

COMMITTEE CS-034

DR 05246

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Draft for Public Comment Australian Standard

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BEGINNING DATE 9 May 2005
FOR COMMENT:

CLOSING DATE 11 July 2005
FOR COMMENT:

Swimming pool safety
Part 2: Location of safety barriers for swimming pools
(Revision of AS 1926.2 — 1995)



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Draft for Public Comment Australian Standard

The committee responsible for the issue of this draft comprised representatives of organizations interested in the subject matter of the proposed Standard. These organizations are listed on the inside back cover.

Comments are invited on the technical content, wording and general arrangement of the draft.

The preferred method for submission of comment is to download the MS Word comment form found at <http://www.standards.com.au/Catalogue/misc/Public%20Comment%20Form.doc>. This form also includes instructions and examples of comment submission.

When completing the comment form ensure that the number of this draft, your name and organization (if applicable) is recorded. Please place relevant clause numbers beside each comment.

Editorial matters (i.e. spelling, punctuation, grammar etc.) will be corrected before final publication.

The coordination of the requirements of this draft with those of any related Standards is of particular importance and you are invited to point out any areas where this may be necessary.

Please provide supporting reasons and suggested wording for each comment. Where you consider that specific content is too simplistic, too complex or too detailed please provide an alternative.

If the draft is acceptable without change, an acknowledgment to this effect would be appreciated.

When completed, this form should be returned to the Projects Manager, **Adrian La Manna** via email to adrian.lamanna@standards.com.au.

Normally no acknowledgment of comment is sent. All comments received electronically by the due date will be put before the relevant drafting committee. Because Standards committees operate electronically we cannot guarantee that comments submitted in hard copy will be considered along with those submitted electronically. Where appropriate, changes will be incorporated before the Standard is formally approved.

If you know of other persons or organizations that may wish to comment on this draft Standard, could you please advise them of its availability. Further copies of the draft are available from the Customer Service Centre listed below and from our website at <http://www.standards.com.au/>.

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Draft for Public Comment

STANDARDS AUSTRALIA

Committee CS-034—Safety of Private Swimming Pools

DRAFT

**Australian Standard
Swimming pool safety**

Part 2: Location of safety barriers for swimming pools

(Revision of AS 1926.2 — 1995)

(To be AS 1926.2)

This draft has been prepared by CS-034 for Public Comment.

This Table is an outline of the major changes that have occurred in the revision of this Standard.

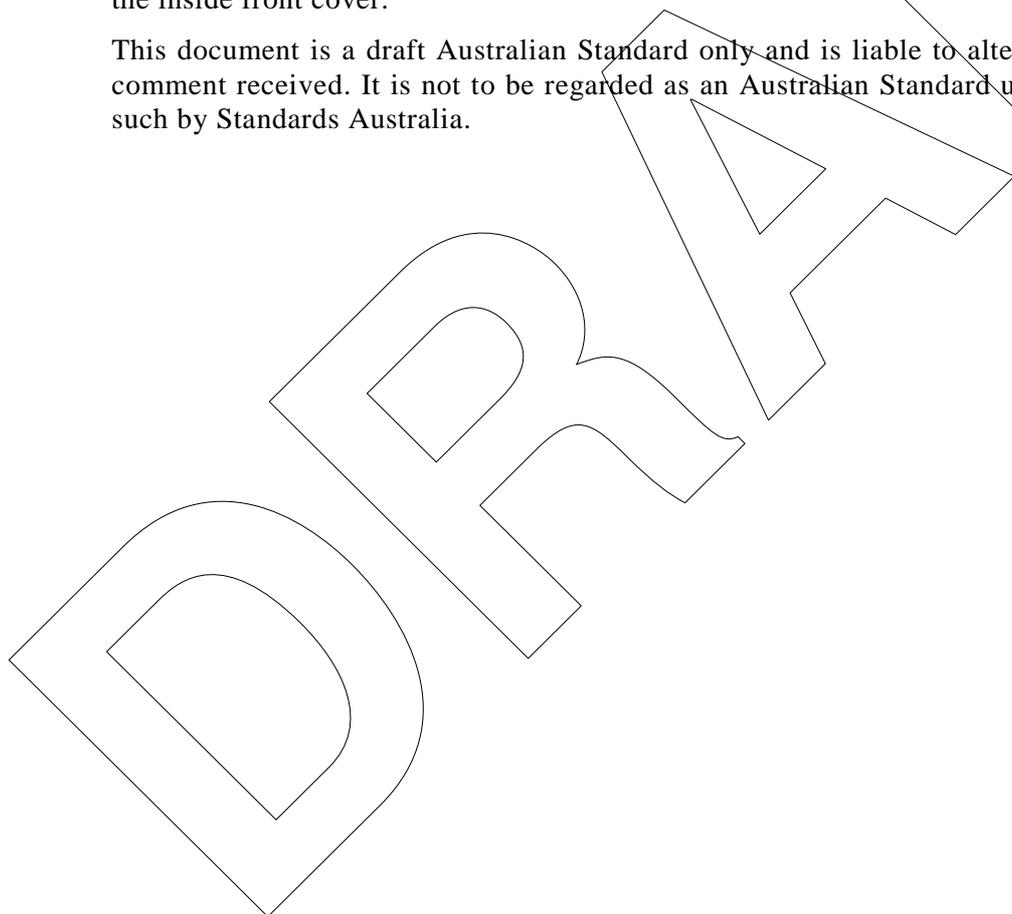
OUTLINE OF MAJOR CHANGES

Item	Clause No.	Clause title	Nature of change	Reason for change	Possible Implications
1	Clause 1	Scope	Updated scope to be conversant with revisions in AS 1926.1	Consistency in approach	Clarity
2	Clause 3	Definitions	Updated section with relevant revised definitions from AS 1926.1 Inserted definitions regarding different pool barrier assemblies and locations	Remove confusion	Clarity
3	Clause 4.2	Option A and Option B	Amalgamated into one option, given the decision that child resistant windows can constitute part of an acceptable four sided barrier without child resistant doorsets	The committee agreed that there is a low likeability for a child accessing a pool area via a child resistant window and drowning.	Remove confusion

4	New Option B	Indoor pools	Option inserted to address specific requirements for above ground pools	Recorded child drowning involving this type of pool, indicated a user need to address the appropriate requirements for an effective above ground pool.	Address the use of these pools and its requirements for safe barriers.
5	Previous Option C	Previous Option C	Deleted	The Committee decided on the basis of empirical evidence to remove this option, as there appears to be potential hazards posed by the use of child resistant doorsets in pool barriers.	

Comment on the draft is invited from people and organizations concerned with this subject. It would be appreciated if those submitting comment would follow the guidelines given on the inside front cover.

This document is a draft Australian Standard only and is liable to alteration in the light of comment received. It is not to be regarded as an Australian Standard until finally issued as such by Standards Australia.



PREFACE

This Standard was prepared by the Standards Australia Committee on Safety of Private Swimming Pools following a review of the AS 1926.2—1995, Swimming pool safety, Part 2: Location of fencing for private swimming pools.

This Standard outlines what is seen as the optimal solution for the location of pool barriers. This solution is based on empirical trends regarding barrier effectiveness relative to child drowning.

This Standard is part of a series dealing with barriers, location of barriers and water recirculation and filtration systems.

The other Standards in the series are as follows:

AS

1926 Swimming pool safety

1926.1 Part 1: Fencing for swimming pools

1926.3 Part 3: Water recirculation and filtration systems

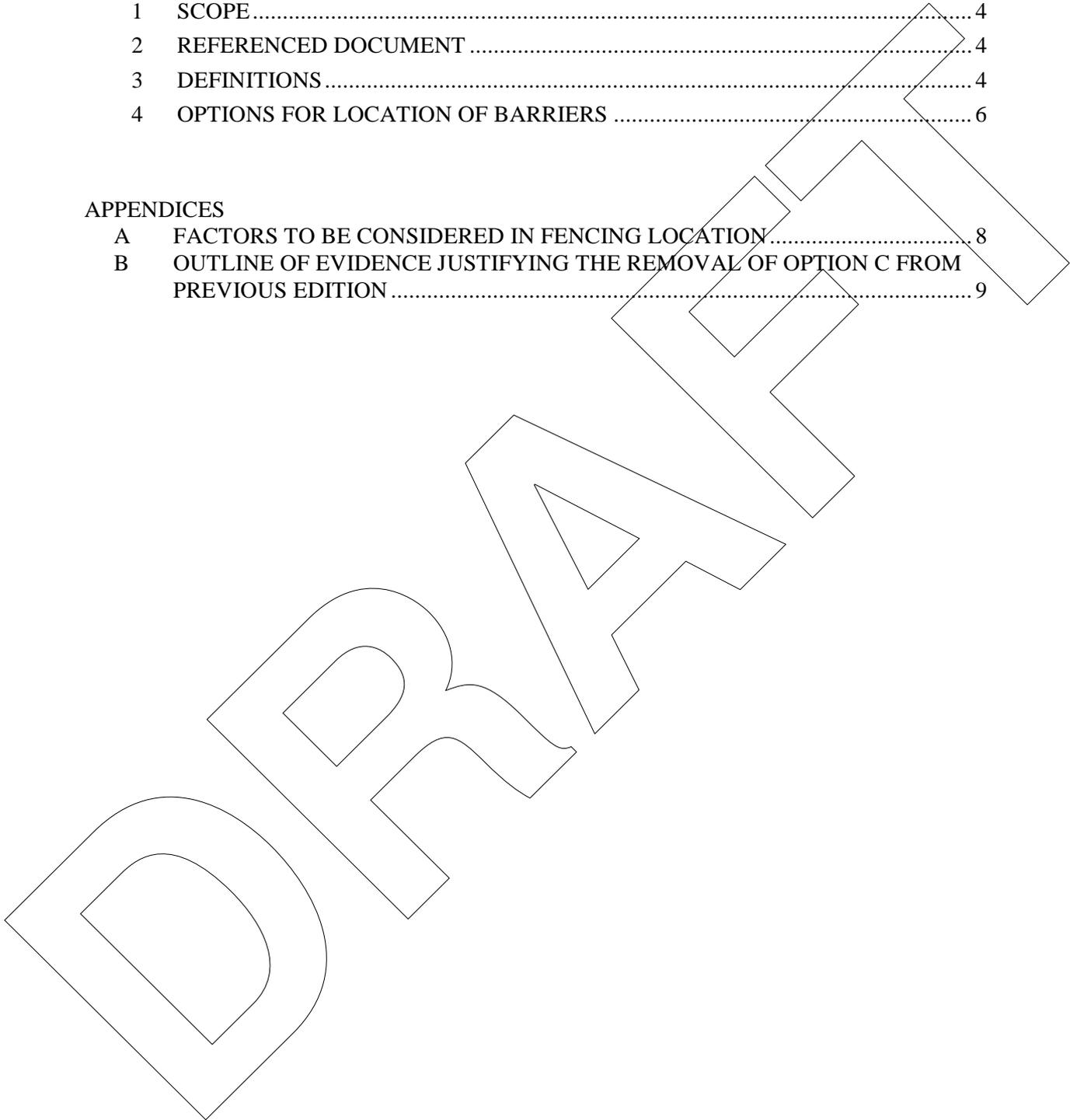
This edition incorporates the following major changes from the previous document:

- (a) New definitions have been inserted regarding different pool barrier configurations and locations
- (b) Option A and B have been combined into one option.
- (c) A new section has been inserted regarding indoor pools.
- (d) Option C has been removed. Please refer to Appendix B for more information.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

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STANDARDS AUSTRALIA

Australian Standard Swimming pool safety

Part 2: Location of safety barriers for swimming pools

1 SCOPE

This Standard sets out an option recommended by the committee for the location of effective safety barriers that will restrict the access of young children to swimming pools.

NOTES:

- 1 Public swimming pools have different human dynamics, such as access for people with disabilities, increased gate usage, crowd behaviour and supervision, and the duplication of the requirements of this Standard may not always be appropriate.
- 2 The location of the barriers should be related to the need for protection and should take into account all the circumstances of the particular site. Most drowning victims in private pools are under the age of five years and are residents or invited visitors.
- 3 Guidance on factors to be considered in selecting the location of barriers is given in Appendix A.
- 4 The type of barrier and the location of the pool within the property should permit viewing through or over the barrier so that the pool area may be directly viewed from commonly used areas of the building or yard.

2 REFERENCED DOCUMENT

The following document is referred to in this Standard:

AS
1926 Swimming pool safety
1926.1 Part 1: Fencing for swimming pools

3 DEFINITIONS

3.1 Child-resistant doorset

Comprises a door, door frame, self-closing device and self-latching device, that is designed to provide an access way to the swimming pool from a building.

3.2 Barrier

The assembly of components natural or otherwise, which form the intended barrier to the pool. The barrier includes items such as posts and panels, gates and doorsets constructed or natural walls, sides of buildings, child-resistant windows, balustrades on a balcony, where they form part of the intended barrier.

3.3 Fencing

A barrier comprising a fence and associated gate or gates.

3.4 Gate

Any portion of the barrier other than a child-resistant doorset that is designed to provide an access way through the fence. A gate is not designed to provide an access way to the swimming pool from a building.

3.5 Swimming pool

Any excavation or structure containing water to a depth greater than 300 mm and used primarily for swimming, wading, paddling or the like, including a bathing or wading pool.

NOTE: The definition of a swimming pool may vary from state to state. Refer to the appropriate regulatory authority.

3.6 Young child

A child under the age of five years.

3.7 Pool area

The area that surrounds the pool that is separated from the rest of the allotment by a safety barrier.

NOTE: The pool area may be defined differently by regulating authorities.

3.8 Isolation barrier

A four sided fence with all unrelated pool ancillary structures excluded from the pool area.

3.9 Four sided barrier without child resistant doorsets

A four sided barrier that restricts access to the pool by a young child and the barrier may include a child resistant window.

3.10 Four sided barrier with child resistant doorsets

A fence or a building wall and a child resistant doorset restricts access to the pool by a young child and the barrier may include a child resistant window.

3.11 Perimeter Barrier

Barriers primarily located along the property boundaries with no child resistant doorsets or windows from the house to the pool.

3.12 House Containment

3.12.1 House only

A barrier that restricts access from the house to the pool only, using child resistant doorsets and windows.

3.12.2 House and perimeter barrier

A barrier that restricts access to the pool from the house, using child resistant doorsets and windows, and adjoining properties by the perimeter barrier.

3.13 Indoor pool

A pool fully enclosed by a building.

3.14 Semi indoor pool

A pool partly enclosed by a building.

4 OPTIONS FOR LOCATION OF BARRIERS

4.1 General

Fences, gates, retaining walls and other such barriers in Options A and Option B shall comply with AS 1926.1.

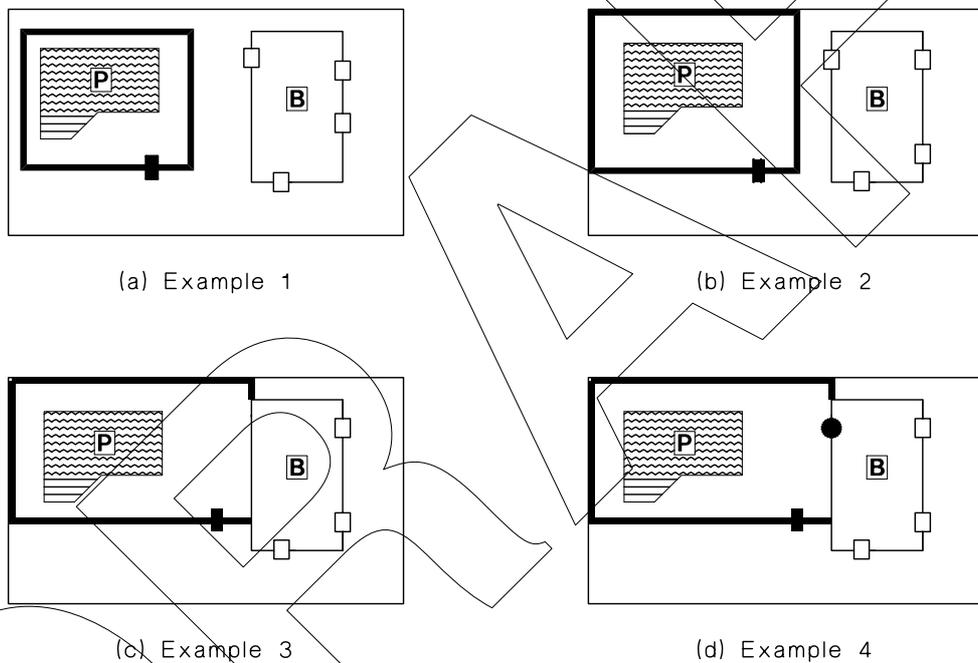
4.2 Outdoor Pools

Barriers for outdoor pools shall not permit direct access to the pool area from the building, or adjoining properties. Where the wall of a building forms part of the fencing, a child-resistant openable portion of window that complies with AS 1926.1, is permitted.

NOTE: A gate that is deliberately propped open or a faulty gate that does not comply with AS 1926.1 or a fence that is not properly maintained compromises the safety of this option.

A balcony projecting into a pool area shall comply with AS 1926.1.

Typical examples of this option barrier are given in Figure 2.1.



LEGEND:

- P Pool
- B Building
- Window or door
- Gate complying with AS 1926.1

- Child-resistant openable portion of window complying with AS 1926.1
- Property boundary
- Fence, retaining wall or other such barrier complying with AS 1926.1

FIGURE 2.1 TYPICAL EXAMPLES OF OUTDOOR POOL BARRIERS

4.3 Indoor Pools

4.3.1 Fully Indoor Pool

Access to a fully indoor pool shall be via a child resistant doorset, that is compliant with AS 1926.1. Where windows are present in the pool barrier they shall be made to be child resistant.

4.3.2 Partly Indoor Pool

Where the pool is in a partially indoor area that extends directly into an outdoor area, each area shall be treated in the same way as a pool in that exclusive area.

The indoor section of the pool barrier shall be accessible via a child resistant doorset or pool gate, that is compliant with AS 1926.1.

The outdoor section of the pool barrier shall be accessible via a pool gate or appropriate pool barrier other than a doorset, that is compliant with AS 1926.1

4.4 Option C

This option has been removed see Appendix B for more information.

APPENDIX A
FACTORS TO BE CONSIDERED IN FENCING LOCATION

(Informative)

The distance of fencing from the pool should take into consideration a safety margin sufficient to discourage diving and jumping from the fencing into the pool. The fencing should not be located so close to the pool that adults will be discouraged from making use of the area within the fencing while supervising children in the pool.

The possibility that the compliance of boundary fences used as pool safety fences may be compromised by actions taken by adjoining property owners should be taken into consideration.

Where possible, tool sheds, garages, barbecues and clotheslines should be located outside the pool area to reduce the likelihood of self-closing gates being propped open in order to gain access.

Wherever a young child is inside a pool area, constant supervision is essential. Increasing the area and utilities inside the pool area may increase this responsibility.

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APPENDIX B

OUTLINE OF EVIDENCE JUSTIFYING THE REMOVAL OF OPTION C FROM PREVIOUS EDITION

This could have more detail regarding the analysis and evaluation of the results of QLD Data

The Committee has decided to remove Option C at Public Comment based on empirical evidence indicating that the child resistant doorset component in a pool barrier combination may cause a risk in safety.

This has been inserted to document the justification for the removal of 3-sided fencing which entails child resistant doorsets. This will be removed before publication.

From Queensland Injury Surveillance Unit "Pool Fencing in Australia in 2003: The Way Forward"

<http://www.safecommunitiesqld.org/modcore/Publications/frontend/index.asp#a39>

B1 Pool Fence Definitions**B1.1 3-sided Fencing**

A fence and building wall restricts access to the pool by a toddler but there is restricted access (Australian Standard 1926) via a house-door from the house to the pool.

B1.2 4-sided Fencing

A fence or building wall restricts access to the pool by a toddler and there is no direct door access from the house to the pool but may include a window (AS 1926).

B1.3 Inspection Compliance

Static compliance refers to the ability of the fence or access point to meet relevant Australian standards for restricting access to the pool by a toddler after all temporary impediments to compliance are removed. It is the level of compliance an inspector would commonly find and report. Dynamic compliance refers to the absence of temporary impediments of a non-structural nature that impair the barrier function at the time of a drowning or near-drowning incident (eg. a rope tying a pool gate open).

B1.4 Primary and secondary access hazard

Toddlers can only drown in fenced pools (possessing static compliance) if they are let through the barrier, let themselves through the barrier or climb the barrier.

The primary access hazard for pool fence design reflects the relative efficacy of a pool fence when it is operating as designed with full compliance.

Very few toddlers drown having climbed a pool fence, let themselves through a pool gate or whilst swimming with others.

Therefore, the primary access hazard is largely determined by a particular design's ability to discourage others from allowing the toddler access to the pool area.

Primary Access Hazard Represents A Fundamental Flaw In The Design Of The Pool Fence.

The secondary access hazard is the likelihood of a child gaining unintended access through the barrier of a fenced pool because of a lapse in dynamic compliance.[R1]

B1.5 Table summarising Queensland data for the last 10 years (1992-2001):

Queensland was the first state to introduce and maintain legislation requiring a four sided barrier with no door access for new pools. Since the introduction of this legislation in 1991, the toddler death rate due to drowning has fallen to one third of pre-legislation levels.

In the 10 years since the introduction of statewide legislation, the interaction between toddler drowning in domestic pools and safety barriers has been better studied than anywhere else in the world.

For the first time, there is sound evidence that the safest pool fence configuration is a fence between the house and the pool.

Fence Description	Static Compliance	Dynamic Compliance	Number Toddlers Drowned (3/4)	Relative Risk 3-sided v 4-sided
Not sufficient info	NA	NA	5	NA
Unfenced	NA	NA	17	NA
Defective fence or gate	No	No	21	2.8 (1.0-8.8)
Primary Hazard	Yes	Yes	7	10.9 (1.3-505.0)
Secondary Hazard	Yes	No	5	Not significant
Total			56	

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During the development process, Australian Standards are made available in draft form at all sales offices and through affiliated overseas bodies in order that all interests concerned with the application of a proposed Standard are given the opportunity to submit views on the requirements to be included.

The following interests are represented on the committee responsible for this draft Australian Standard:

- Australian Industry Group
- Office of Fair Trading NSW Consumer Protection Agency
- Australian Institute of Building Surveyors
- Kidsafe National
- Standards Australia
- Commonwealth Department of Health and Ageing
- Australian Building Codes Board
- National Injury Surveillance Unit
- Royal Life Saving Society Australia
- Department of Local Government and Planning (Queensland)
- Swimming Pool and Spa Association of NSW Limited
- Planning South Australia
- Swimming Pool and Spa Association of Victoria
- Swimming Pool and Spa Association of Western Australia

Standards Australia

Standards Australia is an independent company, limited by guarantee, which prepares and publishes most of the voluntary technical and commercial standards used in Australia. These standards are developed through an open process of consultation and consensus, in which all interested parties are invited to participate. Through a Memorandum of Understanding with the Commonwealth government, Standards Australia is recognized as Australia's peak national standards body.

Standards New Zealand

The first national Standards organization was created in New Zealand in 1932. The Standards Council of New Zealand is the national authority responsible for the production of Standards. Standards New Zealand is the trading arm of the Standards Council established under the Standards Act 1988.

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Under a Memorandum of Understanding between Standards Australia and Standards New Zealand, Australian/New Zealand Standards are prepared by committees of experts from industry, governments, consumers and other sectors. The requirements or recommendations contained in published Standards are a consensus of the views of representative interests and also take account of comments received from other sources. They reflect the latest scientific and industry experience. Australian/New Zealand Standards are kept under continuous review after publication and are updated regularly to take account of changing technology.

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Standards Australia and Standards New Zealand are responsible for ensuring that the Australian and New Zealand viewpoints are considered in the formulation of international Standards and that the latest international experience is incorporated in national and Joint Standards. This role is vital in assisting local industry to compete in international markets. Both organizations are the national members of ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission).

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