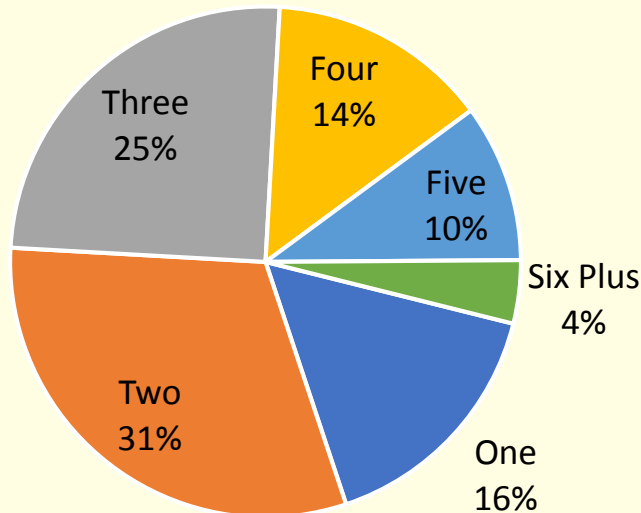


Healthcare systems included BBHMF, EMS, and CSMP. Neither Medicaid or Corrections were included.

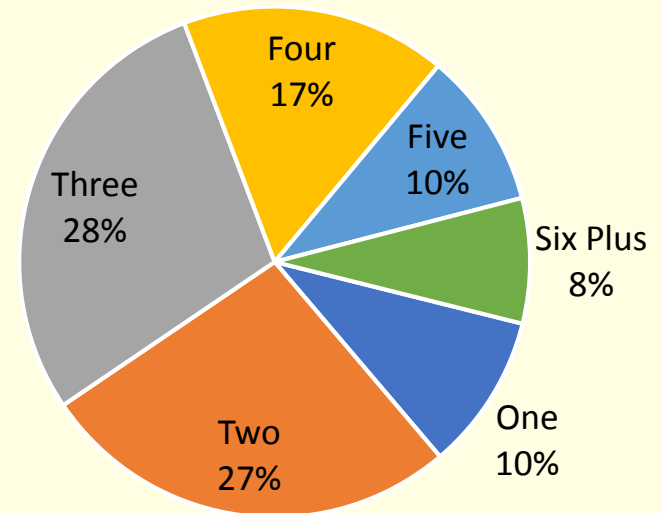
Number of Drugs at Time of Death

- Females were more likely than males to have more than one drug in their system at their time of death.

Males: Number of Drugs at Time of Death

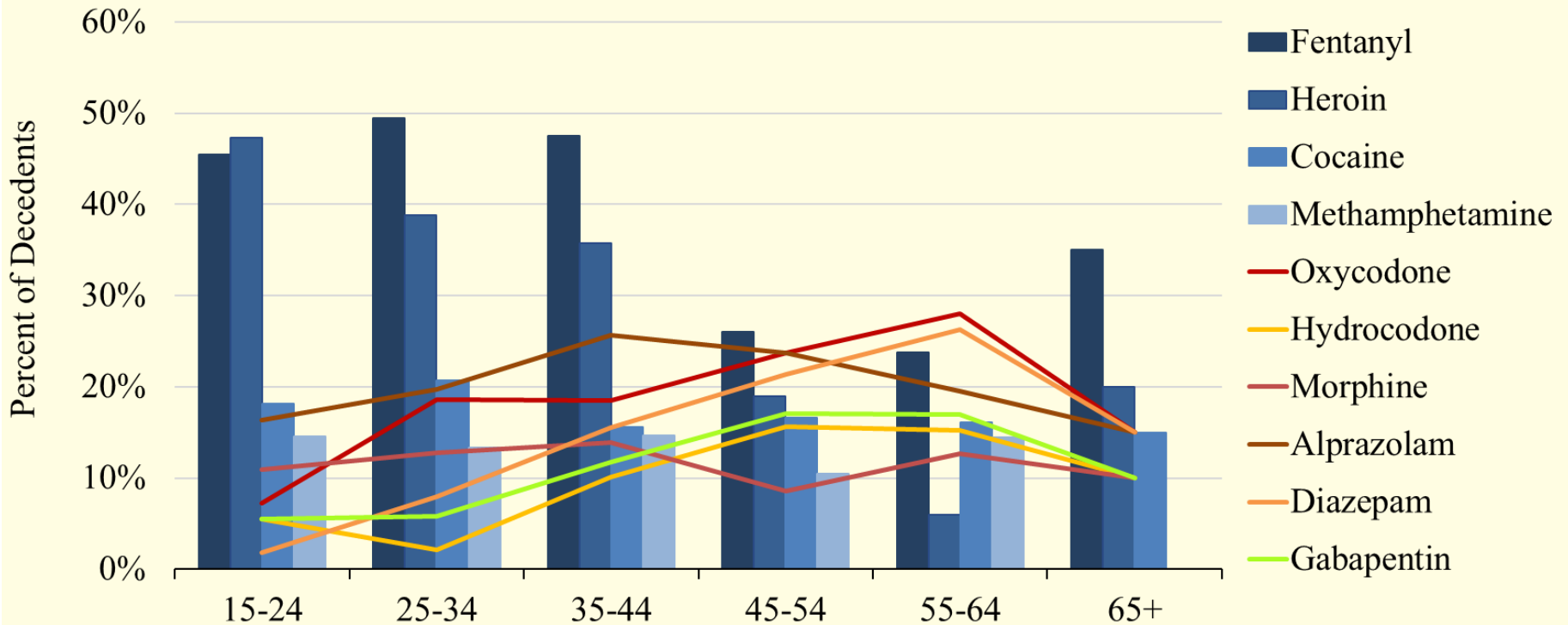


Females: Number of Drugs at Time of Death

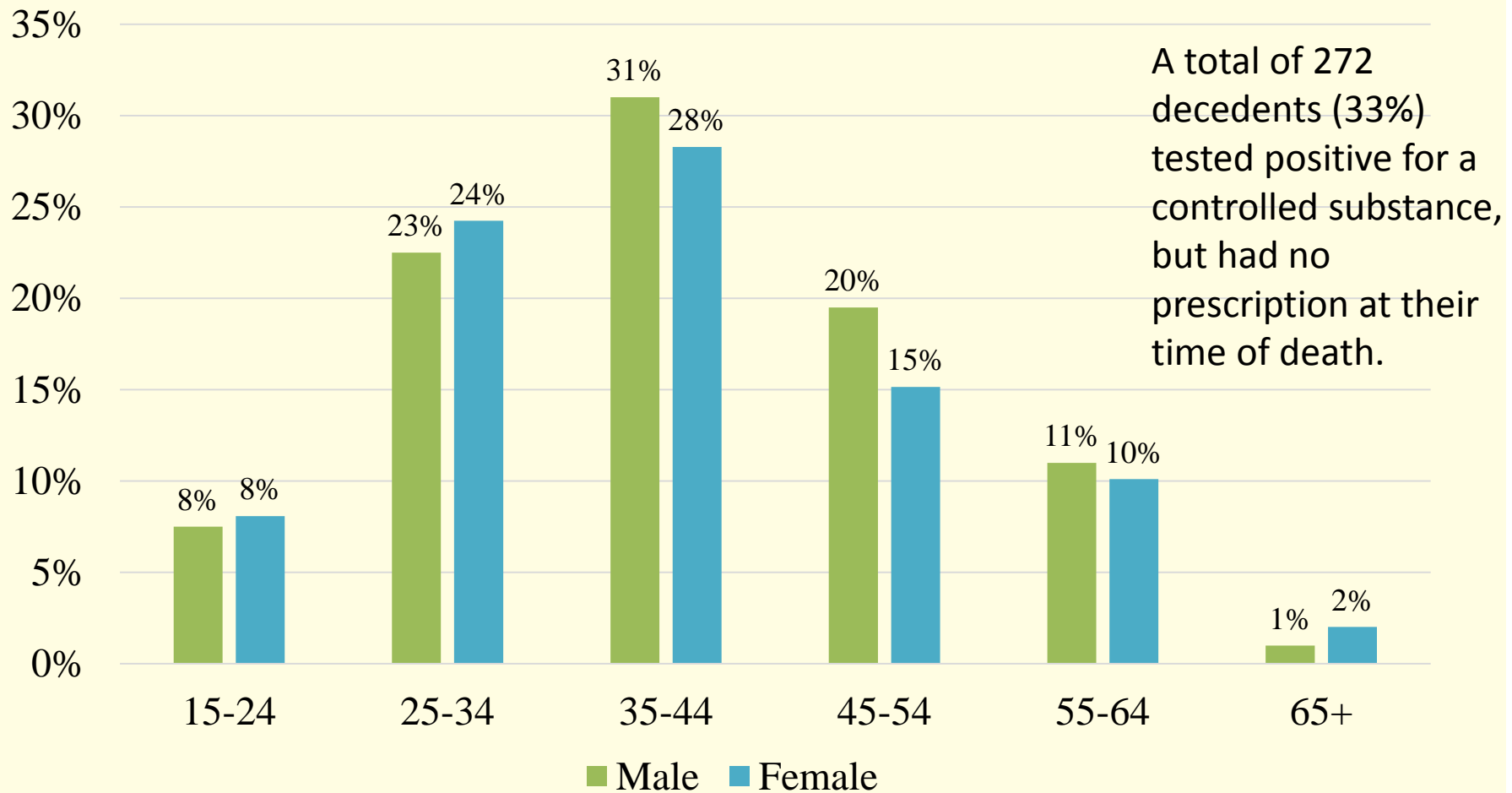


Drugs at Time of Death

Top 10 Drugs Used by Decedents at Time of Death by Age Category

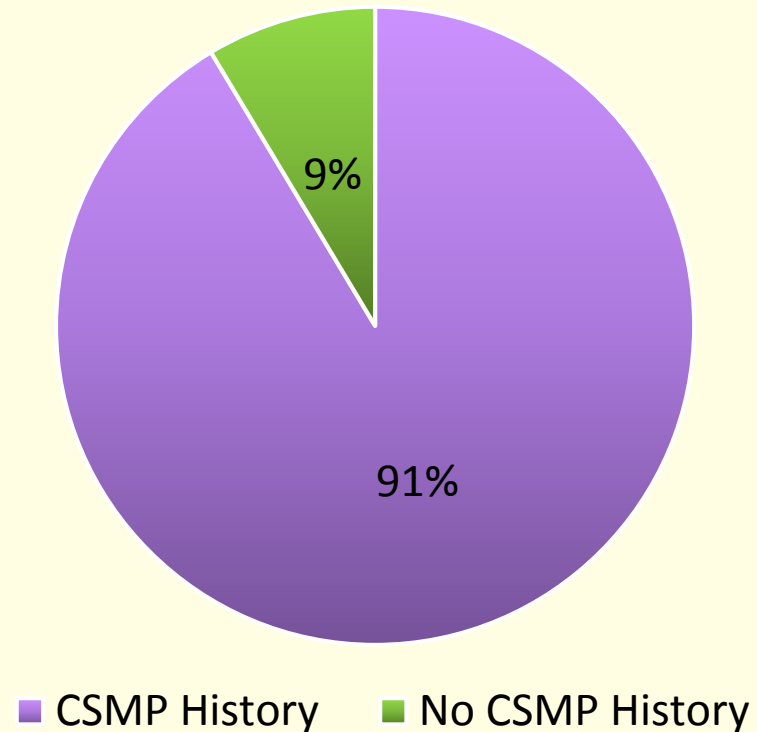


Decedents Positive for a Controlled Substance at Death but no Prescription by Gender and Age



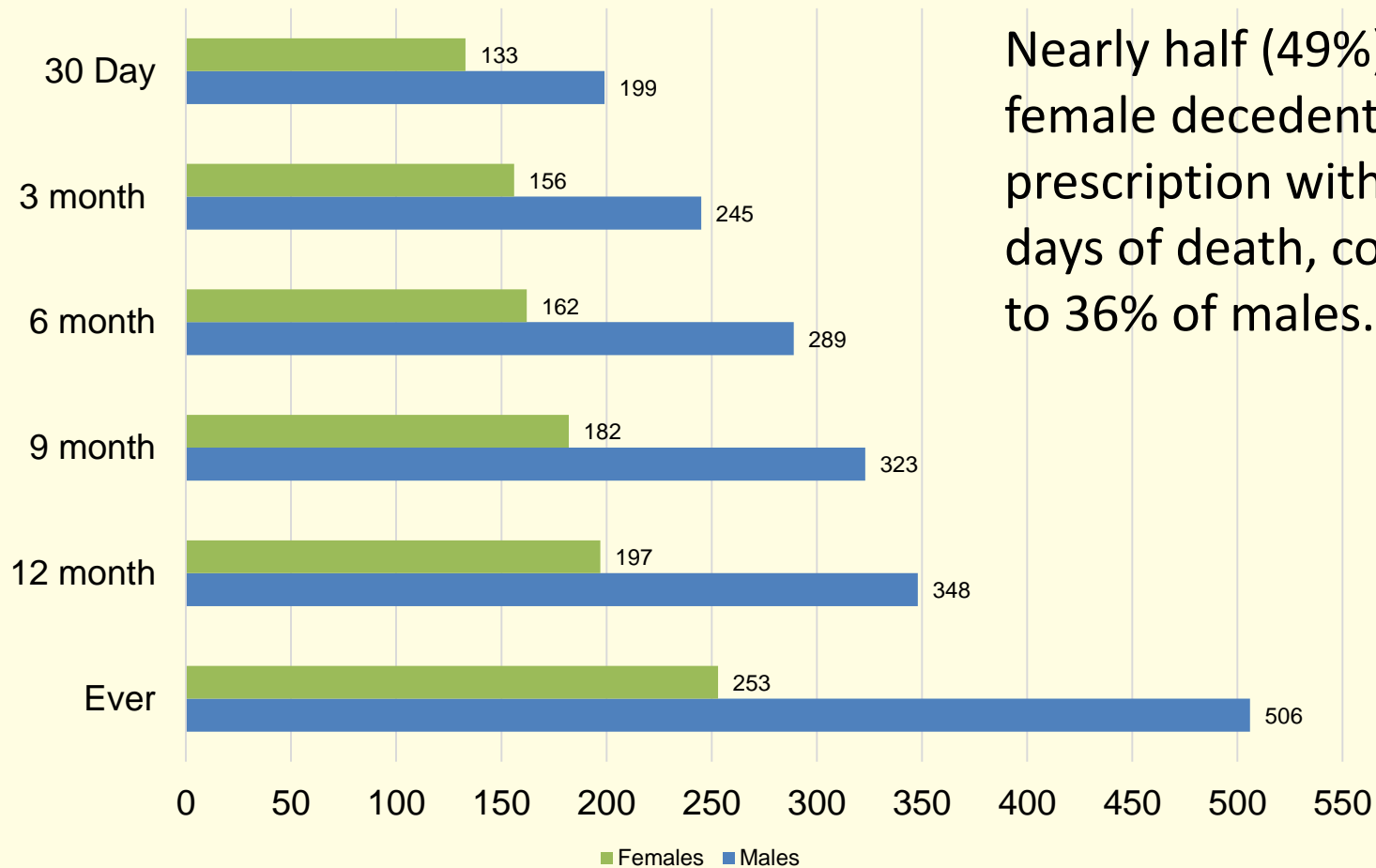
Decedents with CSMP Interaction

The West Virginia Board of Pharmacy's Controlled Substances Monitoring Program (CSMP) documents the dispensing of Schedule II-IV controlled substances.



CSMP History at Point in Time Intervals

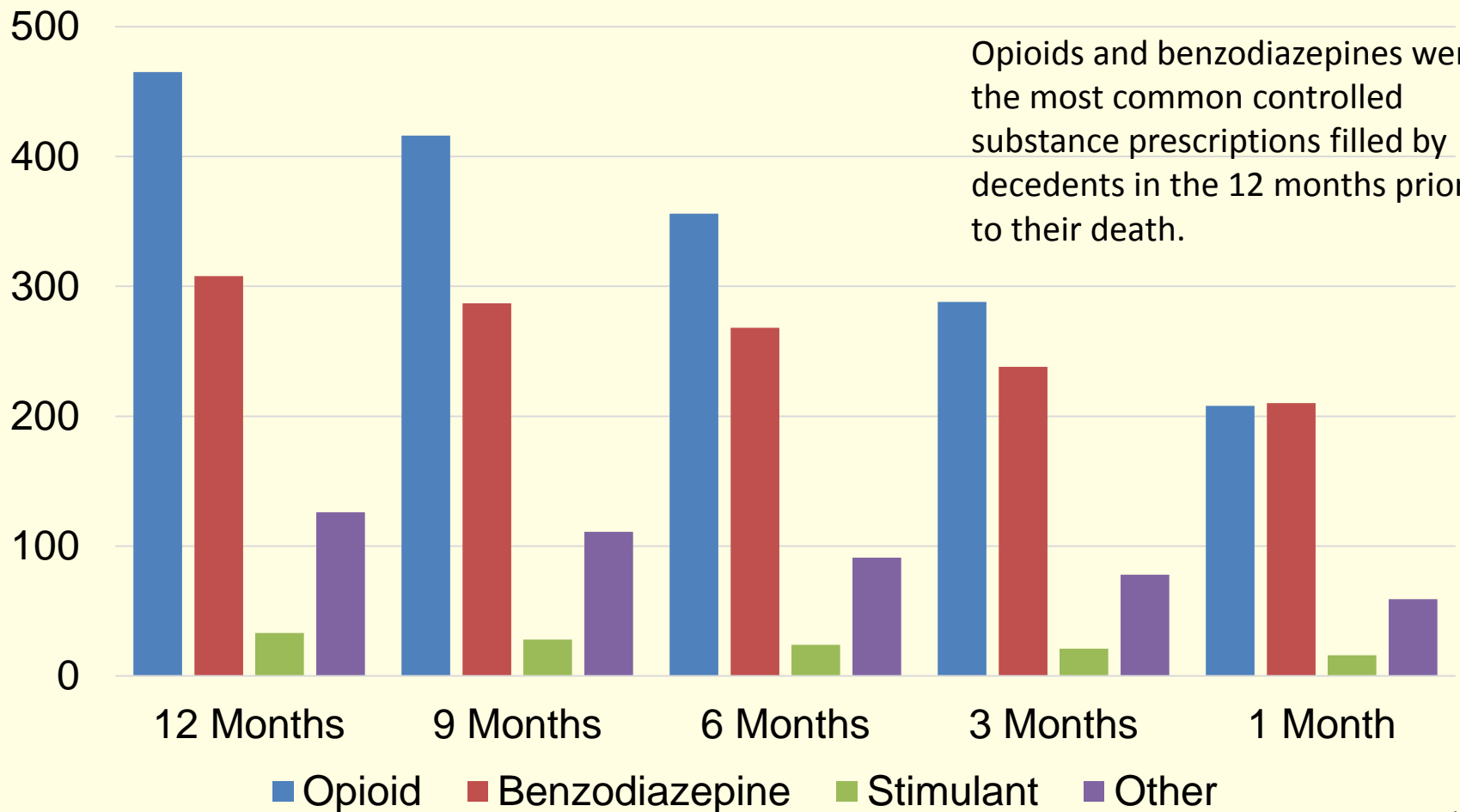
CSMP History at Point in Time Intervals before Death by Gender



Nearly half (49%) of all female decedents filled a prescription within 30 days of death, compared to 36% of males.

Number of Prescriptions by Drug Category

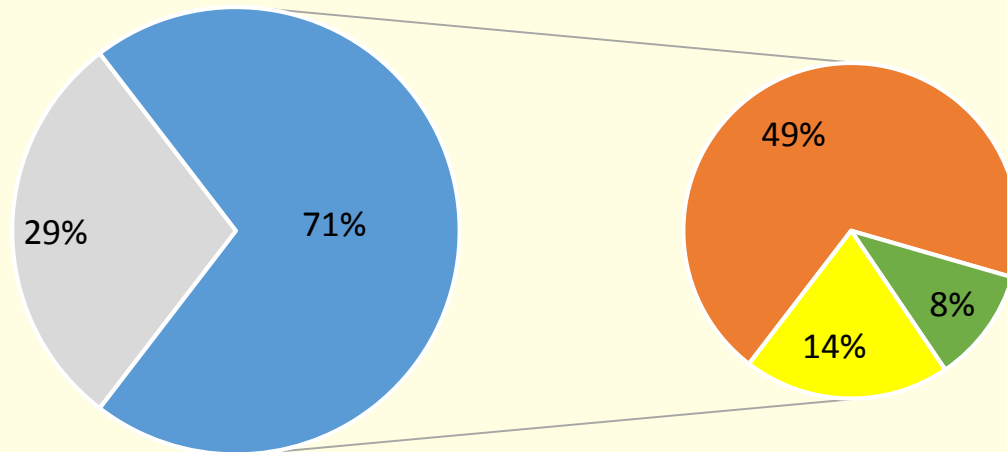
Number of Prescriptions Before Death by Drug Category



Prescriber and Pharmacy Utilization

- Decedents were three times more likely to have three or more prescribers as compared to the overall CSMP population for 2016 (9% versus 3%).
- Decedents were more than 70 times likely to have prescriptions at four or more pharmacies compared to the overall CSMP population for 2016 (7% vs. 0.1%).

Decedents with EMS Administered Naloxone

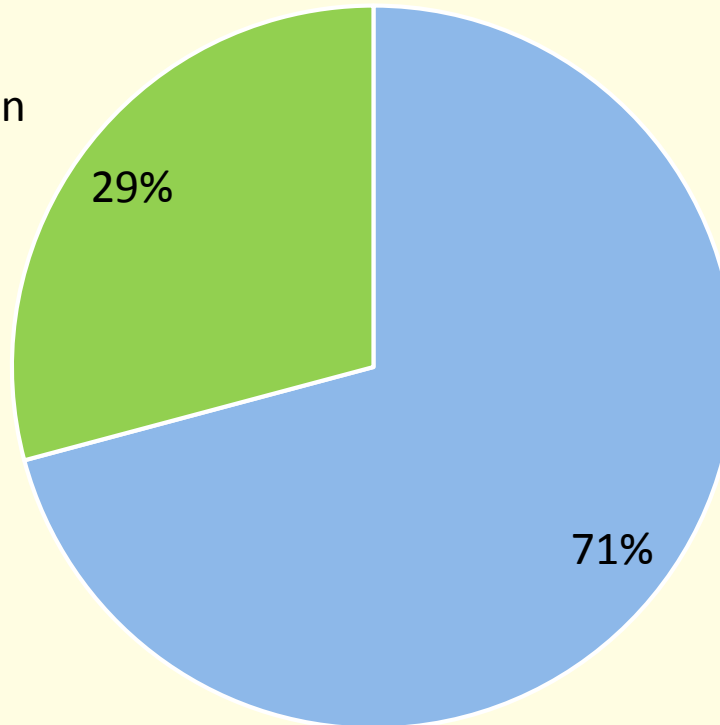


- No Interaction with EMS
- No Naloxone
- Naloxone > 48 Hrs Before Death
- Naloxone < 48 Hrs Before Death

There may be a disparity in the overall emergency response to West Virginians older than 65 that warrants further study.

Medicaid Eligibility at Any Time 12 Months Prior to Death

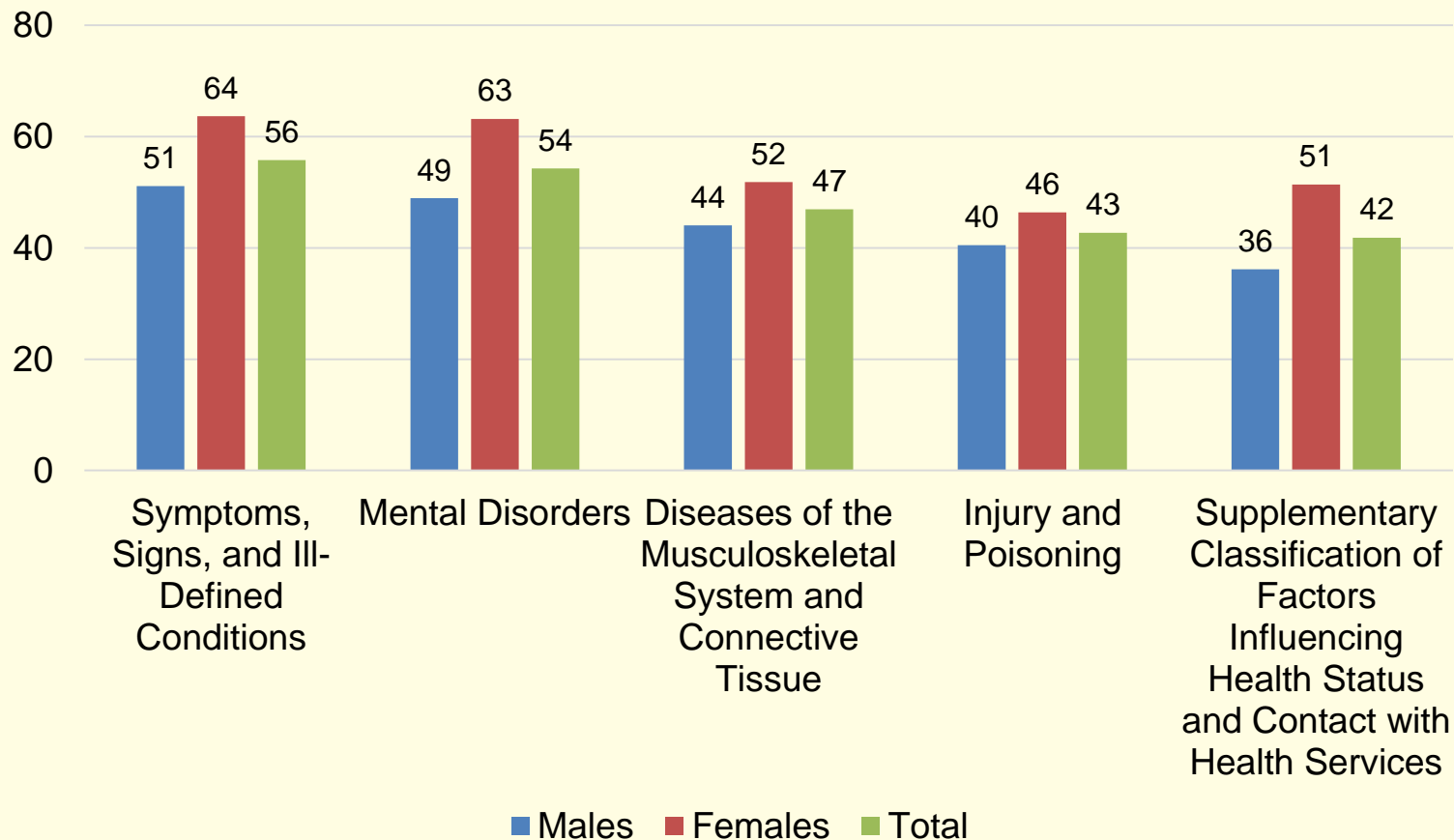
According to the Kaiser Foundation, only 23% of West Virginia's overall adult population ages 19-64 have Medicaid.



■ Medicaid ■ No Medicaid

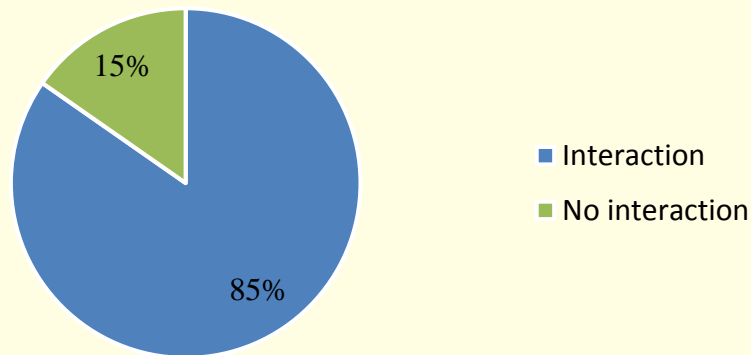
Medicaid Major Diagnostic Categories

Major Diagnostic Categories with the Most Medicaid Eligible Decedents Represented



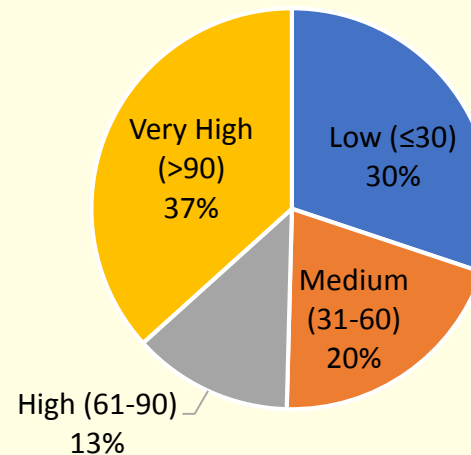
Medicaid Utilization

Percentage of Decedents Utilizing Medicaid within 12 Months Prior to Death



Excludes claims within < 48 hours of death.

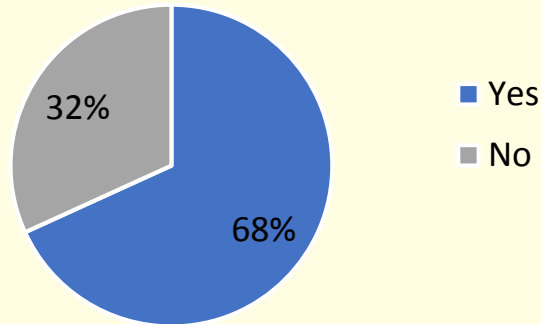
Number of Medicaid Claims Prior to Death



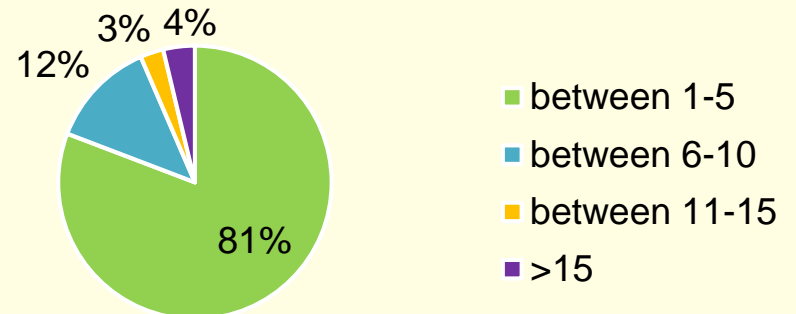
Excludes pharmacy claims and claims within < 48 hours of death.

Utilization of Medicaid for Emergency Department (ED) Visits

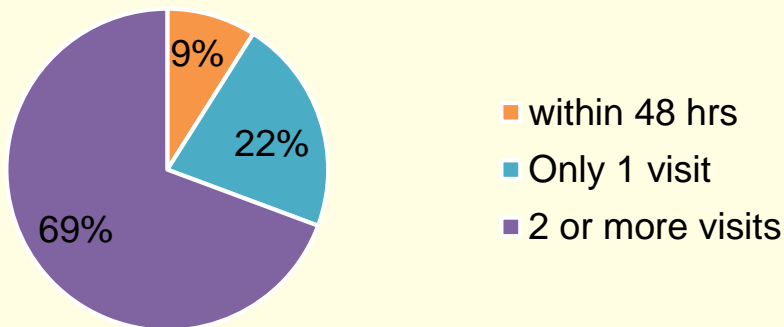
Medicaid Decedents with an ED Visit within 12 Months of Death



Emergency Department Utilization by Number of Visits



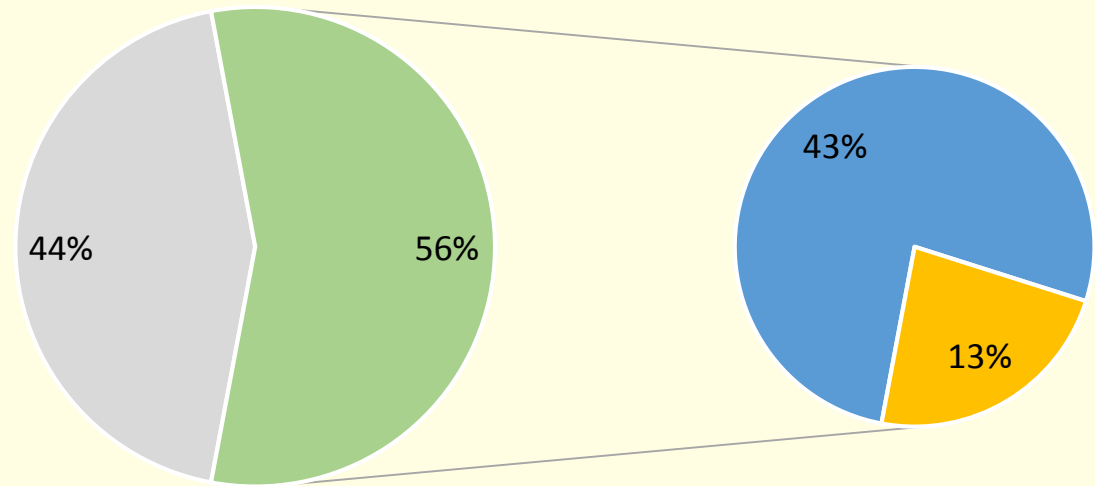
Emergency Department Utilization Among Decedents



Medical services have the potential to reach a significant portion of individuals at risk of fatal overdose. Implementation of the Medicaid 1115 Waiver will expand opportunities for treatment and recovery services.

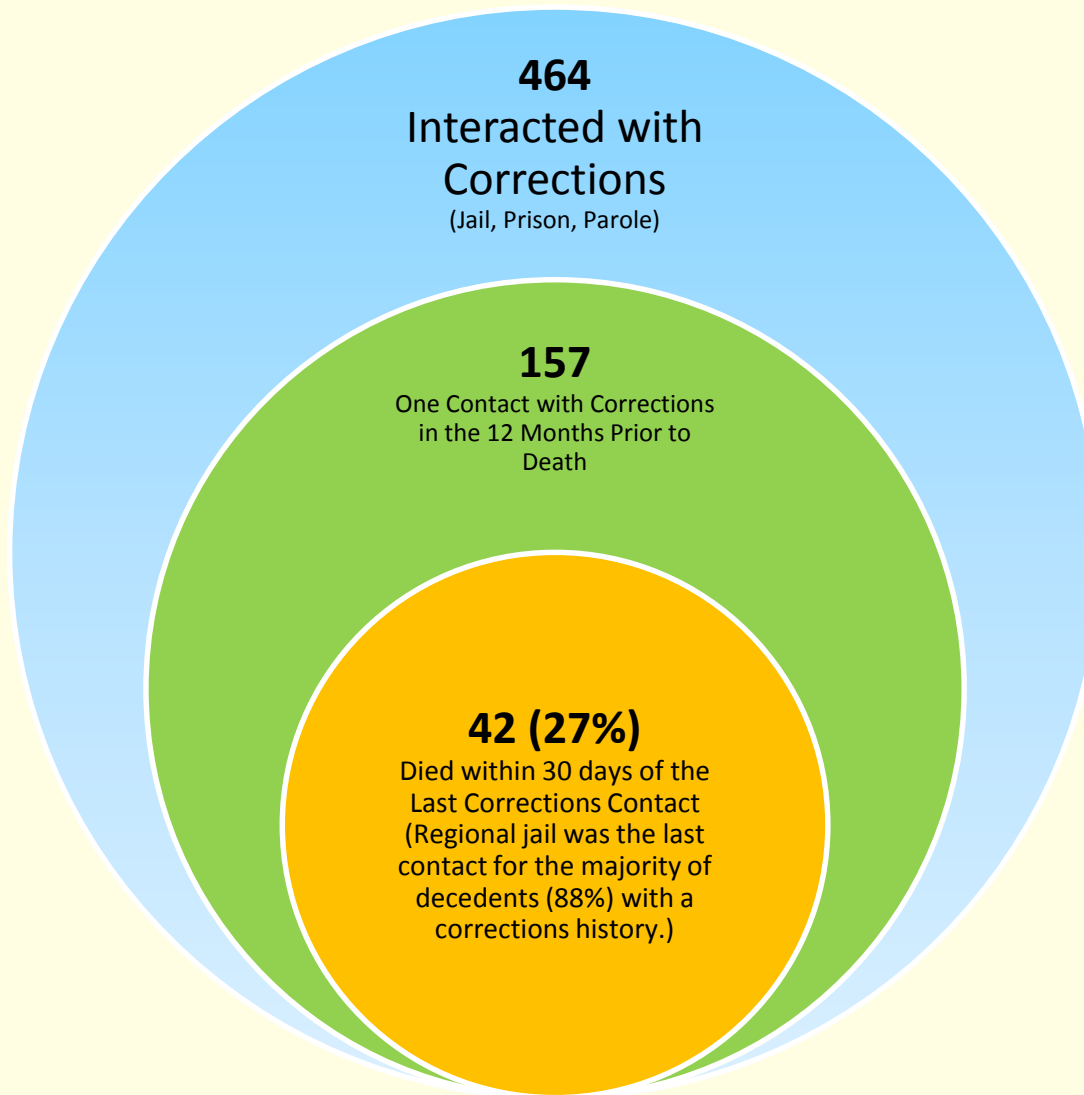
Corrections History by Gender

Officials from the WV Department of Military Affairs and Public Safety reported that there is not a uniform strategy for identifying how people with a substance abuse disorder are referred to services in their community.



■ None ■ Males with History ■ Females with History

Death After Incarceration



- 46% with some high school education died within 30 days.
- 32% of decedents that were never married died within 30 days.

Select High Risk Factors

Males
(67%)

35-54 Years of
Age
(54%)

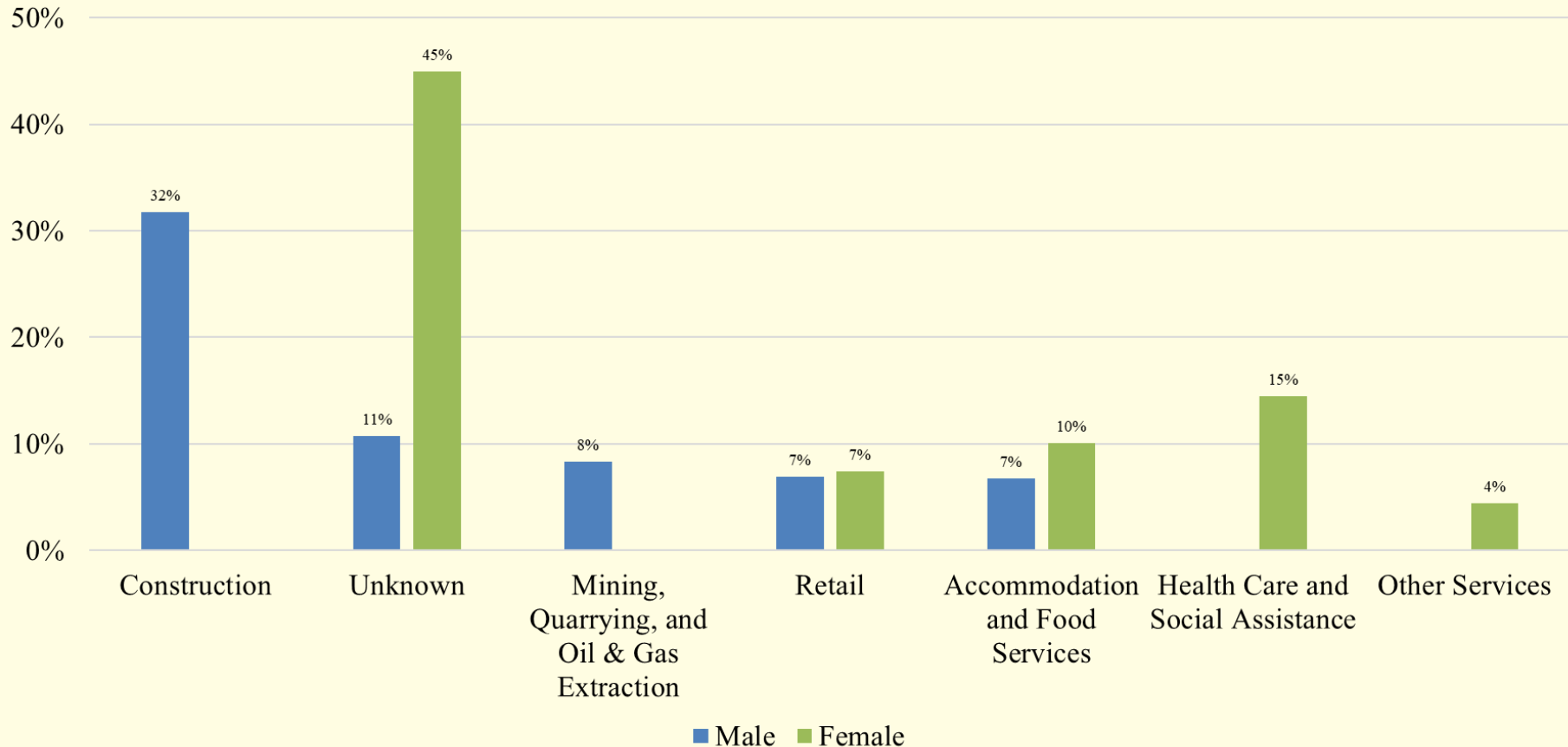
HS Education or
Less
(79%)

Unmarried
(75%)

Blue Collar
Occupations

Decedents by Industry Type

Top Industry Types for Male and Female Decedents



Recommendations for Healthcare Providers

- Be prepared to offer screening, referral, and/or treatment.
- Continuing education opportunities that help identify risk factors for overdose death and retain individuals in substance abuse treatment.
- Require prescribers to run a CSMP report on each patient prior to prescribing any Schedule II drugs, any opioids, and any benzodiazepines.
- Prescribers should consider offering naloxone for individuals at increased risk for opioid overdose.

CSMP Recommendations

- Enhance CSMP Advisory Committee legislation to identify abnormal or unusual prescribing and dispensing patterns and to permit sharing this data with appropriate professional licensing boards and other agencies.
- Develop CSMP policies and procedures for proactive reports to alert prescribers about the increased risk of overdose and potential misuse or diversion for those individuals known to the CSMP.

Other Recommendations

- Corrections officials should work with judges to assure naloxone availability, treatment referral, and peer supports at release of incarceration.
- Healthcare providers and the public may benefit from education regarding overdose signs and symptoms. This education should include information specific to individuals older than 65 years to increase the chance that someone will call emergency services and that appropriate administration of naloxone is offered.

Contact

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