



Council of State and Territorial Epidemiologist

Drug Overdose Indicator

Nonfatal Drug Overdose Hospitalizations OR ED Visits

Numerator for Nonfatal Drug Overdose Hospitalizations:

 Nonfatal hospitalizations from the Drug Overdose hospitalizations with any of the following ICD-10-CM diagnosis codes in any field.

Numerator for Nonfatal Drug Overdose ED Visits:

• Nonfatal ED visits from the Drug Overdose ED visit subset with any of the following ICD-10-CM diagnosis codes in any field.

Codes* for Nonfatal Drug Overdose

Indicator	Any Mention of Diagnosis	AND a 5 th /6 th character of:
All drug overdoses	T36-T50: Poisoning by drugs, medicaments and biological substances	For T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9, a 5th character; for all others, a 6th character 1: Accidental (unintentional) 2: Intentional self-harm 3: Assault 4: Undetermined intent Does not include: 5: Adverse effect 6: Underdosing
Opioid overdoses	T40.0X: Poisoning by opium T40.1X: Poisoning by heroin T40.2X: Poisoning by other opioids T40.3X: Poisoning by methadone T40.4X: Poisoning by synthetic narcotics T40.60: Poisoning by unspecified narcotics T40.69: Poisoning by other narcotics	
Heroin overdoses	T40.1X: Poisoning by heroin	
Stimulant overdoses	T40.5X: Poisoning by cocaine T43.60: Poisoning by unspecified psychostimulants T43.61: Poisoning by caffeine T43.62: Poisoning by amphetamines T43.63: Poisoning by methylphenidate T43.64: Poisoning by ecstasy T43.69: Poisoning by other psychostimulants	

^{*7}th character of A or missing (reflects initial encounter, active treatment)

Denominator:

 Midyear population for the calendar year under surveillance obtained from the U.S. Census Bureau or suitable alternative.

Measures of frequency:

- Annual number of hospitalizations or ED visits, by age group and sex.
- Annual age-adjusted rates, overall and by sex, standardized by the direct method to the year 2000 standard U.S. population.^{2,11}

Period for case definition:

Calendar year based on date of discharge.

Indicator notes:

- The Drug Overdose Indicators for use with hospitalization and ED visits data include cases with an injury diagnosis code in any field. For hospitalization indicators, this broad definition is NOT in line with the other injury hospitalization indicators, where the injury subset is restricted to cases where the principal diagnosis is injury. The unique hospitalization definition for Drug Overdose indicators reflects the recommendations and findings of the CSTE ICD-10-CM Drug Poisoning Indicators Workgroup. For ED visit indicators, this broad definition is in line with the other injury ED indicators presented in this toolkit.
- The ED visit indicator does not include cases that were admitted to the hospital.
- Using an "any mention" approach may reduce the specificity of the indicators. The sensitivity and specificity of these indicators may vary by year, hospital location, and drug type.

Limitations of data sources:

- Overdoses that result in hospitalizations or ED visits represent only a portion of the overall burden of drug overdose.
- Indicators in ICD-9-CM are not comparable to ICD-10-CM.
- The accuracy of indicators based on codes found in hospitalization and ED visit data are limited by the completeness and quality of coding.