

Injury Mechanism and Intent

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Injury mechanism and intent are concepts used to understand how and why injuries occur. These concepts help us to design programs that respond to injury problems and prevent future injuries.

Injury Mechanism

IVPB groups the codes used to identify injury deaths (ICD-10 codes in death certificate data) and non-fatal injuries (ICD-10-CM codes in morbidity data) into injury mechanism categories to help understand the type of injuries that occur.

Injury mechanism helps us:

- Explain how the injury happened.
- Describe what created the force that caused the injury.

Sub-causes of Injury

- Allow certain mechanism categories to be broken out to more specific causes of injury.
- Provide more details about how the injury happened.

Injury Mechanism	Sub-cause
Cut/Pierce	
Drowning/Submersion	
Fall	
Fire/Burn	Fire/Flame
	Hot Object/Substance
Firearm	
Machinery	
Motor Vehicle Non-Traffic*	
Motor Vehicle Traffic (MVT)	Motorcyclist
	Occupant
	Other*
	Pedal Cyclist
	Pedestrian
	Unspecified
Natural/Environmental	Bites/Nonvenomous*
	Bites/Venomous*
	Other*

* categories not used in death certificate data

Injury Mechanism	Sub-cause
Other Land Transport	
Other Specified/ Classifiable	Child/Adult Abuse*
	Foreign Body*
	Other Classifiable*
Other Specified/Not Elsewhere Classified	
Other Transport	
Overexertion	
Pedal Cyclist Other	
Pedestrian Other	
Poisoning	Drug
	Nondrug
Struck By/Against	
Suffocation	
Unspecified	

For more information on what is included in each mechanism and sub-cause category, visit: www.cdc.gov/nchs/injury/injury_matrices.htm.

Injury Intent

Injury intent helps us:

- Describe why an injury happened
- Explain if the injury happened on purpose (intentional) or not (unintentional)

Injury Mechanism	Sub-cause
Unintentional	These are injuries that did not happen on purpose, including if someone hurts themselves or if they hurt someone else by mistake ¹ . Unintentional injuries are sometimes called accidents.
Intentional: Self-Inflicted/Suicide	These are injuries that happen when a people hurts themselves on purpose. Self-inflicted injuries include suicide deaths, suicide attempts, and injuries from self-harm.
Intentional: Assault/Homicide	These are injuries that happen when someone uses force to hurt another person on purpose ¹ . Assault includes things like fighting, hitting, or using weapons to cause harm or death.
Intentional: Legal Intervention	These are injuries caused by police or other law enforcement officers while doing their jobs. This can include government-approved executions ¹ . This category does not mean the actions were legal or illegal from a criminal justice perspective. Some systems define legal intervention differently. For example, NC Violent Death Reporting System excludes legal executions, assisted suicides, and deaths from war. Other systems may include some or all of these deaths.
Undetermined	These are injuries where it is not clear if the injury happened on purpose or not.

¹CDC WISQARS, www.cdc.gov/injury/wisqars/cost_help/intent_injury.html

Using Mechanism and Intent Together

Together, injury mechanism and intent help us to monitor different types of injuries and understand their causes to inform injury-specific prevention strategies.

Example Injury Mechanisms	Example Injury Intents				
	Unintentional (Unint.)	Self-Inflicted/Suicide	Assault/Homicide	Undetermined (Undet.)	All Injury Intents
Motor Vehicle Traffic (MVT)	Unint. MVT	Self-Inflicted MVT	MVT Assault	Undet. MVT	Total MVT
Falls	Unint. Falls	Self-Inflicted Falls	Fall Assaults	Undet. Falls	Total Falls
Firearm	Unint. Firearm	Self-Inflicted Firearm	Firearm Assault	Undet. Firearm	Total Firearm
Drowning	Unint. Drowning	Self-Inflicted Drowning	Drowning Assault	Undet. Drowning	Total Drowning
Drug Poisoning	Unint. Drug Poisoning	Self-Inflicted Drug Poisoning	Drug Poisoning Assault	Undet. Drug Poisoning	Total Drug Poisoning
All Injury Mechanisms	Total Unint.	Total Self-Inflicted	Total Assault	Total Undet.	Total Injuries

For more information on injury mechanism and intent and the codes used to identify injuries, visit [NCHS - ICD Injury Codes and Matrices](#) and [NCHS - Injury Tools and Frameworks](#).

