How-to guide

Transport injury event coding tips

This advice relates to coding fatalities involving motor vehicles.

NCIS coding queries should be emailed to the NCIS Unit - ncis@ncis.org.au

Transport related deaths include all events involving at least one vehicle when, at the time of the incident, the vehicle was being used for transport activities.

There is no requirement that the event must have occurred on a public road. However, if the vehicle contributing to death was not being used as a means of transport at the time of the event, the case should not be coded as a transport injury event but as a more appropriate mechanism of injury, for example, crushed whilst working on vehicle in garage.

Coding Transport injury events (TIE) involves four data fields in addition to the *Mechanism of injury* and *Object or substance producing injury*:

Date field	Description
Mode of transport	The way by which the deceased was travelling at the time of the incident
Counterpart	The object, person or animal (if any) with which the deceased, or vehicle in which the deceased was travelling collided
Context	Nature of the transport injury event and for a land transport event, where it occurred
User	Role of deceased the specified means of transport at time of the injury event

Why is it important to code this correctly?

The accurate reporting of Transport Injury Events is important for several reasons including:

- providing a clear representation of events which resulted in death
- accurate reflection of mechanism and objects contributing to death
- support research related to transport events and road safety

Alcohol and/or drug contribution

Contribution of alcohol and drugs must be included where determined to be a factor in the accident resulting in death and should be coded as the last mechanism/object event.

For more information refer to the NCIS Coding tips newsletter

Selecting the contributing factors to code

If there are more than three contributing factors, it is appropriate to exclude the factor that has been at least partially explained by coding. For example, driver drowns following a collision with a tree whilst driving under the influence of alcohol, code the:

- drowning, TIE and alcohol – the contact with the tree is partially represented within the counterpart coding (large or fixed object) and it is more important to include the alcohol contribution.

There are other considerations or factors which may influence sequencing of items in the *Mechanism of injury* and *Object or substance producing injury* fields.

Considerations	Advice
What was the cause of death (COD)? • Was the COD a direct result of the TIE or was it related to a subsequent event, for example drowning which resulted from vehicle rolling into water or fire resulting from vehicle igniting	The primary *Mechanism/Object* must reflect the COD. 1. If died from injuries from crash – first code the TIE 2. If died from drowning – first code the drowning, then the TIE 3. If died from fire – first code the fire, then the TIE 4. If died from crushing or ejection resulting from the rollover or movement of the vehicle during the crash – first code TIE, then if appropriate crushing or ejection.
Contributing factors including • Alcohol • Drugs • Behaviour of vehicle occupants • Mechanical status of vehicle(s) • Physical conditions of road • Weather conditions	Any contributing factors should be coded to provide a complete depiction of the events leading to the death. These should be coded as the final mechanism/object as they are not the primary cause of death but contributing factors to the death.
Work relatedness • Was anyone involved in the TIE working at the time, for example, driver or either vehicle	Workers with commercial vehicles such as truck drivers, taxi drivers, and tradespeople are working when the commercial vehicle is in use. When a driver, passenger or bystander is fatally injured by a commercial vehicle, this is also considered to be work related. If appropriate, this should be represented in the *Work relatedness* field.

TIE sequencing

In most scenarios the vehicle being described in both the *Object or Substance producing injury* and *Mode of transport* data fields will be the same – the vehicle in which the deceased was travelling.

The exception is when deceased is a pedestrian or a bystander to movement of the vehicle, for example, diner sitting in sidewalk café, person waiting at bus stop. This is further explained in the coding scenarios below:

Scenario	Object	Mode	Counterpart
Deceased an occupant (driver, rider, passenger) of a vehicle	Vehicle deceased was travelling in	Vehicle deceased travelling in	Vehicle which deceased's vehicle collided with (or collided with deceased's vehicle)
Deceased a pedestrian or bystander to the movement of the vehicle	Vehicle which struck the deceased	Method by which deceased was travelling	Vehicle which struck the deceased

Code sequencing

There are five main scenarios that involve transport injury events.

1. Vehicle v vehicle(s)
2. Vehicle v object
3. Vehicle v no object
4. Pedestrian v vehicle(s)
5. Pedestrian v vehicle(s) and object

The coding advice and sequencing varies slightly for each of these.

Examples for each of the scenarios are provided below.

CODING SCENARIOS

Vehicle v vehicle(s)

A collision between two vehicles or more vehicles.

Coding should reflect the vehicles involved in the TIE.

If multiple vehicles involved it may be appropriate to code the both events. The primary mechanism/object should reflect the TIE which resulted in the death, with the less serious TIE coded as a secondary.

If it is not possible to determine which TIE resulted in the fatal injuries, code as per sequence of occurrence.

Rank	Data field	Advice
Primary	*Mechanism*	*Transport injury event* *+ 3rd level (Vehicle occupant; Passenger; Motorcyclist/motorcycle rider)*
	Object	Describe the vehicle in which the deceased was travelling, for example: • *Motorcycle* • *Motor car, station wagon, minivan* • *Four wheel drive, sport utility vehicle, Jeep* • *Tractor-trailer, articulated truck, 18 wheeler, rig, road train*
	Mode of transport	Describe the vehicle in which the deceased was travelling, for example: • *Motorcycle* • *Motor car, station wagon, minivan* • *Truck* • *Four wheel drive vehicle, 4x4*
	Counterpart	Describe the second vehicle involved in the collision – what the vehicle in which the deceased was travelling collided with, for example: • *Motorcycle* • *Motor car, station wagon, minivan* • *Truck* • *Four wheel drive vehicle, 4x4* • *Railway train*
	Context	Indication of where the TIE occurred, for example: • *Land transport traffic injury event* • *Land transport non-traffic injury event* • *Water transport crash or collision*
	User	Role of the deceased, for example: • *Driver, rider or operator,* • *Passenger*

Vehicle v object(s)

A collision between a vehicle and an object (fixed or moving).

Coding should reflect the vehicle in which the deceased travelled and the object with which they collided.

Rank	Data field	Advice
Primary	Mechanism	*Transport injury event* *+ 3rd level (Vehicle occupant; Passenger; Motorcyclist/motorcycle rider)*
	Object	Describe the vehicle in which the deceased was travelling, for example: • *Motorcycle* • *Motor car, station wagon, minivan*
	Mode of transport	Describe the vehicle in which the deceased was travelling, for example: • *Motorcycle* • *Motor car, station wagon, minivan*
	Counterpart	Describe the object involved in the collision – what the vehicle in which the deceased was travelling collided with, for example: • *Fixed or stationary object* • *Animal* • *Moving or unsecured object*
	Context	Indication of where the TIE occurred, for example: • *Land transport traffic injury event* • *Land transport non-traffic injury event* • *Water transport crash or collision*
	User	Role of the deceased, for example: • *Person on foot, bystander, swimmer*, • *Driver, rider or operator*, • *Passenger*
Secondary 1	Mechanism	Description of the mechanism, for example: • *Contact with static, stationary object* • *Contact with* moving object
	Object	Detailed description of the counterpart (object involved in collision), for example: • *Tree, plant* • *Marsupial* • *Wall – brick, concrete, tile, plasterboard*

Vehicle v no object

A collision with no external counterpart, often caused directly by the actions of the driver or an occupant within the vehicle (e.g. driver inattention, too much speed, unable to control vehicle in a turn etc.)

Coding should reflect the vehicle in which the deceased travelled and record the counterpart as appropriate.

Example

Rank	Data field	Advice
Primary	Mechanism	*Transport injury event* *+ 3rd level (Vehicle occupant; Passenger; Motorcyclist/motorcycle rider)*
	Object	Describe the vehicle in which the deceased was travelling, for example: • *Motorcycle* • *Motor car, station wagon, minivan*
	Mode of transport	Describe the vehicle in which the deceased was travelling, for example: • *Motorcycle* • *Motor car, station wagon, minivan*
	Counterpart	Describe the action that resulted in the injury, for example: • *Sudden movement of vehicle, resulted in injury* • *Rollover of vehicle without collision* • *No counterpart*
	Context	Indication of where the TIE occurred, for example: • *Land transport traffic injury event* • *Land transport non-traffic injury event* • *Water transport crash or collision*
	User	Role of the deceased, for example: • *Driver, rider or operator,* • *Passenger*

Where a thrown or dropped object caused no injury, code the subsequent event which resulted in the death rather than the object which initiated the event (dropped object): driver lost control of vehicle following rock thrown off a bridge:

- **collided with streetlight – code Counterpart as streetlight (collision causing injuries)**
- **resulting in rollover of vehicle – code Counterpart as the rollover**

Pedestrian v vehicle

A collision between a pedestrian (or bystander to the activity of the vehicle) and a vehicle

Coding should reflect the role of the deceased as a pedestrian or bystander and the vehicle which struck them.

Example

Rank	Data field	Advice
Primary	Mechanism	*Transport injury event* *+ 3rd level (Pedestrian/swimmer; Occupant out of vehicle)*
	Object	Describe the vehicle which struck the deceased, for example: • *Motorcycle* • *Motor car, station wagon, minivan* • *Four wheel drive, sport utility vehicle, Jeep* • *Tractor-trailer, articulated truck, 18 wheeler, rig, road train*
	Mode of transport	Describe the method by which the deceased was travelling, for example: • *Person on foot* • *Swimmer* • *Occupant out of vehicle*
	Counterpart	Describe the object involved in the collision – the vehicle which struck the deceased, for example: • *Motorcycle* • *Motor car, station wagon, minivan*
	Context	Indication of where the TIE occurred, for example: • *Land transport traffic injury event* • *Land transport non-traffic injury event* • *Water transport crash or collision*
	User	Role of the deceased, for example: • *Person on foot, bystander, swimmer,* • *Driver, rider or operator,* • *Passenger*

Pedestrian v vehicle and object(s)

A collision between a pedestrian (or bystander)and a vehicle and an object (fixed or moving).

Coding should reflect the role of the deceased as a pedestrian and the vehicle which struck them plus any contact with an additional object such as the roadway.

Example

Rank	Data field	Advice
Primary	Mechanism	*Transport injury event* *+ 3rd level (Pedestrian/swimmer; Occupant out of vehicle)*
	Object	Describe the vehicle which struck the deceased, for example: • *Motorcycle* • *Motor car, station wagon, minivan*
	Mode of transport	Describe the method by which the deceased was travelling, for example: • *Person on foot* • *Swimmer* • *Occupant out of vehicle*
	Counterpart	Describe the object involved in the collision – the vehicle which struck the deceased, for example: • Motorcycle • Motor car, station wagon, minivan
	Context	Indication of where the TIE occurred, for example: • *Land transport traffic injury event* • *Land transport non-traffic injury event* • *Water transport crash or collision*
	User	Role of the deceased, for example: • *Person on foot, bystander, swimmer* • *Occupant out of vehicle*
Secondary 1	Mechanism	Description of the mechanism, for example: • *Contact with static, stationary object* • *Contact with* moving object
	Object	Detailed description of the counterpart (object involved in collision), for example: • *Footpath* • *Roadway* • *Wall – brick, concrete, tile, plasterboard*