



Montana Injury Prevention Program: Injury Indicator Definitions

This document is for use with the Montana Office of Vital Statistics (OVS) death certificate data (fatal injuries) and Montana Hospital Discharge Data System (MHDDS) emergency department (ED) and hospitalization data (nonfatal injuries)

Injury Dataset Preparation

Preparing the fatality injury subset

- If the underlying cause of death field contains an injury external cause code, then include the record in the fatality injury subset
 - ICD-10 External Cause of Injury Codes – Fatalities

Preparing the hospitalization injury subset

- If the primary diagnosis field contains an injury diagnosis code, then include the record in the hospitalization injury subset
 - ICD-10-CM Injury diagnosis codes (S & T codes) included for injury surveillance

Preparing the ED injury subset

- If any ICD-coded field contains an injury diagnosis code or an external cause of injury code, then include the record in the ED injury subset
 - ICD-10-CM Injury diagnosis codes (S & T codes) included for injury surveillance
 - ICD-10-CM External cause of injury codes (V, W, X, Y codes) included for injury surveillance



ICD-10 External Cause of Injury Codes (Fatal)

| ICD-10 Codes | Description |
|--------------------------------|----------------------|
| V01-Y36, Y85-Y87, Y89, U01-U03 | Injury and poisoning |

Regular Expression

`^V|^W|^X|^Y[0-2]|^Y3[0-6]|^Y8[567]|^Y89|^U0[1-3]`

The Drug overdose subset: X40-X44, X60-X64, X85, Y10-Y14



ICD-10-CM Injury diagnosis codes (S & T codes) included for injury surveillance (Nonfatal)

| ICD-10-CM Codes* | Description |
|--|--|
| S00-S99 | Anatomic injuries |
| T07-T34 | Foreign bodies, burns, corrosions, frostbite |
| T36-T50 with an intent character of 1, 2, 3, or 4 <i>Note: Intent information is captured in the 5th character of the following codes: T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9. Intent is captured in 6th character of all other T36-T50 codes.</i> | Poisoning by drugs, medicaments, and biological substances (Includes unintentional, intentional self-harm, assault, and underdetermined intents; Excludes adverse effects and underdosing) |
| T51-T65 | Toxic effects of substances nonmedicinal as to source |
| T66-T76 | Other and unspecified effects of external causes |
| T79 | Certain early complications of trauma, not elsewhere classified |
| O9A.2-O9A.5 | Traumatic injuries and abuse complicating pregnancy, childbirth, and the puerperium |
| T84.04, M97 | Periprosthetic fracture around internal prosthetic joint |

*7th character of A, B, C, or missing (reflects initial encounter, active treatment). Exceptions: T30-T32 have 4-5 characters only, O9A.2-O9A.5 have 5-6 characters only, U07.0 has 4 characters, R45.88 has 5 characters, T07, T14.8, T14.90, T14.91 have 3-5 characters if using data prior to FY2018

Regular Expression

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(S\d...|(T3[679]9|T414|T427|T4[3579]9)[1-4].!(?(T3[679]9|T414|T427|T4[3579]9))(T3[6-9]|T4[0-9]|T50)..[1-4]|(T1[5-9]|T2.|T3[34]|T5[1-9]|T6.|T7[0-6]|T79|M97)...|T8404.|O9A[2-5].{1,2}|T3[0-2].{1,2}|T07(...)?|T148(...)?|T149[01](.A?)(A|B|C|$|\b)
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FY2017 Changes affecting injury diagnosis codes (effective Oct 1, 2016):

- T84.04 code retired and replaced by M97

FY2018 Changes affecting injury diagnosis codes (effective Oct 1, 2017):

- T07 code retired and replaced by T07xxxA, T07xxxD, T07xxxS
- T14.8 code retired and replaced by T14.8xxA, T14.8xxD, T14.8xxS
- T14.90 code retired and replaced by T14.90xA, T14.90xD, T14.90xS
- T14.91 code retired and replaced by T14.91xA, T14.91xD, T14.91xS

FY2019 Changes affecting injury diagnosis codes (effective Oct 1, 2018)

- None

FY2020 Changes affecting injury diagnosis codes (effective Oct 1, 2019)

- None

FY2021 Changes affecting injury diagnosis codes (effective Oct 1, 2020)

- None

FY2022 Changes affecting injury diagnosis codes (effective Oct 1, 2021)

- U07.0 vaping-related disorder was introduced to the ICD-10-CM on an emergency basis on April 1, 2020 and was added to injury diagnosis matrix in FY 22 (*This code is NOT added to the injury diagnoses codes used in defining the injury subset*)
- R45.88 non-suicidal self-harm added to injury diagnosis matrix & external cause matrix in FY 22 (*This code is NOT added to the injury diagnoses or external cause codes used in defining the injury subset. It is added in the self harm indicator*)



Selected ICD-10-CM Injury diagnosis codes that convey external cause (mechanism and intent) information (Nonfatal)

| ICD-10-CM Codes* | Description |
|--|---|
| T14.91 | Suicide attempt |
| T15-T19 | Effects of foreign body entering through natural orifice |
| T36-T50 with an intent character of 1, 2, 3, or 4 <i>Note: Intent information is captured in the 5th character of the following codes: T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9. Intent is captured in 6th character of all other T36-T50 codes.</i> | Poisoning by drugs, medicaments, and biological substances (Includes unintentional, intentional self-harm, assault, and undetermined intents; Excludes adverse effects and underdosing) |
| T51-T65 | Toxic effects of substances nonmedicinal as to source |
| T71 | Asphyxiation |
| T73 | Effects of deprivation |
| T74, T76 | Adult and child abuse, neglect, and other maltreatment, confirmed or suspected |
| T75.0-T75.4 | Effects of lightning, drowning and non-fatal submersion, vibration, motion sickness, and electrocution |

*7th character of A or missing (reflects initial encounter, active treatment). Exceptions: R45.88 has 5 characters, T14.91 has 5 characters if using data prior to FY2018

Regular Expression

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((T3[679]9|T414|T427|T4[3579]9)[1-4].|(?!(T3[679]9|T414|T427|T4[3579]9))(T3[6-9]|T4[0-9]|T50)..[1-4]|T1491(.A)?|(T1[5-9]|T5[1-9]|T6[0-5]|T7[1346])...|T75[0-4]..)(A|S|\b)
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FY2018 Changes affecting injury diagnosis codes (effective Oct 1, 2017):

- T14.91 code retired and replaced by T14.91xA, T14.91xD, T14.91xS

FY2020 Changes affecting Diagnosis codes with external cause implications (effective Oct 1, 2019):

- Code T75.1 was added to the external cause matrix (Mechanism=Drowning/submersion, Intent=Undetermined)
- Code T75.4 was added to external cause matrix (Mechanism=Other Specified, Classifiable, Intent=Unintentional) for consistency with inclusion of legal intervention codes involving a conducted energy device (Y35.831, Y35.832, Y35.833, T35.839)

FY2022 Changes affecting Diagnosis codes with external cause implications (effective Oct 1, 2021)

- R45.88 non-suicidal self-harm added to injury diagnosis matrix & external cause matrix in FY 22 *(This code is NOT added to the injury diagnoses or external cause codes used in defining the injury subset. It is added in the self harm indicator)*



ICD-10-CM External cause of injury codes (V, W, X, Y codes) included for injury surveillance (Nonfatal)

| ICD-10-CM Codes* | Description |
|------------------|---|
| V00-V99 | Transport accidents |
| W00-X58 | Other external causes of accidental injury |
| X71-X83 | Intentional self-harm |
| X92-Y09 | Assault |
| Y21-Y33 | Event of undetermined intent |
| Y35-Y38 | Legal intervention, operations of war, military operations, and terrorism |

*7th character of A or missing (reflects initial encounter, active treatment). Exceptions: Y07 has 4-6 characters only, Y09 has 3 characters only.

Regular Expression

`((V|W|X)\d....|(?!(Y0[79]))Y[0-3]....|Y07.{1,3}|Y09)(A|$|\b)`



Unintentional Injury

Unintentional Injury (Fatal)

Select records from the fatal injury subset containing any of the following codes in underlying cause field:

| ICD-10 Codes | Description |
|--------------|--|
| V00-V99 | Transport Accidents |
| W00-X59 | Other external causes of accidental injury |
| Y85 | Sequelae of Transport Accidents |
| Y86 | Sequelae of Other Accidents |

Regular Expression

^[VW][0-9]/d|^X[0-5]/d|^Y8[56]

Unintentional Injury (Nonfatal)

Select records from the ED or hospitalization injury subset containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|--|--|
| T15-T19 | Effects of foreign body entering through natural orifice |
| T36-T50 with an intent character of 1 <i>Note: Intent information is captured in the 5th character of the following codes: T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9. Intent is captured in 6th character of all other T36-T50 codes.</i> | Unintentional poisoning with drugs, medications, and biological substances |
| T51-T65 with an intent character of 1 <i>Note: Intent information is captured in the 5th character of the following codes: T51.9, T52.9, T53.9, T54.9, T56.9, T57.9, T58.0, T58.1, T58.9, T59.9, T60.9, T61.0, T61.1, T61.9, T62.9, T63.9, T64.0, T64.8, and T65.9. Intent is captured in 6th character of all other T51-T65 codes.</i> | Unintentional toxic effects of non-medicinal substances |
| V00-V99 | Transport accidents |
| W00-X58 | Other external causes of accidental injury |
| T71.1 with 6 th character of 1 T71.20, T71.21, T71.29 T71.22, T71.23 with 6 th character of 1 T71.9 | Unintentional asphyxiation, suffocation, hanging |
| T73 | Effects of other deprivation |
| T75.0, T75.2, T75.3, T75.4 | Effects of lightning, vibration, motion sickness, electrocution |

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

Regular Expression

(T1[5-9]...|(T3[679]9|T414|T427|T4[3579]9)1.|(?!(T3[679]9|T414|T427|T4[3579]9))(T3[6-9]|T4[0-9]|T50)..1|((T5[1-46-9]|T6[0-35])9|(T58|T61)[01]|T64[08])1.|(?!(T5[1-46-9]|T6[0-35])9|(T58|T61)[01]|T64[08]))(T5[1-9]|T6[0-5])..1|(V|W)\d....|X[0-5]....|T71..1|T712[019].|T719..|T73...|T75[0234]..)(A|\$|\b)

FY2020 Changes affecting indicator (effective Oct 1, 2019):

- Code T75.4 was added to external cause matrix (Mechanism=Other Specified, Classifiable, Intent=Unintentional) for consistency with inclusion of legal intervention codes involving a conducted energy device (Y35.83)



Intentional Self-harm/Suicide

Suicide (Fatal)

Select records from the fatal injury subset containing any of the following codes in underlying cause field:

| ICD-10 Codes | Description |
|--------------|-----------------------------------|
| X60-X84 | Intentional self-harm |
| Y87.0 | Sequelae of intentional self-harm |
| U03 | Terrorism-intentional self-harm |

Regular Expression

`^X[67][0-9]|^X8[0-4]|^Y870|^U03`

Intentional self-harm (Nonfatal)

Select records from the ED or hospitalization injury subset containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|--|---|
| T36-T50 with an intent character of 2 <i>Note: Intent information is captured in the 5th character of the following codes: T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9. Intent is captured in 6th character of all other T36-T50 codes.</i> | Self-harm by poisoning with drugs, medications, and biological substances |
| T51-T65 with an intent character of 2 <i>Note: Intent information is captured in the 5th character of the following codes: T51.9, T52.9, T53.9, T54.9, T56.9, T57.9, T58.0, T58.1, T58.9, T59.9, T60.9, T61.0, T61.1, T61.9, T62.9, T63.9, T64.0, T64.8, and T65.9. Intent is captured in 6th character of all other T51-T65 codes.</i> | Self-harm by toxic effects of non-medicinal substances |
| X71-X83 | Self-harm |
| T71 with 6 th character of 2 | Self-harm by asphyxiation, suffocation, hanging |
| T14.91 | Suicide attempt |
| R45.88 | Non-suicidal self-harm |

*7th character of A or missing (reflects initial encounter, active treatment). Exceptions: R45.88 has 5 characters, T14.91 has 5 characters if using data prior to FY2018

Regular Expression

`((T3[679]9|T414|T427|T4[3579]9)2.|(?!(T3[679]9|T414|T427|T4[3579]9))(T3[6-9]|T4[0-9]|T50)..2|((T5[1-46-9]|T6[0-35]9|(T58|T61)[01]|T64[08])2.|(?!((T5[1-46-9]|T6[0-35]9|(T58|T61)[01]|T64[08]))(T5[1-9]|T6[0-5])..2|(X7[1-9]|X8[0-3])...|T71..2|T1491(.A)?|R4588)(A|$|\b)`

FY2018 Changes affecting indicator (effective Oct 1, 2017):

- T14.91 retired and replaced by T14.91xA, T14.91xD, T14.91xS

FY2022 Changes affecting Diagnosis codes with external cause implications (effective Oct 1, 2021) → provisionally added until confirmed by CDC

- R45.88 non-suicidal self-harm added to injury diagnosis matrix & external cause matrix in FY 22 (*this code is added to the self-harm indicator only*)



Assault/Homicide

Homicide (Fatal)

Select records from the fatal injury subset containing any of the following codes in underlying cause field:

| ICD-10 Codes | Description |
|--------------|-------------------------------|
| X85-Y09 | Assault |
| Y87.1 | Sequelae of assault |
| U01 | Terrorism-assault |
| U02 | Sequelae of terrorism-Assault |

Regular Expression

`^X8[5-9]|^X9[0-9]^Y0[0-9]^Y871|^U0[12]`

Assault (Nonfatal)

Select records from the ED or hospitalization injury subset containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|--|---|
| T36-T50 with an intent character of 3 <i>Note: Intent information is captured in the 5th character of the following codes: T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9. Intent is captured in 6th character of all other T36-T50 codes.</i> | Assault by poisoning with drugs, medications, and biological substances |
| T51-T65 with an intent character of 3 <i>Note: Intent information is captured in the 5th character of the following codes: T51.9, T52.9, T53.9, T54.9, T56.9, T57.9, T58.0, T58.1, T58.9, T59.9, T60.9, T61.0, T61.1, T61.9, T62.9, T63.9, T64.0, T64.8, and T65.9. Intent is captured in 6th character of all other T51-T65 codes.</i> | Assault by toxic effects of non-medicinal substances |
| X92-Y09 | Assault by various mechanisms |
| T71 with 6 th character of 3 | Assault by asphyxiation, suffocation, hanging |
| T74, T76 | Confirmed/suspected adult or child abuse, neglect, and other maltreatment |
| Y38 | Terrorism |

*7th character of A or missing (reflects initial encounter, active treatment). Exceptions: Y07 has 4-6 characters only, Y09 has 3 characters only.

Regular Expression

`((T3[679]9|T414|T427|T4[3579]9)3.|(?!(T3[679]9|T414|T427|T4[3579]9))(T3[6-9]|T4[0-9]|T50)..3|((T5[1-46-9]|T6[0-35]9)|(T58|T61)[01]|T64[08])3.|(?!(T5[1-46-9]|T6[0-35]9)|(T58|T61)[01]|T64[08]))(T5[1-9]|T6[0-5])..3|T71..3|(X9[2-9]|Y0[0-68]|T7[46]|Y38)...|Y07.{1,3}|Y09)(A|$|\b)`



Traumatic brain injury (TBI)

TBI (Fatal)

Select records from the fatal injury subset containing any of the following codes in underlying cause field:

| ICD-10 Codes | Description |
|--|--|
| S01.0–S01.9 | Open wound of head |
| S02.0, S02.1, S02.3, S02.7–S02.9 | Fracture of skull and facial bones |
| S04.0 | Injury of optic nerve and pathways |
| S06.0–S06.9 | Intracranial injury |
| S07.0, S07.1, S07.8, S07.9 | Crushing injury of head |
| S09.7-S09.9 | Other and unspecified injuries of head |
| T90.1, T90.2, T90.4, T90.5, T90.8, T90.9 | Sequelae of injuries of head |

Regular Expression

`^S0[16][0-9]|^S02[0137-9]|^S040|^S07[0189]|^S09[7-9]|^T90[124589]`

TBI (Nonfatal)

Select records from the ED or hospitalization injury subset containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|------------------------|---|
| S02.0, S02.1 | Fracture of skull |
| S02.8 | Fracture of other specified skull and facial bones |
| S02.91 | Unspecified skull fracture |
| S04.02, S04.03, S04.04 | Injury of optic chiasm; injury of optic tract and pathways; injuries of visual cortex |
| S06 | Intracranial injury |
| S07.1 | Crushing injury of skull |
| T74.4 | Shaken infant syndrome |

*7th character of A, B, or missing (reflects initial encounter, active treatment).

Regular Expression

`((S02[018].|S0291|S040[2-4]|S06..|S071.|T744.)))(A|B|$|\b)`

Note: This indicator does NOT include “Unspecified injury of head” (S09.90). A study by Bazarian et al found that 75.3% of emergency department records coded with unspecified head injury in ICD-9-CM (959.01) did not meet the clinical criteria for TBI.



Unintentional Motor Vehicle Traffic

Unintentional MVT (Fatal)

Select records from the fatal injury subset containing any of the following codes in underlying cause field:

| ICD-10 Codes | Description |
|--|---|
| V02-V04 (.1, .9), V09.2 | Pedestrian injured in transport accident |
| V12-V14 (.3-.9), V19.4-V19.6 | Pedal cyclist injured in transport accident |
| V20-V28 (.3-.9), V29.4-V29.9 | Motorcycle rider injured in transport accident |
| V30-V39 (.4-.9) | Occupant of three-wheeled motor vehicle injured in transport accident |
| V40-V49 (.4-.9) | Car occupant injured in transport accident |
| V50-V59 (.4-.9) | Occupant of pick-up truck or van injured in transport accident |
| V60-V69 (.4-.9) | Occupant of heavy transport vehicle injured in transport accident |
| V70-V79 (.4-.9) | Bus occupant injured in transport accident |
| V80.3-V80.5, V81.1, V82.1, V83-V86 (.0-.3), V87.0-V87.8, V89.2 | Other land transport accidents |

Regular Expression

V0[234][19]|V092|V1[2-4][3-9]|V19[4-6]|V2[0-8][3-9]|V29[4-9]|V[3-7].[4-9]|V8[3-6][0-3]|V87[0-8]|V892|V80[3-5]|V8[12]1



Unintentional MVT (Nonfatal)

Select records from the ED or hospitalization injury subset containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|--|-----------------|
| V02.1, V02.9, V03.1, V03.9, V04.1, V04.9, V09.2, V09.3 | MVT Pedestrian |
| V12-V14 (.3-.9), V19.4-V19.6, V19.9 <i>For 10/1/22 and later, add these codes: V22-V24 (.3-.9), V29.9 with 5th character of 1 V29.4-V29.6 with 6th character of 1</i> | MVT Pedal cycle |
| V20-V28 (.3-.9), V29.4-V29.9 <i>For 10/1/22 and later, exclude these codes: V20-V28 (.3-.9), V29.9 with 5th character of 1 V29.4-V29.8 with 6th character of 1</i> | MVT Motorcycle |
| V30-V79 (.4-.9), V83-V86 (.0-.3), V87.0-V87.8, V89.2 | MVT Occupant |
| V80.3-V80.5, V81.1, V82.1 | MVT Other |

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

Regular Expression (before 10/1/22)

`((V0[234][19]|V09[23]|V1[2-4][3-9]|V19[4-69]|V2[0-8][3-9]|V29[4-9]|V[3-7].[4-9]|V8[3-6][0-3]|V87[0-8]|V892|V80[3-5]|V8[12]1)..)(A|$|\b)`

Regular Expression (on or after 10/1/22)

`(?!V2[0-15-8][3-9]1.|V298\d1)((V0[234][19]|V09[23]|V1[2-4][3-9]|V19[4-69]|V2[0-8][3-9]|V29[4-9]|V[3-7].[4-9]|V8[3-6][0-3]|V87[0-8]|V892|V80[3-5]|V8[12]1)..)(A|$|\b)`

E-Bikes (MVT Pedal Cycle) (transfer from MVT motorcycle to MVT pedal cycle on or after 10/1/22)

`(V2[2-4][3-9]1.|V29[4-6]\d1|V2991.)(A|$|\b)`

E-Bikes (exclude from MVT motorcycle and do not transfer elsewhere on or after 10/1/22)

`(V2[0-15-8][3-9]1.|V298\d1)(A|$|\b)`

NOTE: This indicator includes ONLY traffic-related incidents. Transport incidents involving motor vehicles are considered “traffic” incidents if they occur on a public highway or street, whereas a “non-traffic” incident occurs entirely in any place other than a public highway or street.

FY2020 Changes affecting indicator (effective Oct 1, 2019):

- Codes V87.0-V87.8, V89.2 were moved from external cause mechanism category “MVT-Unspecified” to “MVT-Occupant”
- V09.3 was moved from “Pedestrian, other” to “MVT-Pedestrian”

FY2022 (effective Oct 1, 2022)

- Electric bicycle (e-bike) codes were added under the motorcycle parent codes (V20-V29), however, for the external cause of injury matrix they are considered pedal cycles.



Unintentional Motor Vehicle Occupant (Traffic and Non-Traffic)

Unintentional MVO (Nonfatal)

Select records from the ED or hospitalization injury subset containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|---|---|
| V20-V29 For 10/1/22 and later, exclude these codes: V20-V28, V29.3, V29.9 with 5 th character of 1 V29.0-V29.2, V29.4-V29.8 with 6 th character of 1 | Motorcycle rider injured in transport accident |
| V30-V39 | Occupant of three-wheeled motor vehicle injured in transport accident |
| V40-V49 | Car occupant injured in transport accident |
| V50-V59 | Occupant of pick-up truck or van injured in transport accident |
| V60-V69 | Occupant of heavy transport vehicle injured in transport accident |
| V70-V79 | Bus occupant injured in transport accident |
| V83-V86 | Occupant of special industrial vehicle, special agriculture vehicle, special construction vehicle, or special all-terrain or other off-road motor vehicle injured in transport accident |
| V87.0-V87.8 | Person injured in transport accident involving motor vehicles - traffic |
| V88.0-V88.8 | Person injured in transport accident involving motor vehicles - nontraffic |
| V89.0, V89.2 | Person injured in unspecified motor-vehicle accident |

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

Regular Expression (before 10/1/2022)

`(V[234567]....|V8[3456]...|V8[78][0-8]..|V89[02]..)(A|$|\b)`

Regular Expression (10/1/2022 and later)

`(?!((V2[0-8]\d|V29[39])1.|V29[0-24-8]\d1))(V[234567]....|V8[3456]...|V8[78][0-8]..|V89[02]..)(A|$|\b)`

E-Bikes (All) (Exclude from MVO on or after 10/1/22)

`((V2[0-8]\d|V29[39])1.|V29[0-24-8]\d1)(A|$|\b)`

NOTE: This indicator includes both traffic and non-traffic-related incidents. Transport incidents involving motor vehicles are considered “traffic” incidents if they occur on a public highway or street, whereas a “non-traffic” incident occurs entirely in any place other than a public highway or street.



Pedestrian Injuries

Pedestrian (Nonfatal)

Select records from the ED or hospitalization injury subset containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|--|--------------------------------------|
| V02.1, V02.9, V03.1, V03.9, V04.1, V04.9, V09.2, V09.3 | MVT Pedestrian |
| V00.0, V01, V02.0, V03.0, V04.0, V05, V06, V09.0, V09.1, V09.9 | Other Nontraffic Pedestrian injuries |
| V00.1 (.1, .2, .3, .8) | Pedestrian Conveyance |

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

Regular Expression

(V0\d...)(A|S|\b)

Pedal Cyclist Injuries

Pedal Cyclist (Nonfatal)

Select records from the ED or hospitalization injury subset containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|--|------------------------------|
| V12-V14 (.3-.9), V19.4-V19.6, V19.9 For 10/1/22 and later, add these codes: V22-V24(.3-.9), V29.9 with 5 th character of 1 V29.4-V29.6 with 6 th character of 1 | MVT Pedal cycle |
| V12-V14(.0-.2), V19.0-V19.2 For 10/1/22 and later, add these codes: V22-V24 (.0-.2) with 5 th character of 1 V29.0-V29.2 with 6 th character of 1 | MVN Pedal cycle |
| V10-V11, V15-V18, V19.3, V19.8 For 10/1/22 and later, add these codes: V20-V21, V25-V28, V29.3 with 5 th character of 1 V29.8 with 6 th character of 1 | Other Pedal Cyclist injuries |

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

Regular Expression (before 10/1/2022)

(V1\d...)(A|S|\b)

Regular Expression (10/1/2022 and later)

((V2[0-8]\d|V29[39])1.|V29[0-24-8]\d1|V1\d...)(A|S|\b)

E-Bikes (All) (Add to Pedal Cyclist on or after 10/1/22)

((V2[0-8]\d|V29[39])1.|V29[0-24-8]\d1)(A|S|\b)

FY2022 (effective Oct 1, 2022)

- Electric bicycle (e-bike) codes were added under the motorcycle parent codes (V20-V29), however, for the external cause of injury matrix they are considered pedal cycles.



Unintentional Motor Vehicle NonTraffic

Unintentional MVN (Nonfatal)

Select records from the ED or hospitalization injury subset containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|---|-----------------|
| V02-V04(.0), V09.0 | MVN Pedestrian |
| V12-V14(.0-.2), V19.0-V19.2 <i>For 10/1/22 and later, add these codes: V22-V24 (.0-.2) with 5th character of 1 V29.0-V29.2 with 6th character of 1</i> | MVN Pedal cycle |
| V20-V28 (.0-.2), V29.0-V29.3 <i>For 10/1/22 and later, exclude these codes: V20-V28 (.0-.2), V29.3 with 5th character of 1 V29.0-V29.2 with 6th character of 1</i> | MVN Motorcycle |
| V30-V79 (.0-.3), V83-V86 (.4-.7, .9), V88.0-V88.8, V89.0 | MVN Occupant |
| V81.0, V82.0 | MVN Other |

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

Regular Expression (before 10/1/22)

```
((V0[2-49][0]|V1[2-49][0-2]|V2[0-8][0-2]|V29[0-3]|V[3-7]\d[0-3]|V8[3-6][4-79]|V88[0-8]|V890|V8[12]0..)(A|$\|b)
```

Regular Expression (on or after 10/1/22)

```
(?!((V2[0-15-8][0-2]|V293)1.))((V0[2-49][0]|V1[2-49][0-2]|V2[0-8][0-2]|V29[0-3]|V[3-7]\d[0-3]|V8[3-6][4-79]|V88[0-8]|V890|V8[12]0..)(A|$\|b)
```

E-Bikes (MVN Pedal Cycle) (transfer from MVN motorcycle to MVN pedal cycle)

```
(V2[2-4][0-2]1.|V29[0-2][09]1)(A|$\|b)
```

E-Bikes (exclude from MVN motorcycle and do not transfer elsewhere)

```
((V2[0-15-8][0-2]|V293)1.)(A|$\|b)
```

Note: This indicator is NOT the same as the MVN row of the external cause matrix. Some codes included in this MVN indicator (directly analogous to MVT codes) are part of the "Other Land Transport" row of the external cause matrix.

Codes not specified whether traffic or nontraffic, Currently included in "MVT" and not in "MVN":

- V12.3, V13.3, V14.3, V22.3, V23.3, V24.3- "Person boarding or alighting a pedal cycle injured in collision with motor vehicle"
- V02.9, V03.9, V04.9 – "Pedestrian injured in collision with motor vehicle, unspecified whether traffic or nontraffic accident"
- V80.31, V80.32, V80.41, V80.42, V80.51, V80.52- "Animal-rider/occupant of animal-drawn vehicle injured in collision with motor vehicle"

FY2022 (effective Oct 1, 2022)

- Electric bicycle (e-bike) codes were added under the motorcycle parent codes (V20-V29), however, for the external cause of injury matrix they are considered pedal cycles.



Off-Highway Vehicle -Nontraffic

Unintentional MVN Off-Highway Vehicle (Nonfatal)

| ICD-10-CM Codes* | Description |
|--|---|
| V86.45, V86.55, V86.65, V86.75, V86.95 | Occupant of 3- or 4-wheel ATV |
| V86.49, V86.59, V86.69, V86.79, V86.99 | Occupant of other special all-terrain or off-road motor vehicle |
| V86.46, V86.56, V86.66, V86.76, V86.96 | Occupant of Dirt Bike |
| V86.42, V86.52, V86.62, V86.72, V86.92 | Occupant of Snowmobile |
| V86.43, V86.53, V86.63, V86.73, V86.93 | Occupant of Dune buggy |

Regular Expression

`((V86[4-79][23569])..)(A|$|\b)`

Note: This indicator is a subset of MVN-Occupant. Some codes included in this MVN indicator (directly analogous to MVT codes) are part of the “Other Land Transport” row of the external cause matrix.

Codes in **BLACK** are part of the “MV-Nontraffic” row of the ICD-10-CM External Cause of Injury Framework.

Codes in **RED** are part of the “Other Land Transport” row of the ICD-10-CM External Cause of Injury Framework.



Unintentional Falls

Unintentional Falls (Fatal)

Select records from the fatal injury subset containing any of the following codes in underlying cause field:

| ICD-10 Codes | Description |
|--------------|-------------|
| W00-W19 | Falls |

Regular Expression

`^W[01][0-9]`

Unintentional Falls (Nonfatal)

Select records from the ED or hospitalization injury subset containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|---|---|
| V00.11-V00.89 with 6 th character of 1 | Falls related to pedestrian conveyance |
| W00-W15, W17, W19 | Falls |
| W16.0-W16.3, W16.5-W16.8 with 6 th character of 2 W16.4 and W16.9 with 5 th character of 2 | Fall, jump, or diving into water causing other injury |
| W18.1, W18.2, W18.3 | Other falls |

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

Regular Expression

`((?!V000)V00..1|(W0.|W1[0-579])...|W18[123]..|W16[49]2.|(?!W16[49])W16..2)(A|$|\b)`

Unintentional fall-related hip fracture in persons aged 65 and older

Identify unintentional fall-related records using the previous indicator, restrict to ages 65 and older, and then select records containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|------------------|--|
| S72.0 | Fracture of head and neck of femur |
| S72.1 | Pertrochanteric fracture |
| S72.2 | Subtrochanteric fracture |
| T84.040** | Periprosthetic fracture around internal prosthetic right hip joint |
| T84.041** | Periprosthetic fracture around internal prosthetic left hip joint |
| M97.0** | Periprosthetic fracture around internal prosthetic hip joint |

*7th character of A, B, C, or missing (reflects initial encounter, active treatment).

Regular Expression

`(S72[012]..|M970..|T8404[01])(A|B|C|$|\b)`

FY2017 Changes affecting injury diagnosis codes (effective Oct 1, 2016):

- T84.04 retired and replaced by M97



Drowning

Drowning (Fatal)

Select records from the injury fatality subset containing any of the following codes in underlying cause field:

| ICD-10 Codes | Description |
|--------------|--|
| W65-W74 | Accidental drowning and submersion |
| V90 | Accident to watercraft causing drowning and submersion |
| V92 | Water-transport-related drowning and submersion without accident to watercraft |
| X92 | Assault by drowning and submersion |
| Y364 | Drowned in war operations NOS |
| Y21 | Drowning and submersion, undetermined intent |
| X71 | Intentional self-harm by drowning and submersion |

Regular Expression- Drowning (All Intent)

`^W6[5-9]|^W7[0-4]|^V9[02]|^X92|^Y364|^Y21|^X71`

Regular Expression- Drowning (Unintentional)

`^W6[5-9]|^W7[0-4]|^V9[02]`

Drowning (Nonfatal)

Select records from the ED or hospitalization injury subset containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|---|---|
| T75.1 | Drowning and nonfatal submersion |
| V90 | Drowning and submersion due to accident to watercraft |
| V92 | Drowning and submersion due to accident on board watercraft, without accident to watercraft |
| W16.0-W16.3, W16.5-W16.8 with 6 th character of 1 W16.4 and W16.9 with 5 th character of 1 | Fall, jump, or diving into water causing drowning and submersion |
| W22.041 | Striking against wall of swimming pool causing drowning and submersion |
| W65-W74 | Accidental non-transport drowning and submersion |
| X71 | Intentional self-harm by drowning and submersion |
| X92 | Assault by drowning and submersion |
| Y21 | Drowning and submersion, undetermined intent |

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

FY2020 Changes affecting indicator (effective Oct 1, 2019):

- V90, V92 codes were moved from external cause mechanism category “Other Transport” to “Drowning/submersion”

Regular Expression

`(T751..|W16[49]1.|(?!W16[49])W16..1|W22041|(V9[02]|W6[5-9]|W7.|X71|X92|Y21)...)(A|$|\b)`



Unintentional Fire

Unintentional Fire (Fatal)

Select records from the injury fatality subset containing any of the following codes in underlying cause field:

| ICD-10 Codes | Description |
|--------------|-------------------------------------|
| X00–X09 | Exposure to smoke, fire, and flames |

Regular Expression

`^X0[0-9]`

Unintentional Fire (Nonfatal)

Select records from the ED or hospitalization injury subset containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|------------------|-------------------------------------|
| X00–X08 | Exposure to smoke, fire, and flames |

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

Regular Expression

`(X0[0-8]...)(A|$\|b)`



Firearm

Firearm (Fatal)

Select records from the injury fatality subset containing any of the following codes in underlying cause field:

| ICD-10 Codes | Description |
|--------------|---|
| W32–W34 | Exposure to inanimate mechanical forces—firearm discharge |
| X72–X74 | Intentional self-harm by firearm discharge |
| X93–X95 | Assault by firearm discharge |
| Y22–Y24 | Firearm discharge of undetermined intent |
| Y35.0 | Legal intervention involving firearm discharge |
| U01.4 | Terrorism involving firearms |

Regular Expression- Firearm (All Intent)

`^W3[2-4]|^X7[2-4]|^X9[3-5]|^Y2[2-4]|^Y350|^U014`

Regular Expression- Firearm (Suicide)

`^X7[2-4]`

Firearm (Nonfatal)

Select records from the ED or hospitalization injury subset containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|--|--|
| W32.0, W32.1, W33.0, W33.1, W34.00, W34.09, W34.10, W34.19 | Accidental discharge or malfunction of firearm |
| X72, X73, X74.8, X74.9 | Intentional self-harm by firearm |
| X93, X94, X95.8, X95.9 | Assault by firearm |
| Y38.4 | Terrorism involving firearms |
| Y22, Y23, Y24.8, Y24.9 | Firearm discharge of undetermined intent |
| Y35.00-Y35.03, Y35.09 | Legal intervention involving firearm discharge, excluding rubber bullets |

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

Regular Expression

`((W3[23][01]|(X74|X95|Y24)[89]|Y350|Y384)..|((X7|Y2)[23]|X9[34])...|W34[01][09].|Y350[0-39].)(A|$\|b)`

NOTE: This indicator includes accidental malfunctions of firearm. It excludes injuries related to gas, air or spring-operated guns (air gun, BB gun, paintball gun) as well as rubber bullets. Excludes war/military operations.

FY2020 Changes affecting indicator (effective Oct 1, 2019):

- Codes for firearm malfunction (W32.1, W33.1, W34.10, W34.19) were moved from external cause mechanism category “Other Specified, Classifiable” to “Firearm”



Non-drug poisoning

Non-drug poisoning (Fatal)

Select records from the injury fatality subset containing any of the following codes in underlying cause field:

| ICD-10 Codes | Description |
|--------------|--|
| X45–X49 | Accidental poisoning by nondrugs |
| X65–X69 | Intentional self-poisoning by nondrugs |
| X86–X90 | Assault by nondrug poisoning |
| Y15–Y19 | Poisoning by and exposure to nondrugs, undetermined intent |
| Y35.2 | Legal intervention involving gas |
| U01.6, U01.7 | Terrorism involving biological or chemical weapons |

Regular Expression

`^X[46][5-9]|^X8[6-9]|^X90|^Y1[5-9]|^Y352|^U01[67]`

Non-drug poisoning (Nonfatal)

Select records from the ED or hospitalization injury subset containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|-------------------------------------|---|
| T51-T53, T55-T62, T64 | Toxic effects of nonmedicinal substances |
| T54.0 | Toxic effects of phenol and phenol homologues |
| T65.0-T65.81, T65.83, T65.89, T65.9 | Toxic effects of other and unspecified substances |
| Y38.7 | Terrorism due to chemical weapons |
| Y35.2 | Legal intervention involving gas |

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

Regular Expression

`((T5[1-35-9]|T6[0-24])...|(T540.|T65[0-69].|T658[139]).|(Y387|Y352)..)(A|$|\b)`

NOTE: This indicator includes toxic effects of ethanol (T51.0). It excludes toxic effects of corrosive substances (T54.1, T54.2, T54.3, T54.9), toxic effect of contact with venomous animals and plants (T63), and toxic effect of harmful algae and algae toxins (T65.82)

FY2020 Changes affecting indicator (effective Oct 1, 2019):

- Codes for terrorism (Y38.6) and war operations (Y36.6) involving biological weapons were moved from external cause mechanism category “Poisoning, Non-drug” to “Other Specified, Classifiable” → dropped from non-drug poisoning indicator



All drug overdose

All Drug Overdose (Fatal)

Select records containing any of the following codes in underlying cause field:

| ICD-10 Codes | Description |
|--------------|---|
| X40-X44 | Accidental Poisoning by drugs, medicaments, and biological substances |
| X60-X64 | Intentional self-poisoning by drugs, medicaments, and biological substances |
| X85 | Assault by drugs, medicaments, and biological substances |
| Y10-14 | Poisoning by and exposure to drugs, medicaments, and biological substances, undetermined intent |

Regular Expression

`^X[46][0-4]|^X85|^Y1[0-4]`

All Drug Overdose (Nonfatal)

Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|--|---|
| T36-T50 with an intent character of 1, 2, 3, or 4 <i>Note: Intent information is captured in the 5th character of the following codes: T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9. Intent is captured in 6th character of all other T36-T50 codes.</i> | Poisoning by drugs, medicaments, and biological substances (Includes unintentional, intentional self-harm, assault, and undetermined intents; Excludes adverse effects and underdosing) |

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

Regular Expression

`((T3[679]9|T414|T427|T4[3579]9)[1-4].|(?!(T3[679]9|T414|T427|T4[3579]9))(T3[6-9]|T4[0-9]|T50)..[1-4])(A|$|\b)`

All Drug Overdose (DOSE)

DOSE only includes unintentional and undetermined intent. Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|---|---|
| T36-T50 with an intent character of 1 or 4 <i>Note: Intent information is captured in the 5th character of the following codes: T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9. Intent is captured in 6th character of all other T36-T50 codes.</i> | Poisoning by drugs, medicaments, and biological substances (Includes unintentional, intentional self-harm, assault, and undetermined intents; Excludes adverse effects and underdosing) |

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

Regular Expression

`((T3[679]9|T414|T427|T4[3579]9)[14].|(?!(T3[679]9|T414|T427|T4[3579]9))(T3[6-9]|T4[0-9]|T50)..[14])(A|$|\b)`



Unintentional drug overdose

Unintentional Drug Overdose (Fatal)

Select records containing any of the following codes in underlying cause field:

| ICD-10 Codes | Description |
|--------------|---|
| X40–X44 | Accidental Poisoning by drugs, medicaments, and biological substances |

Regular Expression

`^X4[0-4]`

Unintentional Drug Overdose (Nonfatal)

Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|--|--|
| T36-T50 with an intent character of 1 <i>Note: Intent information is captured in the 5th character of the following codes: T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9. Intent is captured in 6th character of all other T36-T50 codes.</i> | Unintentional poisoning by drugs, medicaments, and biological substances |

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

Regular Expression

`((T3[679]9|T414|T427|T4[3579]9)1.|(?!(T3[679]9|T414|T427|T4[3579]9))(T3[6-9]|T4[0-9]|T50)..1)(A|$|\b)`



Self-harm/Suicide drug overdose

Suicide Drug Overdose (Fatal)

Select records containing any of the following codes in underlying cause field:

| ICD-10 Codes | Description |
|--------------|---|
| X60-X64 | Intentional self-poisoning by drugs, medicaments, and biological substances |

Regular Expression

`^X6[0-4]`

Intentional self-harm Drug Overdose (Nonfatal)

Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|--|--|
| T36-T50 with an intent character of 2 <i>Note: Intent information is captured in the 5th character of the following codes: T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9. Intent is captured in 6th character of all other T36-T50 codes.</i> | Intentional self-harm poisoning by drugs, medicaments, and biological substances |

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

Regular Expression

`((T3[679]9|T414|T427|T4[3579]9)2.|(?!(T3[679]9|T414|T427|T4[3579]9))(T3[6-9]|T4[0-9]|T50)..2)(A|$|\b)`



Opioid Overdose

Opioid Overdose (Fatal)

Select records with drug overdose as underlying cause code (X40–X44, X60-X64, X85, Y10-14) and any of the following codes *in any field*:

| ICD-10 Codes | Description |
|--------------|--|
| 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 |
| T40.6 | Poisoning by other/unspecified narcotics |

Regular Expression Fatal Opioid Overdose: ^T40[0-46]

Regular Expression Fatal Heroin Overdose: ^T401

Regular Expression Fatal Synthetic Opioid Overdose: ^T404

Note: Overdose deaths due to Fentanyl are not captured using ICD-10 Codes because there is currently no specific ICD-10 code for fentanyl. Fentanyl deaths are captured by searching text literals on the death certificate.

Fentanyl is a synthetic opioid so it should be coded as T40.4 but there is no way to specifically identify fentanyl if the term is not mentioned in literal text.

Opioid Overdose (Nonfatal)

Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|------------------|--|
| 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 |
| T40.60, T40.69 | Poisoning by other/unspecified narcotics |

**6th character of 1,2,3, or 4 (excludes adverse effects and underdosing). 7th character of A or missing (reflects initial encounter, active treatment).*

Regular Expression Opioid Overdose: ((T40[0-4].|T406[09])[1-4])(A|\$|\b)

Regular Expression Heroin Overdose: (T401.[1-4])(A|\$|\b)

Regular Expression Fentanyl Overdose: (T4041[1-4])(A|\$|\b)

FY2021 Changes affecting indicator (effective Oct 1, 2020):

- Code specific for fentanyl or fentanyl analogs was added to ICD-10-CM



Opioid Overdose (DOSE)

DOSE only includes unintentional and undetermined intent. Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|------------------|--|
| 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 |
| T40.60, T40.69 | Poisoning by other/unspecified narcotics |

*6th character of 1 or 4 (excludes intentional, adverse effects and underdosing). 7th character of A or missing (reflects initial encounter, active treatment).

Regular Expression DOSE Opioid Overdose: ((T40[0-4].|T406[09])[14])(A|\$|\b)

Regular Expression DOSE Heroin Overdose: (T401.[14])(A|\$|\b)

Regular Expression DOSE Fentanyl Overdose: (T4041[14])(A|\$|\b)

FY2021 Changes affecting indicator (effective Oct 1, 2020):

- Code specific for fentanyl or fentanyl analogs was added to ICD-10-CM

Benzodiazepine Overdose

Benzodiazepine Overdose (Fatal)

Work in progress

Benzodiazepine Overdose (Nonfatal)

Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|------------------|------------------------------|
| T42.4 | Poisoning by benzodiazepines |

*6th character of 1,2,3, or 4 (excludes adverse effects and underdosing). 7th character of A or missing (reflects initial encounter, active treatment).

Regular Expression: (T424.[1-4])(A|\$|\b)

Opioid Overdose (DOSE)

DOSE only includes unintentional and undetermined intent. Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|------------------|------------------------------|
| T42.4 | Poisoning by benzodiazepines |

*6th character of 1 or 4 (excludes intentional, adverse effects and underdosing). 7th character of A or missing (reflects initial encounter, active treatment).

Regular Expression: (T424.[14])(A|\$|\b)



Stimulant Overdose

Stimulant Overdose (Fatal)

Select records with drug overdose as underlying cause code (X40–X44, X60-X64, X85, Y10-14) and any of the following codes *in any field*:

| ICD-10 Codes | Description |
|--------------|--|
| T40.5 | Poisoning by Cocaine |
| T43.6 | Poisoning by Psychostimulants with abuse potential |

Regular Expression

T405|T436

Stimulant Overdose (Nonfatal)

Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|------------------|--|
| 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 |
| T43.65 | Poisoning by Methamphetamines |
| T43.69 | Poisoning by other psychostimulants |

**6th character of 1,2,3, or 4 (excludes adverse effects and underdosing). 7th character of A or missing (reflects initial encounter, active treatment).*

Regular Expression Stimulant Overdose: ((T405|T436).[1-4])(A|\$|\b)

Regular Expression Cocaine Overdose: (T405.[1-4])(A|\$|\b)

Regular Expression Methamphetamine Overdose: (T4365[1-4])(A|\$|\b)

Regular Expression Other Stimulants Overdose: (T436[^5][1-4])(A|\$|\b)

Stimulant Overdose (DOSE)

DOSE only includes unintentional and undetermined intent. Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|------------------|--|
| 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 |
| T43.65 | Poisoning by Methamphetamines |
| T43.69 | Poisoning by other psychostimulants |

**6th character of 1, or 4 (excludes intentional, adverse effects and underdosing). 7th character of A or missing (reflects initial encounter, active treatment).*

Regular Expression Stimulant Overdose: ((T405|T436).[14])(A|\$|\b)

Regular Expression Cocaine Overdose: (T405.[14])(A|\$|\b)

Regular Expression Methamphetamine Overdose: (T4365[14])(A|\$|\b)



Cannabis-related

Cannabis-related (Nonfatal)

Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|--|--|
| T40.7 with 6 th character of 1,2,3,4,5 (includes adverse effects; excludes underdosing) | Poisoning or adverse effects of cannabis |
| F12 | Cannabis use, abuse, dependence |

*7th character of A or missing (reflects initial encounter, active treatment). F12 codes only have 5-6 characters

Regular Expression

`^F12 | (T407.[1-5]) (A|$\|b)`

Cannabinoid hyperemesis syndrome

NOTE: This indicator picks up suspected cases and is likely to be an overcount.

Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing:

- A cannabis-related code (T40.7 with 6th character of 1,2,3,4,5 or F12), AND
- A vomiting-related code (R11.1, R11.2)

| ICD-10-CM Codes* | Description |
|--|--|
| T40.7 with 6 th character of 1,2,3,4,5 (includes adverse effects; excludes underdosing) | Poisoning or adverse effects of cannabis |
| F12 | Cannabis use, abuse, dependence |
| R11.1 | Vomiting |
| R11.2 | Nausea with vomiting, unspecified |

Regular Expressions

`^F12 | (T407.[1-5]) (A|$\|b)
 (R11) (1|2)`



Drug Use/Abuse/Dependence

All Drug Use/Abuse/Dependence (Nonfatal)

Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|------------------|--|
| F10 | Alcohol related disorders |
| F11 | Opioid related disorders |
| F12 | Cannabis related disorders |
| F13 | Sedative, hypnotic or anxiolytic related disorders |
| F14, F15 | Cocaine, and Other Stimulant related disorders |
| F16 | Hallucinogen related disorders |
| F17 | Nicotine dependence |
| F18 | Inhalant related disorders |
| F19 | Other psychoactive substance related disorders |

*F codes only have 5-6 characters

Regular Expression All drug use/abuse/dependence: ^F1

Regular Expression Opioid use/abuse/dependence: ^F11

Regular Expression Stimulant use/abuse/dependence: ^F1 [45]



Alcohol-related

Alcohol-related deaths (Fatal)

Select records from the full fatality dataset (do not restrict to the injury subset) containing any of the following codes in any field:

| ICD-10 Codes | Description |
|--------------------|--|
| F10.3-F10.9 | Alcoholic psychosis |
| F10.0, F10.1 | Alcohol abuse |
| F10.2 | Alcohol dependence syndrome |
| G62.1 | Alcohol polyneuropathy |
| G31.2 | Degeneration of nervous system due to alcohol |
| G72.1 | Alcoholic myopathy |
| I42.6 | Alcohol cardiomyopathy |
| K29.2 | Alcoholic gastritis |
| K70.0-K70.4, K70.9 | Alcoholic liver disease |
| K85.2 | Alcohol-induced acute pancreatitis |
| K86.0 | Alcohol-induced chronic pancreatitis |
| Q86.0 | Fetal alcohol syndrome |
| P04.3 | Fetus and newborn affected by maternal use of alcohol |
| X45, Y15 | Alcohol poisoning |
| X65 | Suicide by and exposure to alcohol |
| O35.4 | Maternal care for (suspected) damage to fetus from alcohol |
| T51.0 | Toxic effect of ethanol |

Regular Expression

`^F10|^G621|^G312|^G721|^I426|^K292|^K70|^K852|^K860|^Q860|^P043|^O354|^T510|^X45|^Y15|^X65`

Alcohol-related (Nonfatal)

Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|------------------|--|
| F10 | Alcohol related disorders |
| G62.1 | Alcohol polyneuropathy |
| G31.2 | Degeneration of nervous system due to alcohol |
| G72.1 | Alcoholic myopathy |
| I42.6 | Alcohol cardiomyopathy |
| K29.2 | Alcoholic gastritis |
| K70 | Alcoholic liver disease |
| K85.2 | Alcohol-induced acute pancreatitis |
| K86.0 | Alcohol-induced chronic pancreatitis |
| Q86.0 | Fetal alcohol syndrome |
| P04.3 | Fetus and newborn affected by maternal use of alcohol |
| O35.4 | Maternal care for (suspected) damage to fetus from alcohol |
| O99.31 | Alcohol use complicating pregnancy, childbirth, and the puerperium |
| T51.0 | Toxic effect of ethanol |

Regular Expression

`^F10|^G621|^G312|^G721|^I426|^K292|^K70|^K852|^K860|^Q860|^P043|^O354|^O9931|^T510`



Neonatal abstinence syndrome

Confirmed neonatal abstinence syndrome

Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing:

- A primary diagnosis code of Z38, AND
- A diagnosis code of P96.1 in any field

| ICD-10-CM Codes* | Description |
|------------------|--|
| Z38 | Liveborn infants according to place of birth and type of delivery |
| P96.1 | Neonatal withdrawal symptoms from maternal use of drugs of addiction |

Regular Expressions

(Z38)
(P961)

Suspected neonatal abstinence syndrome

Select records from the full ED or hospitalization dataset (do not restrict to the injury subset) containing:

- A primary diagnosis code of Z38, AND
- NO diagnosis code of P96.1 in any field, AND
- Any of the following codes in any field:

| ICD-10-CM Codes* | Description |
|------------------|--|
| P04.14 | Newborn affected by maternal use of opiates |
| P04.17 | Newborn affected by maternal use of sedative-hypnotics |
| P04.1A | Newborn affected by maternal use of anxiolytics |

Regular Expression

(P041)(4|7|A)

History:

- 9/17/2024: Definition created based on CSTE case definition:
https://cdn.ymaws.com/www.cste.org/resource/resmgr/2019ps/final/19-MCH-01_final_7.31.19.pdf