VERMONT
DEPARTMENT OF HEALTH

Treatment for Substance Use Disorder Among People Who Died of a Drug Overdose

December 2021

The State Unintentional Drug Overdose Reporting System (SUDORS) collects data about people who died of an accidental or undetermined intent drug overdose in Vermont. There were 663 deaths entered into SUDORS for 2016 through 2020, ranging from 113 to 177 deaths per year. In addition to the immediate circumstances surrounding an overdose death, SUDORS also collects information about the person's substance use and treatment history. This history is typically obtained from interviews with the person's family and friends recorded in medical examiner and law enforcement reports, so it may not reflect their full treatment history.

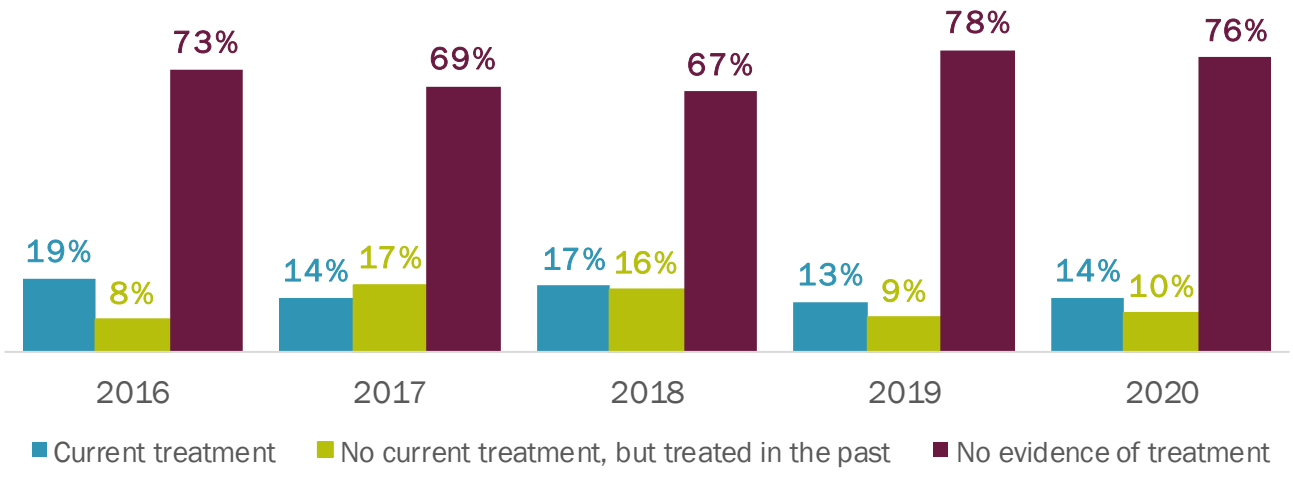
KEY POINTS

- **There is no evidence in SUDORS that most people who died of a drug overdose have ever received any form of treatment for substance use disorder.**
- **Methadone and buprenorphine were not present in the toxicology results of most people who died of a drug overdose.**

Treatment History of Those Who Died of Fatal Overdoses

The CDC/SUDORS definition of treatment for substance use disorder (SUD) includes medication-assisted therapy (MAT), inpatient or outpatient rehabilitation, cognitive and behavioral therapy, and community-based meetings. For this analysis, if there was evidence that a person was receiving treatment for SUD at the time of their fatal overdose, they were considered currently in treatment. If they had prescriptions for SUD treatment medications that were no longer current or they had not met with a professional in a month or more, treatment was classified as occurring in the past. According to SUDORS, nearly three-quarters of people who died of a drug overdose in Vermont between 2016 and 2020 had never been treated for SUD. Among those who had received treatment, the type of treatment is known for approximately one-third of individuals. The most common form of treatment is medications for SUD, followed by inpatient or outpatient rehabilitation with or without medications.

Most people who died of a drug overdose between 2016 and 2020 did not have evidence that they had ever been treated for SUD.



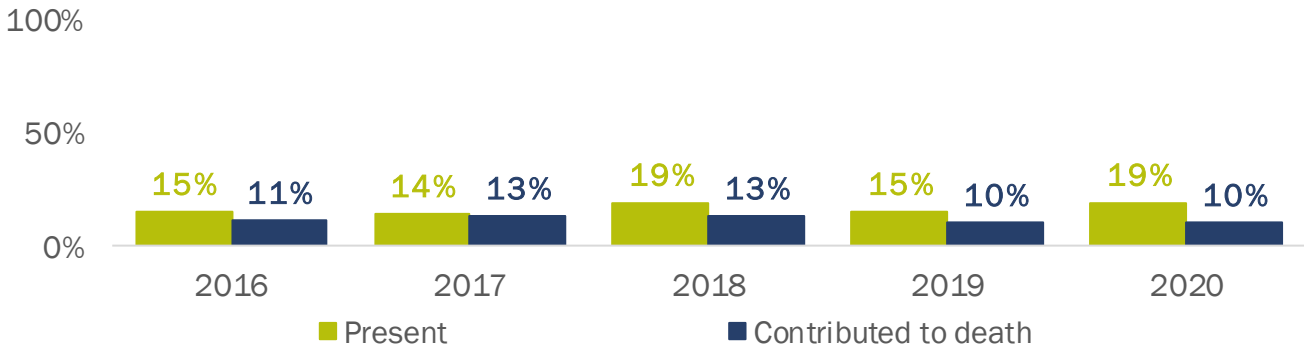
Medications for Treating SUD: Role in Fatal Overdoses

Medications are sometimes used, often in combination with cognitive therapy, to treat substance use disorder.[1] Methadone and buprenorphine are both medications used to treat opioid use disorder (OUD). These medications are safe and effective when used as prescribed, but they are sometimes misused. Buprenorphine is commonly combined with naloxone to treat OUD and reduce misuse.[2] Methadone and buprenorphine are most frequently used to treat OUD, but they may also be used to treat pain.

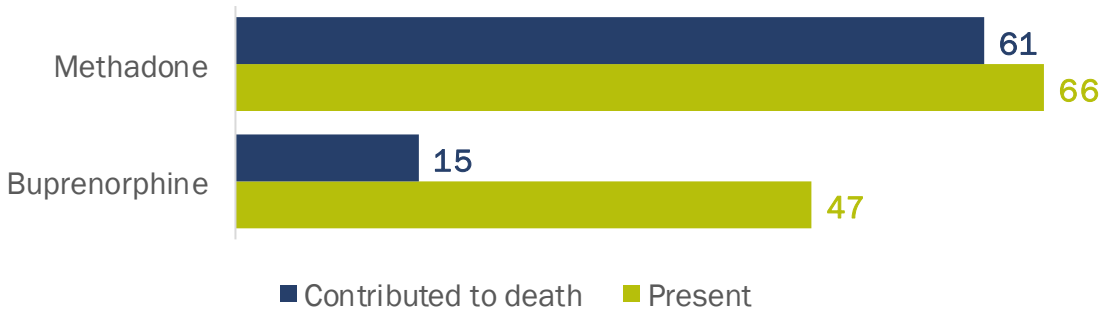
Toxicology results cannot differentiate between the forms of methadone and buprenorphine used to treat pain and those used to treat OUD. Additionally, the presence of a substance in toxicology results in and of itself does not mean that it contributed to a person's death. The medical examiner reviews all available information and determines which substance(s) contributed to an individual's death.

Methadone was present in approximately one in ten people who died from a drug overdose between 2016 and 2020.[3] Of these, methadone contributed to the death more than 90% of the time. Buprenorphine was present in toxicology results less frequently than methadone (7% vs 10%), except in 2018 (n=17 for buprenorphine; n=10 for methadone). When present, buprenorphine also contributed to death less frequently than methadone (32%).

Methadone and buprenorphine were not present in the toxicology results of most people who died of an overdose between 2016 and 2020.



Buprenorphine contributed to fewer deaths than methadone between 2016 and 2020.



Treatment status among people who died of overdose

Approximately 4 in 10 people who tested positive for medications used to treat SUD had evidence that they were currently in treatment for substance use disorder.

Why is this important?

The data suggests that we should continue to prioritize getting people into treatment because it suggests that any experience of treatment has some protective features, as most people who died were not in treatment at the time of their death. Treatment and medications for opioid use disorder can be lifesaving. Given that approximately 30% of the people who died were, or had been, engaged in treatment, there are opportunities to identify individuals who are at higher risk of unintentional overdose. If feasible, it may be beneficial to do a clinical records review of those who died. This could help to develop clinical profiles to identify who may be at increased risk of accidental overdose while in treatment, and could supplement the information available in the Vermont social autopsy reports (2017 report, 2018 report).

Key Takeaways

Most people who died of a drug overdose were not receiving treatment for substance use disorder.

Most people who died of a drug overdose in Vermont between 2016 and 2020 did not have any evidence in SUDORS that they ever received treatment for substance use disorder. While methadone was present in approximately 1 in 10 people who died from a drug overdose, it contributed to death in more than 90% of those who tested positive for the substance, compared to approximately one-third of people who tested positive for buprenorphine.

Data Source and References: State Unintentional Drug Overdose Reporting System (SUDORS)

[1] https://www.samhsa.gov/medication-assisted-treatment

[2] https://www.samhsa.gov/medication-assisted-treatment/medications-counseling-related-conditions/buprenorphine

[3] The primary metabolites of methadone and buprenorphine, 2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP) and norbuprenorphine, respectively, were included in this analysis.

For more information about the data: Lindsay Bonesteel, Lindsay.bonesteel@vermont.gov

For more information about programming: Megan Mitchell, Megan.mitchell@vermont.gov or Anthony Folland, Anthony.Folland@vermont.gov