

Definitions from ICD-10-CM Data

Fatal Overdose

Death certificate ICD-10 codes are scanned to identify overdose fatalities of Kentucky residents. A drug overdose death was defined as an event that included an underlying cause of death code falling within the following ranges: X40–X44, X60–X64, X85, or Y10–Y14. Note that one overdose event may be coded with multiple codes for different drug types, thus counts are not mutually exclusive. Drug overdose deaths are identified by drug type using the following ICD-10 codes:

Any Opioid

- T40.0: Poisoning by opium
- T40.1: Poisoning by heroin
- T40.2: Poisoning by other opioids
- T40.3: Poisoning by methadone
- T40.4: Poisoning by synthetic narcotics and
- T40.6: Poisoning by unspecified or other narcotics

Heroin

- T40.1: Poisoning by heroin

Non-Heroin Opioid

- T40.0: Poisoning by opium
- T40.2: Poisoning by other opioids
- T40.3: Poisoning by methadone
- T40.4: Poisoning by synthetic narcotics
- T40.60: Poisoning by unspecified narcotics and
- T40.69: Poisoning by other narcotics

Stimulant

- T40.5: 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 and
- T43.69: Poisoning by other psychostimulants

Cocaine

- T40.5: Poisoning by cocaine

Non-Cocaine Stimulant

- 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 and
- T43.69: Poisoning by other psychostimulants

Nonfatal Overdose-Related ED Visits

Nonfatal overdose-related ED visits are drug overdoses that present in the ED, defined by any mention of those categorized codes in the discharge paperwork, and survive the overdose event. Note that one overdose event may be coded with multiple codes for different drug types, thus counts are not mutually exclusive. See below for diagnosis codes. For T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9, a 5th character of the following—and for all other codes a 6th character of the following—is required:

- 1: Accidental (unintentional)
- 2: Intentional self-harm
- 3: Assault or
- 4: Undetermined intent.

Note: 5th or 6th characters of “5” (denoting adverse effect) or “6” (denoting underdosing) are excluded from overdose-related counts.

If present, a 7th character of “A” is required, indicating an initial encounter for active treatment.

Any Drug

T36–T50: Poisoning by drugs, medicaments, and biological substances

Any Opioid

- 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 and
- T40.69: Poisoning by other narcotics

Heroin

- T40.1X: Poisoning by heroin

Non-Heroin Opioid

- T40.0X: Poisoning by opium
- T40.2X: Poisoning by other opioids
- T40.3X: Poisoning by methadone
- T40.4X: Poisoning by synthetic narcotics
- T40.60: Poisoning by unspecified narcotics and
- T40.69: Poisoning by other narcotics

Stimulant

- 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 and
- T43.69: Poisoning by other psychostimulants

Cocaine

- T40.5X: Poisoning by cocaine

Non-Cocaine Stimulant

- 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 and
T43.69: Poisoning by other psychostimulants

Substance Use Disorder Diagnosis

This indicator is meant to capture ED visits or inpatient hospitalizations with a substance use disorder diagnosis (not necessarily the initial diagnosis—any time the code is used for billing) in any diagnosis field. **Note that alcohol related disorders, nicotine dependence, and inhalant related disorders are excluded.** ED or inpatient hospitalization records are scanned for the following ICD-10-CM codes:

Any Opioid

F11: Opioid related disorders
F12: Cannabis related disorders
F13: Sedative, hypnotic, or anxiolytic related disorders
F14: Cocaine related disorders
F15: Other stimulant related disorders
F16: Hallucinogen related disorders and
F19: Other psychoactive substance related disorders

Drug-Exposed Inpatient Hospitalization Births

Neonatal Abstinence Syndrome Birth

Both codes must be present for an inpatient hospitalization to be counted. **Also note that neonates are group by their year of BIRTH, not discharge (unlike the other ED and inpatient indicators).** For example, an infant born with NAS at the end of 2019, but discharged in the first quarter of 2020, will be included in the 2019 count. Thus, if available, inpatient data from the first quarter of the year following the final was pulled to allow for those babies discharged later. If not available, counts will be marked with ^^.

P96.1: Neonatal withdrawal symptoms from maternal use of drugs of addiction AND
Z38: Liveborn infant according to place of birth and type of delivery

Infectious Disease

Hepatitis A

B15.0: Hepatitis A with hepatic coma and
B15.9: Hepatitis A without hepatic coma

Hepatitis C

B17.10: Acute hepatitis C without hepatic coma
B17.11: Acute hepatitis C with hepatic coma
B18.2: Chronic viral hepatitis C
B19.20: Unspecified viral hepatitis C without hepatic coma
B19.21: Unspecified viral hepatitis C with hepatic coma and
Z22.52: Carrier of viral hepatitis C

Human Immunodeficiency Virus (HIV) Disease

B20: Human immunodeficiency virus (HIV) disease and
Z21: Asymptomatic human immunodeficiency virus (HIV) infection status

Endocarditis

B37.6: Candidal endocarditis

I33.0: Acute and subacute infective endocarditis
I33.9: Acute and subacute infective endocarditis, unspecified
I38: Endocarditis, valve unspecified
I39: Endocarditis and heart valve disorders in diseases classified elsewhere and
A32.82: Listerial endocarditis

Hepatitis A with Drug-Related Comorbidity

Any ICD-10-CM code found in **Drug(s) with Potential for Abuse and Dependence** AND one or more of the ICD-10-CM codes found in **Hepatitis A**.

Hepatitis C with Drug-Related Comorbidity

Any ICD-10-CM code found in **Drug(s) with Potential for Abuse and Dependence** AND one or more of the ICD-10-CM codes found in **Hepatitis C**.

Human Immunodeficiency Virus with Drug-Related Comorbidity

Any ICD-10-CM code found in **Drug(s) with Potential for Abuse and Dependence** AND one or more of the ICD-10-CM codes found in **Human Immunodeficiency Virus (HIV) Disease**.

Endocarditis with Drug-Related Comorbidity

Any ICD-10-CM code found in **Drug(s) with Potential for Abuse and Dependence** AND one or more of the ICD-10-CM codes found in **Endocarditis**.

Co-Occurring Drug-Related Diagnosis: Drug(s) with Potential for Abuse and Dependence

The Council of State and Territorial Epidemiologists' (CSTE) Indicator 7 definition was used (see below for codes). Both ED and inpatient regular expressions take an "any mention" approach and scan all diagnosis codes included in discharge. Infectious disease-related ED visits or inpatient hospitalizations with co-occurring drug-related diagnosis have both an infectious disease code and one of the following codes.

F11.1–F11.9: Opioid-related disorders
F12.1–F12.9: Cannabis-related disorders
F13.1–F13.9: Sedative-, hypnotic-, or anxiolytic related disorders
F14.1–F14.9: Cocaine-related disorders
F15.1–F15.9: Other stimulant-related disorders
F16.1–F16.9: Hallucinogen-related disorders
F19.1–F19.9: Other psychoactive substance-related disorders
O99.32: Drug use complicating pregnancy, childbirth, and the puerperium
P04.4: Newborn suspected to be affected by maternal use of drugs of addiction
P96.1: Neonatal withdrawal symptoms from maternal use of drugs of addiction
T40.0–T40.9: Poisoning by narcotics and hallucinogens
T42.3: Poisoning by barbiturates
T42.4: Poisoning by benzodiazepines
T42.6: Poisoning by other antiepileptic and sedative-hypnotic drugs
T42.7: Poisoning by unspecified antiepileptic and sedative-hypnotic drugs and
T43.6: Poisoning by psychostimulants

For all T codes, adverse effects, underdosing, and encounters due to sequela are excluded.