

Background

In January 2023, the Montana Department of Public Health and Human Services (DPHHS) notified local public health agencies of a notable increase in Montana in fatal and non-fatal overdoses likely associated with non-pharmaceutical fentanyl.¹ Fentanyl is a powerful synthetic (manufactured chemical in a laboratory) opioid classified into two types; 1. pharmaceutical (prescribed by doctors to treat severe pain) and 2. illicitly manufactured fentanyl (non-pharmaceutical, distributed illegally).² Fentanyl is up to 50 times stronger than heroin and 100 stronger than morphine and is a major contributor to fatal and non-fatal overdoses in the U.S.³ Examples of non-synthetic opioids (naturally occurring) include morphine and codeine.

How are Opioids Taken and How do they Work?

Opioids can be taken as a pill, crushed pill to be snorted, lozenges, lollipops, injected, an IV, or in a form of a skin patch.⁴ When opioids enter the body, they interact with opioid receptors in the brain to block pain signals between the brain and the body producing a number of physiological responses including pain relief, well-being, and happiness known as euphoria.⁵

What is Opioid Use Disorder (OUD)?

Persons using opioids over time produces changes in the brain that lead to tolerance and dependence called opioid use disorder (OUD). OUD, sometimes called an addiction, is a chronic disease of the brain.⁶ OUD is characterized by the persistent use of opioids despite damaging consequences caused by their use. People who have OUD and stop using opioids are at increased risk of reverting to opioid use, even after years of abstinence.

How can Suspected Overdose be Reversed and Can OUD be Treated?

Naloxone is a Food and Drug Administration (FDA) approved and safe medication that can rapidly reverse a suspected opioid-related overdose. The most effective treatment for OUD is a combined use of medication and behavioral therapy.⁷

Medication for OUD (MOUD). The FDA has approved three medications for OUD: methadone, buprenorphine, and naltrexone.⁸ Individuals with OUD may continue treatment with these medications for years, decades, or even lifetime.

Counseling and behavioral therapy. Engaging in counseling and behavioral services, people with OUD learn new ways of thinking about drug use and adherence to treatment regimens⁹. This type of therapy considers several approaches including:

- Medication management
- Cognitive-behavioral therapy (CBT)
- Contingency management
- Motivational enhancement therapy
- Family counseling
- Mutual help group
- Harm reduction education.

Opioid Burden in Lewis and Clark County:

Overdose Events:

- A total of 262 suspected opioid overdose events were reported in Lewis and Clark County in just over a 5-year period (2018-Mar. 7, 2023). Out of these events, about 3% (n=7) resulted in death [Fig. 1].
- In the same time frame, naloxone, a medication used for the emergency treatment of a known or suspected overdose, was documented in 98 cases. The use of naloxone doubled from 2018 (n=13) to 2020 (n=26) [Fig. 1].
- The highest percentage of suspected opioid cases were reported in the age group 30-39 years (30.5%; n=80) [Fig. 2].
- Among the suspected overdose cases just over half (52.3%; n=137) were males. The proportion of male cases also doubled (20.6%; n=54) compared to female cases (9.9%; n=26) [Fig. 2].

Hospitalizations, Emergency Room Visits, and Prescriptions:

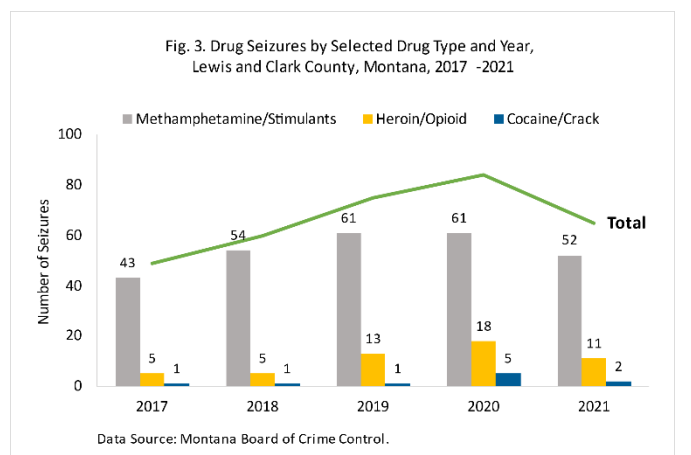
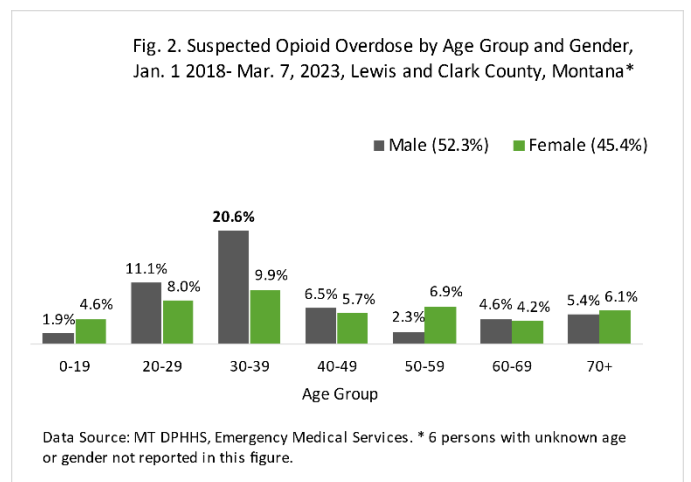
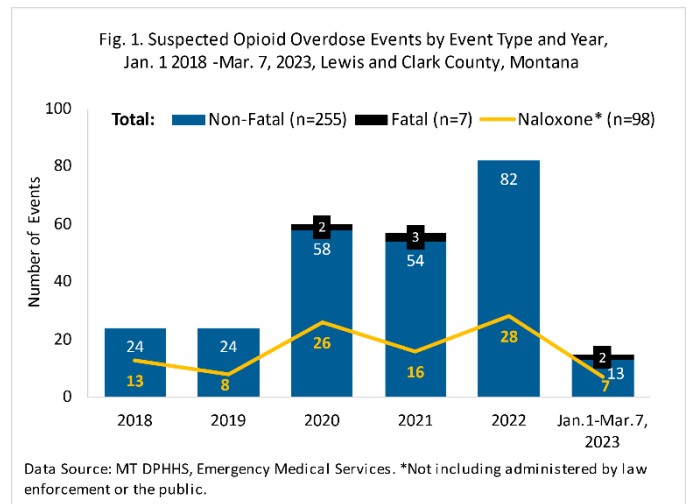
- In a 5-year period (2017-2021), there were 901 opioid-related hospitalizations statewide.¹⁰ Of those, 7.4% were Lewis and Clark County residents. During the same time frame, a total of 1,417 emergency room visits were reported in MT of which 5.6% accounted for county residents.
- The number of patients with opioid use disorder diagnosis went up by 84.5% in 3-year period from 2019 (n=103) to 2022 (n=190) in patients served by Purview Health Center.¹¹ Annually, about 82%, of these patients received MOUD treatment.
- In 2020, the overall national opioid dispensing rate had fallen to the lowest in the 15 years (43.3 per 100 persons).¹² In 2020, data for Lewis and Clark County shows at 44.7 prescriptions per 100 persons, a drop from 55.6 in 2018.

Deaths:

- In a 5-year period (2017-2021), there have been 294 overdose-related deaths statewide of which 4.4% (n=13) account for Lewis and Clark County residents. In 2021, Montana reported 103 overdose deaths, a 21.2% increase from the previous year.¹³

Crime:

- A total of 757 drug seizures occurred in Lewis and Clark County in a 5-year period (2017-2021).¹⁴ Meth/stimulants (35.8%; n=271), heroin/opioid (6.9%; n=52), and cocaine/crack (1.3%; n=10) accounted for 44% of all reported drug seizures [Fig.3].
- The number of heroin/opioid seizures in the county almost quadrupled from 5 in 2017 to 18 in 2020 [Fig.3].



References

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- ¹³ Montana Department of Public Health and Human Services. Office of Epidemiology and Scientific Support. Vital Statistics Unit.
- ¹⁴ Montana Board of Crime Control. <https://mbcc.mt.gov/Data/Montana-Reports/>