

# coding matters



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## New External Cause Categories in ICD-10-AM Third Edition



*Sports injuries can now be classified by activity*

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The External Causes chapter of ICD-10-AM (Chapter XX) has developed considerably between the Second and Third Editions. The greater specificity will make Australia's hospital statistics more useful for injury prevention and control.

### Special Injury Edition

- What's new in Third Edition ..... 5
- Monash University Accident Research Centre (MUARC) ..... 14
- Injury Prevention Research Unit (New Zealand) ..... 16
- International Classification of Functioning Disability and Health (ICF) ... 18
- International Classification of External Causes of Injury (ICECI) ..... 21

Some major gaps in information are now being filled. In particular, sports injury and work-related injury are beginning to be described to a level of detail in keeping with the importance of these activities as settings for injury.

Other developments reflect changes in patterns of risk (eg the emergence of four wheel drives as common vehicles on Australian roads); recognition that some useful categories were lost with the change from ICD-9 to ICD-10 (eg poisoning by motor vehicle exhaust gas); demand for more detail on the circumstances of some common types of hospitalised injury (eg falls by children from playground

equipment); and interest in achieving capacity to distinguish certain case types that attract much interest, though the case frequency may be low (eg shark attacks).

The changes arose out of a consultation process managed by the National Centre for Classification in Health and reflect views of people concerned with injury prevention and control in Australia about topics and categories that would increase the value of hospital separations data for injury prevention and control. Practicability of implementation was kept in mind, and clinical coders participated in the process of identifying topics and designing new categories. All of the changes provide more specific categories by splitting existing external cause categories. Thus, data collected according ICD-10-AM Third Edition can be made compatible with data collected according to earlier versions of ICD-10-AM by collapsing the new categories into the broader ones available in previous editions.

### **Transport-related injuries**

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Not many years ago, four wheel drive vehicles were uncommon on Australian roads. They are now common. These vehicles tend to have characteristics that present special risk to their occupants, and to other road users. These characteristics include large mass, high centre of gravity and limited occupant protection. Chapter XX treated these vehicles in a way that was appropriate for uncommon, special purpose vehicles: briefly and somewhat ambiguously. The new edition treats these vehicles as cars (V40-V49) and introduces a fifth digit classification to distinguish several major types, one of which is 'all-terrain four-wheel drive' vehicles. This approach also enables distinction of 'people movers' and the much less common but hazardous 'quad cycles' and related four-wheeled motor cycles.

A related development is enhanced capacity to distinguish types of motorcycle, particularly the types designed for off-road use such as 'dirt bikes' and 'ag bikes' on farms.

Some transport-related injuries are recorded as being intentional, or of undetermined intent. To date, there has been essentially no capacity in the ICD to record information about the nature of these events. A fourth character expansion has been provided to enable the 'counterpart' (another vehicle, a fixed object, etc.) to be recorded in these cases.

### **Falls**

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Information about the circumstances in which falls occur is one of the foundations of prevention. The fourth character position has been used to increase the specificity of information about types of recreational conveyances from which falls often occur. W02 is one of the new categories for falls involving the small folding scooters that have become common in the past two years. W09 is about types of playground equipment. It will be possible to code 'falls on the same level' (W01) separately according to whether they result from slipping, tripping, or stumbling.

### **Sports injury**

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Sports injuries are very common, but the ICD has provided very little information about them. The first step towards rectifying this in national hospital data was taken in the second Australian edition of ICD-9-CM. Item E889 was provided to enable sport-related cases to be identified, and to enable a few major types of sporting activity to be distinguished. A new feature of ICD-10-AM is the 'activity' classification in the external causes chapter. Originally, this provided the capacity to distinguish injury 'while engaged in sports activity' but no further detail. ICD-10-AM Second Edition re-introduced the short list of types of sport distinguished by the fourth digit of E889 (this was made possible by treating the 'activity' item, and the 'place' item, as essentially separate items, rather than as fourth and fifth character expansions of external cause codes). During development of ICD-10-AM Third Edition, there was found to be strong user demand for extension of this list for example, to distinguish 'boxing'. Technical factors would have prevented any extension of the list of sports under the approach used to include 'activity' codes in the Second Edition (that is, as a fourth and fifth digit expansion of Y93). The most satisfactory solution was to move the activity classification to the unused range of ICD-10 codes commencing with the letter 'U'. The list of 'types of sport' included there is based on the one in the International Classification of External Causes of Injury (ICECI) version 1.0. That in turn was based on one that forms part of the Australian Sports Injury Data Dictionary.

In addition, a fourth character expansion has been added to W21 to improve understanding of circumstances of common types of sports injury. Finally, the existing category 'sports and athletics area' in the place classification has been expanded to distinguish several types of venue

(ie outdoor sporting grounds, indoor sporting facilities, swimming centres, racetracks, equestrian facilities, skating rinks and skiing facilities).

The changes in ICD-10-AM Third Edition, combined with the classification's existing high quality information about injury diagnoses and procedures should greatly enhance understanding of the occurrence of serious sports injury in Australia.

## Work-related injury

For many years, work-related injury has been an important blind-spot in ICD. Categories were available in ICD-9 to identify a few types of case, such as involving railway workers, and the place classification gave some clues. However, only with the introduction of the ICD-10 activity classification has there been a category defined in terms familiar to contemporary occupational health and safety, that is, injury while working for income. ICD-10-AM Third Edition takes this capability a step further, by providing sub-categories for work-related cases occurring in eight major industry sectors including mining, construction and health services. This will make information based on hospital separations data substantially more useful for purposes of occupational health and safety.



*ICD-10-AM Third Edition provides sub-categories for work-related cases*

## Intentional self-harm

Motor vehicle exhaust gas is one of the more common means of suicide in Australia.

ICD-9 provided a specific category for this external cause (E952.0). In ICD-10, this cause is included in the broader category X67 *Intentional self-poisoning by and exposure to*

*Practicability of implementation was kept in mind, and clinical coders participated in the process of identifying topics and designing new categories*

*other gases and vapours.* A fourth character expansion has been added, chiefly to enable specific identification of motor vehicle exhaust gas cases. For consistency, the same capability is provided for accidental poisoning, assault and poisoning of undetermined intent.

## Assault

Some categories in the 'Assault' section of the ICD-10 external causes chapter enable the type of perpetrator to be distinguished (Y06 and Y07). In ICD-10-AM Third Edition this approach has been extended to the whole of the assault section. Some categories are:

- spouse or domestic partner
- parent
- carer
- person unknown to the victim.

Cutting and stabbing are common modes of assault. Existing categories provide no information on the types of sharp objects used. A fourth character expansion of X99 will enable distinction of some common such as knife or glass, and high-interest (eg hypodermic needle) types. A parallel extension has been provided for self-harm and undetermined intent cases involving a sharp object. (A technical difficulty prevented application of the same change to categories for accidental injuries by sharp objects.)

## Machinery

Expansion of item W30 at fourth character level will enable major types of agricultural machinery involved in injuries to be identified.

Similar expansion of W31 will provide categories for some other major types of injurious machinery. Among other benefits, these categories will enhance the value of the expanded capability to code work-related injuries (described above).

## Animal-related injury

Several changes will improve capacity to identify injury cases resulting from contact with animals.

The changes allow:

- biting to be distinguished from other types of harm involving dogs, such as being knocked over
- falls from horses, and falls from other animals, to be distinguished from other events included in category V80.0
- sharks to be distinguished from other marine animals (W56) and platypus from other specified venomous animals (X27)
- contact with snakes to be coded according to whether the snake is known to be venomous (in which case categories are provided for several types), or is known to be non-venomous, or venomousness is unknown (W59 and X20). (There was no satisfactory category for unknown venomousness previously)
- more specific coding of some noteworthy types of arthropod, where recorded, for example, funnel web and red back spider; jumper ants and fire ants

- identification of some types of venomous marine animals (eg box jellyfish, stone fish, venomous octopus (blue-ringed, for example))

## Other changes

### Other changes enable:

- doors to be distinguished from other causes of crushing injury, such as 'of fingers' (W23)
- drowning and immersion in a 'spa, Jacuzzi or hot tub' to be distinguished from drowning and immersion in a bath, or in a swimming pool. (This will also resolve a coding ambiguity)
- distinctions between injury due to contact with: hot drink, hot food and hot fat and cooking oil (X10); running hot water (such as from a tap or shower) and contained hot water (as in a bath) (X11); and steam from motor vehicle radiators, steam or hot vapours from food, and steam or hot vapours from other sources (X13)
- more specific identification of 'place of occurrence', by further use of the fifth character.

New categories distinguish:

- 'driveway' from other parts of the home (vehicles are sometimes reversed over small children)
- 'roadway', 'sidewalk' and 'cycleway' as parts of street and highway
- provision of categories for several types of residential institution (notably 'prison' and 'aged care facility')
- sporting facilities (listed above) to be identified
- trade and service areas including 'shop and store', 'office building', 'café, hotel and restaurant' to be recorded
- industrial and construction areas, for example 'construction area', 'demolition site', 'factory and plant', 'mine and quarry' to be documented
- other places – 'stream of water', 'beach', 'forest', 'parking lot' can be defined.

Inclusions and terminology are based closely on ICD-10.

### ▶ James Harrison

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## CLINICAL CODERS'



SOCIETY OF AUSTRALIA

ACN 075 387 727

**T**HE CLINICAL CODERS' SOCIETY OF AUSTRALIA LTD was established in 1996 and is affiliated with the Health Information Management Association of Australia (HIMAA).

The CCSA constitution states that the primary objective of the Society is to provide a forum and also support for clinical coders and those interested in the coding of health care data.

The CCSA aims to provide members with advice on workforce and professional issues, continuing education activities, coder accreditation support, regular publications, in addition to helping to raise the profile of the clinical coders and to promote the understanding of the value of coded data.

The constitution of the CCSA enables membership to be offered to clinical coders, health information managers and those interested in clinical coding.

The CCSA is managed through a Board of Directors comprised of a member from each state and territory and a HIMAA Board member who will act as an ex-officio director.

The membership fees are \$50 annually with a one off \$30 initial joining fee. These fees are tax deductible.

For further information contact:

[www.himaa.org.au/CCSA](http://www.himaa.org.au/CCSA)

(membership information and forms on-line);

Your state or territory CCSA representative; or

CCSA Membership

PO Box 203, North Ryde NSW 1670

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# What's new in Third Edition?

*In keeping with the bee theme at the NCCH 7<sup>th</sup> Biennial Conference, the NCCH has been a hive of activity over the past few months in the final production stages of ICD-10-AM Third Edition.*

The word 'export' has taken on a new meaning as the carefully revised volumes are extracted from the ICD-10-AM database, checked and cross-checked, before the processes of typesetting, proofing and finally, publication, occur.

The following is a summary of the major changes that will be effective with ICD-10-AM Third Edition.

## Diseases

A significant number of disease codes have been expanded at fourth or fifth character level. For example:

- Codes at category P07 *Disorders related to short gestation and low birth weight, not elsewhere classified* have been expanded to further specify the weight ranges
- Category F32 *Depressive episode* has a fifth character indicating whether the condition arose within the postnatal period
- Category Z06 *Infection with drug-resistant microorganism* has fourth character breakdown to identify MRSA or VRE.

The aetiology 'daggers' were removed from 68 codes, where the dagger codes duplicated information already contained in the manifestation 'asterisk' code.

The perinatal and congenital chapters (P and Q codes) were expanded to update the classification in line with the recently released British Paediatrics Association version of ICD-10.

## Morphology

Morphology codes have been reviewed in light of the release of International Classification of Diseases for Oncology, Third Edition (ICD-O-3). ICD-O-2 was published in the late 1980s and since then significant changes to the classification of morphology have occurred.

This is particularly important in the lymphoproliferative disorders (leukaemia and lymphoma) where knowledge about their classification has progressed quickly and has made ICD-O-2 inappropriate.

## External Causes

Codes within Chapter XX *External causes of morbidity and mortality* have been expanded to improve the reporting on cause of injuries. This revision was performed primarily in response to a public submission received from the National



Injury Surveillance Unit. Many of the changes have been made with direct reference to the International Classification of External Causes of Injury (ICECI).

Areas expanded include:

- X20 – X29 *Contact with venomous animals and plants*  
eg X20.0 *Contact with venomous snake* requires a fifth digit to identify the type of snake
- X85 – Y09 *Assault* requires a fifth digit to identify the relationship of the perpetrator to the victim
- V90 – V94 *Water transport accidents* codes require a fifth digit to identify the type of watercraft
- W00 – W19 *Falls*  
eg W09 *Fall involving ice-skates, skis, roller skates or skateboards* requires a fifth digit to identify the equipment involved (ie snow ski, water ski, snowboard etc).

Category Y93 *Activity* has been deleted and a much expanded section, U50 – U73 *Activity*, has been created.

The majority of the new codes are contained within the section U50 – U72 *While engaged in sports and leisure*. Many sporting activities previously bundled under Y93.08 *While engaged in sports*, other now have specific codes, for example:

- U61.32 *Karate*
- U53.1 *Jet skiing*
- U56.1 *Jogging and running*

## Procedures

In ICD-10-AM Third Edition, the procedure classification (Volumes 3 and 4) has been renamed the *Australian Classification of Health Interventions (ACHI)*. (See page 10).

Modifications based on changes to the Medicare Benefits Schedule (MBS) from November 1999, May 2000, November 2000 and May 2001 have been included.

The first edition of ACHI (then known as MBS-Extended) was closely aligned with MBS, both in the numbering system and terminology. The MBS utilises diagnostic information to describe many item numbers and this feature was maintained in MBS-Extended. However, in ICD-10-AM Third Edition, a number of diagnostic statements have been deleted from code titles, in line with the principle that a procedure classification should describe only the procedure performed.

The anaesthetic codes have been reviewed, and will provide a more concise and user-friendly code structure. The patient's American Society of Anesthesiologists (ASA) Physical Status Classification is included in the new code structure as the last two characters of the anaesthetic code. For further information on the ASA, see the report on page 13.

Significant improvements have also been made in the classification of:

- spinal procedures (fusion, laminectomy, discectomy)
- colorectal surgery
- urinary diversions
- spinal angiography
- allied health interventions.

## Australian Coding Standards

There are 14 new Standards and a further 68 Standards have been amended. Many of these changes reflect advice previously published in *Coding Matters*. A further 18 Standards have been deleted as a result of new codes, index improvements or amalgamation with other Standards.

Australian Coding Standard 0002 *Additional diagnoses* contains additional guidelines to further clarify the application of this standard. The specific criteria for defining an additional diagnosis have not been altered.

Australian Coding Standard 0020 *Multiple/bilateral procedures* has been revised with increased emphasis on coding procedures as often as they are performed.

Australian Coding Standard 0401 *Diabetes mellitus and impaired glucose regulation* has been renamed and expanded to reflect the changes previously outlined in *Coding Matters* 8(1):13, June 2001.

## ICD-10-AM Third Edition education

***Education to familiarise experienced clinical coders with changes to the classification that will appear in ICD-10-AM Third Edition will be conducted throughout Australia from March to June 2002.***

### ***Web-based learning***

An interactive web-based educational tool is being investigated which will be accessed through the NCCH web site <http://www.cchs.usyd.edu.au>. It is planned that after registering, users will access the password-protected area and work through the educational material and exercises at their own pace. Alternative options, including CD-ROM and a hard copy version, is currently being investigated to assist clinical coders who do not have access to the World Wide Web.

Some coders may feel that the web-based education option will be sufficient for their education needs, but supplementary face-to-face workshops will also be conducted.

### ***Face-to-face workshops***

Workshops are planned for capital cities and major regional centres in each state and territory from May to June 2002.

### ***More information...***

Keep an eye on Code-L and the NCCH web site for further updates about these educational activities.