



Three-Year Hospitalization Trends: Opioids, Alcohol, Cocaine and Amphetamines

This research brief examines three-year trends in hospital admissions related to opioids, alcohol, cocaine and amphetamines (calendar years 2017, 2018 and 2019). It includes Pennsylvania residents, age 15 and older, who were admitted to a Pennsylvania general acute care hospital. This analysis does not include substance-related encounters that did not result in a hospital admission such as those treated in the emergency department and not admitted to the hospital and substance-related deaths that occurred outside the hospital setting.

This research brief includes hospitalization data for both **overdose** and **substance use disorder**:

Overdose hospitalizations are those where the patient was admitted to the hospital for an overdose.

Substance use disorder includes hospital admissions where substance use disorder (dependence and abuse) was the primary reason for admission—usually because the patient was experiencing withdrawal or other symptoms—or hospitalizations where the patient was admitted for another condition but also had substance use disorder as a co-occurring condition.

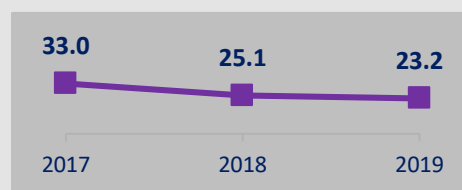
Key Points

- Among the substances analyzed in this brief, the largest *decrease* in hospitalization rates was for opioid overdose (29.7% decrease).
- The largest *increase* in hospitalization rates was for amphetamine overdose (68.0% increase), although the number of hospitalizations for amphetamine overdose was relatively small (391 in 2019) when compared to opioids and cocaine.
- The number of hospital admissions for cocaine overdose rose from 944 in 2017 to 1,204 in 2018 and dropped to 1,073 in 2019.
- The highest number of hospitalizations was for those related to alcohol use disorder (over 60,000 a year for each of the three years studied).

➤ Opioid Overdose

The hospitalization rate for opioid overdose **decreased 29.7%** between 2017 and 2019 (graph 1). The number of hospital admissions dropped from 3,500 in 2017 to 2,667 in 2018 and 2,468 in 2019.

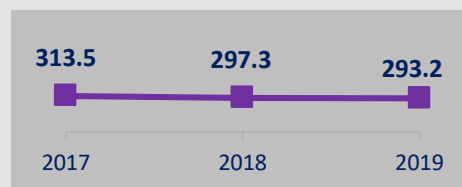
Graph 1: Opioid Overdose Hospitalizations (Rate per 100,000 PA Residents)



➤ Opioid Use Disorder

The hospitalization rate for opioid use disorder **decreased 6.5%** between 2017 and 2019 (graph 2). The number of hospital admissions dropped from 33,212 in 2017 to 31,556 in 2018 and 31,162 in 2019.

Graph 2: Opioid Use Disorder Hospitalizations (Rate per 100,000 PA Residents)



➤ Alcohol Overdose

Overall, the hospitalization rate for alcohol overdose **increased 29.9%** between 2017 and 2019 (graph 3). The number of hospital admissions rose from 234 in 2017 to 338 in 2018 and dropped to 305 in 2019.

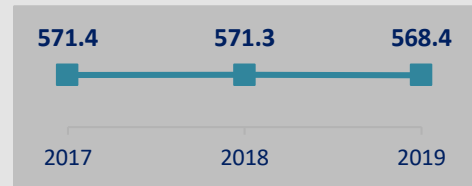
Graph 3: Alcohol Overdose Hospitalizations
(Rate per 100,000 PA Residents)



➤ Alcohol Use Disorder

The hospitalization rate for alcohol use disorder remained fairly steady (**decreased 0.5%**) between 2017 and 2019 (graph 4). The lowest number of hospital admissions among the three years was 60,416 in 2019. The numbers were 60,535 and 60,645 in 2017 and 2018, respectively.

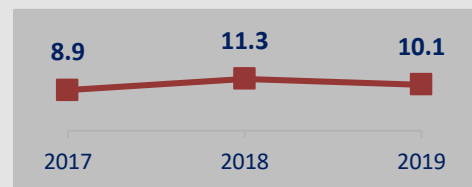
Graph 4: Alcohol Use Disorder Hospitalizations
(Rate per 100,000 PA Residents)



➤ Cocaine Overdose

Overall, the hospitalization rate for cocaine overdose **increased 13.3%** between 2017 and 2019 (graph 5). The number of hospital admissions rose from 944 in 2017 to 1,204 in 2018 and dropped to 1,073 in 2019.

Graph 5: Cocaine Overdose Hospitalizations
(Rate per 100,000 PA Residents)



➤ Cocaine Use Disorder

Overall, the hospitalization rate for cocaine use disorder **decreased 1.7%** between 2017 and 2019 (graph 6). The number of hospital admissions rose from 17,683 in 2017 to 18,451 in 2018 and dropped to 17,445 in 2019.

Graph 6: Cocaine Use Disorder Hospitalizations
(Rate per 100,000 PA Residents)



➤ Amphetamine Overdose

Between 2017 and 2019, the hospitalization rate for amphetamine overdose **increased 68.0%** (graph 7). The number of hospital admissions rose from 232 in 2017 to 314 in 2018 and to 391 in 2019.

Graph 7: Amphetamine Overdose Hospitalizations
(Rate per 100,000 PA Residents)



➤ Amphetamine Use Disorder

The hospitalization rate for amphetamine use disorder **increased 62.6%** between 2017 and 2019 (graph 8). The number of hospital admissions rose from 4,149 in 2017 to 5,442 in 2018 and to 6,770 in 2019.

Graph 8: Amphetamine Use Disorder Hospitalizations
(Rate per 100,000 PA Residents)

