

ARIZONA DEPARTMENT
OF HEALTH SERVICES

Opioid Update & Surveillance Data Summary February 2020

July 1, 2017 – December 31, 2019

3,780
suspect opioid
deaths

34,665
suspect opioid
overdoses

1,560
neonatal
abstinence
syndrome cases

63,458
naloxone doses
dispensed by
pharmacists

13,064
naloxone doses
administered
pre-hospital

Update on Arizona Department of Health Services Opioid Response

February 2020

Arizona's Progress

Since Governor Doug Ducey [declared a public health emergency](#) on June 5, 2017 to address the increase in opioid deaths in Arizona, substantial action has occurred:

- The opioid surveillance system continues to track reported overdoses, neonatal abstinence syndrome cases, naloxone dispensed by pharmacists, and naloxone administered by first responders. An [interactive dashboard](#) was launched at www.azhealth.gov/opioid to enable a more in-depth look at the surveillance data.
- New rules are in place for licensed health care facilities, pain management clinics, and sober living homes.
- Updated guidelines are available to educate healthcare providers on responsible prescribing practices. Guidelines are available at www.azhealth.gov/opioidprescribing.
- ADHS has distributed more than 21,000 free naloxone kits to law enforcement agencies.
- ADHS submitted the [Opioid Action Plan](#) to Governor Ducey on September 5, 2017. The [Opioid Action Plan](#) included over 50 actions completed by June 30, 2018.
- On January 26, 2018, Governor Doug Ducey signed the Arizona Opioid Epidemic Act, [Senate Bill 1001](#), the first bill to become law in 2018, following a four-day Special Session and unanimous passage in the House and Senate.
- The [OARLine](#): Opioid Assistance + Referral Line was launched in March 2018 in partnership with Arizona's Poison and Drug Information Centers. The [OARLine](#) (1-888-688-4222) is available for health care clinicians to call for free consultation on patients with complex pain or opioid use disorder, provides information and referrals to the public, and conducts follow-up with people experiencing overdoses.
- The Arizona Department of Health Services worked with 17 undergraduate health professional schools to develop the **Arizona Pain and Addiction Curriculum**, a statewide curriculum on the modern approach to pain and addiction. Find more information at www.azhealth.gov/curriculum.
- On May 7, 2019 Governor Ducey signed SB 2019, allowing medical and osteopathic schools to graduate students as automatically eligible for the waiver to treat opioid use disorder with buprenorphine.
- The [Arizona Opioid Prescriber Education program](#) is a free online continuing medical education program released in June 2019 that provides the latest information about Arizona's opioid laws and regulations, prescribing guidelines and treatment options for opioid use disorder.
- The Governor's Office of Youth, Faith & Family launched a new campaign <http://www.weneedtotalkaz.org/> in September 2019 to encourage discussion and understanding of addiction and to end the stigma of addiction.
- ADHS held the Arizona Pain and Addiction Curriculum Summit, a continuing education event in November 2019.

Opioid Surveillance Summary Highlights, July 2017 – December 2019

With more than two years of opioid surveillance data available, analysis of the more recent data can help identify the ways in which Arizona's drug crisis may be shifting.

Early Indicators of Success

- The number of opioid prescriptions filled per month in Arizona has declined by 23% between July 2017 and November 2019.
- The average number of morphine milligram equivalents (MME) prescribed with each prescription filled has decreased 28% from July 2017 (62) to December 2019 (44.78).
- Law enforcement officers have administered naloxone to 1,737 people through December 2019; 96.6% survived the immediate pre-hospital event.
- The amount of naloxone dispensed by pharmacies has increased by 185% between July 2017 and December 2019.
- As the mandate for electronic prescribing of opioids went into effect in January 2020, the percentage of providers enabled to e-prescribed controlled substances climbed to

Highlighted Data since July 2017

- Most overdoses (62%) occur among men.
- People ages 25-34 years old had the highest percent of opioid overdoses.
- The most frequently noted pre-existing condition among people who had a verified opioid overdose was history of substance abuse followed by chronic pain (e.g. lower back pain, joint pain, arthritis).
- Fentanyl alone or in combination with other drugs was the most commonly involved substance in verified opioid overdoses in people 24 years old and younger.
- Heroin alone or in combination with other drugs was the most commonly substance involved in verified opioid overdoses in people 25-44.
- Oxycodone alone or in combination with other drugs was the most commonly involved substance in verified opioid overdoses in people 45 years old and older.
- Half of verified overdoses involved more than one drug.
- The most common drug combination in non-fatal overdoses was heroin and methamphetamine.
- Between 2018 and 2019, Arizona has had an increase in verified opioid overdoses.
- The drug whose involvement in verified opioid overdoses that has increased the most since July 2017 is fentanyl.

See Appendix A for more data

Moving Forward

In April 2019, the Arizona Department of Health Services, in partnership with AHCCCS and the Governor's Office of Youth, Faith, and Family (GOYFF), held a one-day Opioid Planning Summit to discuss ideas for next steps in addressing the epidemic. With input from the summit and incorporation of recent legislation and grant-funded activity, the Opioid Action Plan, Version 2.0 has been developed. This Plan articulates tangible, specific actions that will be taken over the next two years by ADHS, AHCCCS, GOYFF, and other state partners. This Plan builds on the foundation established over the past two years, and focuses on improving access to treatment, reducing stigma, and reducing overdoses.

Conclusion

Today's opioid crisis began building more than a decade ago, and it will take time to shift the trend and see fewer Arizonans tragically impacted. With significant recent policy changes and many other interventions just going into effect in 2019 and 2020, we expect to see more positive outcomes occurring in the next few years. The work across Arizona to prevent opioid addiction and overdoses continues with an unrelenting commitment to save lives.

**For more information, visit www.azhealth.gov/opioids
or email: azopioid@azdhs.gov**

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Highlighted Opioid Data: July 1, 2017 – December 31, 2019

Definitions

2018: January 1, 2018-December 31, 2018

2019: January 1, 2019-December 31, 2019

Verified Opioid Overdose: A verified opioid overdose is one where the medical records or death certificate have been reviewed or where investigation information was provided by a healthcare reporter at time of report and the cause of the overdose has been determined by ADHS.

Morphine Milligram Equivalents (MME)/day: The amount of morphine an opioid dose is equal to when prescribed. MME is often use to gauge the abuse and overdose potential of the amount of opioid that is being given at a particular time. (Reference: CDC)

Data Sources

Healthcare Providers, Healthcare Facilities, and Medical Examiner Offices

Cases of suspected overdose events (with and without fatality) and neonatal abstinence syndrome (NAS) may be reported by healthcare providers, facilities, and medical examiner offices in Arizona's Medical Electronic Disease Surveillance Intelligence System (MEDSIS). Additional investigation information, including but not limited to suspected substances, naloxone administration, and referral at discharge, may be entered by a healthcare reporter at time of report or may be entered by ADHS upon medical record review. As of 2/28/2020, 2019 data included in this report is considered *provisional*.

Arizona 1st Responders

The Arizona Prehospital Information & EMS Registry System (AZ-PIERS) is used by 1st responders, including Emergency Medical Services, Ambulance agencies, Fire Departments, and Law Enforcement agencies to report suspected opioid overdoses, suspected opioid deaths, and naloxone doses administered.

Data Matching (MEDSIS & AZ-PIERS)

MEDSIS and AZ-PIERS data is matched on a weekly basis to determine cases that have been reported into both systems. Matching is based on the creation of a unique person identifier.

Prescribers

The Arizona State Board of Pharmacy Controlled Substances Prescription Monitoring Program (PMP) grants access to prescribers and pharmacists to review controlled substance dispensing information for patients. As of April 26, 2018, as part of the 2018 Arizona Opioid Epidemic Act, dispensing pharmacists are required to review the PMP record of a patient receiving a schedule II controlled substance for the preceding 12 months.

[ARS 36-2606](#) required each medical practitioner licensed under Title 32 and who possesses a DEA license to review the preceding 12 months of a patient's PMP record before prescribing an opioid analgesic or benzodiazepine controlled substance listed in schedule II, III, or IV. Exceptions for not reviewing a patient record are described in [A.R.S 36-2606](#).

Data from AZ CSPMP is received on a weekly basis to ADHS through secure file transport and is matched against MEDSIS and AZ-PIERS data. The AZ CSPMP dataset used in this report has a start date of 1/1/2017.

For more information regarding AZ CSPMP, please visit <http://pharmacypmp.az.gov>

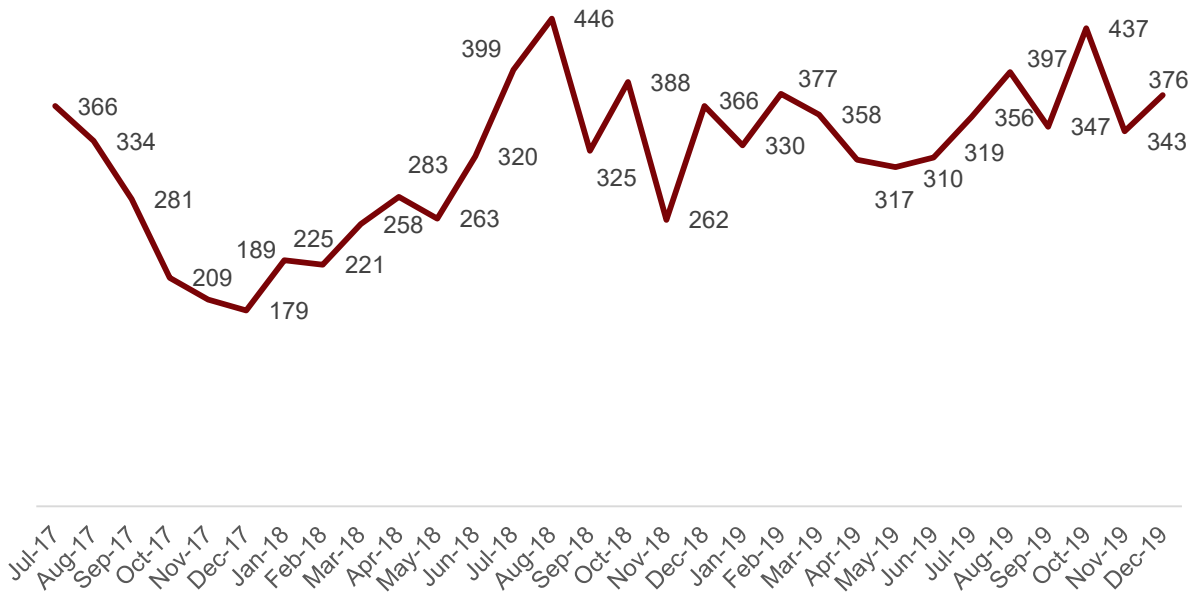
2019 changes in surveillance practice

In October 2019, ADHS reviewed processes related to the verification of opioid overdoses with and without fatality. Due to the large number of reports and resource requirements for review of individual medical records, ADHS implemented a new process utilizing data reported from healthcare reporters into MEDSIS at the time of report. This change in process reduced the burden of staff time required to verify reported cases; however also reduced the amount of available information. Cases reported since June 2019 were most impacted by this change.

ADHS will review and evaluate this surveillance change to determine necessary system and workflow changes in the future.

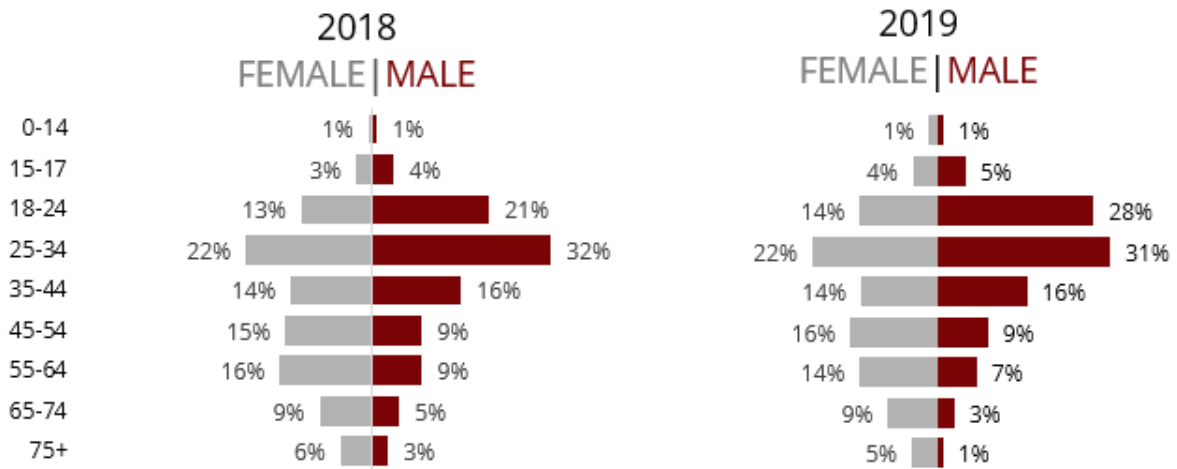
Due to changes in the surveillance practice and ADHS resources, there is a current backlog of case entry. 2019 data included in this report is considered **provisional** and may be subject to change as additional cases and reports are identified and entered into a surveillance system.

Figure 1: Verified Non-Fatal Opioid Overdoses by Month: July 1, 2017-December 31, 2019



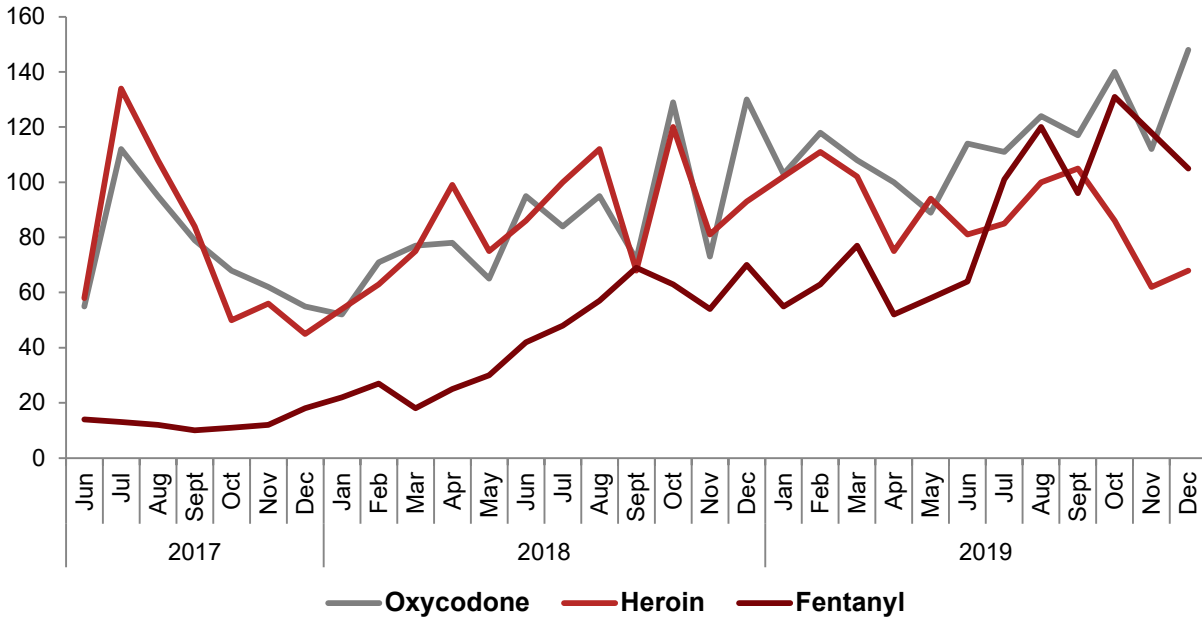
- In 2018, there were 3756 verified non-fatal opioid overdoses with an average of 313 events per month. In 2019, there were 4,267 verified non-fatal opioid overdoses with an average of 355 events per month, a 13% increase.
- Some of this increase may be due to more reports as mandatory reporting was implemented and knowledge of the reporting systems spread among reporting entities.

Figure 2: Verified Non-Fatal Opioid Overdoses by Age Group & Gender, 2018 vs. 2019.



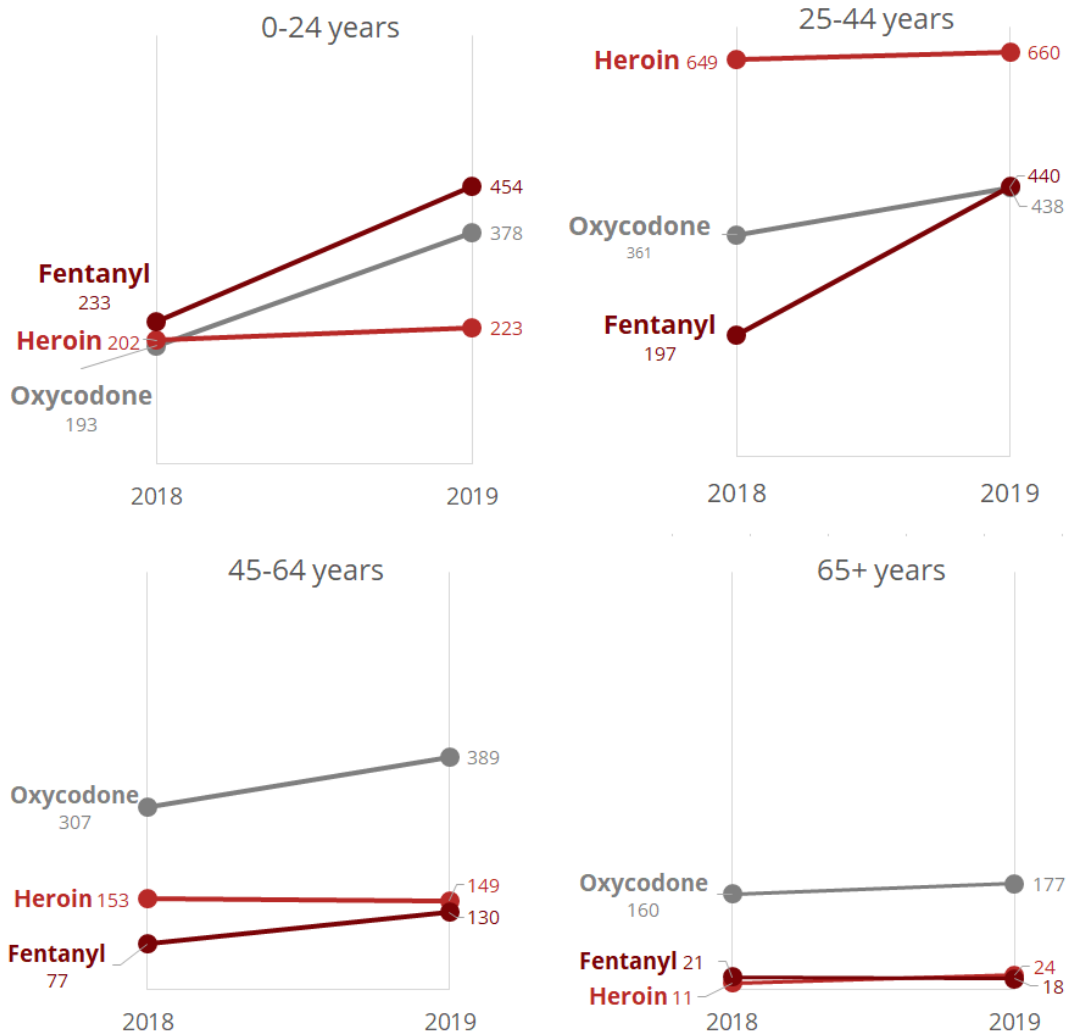
- Across 2018 and 2019, non-fatal verified opioid overdoses were more common in men and women 34 years old and younger.

Figure 3: Verified Non-Fatal Opioid Overdoses by Month for Selected Opioid Types: July 1, 2017-December 31, 2019



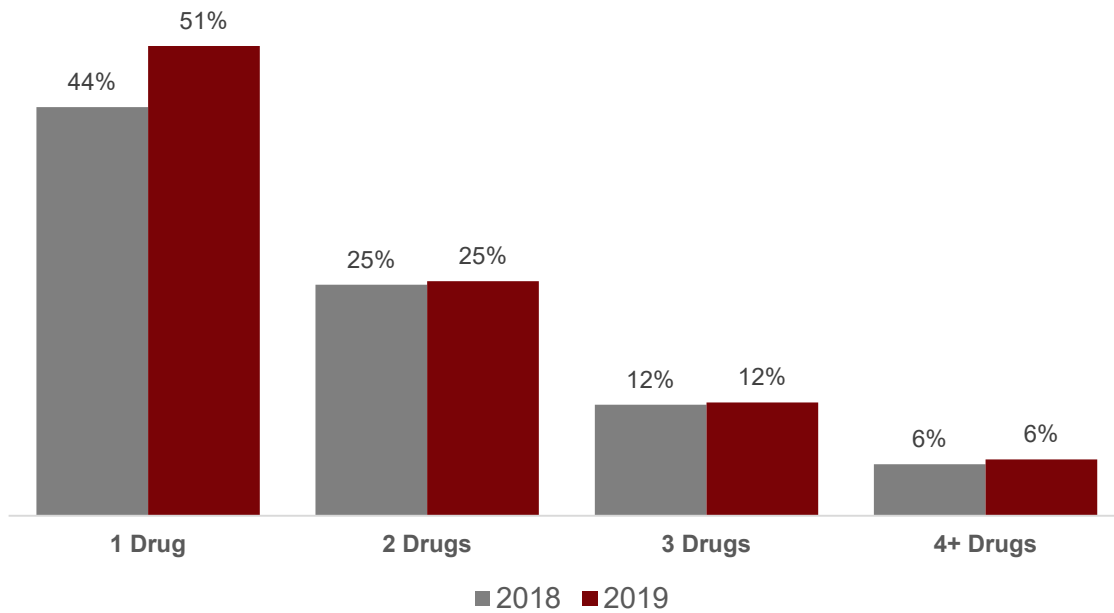
- Oxycodone and heroin account for the majority of opioids involved in verified non-fatal overdoses.
- The number of non-fatal overdoses involving fentanyl has increased since July 2017.

Figure 4: Verified Non-Fatal Opioid Overdoses by Age Group for Selected Opioid Types, 2018 vs. 2019



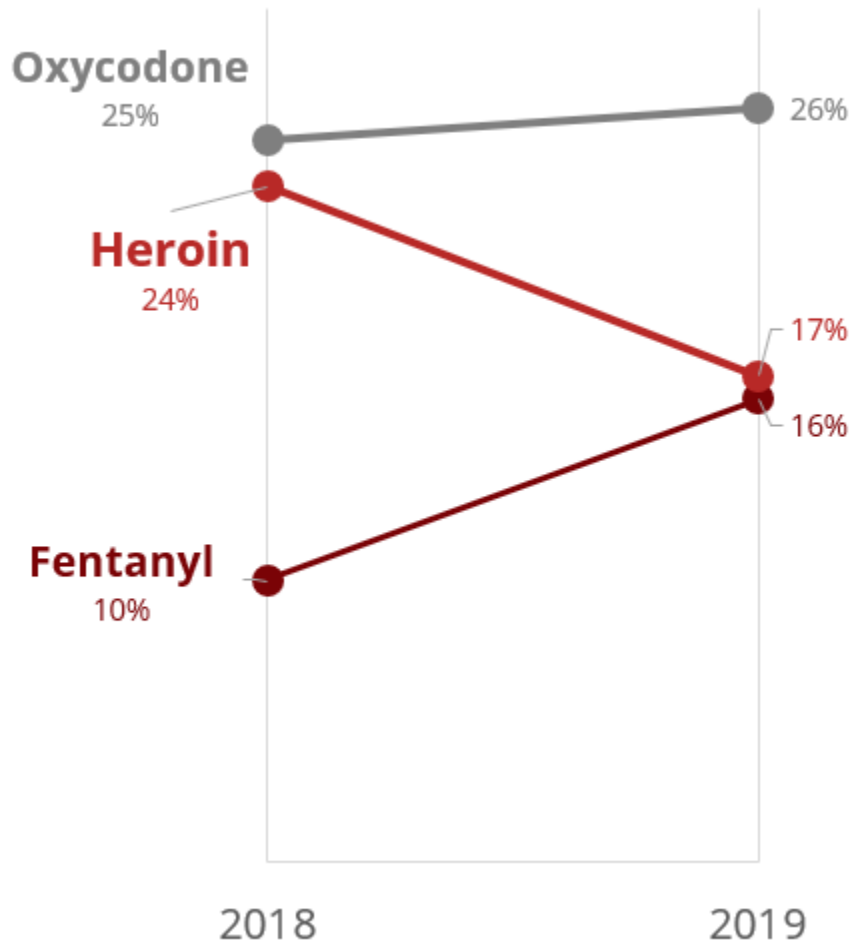
- Overdoses involving oxycodone, fentanyl, and heroin have increased in people ages 24 and under with fentanyl-involved overdoses showing the most dramatic rise.
- Heroin is the most common opioid involved in overdoses in people 25-44.
- Overdoses involving oxycodone and fentanyl have increased in people ages 25-44.
- Oxycodone is the most common opioid involved in verified overdoses in people 45 years and older.

Figure 5a: Number of Drugs Involved in Verified Non-Fatal Opioid Overdoses: 2018 vs. 2019.



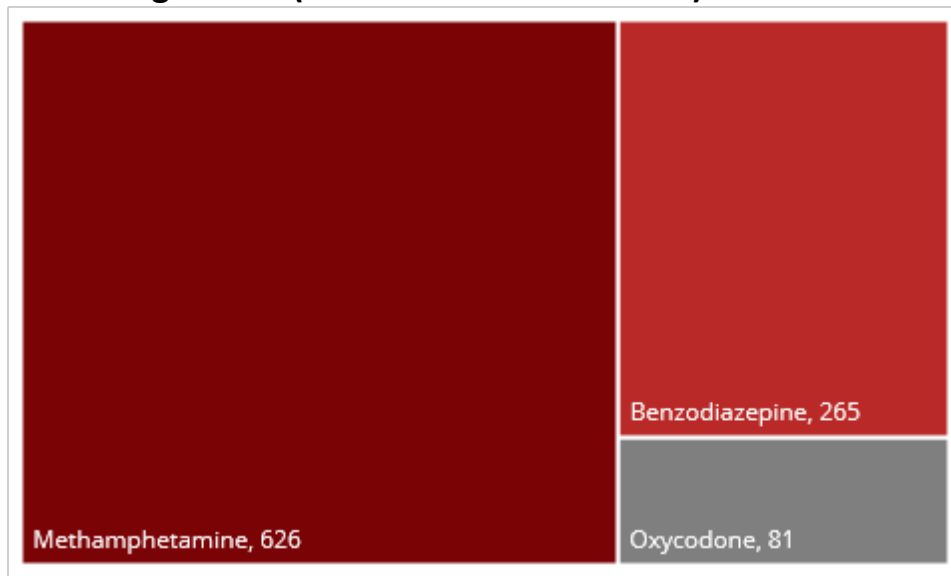
- There has been an increase in the percentage of verified overdoses where only one drug is reported to be involved from 2018 (44%) compared to 2019 (51%).

Figure 5b: Most Common Drugs Involved in Verified Non-Fatal Single Drug Opioid Overdoses: 2018 vs. 2019



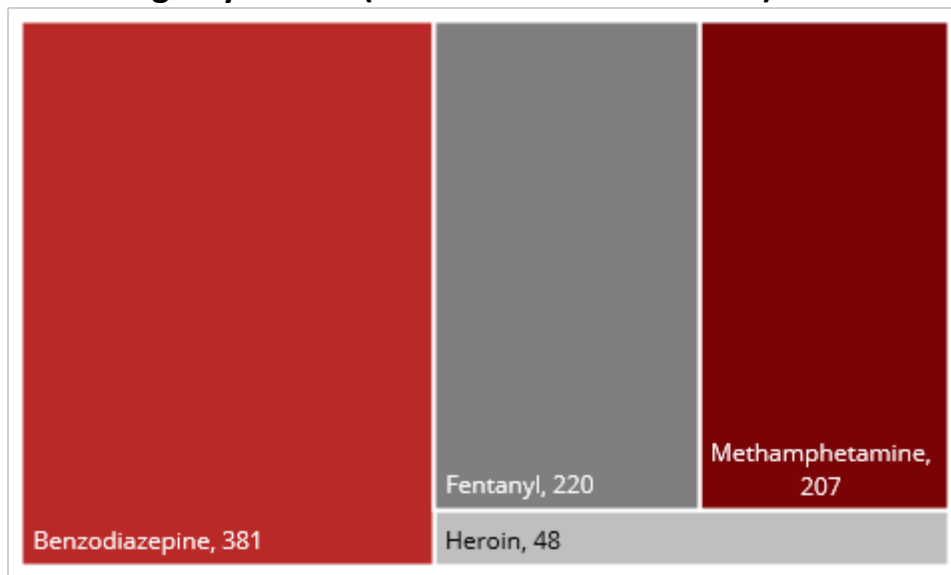
- In 2018 and 2019, oxycodone and heroin were the most common drugs involved in single drug opioid overdoses.
- Between 2018 and 2019, fentanyl involvement in single drug opioid overdoses increased from 10% to 16%.

Figure 6a: Most Common Drugs used in combination amongst verified non-fatal overdoses involving Heroin (combined 2018 and 2019)



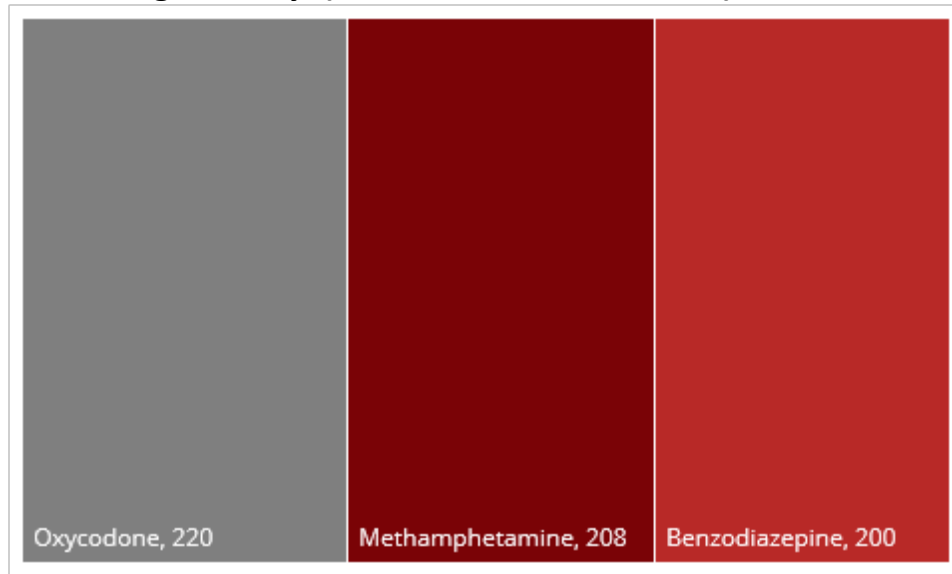
- Methamphetamine was the most commonly used combination drug in verified non-fatal overdoses involving Heroin.

Figure 6b: Most Common Drugs used in combination amongst verified non-fatal overdoses involving Oxycodone (combined 2018 and 2019)



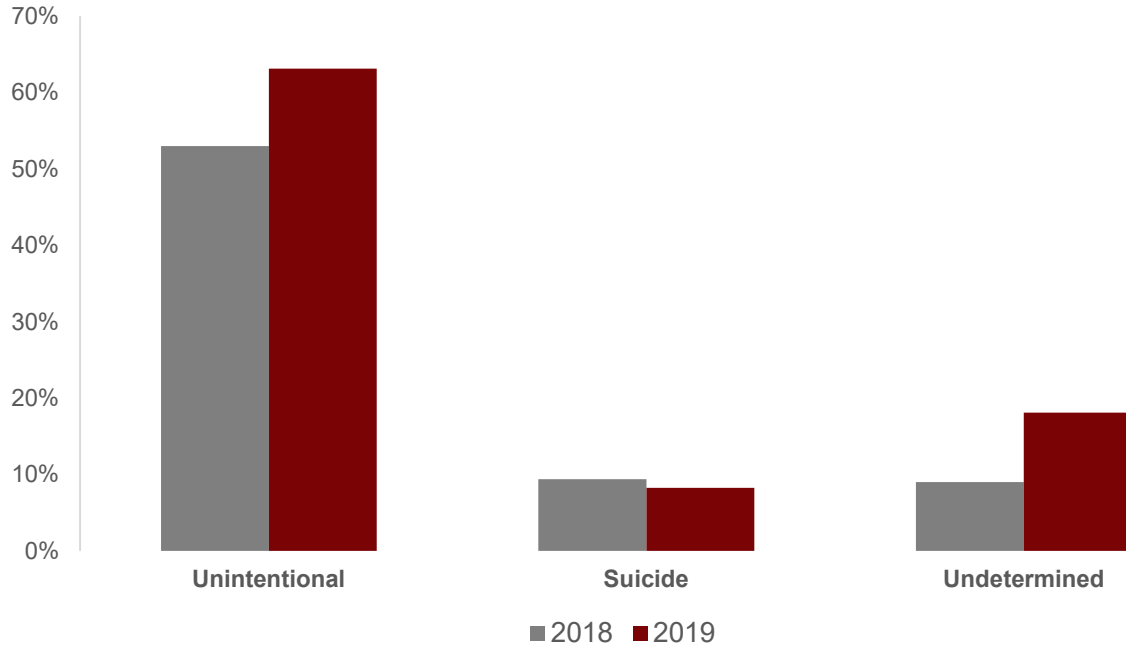
- Benzodiazepine and Fentanyl were the most commonly used combination drug in verified non-fatal overdoses involving Oxycodone.

Figure 6c: Most Common Drugs used in combination amongst verified non-fatal overdoses involving Fentanyl (combined 2018 and 2019)



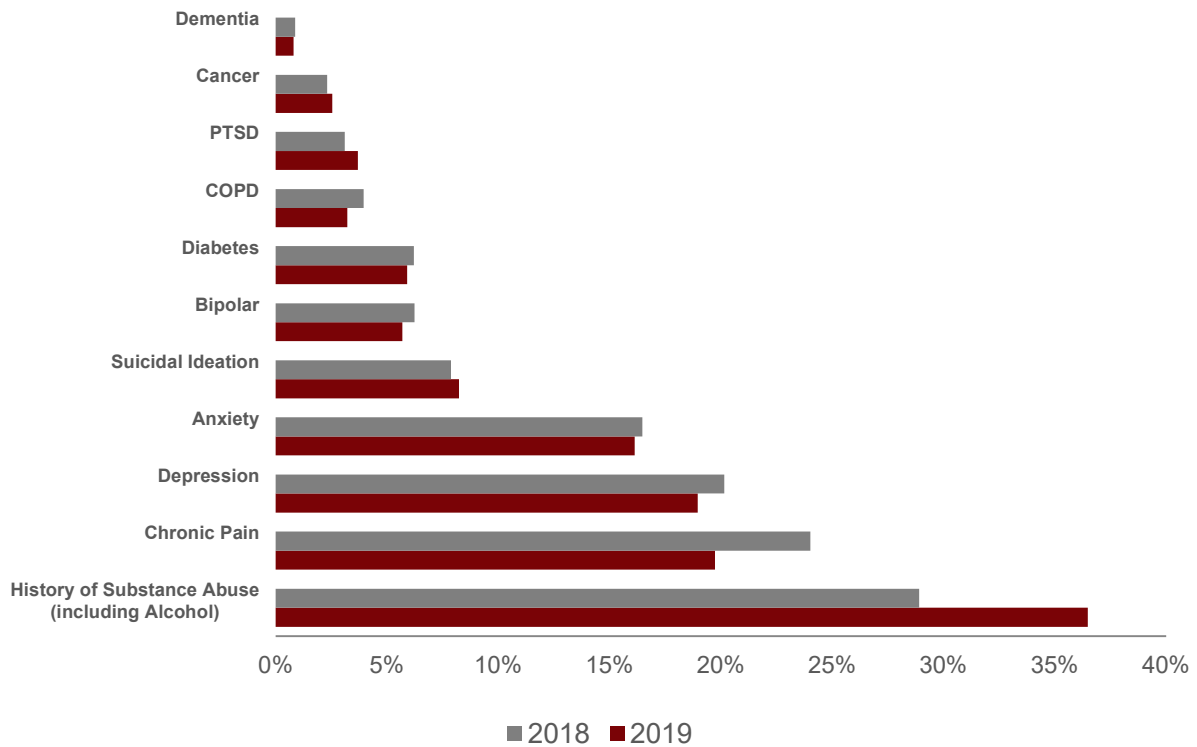
- Oxycodone, methamphetamine, and benzodiazepines were most often found in combination where Fentanyl was involved in non-fatal opioid overdoses.

Figure 7: Intent of Verified Non-Fatal Opioid Overdoses January 1, 2018-December 31, 2018 vs January 1, 2019-December 31, 2019



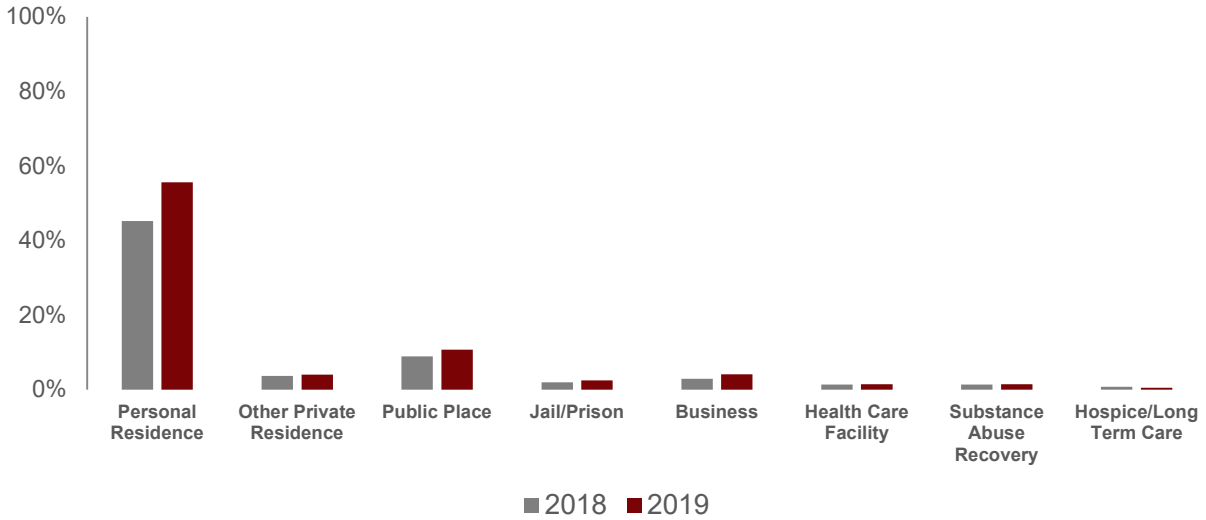
- The majority of non-fatal opioid overdoses in 2018 and 2019 were unintentional.

Figure 8: Pre-Existing Conditions Reported for Verified Non-Fatal Opioid Overdoses, January 1, 2018-December 31, 2018 vs January 1, 2019-December 31, 2019



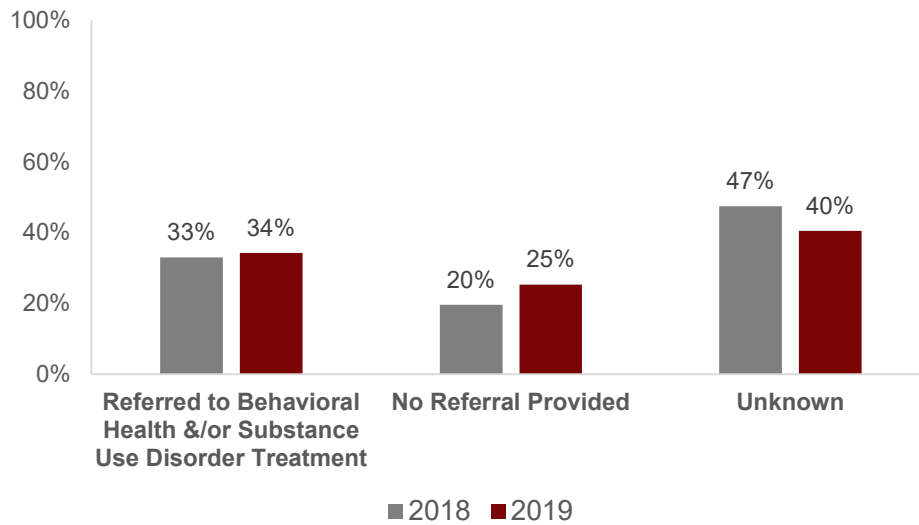
- Across 2018 and 2019, 60% of verified non-fatal opioid overdoses had at least one pre-existing condition that put them at risk.
- The most common condition for both years was a history of substance abuse (including alcohol), followed by chronic pain.
- In both time periods, approximately 30% of verified non-fatal opioid overdoses also had a history of depression, anxiety, bipolar disorder, suicidal ideation, and/or post-traumatic stress disorder (PTSD). (2018: 30.42%; 2019: 28.46%)

Figure 9: Location of Verified Non-Fatal Opioid Overdose, January 1, 2018-December 31, 2018 vs. January 1, 2019-December 31, 2019

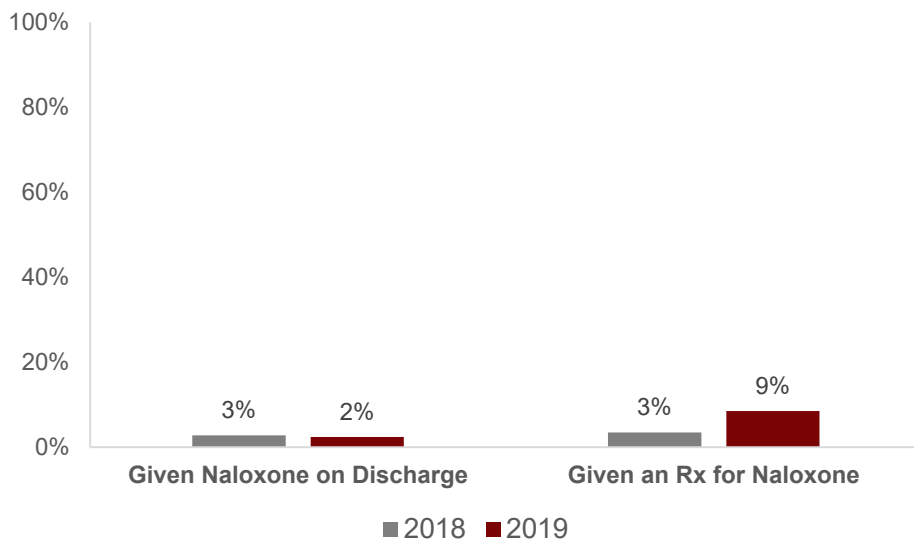


- In 2018 and 2019, approximately 50% of non-fatal verified opioid overdoses occurred in the patients' personal residence. (2019 data may be skewed due to batch classification process change – 20% of cases do not have location indicated in the investigation form compared to 6% in 2018)

Figure 10: Referral to Services for those Discharged Home from Hospital after Verified, Non-Fatal Opioid Overdose, 2018 vs. 2019

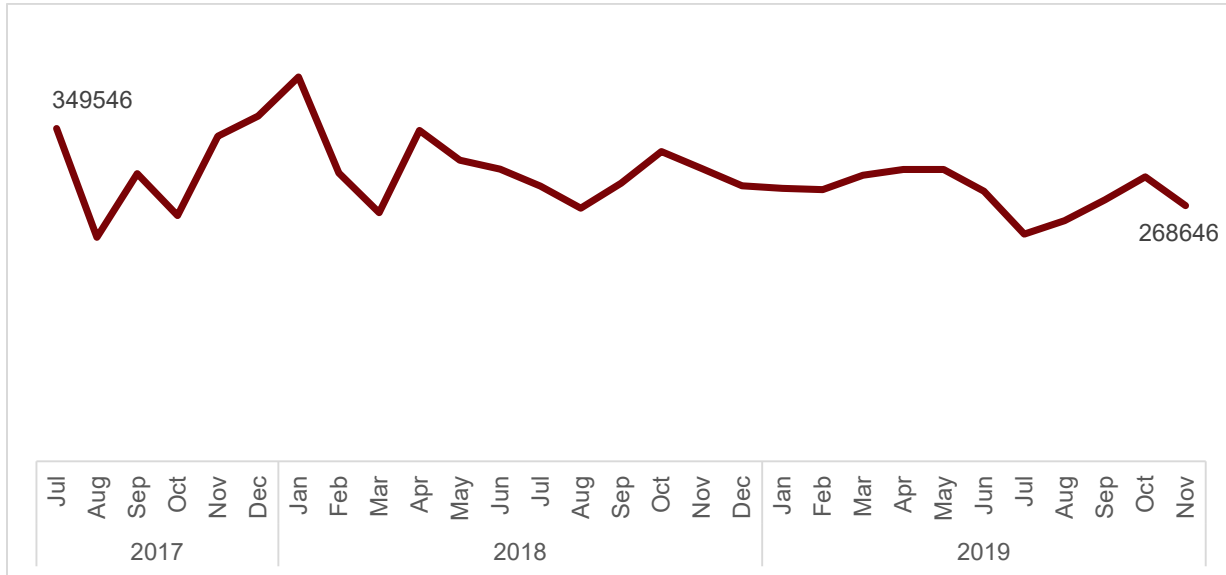


- Hospitals reported approximately 35% of verified non-fatal opioid overdose cases were referred to substance use disorder or behavioral health treatment services upon discharge in both years.



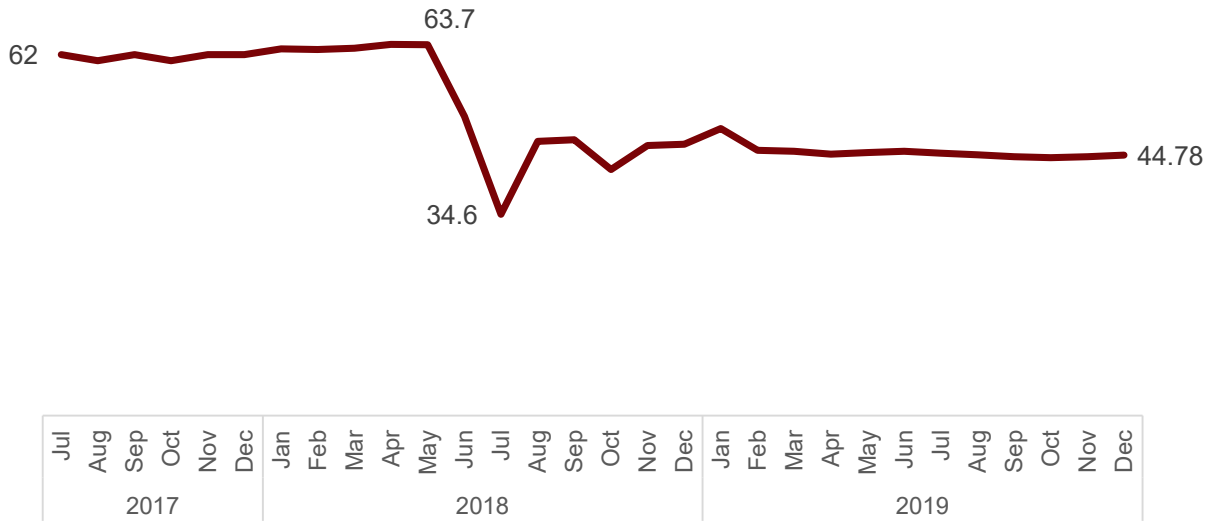
- The number of people given a prescription for naloxone to fill at a pharmacy after being discharged home after a verified, non-fatal opioid overdose increased from 3% in 2018 to 9% in 2019.

Figure 11: Opioid Prescriptions per Month: July 2017 – November 2019



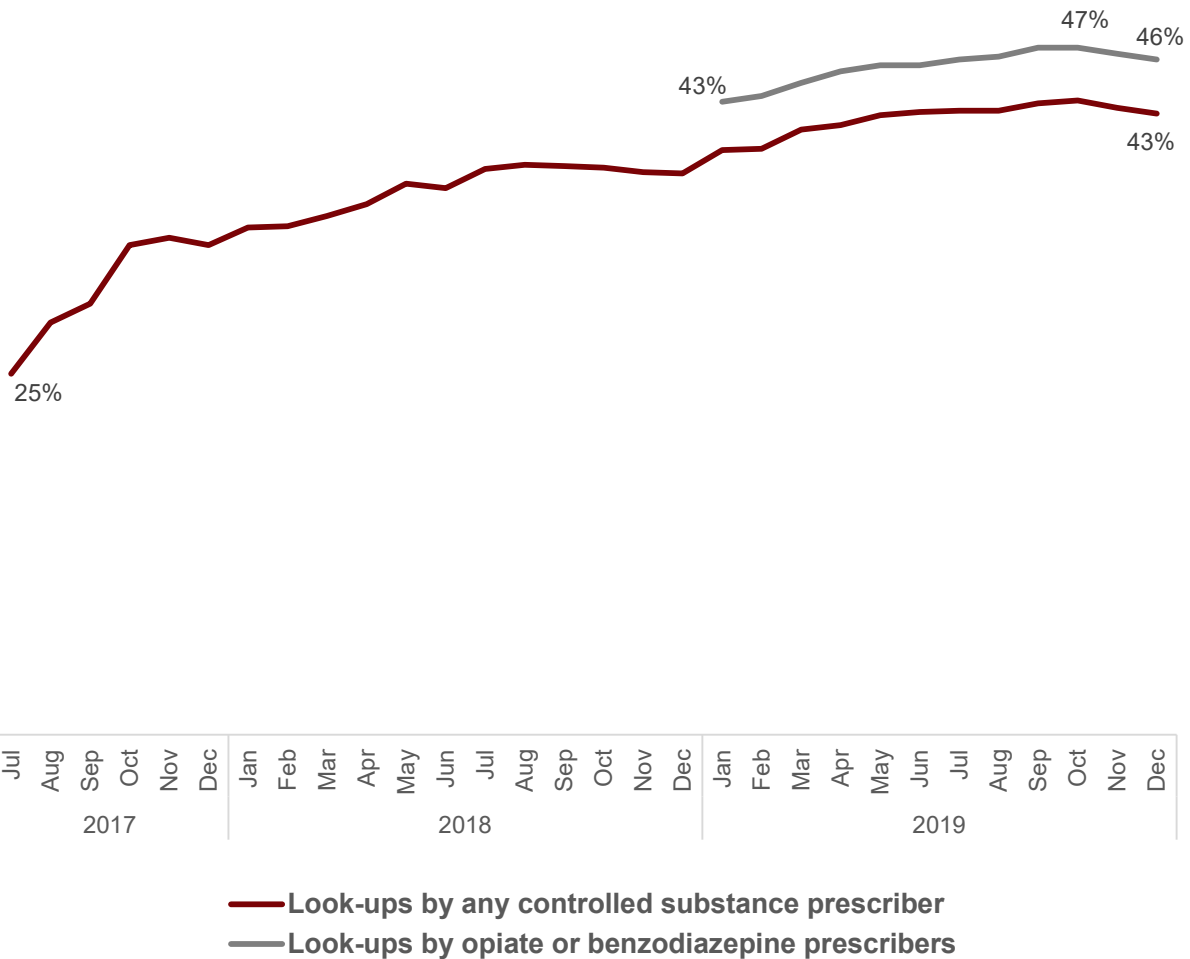
- Data from the Arizona Controlled Substances Prescription Monitoring Programs shows that the number of opioid prescriptions filled per month in Arizona has declined by 23% between July 2017 and November 2019.

Figure 12: Average Morphine Milligram Equivalent Prescribed July 2017-December 2019



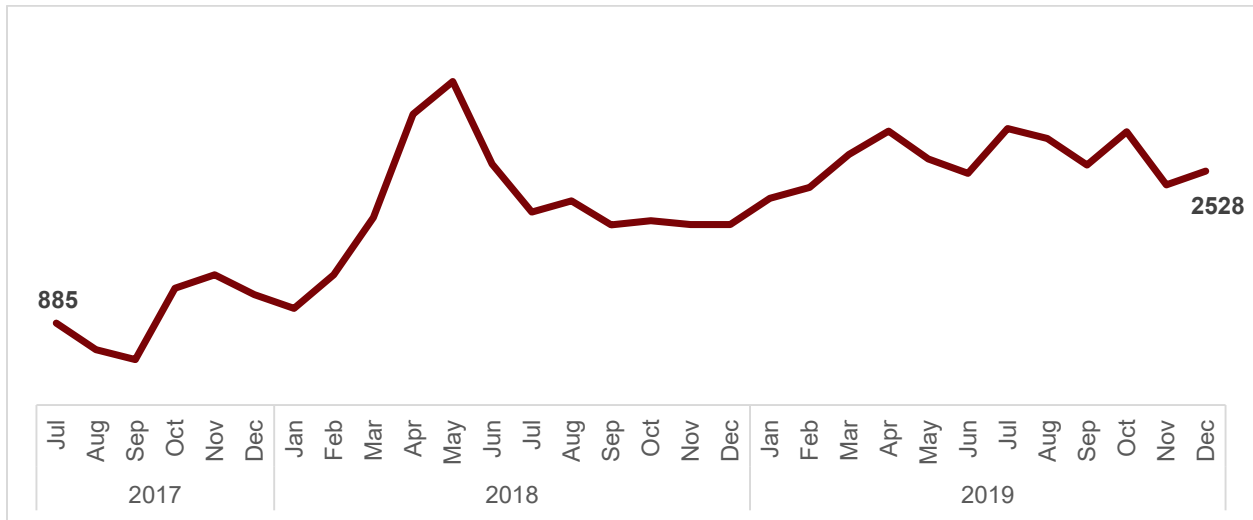
- The average number of morphine milligram equivalents (MME) prescribed with each prescription filled has decreased 28% from July 2017 (62) to December 2019 (44.78).
- The drop in average MME occurred after the Opioid Epidemic Act went into effect April 26, 2018.

Figure 13: Percent of Prescribers who Checked the Controlled Substances Prescription Monitoring Program (CSPMP) at Least Once in the Month, July 2017-December 2019



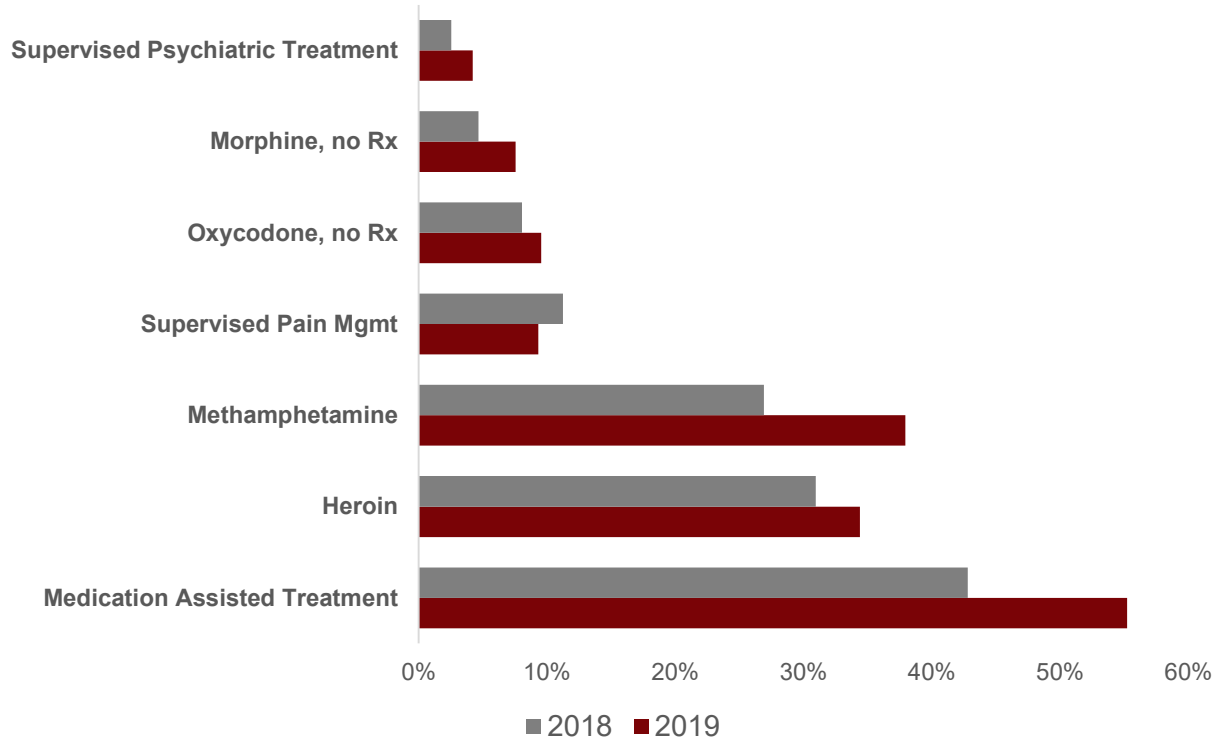
- The percent of prescribers who wrote prescriptions for controlled substances and used the Controlled Substances Prescription Monitoring Program (CSPMP) at least one time to look up a patient increased from 25% to 43%, between July 2017 and December 2019.
- The percent of prescribers who wrote prescriptions for opioids or benzodiazepines and used the Controlled Substances Prescription Monitoring Program (CSPMP) at least one time to look up a patient increased from 43.3% in January 2019 to a high of 47% in October and November 2019.

Figure 14: Naloxone Doses Dispensed by Pharmacies, July 1, 2017-June 30, 2019



- The amount of naloxone dispensed by pharmacies has increased by 185% between July 2017 and December 2019.

Figure 15: Drugs Used by Women Who Gave Birth to Infants Who Developed Neonatal Abstinence Syndrome, 2018 vs 2019



- Numerous drugs can cause neonatal abstinence syndrome.
- The majority of women were reported to have received medically assisted treatment during their pregnancies in both time periods.
- Methamphetamine and heroin were the most common drugs used without medical supervision in both time periods.
- In 2018, 472 verified NAS cases were reported compared to 451 cases in 2019, with cases still pending review.

For more data, visit www.azhealth.gov/opioids