

**Introduction:**

In response to the COVID-19 pandemic, Substance Abuse and Mental Health Services Administration (SAMHSA) guidance allowed opioid treatment programs (OTPs) greater flexibility to provide take-home medication doses to patients. This study aims to characterize trends in the rates of critical incident –safety events occurring in OTPs that are reportable to regulatory entities–across all Colorado OTPs during the COVID-19 pandemic.

**Methods:**

This study is a retrospective review of critical incidents (CIs) for patients enrolled in Colorado OTPs between the years 2017 to 2022, as recorded in Colorado Behavioral Health Administration's (BHA) Opioid Treatment Program Critical Incident Repository Dataset. March 15, 2020 was considered the start of the COVID-19 pandemic in Colorado, so only incidents which occurred from March 15-December 31 of each year were included. CI rate per 100 patients was calculated by dividing CI annual count between March 15-December 31 by the census of enrolled patients at the calendar midpoint of this period, which is August 7. Means comparison tests assessed differences in CI rates.

**Results:**

OTP patient enrollment in Colorado increased from 4,377 in 2017 to 7,327 in 2022. Overall, Medication Diversion accounted for 70% of CIs, followed by Death (14%), and Other (5%). There was a significant increase in the overall rate of CIs from 2017 to 2022 (1.1% to 3.4%). The average post-COVID CI rate was higher than pre-COVID (4.0% vs. 2.4%). There was no difference, however, in the post-COVID rate of CIs when exclusively compared to 2019 (4.0% vs. 4.1%). Post-pandemic years had significantly more CIs per month than pre-pandemic years ( $27.6 \pm 5.6$  vs  $15.8 \pm 3.5$ ). There was no difference in mean monthly CIs between 2019 and post-pandemic ( $28.5 \pm 5.3$  vs  $27.6 \pm 5.6$ ).

**Conclusions:**

There was no increase in the rate of reportable CIs in Colorado OTPs following the SAMHSA COVID-19 guidance increasing take-home doses when comparing 2019 to post-pandemic years. The notable increase in CI incidence occurred from 2018-2019, predating the pandemic. These data offer a measure of reassurance for the safety of increased take-home methadone doses. There should be further consideration of how a greater number of take-home doses might benefit both patients and OTPs.

**Key Words:** COVID-19, opioid use disorder (OUD), medications for opioid use disorder (MOUD), methadone, opioid treatment programs (OTPs), take-home doses, Colorado, SAMHSA, access to treatment