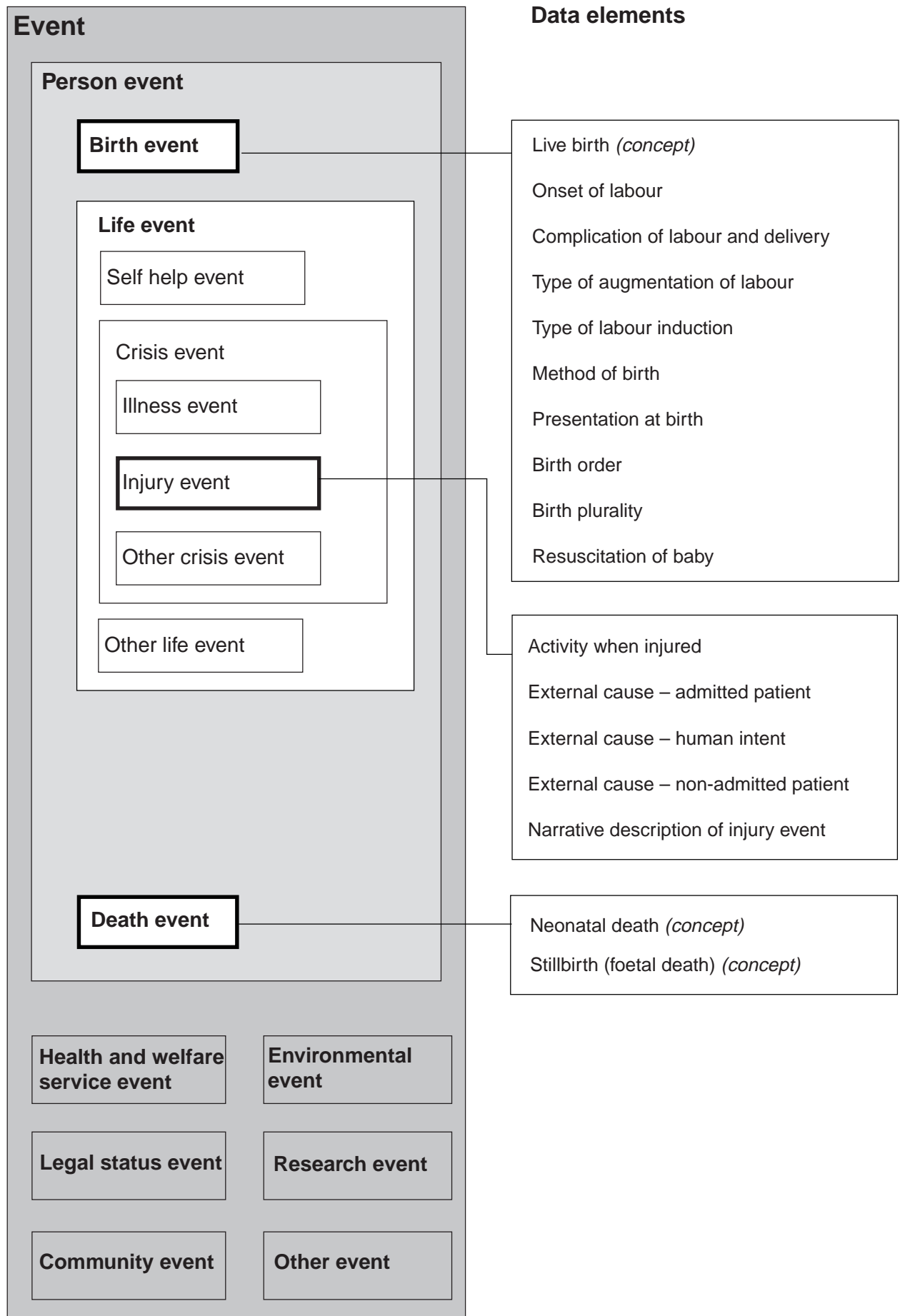


National Health Information Model entities



Live birth

Admin. status: CURRENT 1/07/94

Identifying and definitional attributes

Knowledgebase ID: 000083 *Version number:* 1

Data element type: DATA ELEMENT CONCEPT

Definition: A live birth is defined by the World Health Organization to be the complete expulsion or extraction from the mother of a baby, irrespective of the duration of the pregnancy which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of the voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. Each product of such a birth is considered live born.

Context: Perinatal

Relational and representational attributes

Datatype: *Representational form:*

Field size: *Min.* *Max.* *Representational layout:*

Data domain:

Guide for use:

Verification rules:

Collection methods:

Related data: relates to the data element Status of the baby, version 1

Administrative attributes

Source document: International Classification of Diseases and Related Health Problems, 10th Revision, Vol 1, WHO 1992

Source organisation: National Health Data Committee, National Perinatal Data Development Committee

National minimum data sets:

Institutional health care from 1/07/89 to

Perinatal from 1/07/97 to

Comments:

Onset of labour

Admin. status: CURRENT 1/07/96

Identifying and definitional attributes

Knowledgebase ID: 000113 *Version number:* 1

Data element type: DATA ELEMENT

Definition: Manner in which labour started.

Context: Perinatal statistics: how labour commenced is closely associated with type of delivery and maternal and neonatal morbidity. Induction rates vary for maternal risk factors and obstetric complications and are important indicators of obstetric intervention.

Relational and representational attributes

Datatype: Numeric *Representational form:* CODE

Field size: *Min.* 1 *Max.* 1 *Representational layout:* N

Data domain:

1	Spontaneous
2	Induced
3	No labour
9	Not stated

Guide for use: 'No labour' can only be associated with caesarean section.

Verification rules:

Collection methods:

Related data: is used in conjunction with Type of labour induction, version 1

Administrative attributes

Source document:

Source organisation: National Perinatal Data Development Committee

National minimum data sets:

Perinatal from 1/07/97 to

Comments:

Complication of labour and delivery

Admin. status: CURRENT 1/07/98

Identifying and definitional attributes

Knowledgebase ID: 000027 *Version number:* 2

Data element type: DATA ELEMENT

Definition: Medical and obstetric complications (necessitating intervention) arising after the onset of labour and before the completed delivery of the baby and placenta.

Context: Perinatal statistics: complications of labour and delivery may cause maternal morbidity and may affect the health status of the baby at birth.

Relational and representational attributes

Datatype: Alphanumeric *Representational form:* CODE

Field size: *Min.* 3 *Max.* 6 *Representational layout:* ANN.NN

Data domain: ICD-10-AM

Guide for use: There is no arbitrary limit on the number of conditions specified.

New South Wales, Australian Capital Territory, Victoria and the Northern Territory implemented ICD-10-AM from 1 July 1998. Other States will implement ICD-10-AM from 1 July 1999.

Verification rules: Complications should be coded within the Pregnancy, Childbirth, Puerperium chapter 15 of Volume 1, ICD-10-AM

Collection methods:

Related data: is used in conjunction with Presentation at birth, version 1

is used in conjunction with Method of birth, version 1

is used in conjunction with Perineal status, version 1

supersedes previous data element Complication of labour and delivery – ICD-9-CM code, version 1

is used in conjunction with Postpartum complication, version 2

Administrative attributes

Source document: International Statistical Classification of Diseases and Related health Problems – 10th Revision, Australian Modification (1998) National Centre for Classification in Health, Sydney.

Source organisation: National Perinatal Data Development Committee

National minimum data sets:

Comments:

Type of augmentation of labour

Admin. status: CURRENT 1/07/96

Identifying and definitional attributes

Knowledgebase ID: 000167 *Version number:* 1

Data element type: DATA ELEMENT

Definition: Methods used to assist progress of labour.

Context: Neonatal care: type of augmentation determines the progress and duration of labour and may influence the method of delivery and the health status of the baby at birth.

Relational and representational attributes

Datatype: Numeric *Representational form:* CODE

Field size: *Min.* 1 *Max.* 1 *Representational layout:* N

Data domain: 0 None

- 1 Oxytocin
- 2 Prostaglandins
- 3 Artificial rupture of membranes (ARM)
- 4 Other

Guide for use: More than one method of augmentation can be recorded, except where 0=none applies.

Verification rules:

Collection methods:

Related data: is used in conjunction with Onset of labour, version 1
is used in conjunction with Type of labour induction, version 1

Administrative attributes

Source document:

Source organisation: National Perinatal Data Development Committee

National minimum data sets:

Comments:

Type of labour induction

Admin. status: CURRENT 1/07/96

Identifying and definitional attributes

Knowledgebase ID: 000171 *Version number:* 1

Data element type: DATA ELEMENT

Definition: Methods used to induce labour.

Context: Perinatal statistics: type of induction determines the progress and duration of labour and may influence the method of delivery and the health status of the baby at birth.

Relational and representational attributes

Datatype: Numeric *Representational form:* CODE

Field size: *Min.* 1 *Max.* 1 *Representational layout:* N

Data domain:

0	None
1	Oxytocin
2	Prostaglandins
3	Artificial rupture of membranes (ARM)
4	Other

Guide for use: More than one method of induction can be recorded, except where 0=none applies.

Verification rules:

Collection methods:

Related data: is used in conjunction with Onset of labour, version 1
is used in conjunction with Type of augmentation of labour, version 1

Administrative attributes

Source document:

Source organisation: National Perinatal Data Development Committee

National minimum data sets:

Comments:

Method of birth

Admin. status: CURRENT 1/07/96

Identifying and definitional attributes

Knowledgebase ID: 000093 *Version number:* 1

Data element type: DATA ELEMENT

Definition: The method of complete expulsion or extraction from its mother of a product of conception.

Context: Perinatal statistics: the method of delivery may affect the health status of the mother and the baby at birth and during the postpartum period.

Relational and representational attributes

Datatype: Numeric *Representational form:* CODE

Field size: *Min.* 1 *Max.* 1 *Representational layout:* N

Data domain:

1	Spontaneous vaginal
2	Forceps (assisted vaginal birth)
3	Vaginal breech
4	Caesarean section
5	Vacuum extraction
8	Other
9	Not stated

Guide for use: In a vaginal breech with forceps to the aftercoming head, code as vaginal breech.

Verification rules:

Collection methods:

Related data: is used in conjunction with Presentation at birth, version 1

Administrative attributes

Source document:

Source organisation: National Perinatal Data Development Committee

National minimum data sets:

Perinatal from 1/07/97 to

Comments:

Presentation at birth

Admin. status: CURRENT 1/07/96

Identifying and definitional attributes

Knowledgebase ID: 000133 *Version number:* 1

Data element type: DATA ELEMENT

Definition: Presenting part of the foetus (at lower segment of uterus) at birth.

Context: Perinatal statistics: presentation types other than vertex are associated with higher rates of caesarean section, instrumental delivery, perinatal mortality and neonatal morbidity.

Relational and representational attributes

Datatype: Numeric *Representational form:* CODE

Field size: *Min.* 1 *Max.* 1 *Representational layout:* N

Data domain:

1	Vertex
2	Breech
3	Face
4	Brow
8	Other
9	Not stated

Guide for use:

Verification rules:

Collection methods:

Related data: is used in conjunction with Method of birth, version 1

Administrative attributes

Source document:

Source organisation: National Perinatal Data Development Committee

National minimum data sets:

Comments:

Birth order

Admin. status: CURRENT 1/07/96

Identifying and definitional attributes

Knowledgebase ID: 000019 *Version number:* 1

Data element type: DATA ELEMENT

Definition: The order of each baby of a multiple birth.

Context: Perinatal statistics: required to analyse pregnancy outcome according to birth order and identify the individual baby resulting from a multiple birth pregnancy. Multiple births have higher risks of perinatal mortality and morbidity. Multiple birth pregnancies are often associated with obstetric complications, labour and delivery complications, higher rates of neonatal morbidity, low birthweight, and a higher perinatal death rate.

Relational and representational attributes

Datatype: Numeric *Representational form:* CODE

Field size: *Min.* 1 *Max.* 1 *Representational layout:* N

Data domain:

1	Singleton or first of a multiple birth
2	Second of a multiple birth
3	Third of a multiple birth
4	Fourth of a multiple birth
5	Fifth of a multiple birth
6	Sixth of a multiple birth
8	Other
9	Not stated

Guide for use:

Verification rules:

Collection methods:

Related data: is a qualifier of Birth plurality, version 1

Administrative attributes

Source document:

Source organisation: National Perinatal Data Development Committee

National minimum data sets:

Perinatal from 1/07/97 to

Comments:

Birth plurality

Admin. status: CURRENT 1/07/96

Identifying and definitional attributes

Knowledgebase ID: 000020 *Version number:* 1

Data element type: DATA ELEMENT

Definition: The total number of births resulting from this pregnancy.

Context: Perinatal statistics: multiple pregnancy increases the risk of complications during pregnancy, labour and delivery and is associated with higher risk of perinatal morbidity and mortality.

Relational and representational attributes

Datatype: Numeric *Representational form:* CODE

Field size: *Min.* 1 *Max.* 1 *Representational layout:* N

Data domain:

1	Singleton
2	Twins
3	Triplets
4	Quadruplets
5	Quintuplets
6	Sextuplets
8	Other
9	Not stated

Guide for use: Plurality of a pregnancy is determined by the number of live births or by the number of foetuses that remain in utero at 20 weeks gestation and that are subsequently born separately. In multiple pregnancies, or if gestational age is unknown, only live births of any birthweight or gestational age, or foetuses weighing 400 g or more, are taken into account in determining plurality. Foetuses aborted before 20 completed weeks or foetuses compressed in the placenta at 20 or more weeks are excluded.

Verification rules:

Collection methods:

Related data: is qualified by Birth order, version 1

Administrative attributes

Source document:

Source organisation: National Perinatal Data Development Committee

National minimum data sets:

Perinatal from 1/07/97 to

Comments:

Resuscitation of baby

Admin. status: CURRENT 1/07/96

Identifying and definitional attributes

Knowledgebase ID: 000145 *Version number:* 1

Data element type: DATA ELEMENT

Definition: Active measures taken immediately after birth to establish independent respiration and heart beat, or to treat depressed respiratory effort and to correct metabolic disturbances.

Context: Perinatal statistics: required to analyse need for resuscitation after complications of labour and delivery and to evaluate level of services needed for different birth settings.

Relational and representational attributes

Datatype: Numeric *Representational form:* CODE

Field size: *Min.* 1 *Max.* 1 *Representational layout:* N

Data domain:

1	None
2	Suction only
3	Oxygen therapy only
4	Intermittent positive pressure respiration (IPPR) through bag and mask
5	Endotracheal intubation and IPPR
6	External cardiac massage and ventilation
8	Other

Guide for use:

Verification rules:

Collection methods:

Related data: is used in conjunction with Status of the baby, version 1
is used in conjunction with Apgar score at 1 minute, version 1
is used in conjunction with Apgar score at 5 minutes, version 1

Administrative attributes

Source document:

Source organisation: National Perinatal Data Development Committee

National minimum data sets:

Comments:

Activity when injured

Admin. status: CURRENT 1/07/96

Identifying and definitional attributes

Knowledgebase ID: 000002 *Version number:* 1

Data element type: DATA ELEMENT

Definition: The type of activity being undertaken by the person when injured.

Context: Injury surveillance: enables categorisation of injury and poisoning according to factors important for injury control. Necessary for defining and monitoring injury control targets, injury costing and identifying cases for in-depth research. This item is the basis for identifying work-related and sport-related injuries.

Relational and representational attributes

Datatype: Numeric *Representational form:* CODE

Field size: *Min.* 1 *Max.* 1 *Representational layout:* N

Data domain:

1	Sports activity
2	Leisure activity
3	Working for income (include travel to and from work)
4	Other type of work (include unpaid housework)
5	Resting, sleeping, eating, other personal activity
6	Being nursed or cared for
7	Engaged in formal educational activity (as a student)
8	Other specified activity
9	Unspecified activity

Guide for use: Admitted patients: add the appropriate code as a fifth character when using ICD-10-AM external cause codes within the range V01 – Y34.

Non-admitted patients: select the code which best characterises the type of activity being undertaken by the person when injured, on the basis of the information available at the time it is recorded. If two or more categories are judged to be equally appropriate, select the one that comes first in the code list.

New South Wales, Australian Capital Territory, Victoria and the Northern Territory implemented ICD-10-AM from 1 July 1998. Other States will implement ICD-10-AM from 1 July 1999.

Verification rules:

Collection methods:

Related data:

- is used in conjunction with External cause – major external cause, version 3
- is used in conjunction with External cause – human intent, version 3
- is a qualifier of Narrative description of injury event, version 1
- is used in conjunction with Nature of main injury – non-admitted patient, version 1
- is used in conjunction with Bodily location of main injury, version 1

Activity when injured (*continued*)

Administrative attributes

Source document:

Source organisation: National Injury Surveillance Unit

National minimum data sets:

Institutional health care from 1/07/89 to

Injury surveillance from 1/07/89 to

Comments:

External cause – admitted patient

Admin. status: CURRENT 1/07/98

Identifying and definitional attributes

Knowledgebase ID: 000053 *Version number:* 4

Data element type: DATA ELEMENT

Definition: Environmental event, circumstance or condition as the cause of injury, poisoning and other adverse effect.

Context: Institutional health care: enables categorisation of injury and poisoning according to factors important for injury control. This information is necessary for defining and monitoring injury control targets, injury costing and identifying cases for in-depth research. It is also used as a quality of care indicator of adverse patient outcomes.

Relational and representational attributes

Datatype: Alphanumeric *Representational form:* CODE

Field size: *Min.* 3 *Max.* 6 *Representational layout:* ANN.NN

Data domain: ICD-10-AM

Guide for use: This code must be used in conjunction with an injury or poisoning codes and can be used with other disease codes. Admitted patients should be coded to the complete ICD-10-AM classification.

An external cause code should be sequenced following the related injury or poisoning code, or following the group of codes, if more than one injury or condition has resulted from this external cause. Provision should be made to record more than one external cause if appropriate.

External cause codes in the range W00 to Y34, except Y06 and Y07 must be accompanied by a place of occurrence code (data element Place of occurrence of external cause).

External cause codes V01 to Y34 must be accompanied by an activity code (data element Activity when injured).

New South Wales, Australian Capital Territory, Victoria and the Northern Territory implemented ICD-10-AM from 1 July 1998. Other States will implement ICD-10-AM from 1 July 1999.

Verification rules: As a minimum requirement, the external cause codes must be listed in the ICD-10-AM classification.

Collection methods:

Related data: is used in conjunction with Activity when injured, version 1
 is used in conjunction with Place of occurrence of external cause, version 2
 supersedes previous data element External cause – admitted patient – ICD-9-CM code, version 3
 is used in conjunction with Principal diagnosis, version 3
 is used in conjunction with Additional diagnosis, version 4

External cause – admitted patient (*continued*)

Administrative attributes

Source document: International Statistical Classification of Diseases and Related Health Problems – Tenth Revision – Australian Modification (1998) National Centre for Classification in Health, Sydney.

Source organisation: National Health Data Committee, National Centre for Classification in Health and National Data Standards for Injury Surveillance Advisory Group

National minimum data sets:

Institutional health care from 1/07/89 to

Injury surveillance from 1/07/89 to

Comments: An extended activity code is being developed in consultation with the National Injury Surveillance Unit, Flinders University, Adelaide.

External cause – human intent

Admin. status: CURRENT 1/07/98

Identifying and definitional attributes

Knowledgebase ID: 000382 *Version number:* 4

Data element type: DATA ELEMENT

Definition: The most likely role of human intent in the occurrence of the injury or poisoning as assessed by clinician.

Context: Injury surveillance: enables categorisation of injury and poisoning according to factors important for injury control. This information is necessary for defining and monitoring injury control targets, injury costing and identifying cases for in-depth research.

Relational and representational attributes

Datatype: Numeric *Representational form:* CODE

Field size: *Min.* 2 *Max.* 2 *Representational layout:* NN

Data domain:

01	Accident – injury not intended
02	Intentional self harm
03	Sexual assault
04	Maltreatment by parent
05	Maltreatment by spouse or partner
06	Other and unspecified assault
07	Event of undetermined intent
08	Legal intervention (including police) or operations of war
09	Adverse effect or complications of medical and surgical care
10	Other specified intent
11	Intent not specified

Guide for use: Select the item which best characterises the role of intent in the occurrence of the injury, on the basis of the information available at the time it is recorded. If two or more categories are judged to be equally appropriate, select the one that comes first in the code list. This item must always be accompanied by an External cause – non-admitted patient code.

This data domain is for use in injury surveillance purposes only, when it is not possible to use a complete ICD-10-AM code (eg non-admitted patients in emergency departments).

Verification rules:

Collection methods:

Related data: supersedes previous data element External cause – human intent, version 3

is used in conjunction with Place of occurrence of external cause of injury – non-admitted patient, version 3

is used in conjunction with Narrative description of injury event, version 1

External cause – human intent (*continued*)

Related data (cont'd): is used in conjunction with Nature of main injury – non-admitted patient, version 1

is used in conjunction with Bodily location of main injury, version 1

is used in conjunction with Activity when injured, version 1

Administrative attributes

Source document:

Source organisation: National Health Data Committee; National Data Standards for Injury Surveillance Advisory Group

National minimum data sets:

Injury surveillance from 1/07/89 to

Comments:

External cause – non-admitted patient

Admin. status: CURRENT 1/07/98

Identifying and definitional attributes

Knowledgebase ID: 000381 *Version number:* 4

Data element type: DATA ELEMENT

Definition: Event, circumstance or condition associated with the occurrence of injury, poisoning or adverse effect.

Context: Injury surveillance: enables categorisation of injury and poisoning according to factors important for injury control. This information is necessary for defining and monitoring injury control targets, injury costing and identifying cases for in-depth research.

Relational and representational attributes

Datatype: Numeric *Representational form:* CODE

Field size: *Min.* 2 *Max.* 2 *Representational layout:* NN

Data domain:

01	Motor vehicle – driver
02	Motor vehicle – passenger or unspecified occupant
03	Motorcycle – driver
04	Motorcycle – passenger or unspecified
05	Pedal cyclist or pedal cycle passenger
06	Pedestrian
07	Other or unspecified transport-related circumstance
08	Horse-related (includes fall from, struck or bitten by)
09	Fall – low (on same level or < 1 metre or no information on height)
10	Fall – high (drop of 1 metre or more)
11	Drowning, submersion – swimming pool
12	Drowning, submersion – other than swimming pool (excludes drowning associated with water craft [07])
13	Other threat to breathing (including strangling and asphyxiation)
14	Fire, flames, smoke
15	Hot drink, food, water, other fluid, steam, gas or vapour
16	Hot object or substance, not otherwise specified
17	Poisoning – drugs or medicinal substance
18	Poisoning – other substance
19	Firearm
20	Cutting, piercing object
21	Dog-related
22	Animal-related (excluding Horse [08] and Dog [21])
23	(deleted)
24	Machinery in operation
25	Electricity
26	Hot conditions (natural origin) sunlight

External cause – non-admitted patient (*continued*)

<i>Data domain (cont'd):</i>	27	Cold conditions (natural origins)
	28	Other specified external cause
	29	Unspecified external cause
	30	Struck by or collision with person
	31	Struck by or collision with object

Guide for use: This data domain is for use in injury surveillance purposes only, when it is not possible to use a complete ICD-10-AM code (eg. Non-admitted patients in emergency departments). Select the item which best characterises the circumstances of the injury, on the basis of the information available at the time it is recorded. If two or more categories are judged to be equally appropriate select the one that comes first in the code list. The External cause – non-admitted patient group must always be accompanied by an External cause – human intent code (see data element External cause – human intent – injury surveillance).

Verification rules:

Collection methods:

Related data: supersedes previous data element External cause – major external cause, version 3
is used in conjunction with Place of occurrence of external cause of injury – non-admitted patient, version 3
is used in conjunction with Narrative description of injury event, version 1
is used in conjunction with Nature of main injury – non-admitted patient, version 1
is used in conjunction with Bodily location of main injury, version 1
is used in conjunction with Activity when injured, version 1
is used in conjunction with External cause – human intent, version 4

Administrative attributes

Source document:

Source organisation: National Health Data Committee; National Centre for Classification in Health; and National Data Standards for Injury Surveillance Advisory Group

National minimum data sets:

Comments: This item has been developed to cater for the information requirements of the wide range of settings undertaking injury surveillance who do not have the capability of recording the complete ICD-10-AM external cause codes. This code list has been derived from the ICD-10-AM external cause classification. Further information on the national injury surveillance program can be obtained from the National Injury Surveillance Unit, Flinders University, Adelaide.

Narrative description of injury event

Admin. status: CURRENT 1/07/96

Identifying and definitional attributes

Knowledgebase ID: 000099 *Version number:* 1

Data element type: DATA ELEMENT

Definition: A text description of the injury event.

Context: Injury surveillance: the narrative of the injury event is very important to injury control workers as it identifies features of the event not revealed by coded data.

Relational and representational attributes

Datatype: Alphanumeric *Representational form:* TEXT

Field size: *Min.* 0 *Max.* 100 *Representational layout:* Text

Data domain: Text up to 100 characters in length

Guide for use: Write a brief description of how the injury occurred. It should indicate what went wrong (the breakdown event), the mechanism by which this event led to injury and the object(s) or substance(s) most important in the event. The type of place at which the event occurred, and the activity of the person who was injured should also be indicated.

Verification rules:

Collection methods:

Related data: is qualified by External cause – human intent, version 3

is qualified by Activity when injured, version 1

Administrative attributes

Source document:

Source organisation: National Injury Surveillance Unit

National minimum data sets:

Injury surveillance from 1/07/89 to

Comments: This is a basic item for injury surveillance. The text description of the injury event is structured to indicate context, place, what went wrong and how the event resulted in injury. Further information on the national injury surveillance program can be obtained from the National Injury Surveillance Unit, Flinders University, Adelaide.

Neonatal death

Admin. status: CURRENT 1/07/96

Identifying and definitional attributes

Knowledgebase ID: 000101 *Version number:* 1

Data element type: DATA ELEMENT CONCEPT

Definition: The death of a live birth which occurs during the first 28 days of life. This may be subdivided into early neonatal deaths, occurring during the first seven days of life, and late neonatal deaths, occurring after the seventh day but before 28 completed days of life.

Context: Perinatal

Relational and representational attributes

Datatype: *Representational form:*

Field size: *Min.* *Max.* *Representational layout:*

Data domain:

Guide for use:

Verification rules:

Collection methods:

Related data: relates to the data element Status of the baby, version 1

Administrative attributes

Source document: International Classification of Diseases, 10th Revision, WHO, 1992

Source organisation: National Perinatal Data Development Committee

National minimum data sets:

Perinatal from 1/07/97 to

Comments: Age at death during the first day of life (day zero) should be recorded in units of completed minutes or hours of life. For the second (day one), third (day two) and through 27 completed days of life, age at death should be recorded in days (WHO 1992).

Stillbirth (foetal death)

Admin. status: CURRENT 1/07/96

Identifying and definitional attributes

Knowledgebase ID: 000160 *Version number:* 1

Data element type: DATA ELEMENT CONCEPT

Definition: A foetal death prior to the complete expulsion or extraction from its mother of a product of conception of 20 or more completed weeks of gestation or of 400 g or more birthweight; the death is indicated by the fact that after such separation the foetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

Context: Perinatal

Relational and representational attributes

Datatype: *Representational form:*

Field size: *Min.* *Max.* *Representational layout:*

Data domain:

Guide for use:

Verification rules:

Collection methods:

Related data:

Administrative attributes

Source document:

Source organisation: National Perinatal Data Development Committee

National minimum data sets:

Perinatal from 1/07/97 to

Comments: The WHO definition of live birth, and the legal definition used in Australian States and Territories, do not specify any lower limit for gestational age or birthweight. In practice, liveborn foetuses of less than 20 weeks' gestation are infrequently registered as live births. In analysing data from the perinatal collections, it is recommended that the same criteria of gestational age and birthweight should be used for live births and stillbirths. Births for which gestational age and birthweight have not been recorded (usually occurring outside hospitals) should be included in the perinatal collections if it seems likely that the criteria have been met.

Terminations of pregnancy performed at gestational ages of 20 or more weeks should be included in perinatal collections and should be recorded either as stillbirths or, in the unlikely event of showing evidence of life, as live births.