

Pool Fencing Symposium

Friday 21 November, 2003

Marine Rescue Centre

Section 1:	Agenda	Page 2
Section 2:	Main points and Powerpoint Presentations from Speakers	Page 4
Section 3:	Minutes from Public Debate	Page 17
Section 4:	Recommendations	Page 19
Section 5:	Rationale for Fencing of Immediate Pool Area	Page 20



Recorded by Teresa Stanley, Project Manager, WaterSafe Auckland

Section 1: Agenda

Invitation

To the Regional Pool Fencing Symposium and opening of the Wet and Wise Water Safety Week 21 – 30 November, 2003

Marine Rescue Centre, 3 Solent St,
Mechanics Bay, Auckland
Friday 21 November, 9:30am-12:30pm

WaterSafe Auckland together with ACC and the local bodies across the Region – Auckland, Franklin, Manukau, North Shore, Papakura, Rodney and Waitakere invite you to take part in this Regional Symposium to address the issue of pool fencing and the Fencing of Swimming Pools Act 1987.

Considerable discussion with Pool Compliance Officers, CIPP Co-ordinators, ACC, Local Government and WaterSafe Auckland Inc. has endeavoured to reach a consensus on the interpretation of the Fencing of Swimming Pools Act (1987)

9.30am	MC, Kevin Moran, Co-ordinator Secondary P.Ed., Auckland College of Education and Chairman, WaterSafe Auckland Inc. Welcome and Keynote address, Hon David Cunliffe, MP New Lynn
9.45am	Dr John Wren, Safekids
9.55am	Hamish Handley, Building Industry Authority
10.10am	John Honore, Larry Ogden, NZ Master Pool Builders Guild
10:15am	John Steadman, Thomas & Co. New Lynn
10 25am	Linda Beck, Private Pool Owner
10.35am	Council Representatives from Pool Compliance / Inspections
10.55am	New Innovations – Dr Ian Calhaem, self locking spa pool covers - Warwick Robertson, North Shore City
11.05am	Morning Tea
11.20am	Public Discussion Session chaired by Dr Ian Hassall
12.20pm	Summary, WaterSafe Auckland

Please RSVP by 18 November to watersafe@xtra.co.nz, or ph (09) 306 0809

PTO

This symposium will highlight the progress on these discussions, together with

- promoting the region wide interpretation of the Fencing of Swimming Pools Act
- determining and promoting the current status of any changes to the FoSP Act
- investigating the latest statistics in terms of dangers to the public of spa and swimming pools
- investigating methods to ensure the FoSP Act for both swimming and spa pools is a practical and positive solution to reduce drowning in New Zealand
- developing an approach to achieve a practical solution to the FoSP Act
- highlighting the FoSP Act as a positive legislation for children's safety
- give a widening platform for discussion for all stakeholders



Section 2: Main points and PowerPoint Notes from Speakers

Honorable David Cunliffe, MP for New Lynn

The keynote address was from the Honorable David Cunliffe, MP for New Lynn. He congratulated the group on the 'Your Pool - Your Responsibility' media campaign and wished WaterSafe Auckland well for Wet 'n Wise Water Safety Week. Reference was also made to the new NZ Injury Prevention Strategy (NZIPS) which addresses six main causes of injury in New Zealand, of which drowning is one of the six issues. Injuries from these causes account for 80% of all injuries in New Zealand.

Dr John Wren, Safekids

Dr John Wren from Safekids gave statistics showing the unacceptable high numbers of preschoolers drowning in private pools, and how in the Auckland region preschoolers are more likely to drown in home pools compared to that of the rest of the country (50% compared to 40%). The data is unable to show us whether spa pools area major concern for drowning or hospitalisations in the Auckland area.

celebrate 160 Kids Lives Saved...

Ka Ora Tonu - 160 ngā Tamariki

... by the Fencing of Swimming Pools Act 1987.

Encourage pool fencing because it works!

www.kidsafe.org.nz

in partnership with:

Injuries in New Zealand

- n Injuries are a leading cause of mortality, and cause of hospital admission.

- n Hospital admissions for injury are a major contributor to health costs. The average cost of an injury hospital admission is 10% greater than that of a non-injury admission.

Child Injury in New Zealand in a Global Context

- Child injury is a leading cause of mortality and morbidity in OECD nations.

- New Zealand's rates of child injury, and rates of motor vehicle related injury in general, are significantly worse than other OECD countries.

Drowning Key Facts: All Ages 1989-98 (IPRU data)

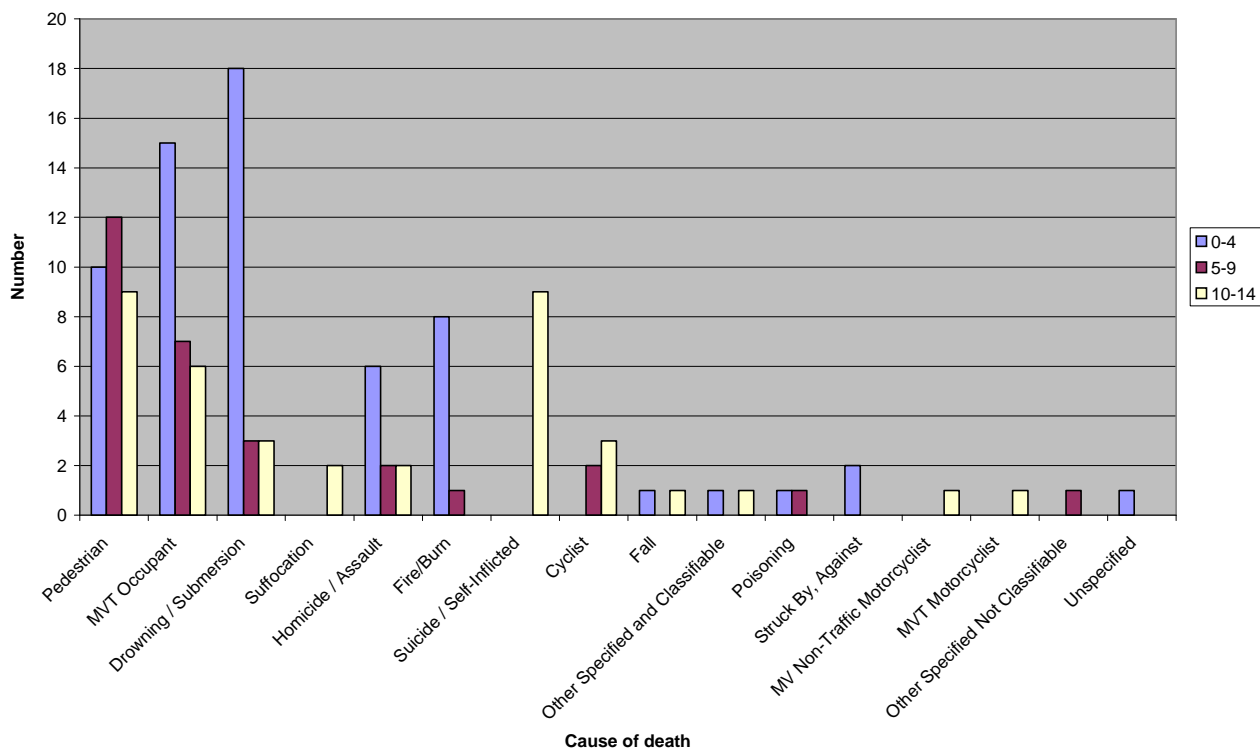
From 1989-1998 there were 1324 deaths by drowning in New Zealand.

- For 63% of the incidents, the victim entered the water voluntarily e.g. for swimming, diving or bathing.
- A further 22% were associated with water transport, 12% with motor vehicle crashes, and 4% were associated with other external causes.
- The majority (87%) of the drownings were unintentional (n=1197).
- There were 134 incidents of suicide by drowning, 9 homicidal drownings, and 34 from undetermined causes.

Drowning fatalities a significant problem for children

Cause	Age			Total	Reg %	% National 1990 - 1998
	0-4	5-9	10-14			
Pedestrian	10	12	9	31	20.0%	15.8%
MVT Occupant	15	7	6	28	18.1%	21.3%
Drowning / Submersion	18	3	3	24	15.5%	13.0%
Suffocation	0	0	2	23	14.8%	17.0%
Homicide / Assault	6	2	2	10	6.5%	7.8%
Fire/Burn	8	1	0	9	5.8%	6.9%
Suicide / Self-Inflicted	0	0	9	9	5.8%	4.8%
Cyclist	0	2	3	5	3.2%	4.5%
Fall	1	0	1	2	1.3%	2.8%
Other Specified and Classifiable	1	0	1	2	1.3%	5.7%
Poisoning	1	1	0	2	1.3%	2.4%
Struck By, Against	2	0	0	2	1.3%	1.8%
MV Non-Traffic Motorcyclist	0	0	1	1	0.6%	
MVT Motorcyclist	0	0	1	1	0.6%	0.4%
Other Specified Not Classifiable	0	1	0	1	0.6%	
Unspecified	1	0	0	1	0.6%	0.4%
Total	63	29	38	151	97%	n = 1118

Drowning fatalities a significant problem for children under 5 years



IPRU NIQS: Child Drowning Fatalities Nationally, All intents, Period 1988-1998(accessed 18/11/03)

- under 5 years 125 fatalities, rate 4.1 /100,00
- 5-9 years 42 fatalities, rate 1.4 /100,000
- 10-14 years 23 fatalities, rate 0.8 /100,000

IPRU NIQS: Child Submersion Injury Hospitalisations Nationally, All intents, Period 1988-2002 (accessed 18/11/03)

- under 5 years 602 hospitalisations, rate 15.2 / 100,00
- 5-9 years 155 hospitalisation, rate 3.8 / 100,000
- 10-14 years 102 hospitalisations, rate 2.5 / 100,000

Auckland Region 1994 - 98

Local Authority	Preschool drownings	Preschool hospitalisations
Rodney	0	4
North Shore	4	6
Waitakere	5	13

Auckland	2	14
Manukau	4	10
Papakura	0	1
Franklin	3	5

Child Drowning: Location

- Reflects developmental stage of child:
 - Most Under 1s drown in the bath
 - Under 5, most (59%) in the home environment
 - § 40% in home pool and spa
 - § 12% bath
 - § 7% other sites around home - e.g. buckets,
 - 5-14 years
 - § 49% rivers
 - § 31% sea
 - § 15% other natural bodies of water
 - § 5% pools

Why are Children Especially at Risk?

- Physiological developmental factors
- Body mass, strength, co-ordination
- Psychological developmental factors
- decision-making and hazard identification
- Special features of drowning
- Temperature of the water (issues associated with both cold (natural bodies of water) and warm water (spas))
- All or nothing events

Grant Kamau from the Department of Internal Affairs

At very short notice, and in the absence of Hamish Handley from the Building Industry Authority, Grant Kamau from the Department of Internal Affairs updated us on the present position of the Act. Grant covered the process involved in how statutes are made from manifesto statement, through policy development, including consultation with industry and interest groups, the select committee stage (where public submissions are normally called for) to final enactment. Grant also mentioned that there was the possibility of a law change involving the current Fencing of Swimming Pools Act and the Building Bill presently before the House. However, no final decisions have yet been made.

Hamish Handley, Building Industry Authority

These notes were supplied in the Absence of Hamish Handley.

Fencing of swimming pools

H K Handley comment 20 November 2003

1. Determination 2003/6 by the Building Industry Authority

There has been no change in the fencing requirements for swimming pools under the law. The Authority has no power to change Acts or Regulations.

The determination said “It is arguable that in some circumstances the opening of a number of sliding or sliding/folding doors would amount to the removal of all or a major part of the safety barrier to the pool. Again, every case will need to be considered on its merits.”

The determination did not say that such doors are not permitted.

2. Building Code Clause F4

Clause F4 and the Approved Document have been under review and the proposed changes were issued for public comment in August with comment closing on 17 October. One of the proposed changes to Clause F4 was to remove Clause F4.3.5. F4.3.5 (a) provides that sliding and sliding/folding doors opening into the immediate pool surround from a building that forms part of the barrier are not required to automatically close and latch.

The reason for making this particular proposal was because there is a difference between F4.3.5 (a) and paragraph 11 of the Schedule to the Fencing of Swimming Pools Act. Paragraph 11 gives the territorial authority the power to decide whether or not doors should have self closers. Thus the result of removing F4.3.5 would be to give the territorial authority the power to decide for each situation because the matter would be covered only by the Schedule.

Should the Authority decide that this change to Clause F4 has sufficient public support, it will make the appropriate recommendation to the Minister of Economic Development.

3. Changes to the legislation concerning swimming pools

The Ministry of Economic Development (MED) is responsible for drafting the Building Bill that has recently been passed to the select committee. As part of the review of the Building Act the MED is reviewing the legislation relating to the fencing of swimming pools, i.e. the Fencing of Swimming Pools Act 1987 and the Building Code (which is the first Schedule to the Building Regulations 1992). It is a possibility that there will be a new Code clause specifically for swimming pool protection and that the Schedule to the Fencing of Swimming Pools Act would therefore be removed. If this change comes about, then a new Approved Document will be needed for the new Clause. This would provide an opportunity to re-consider all the practical aspects of pool fencing in relation to risk. Australian and USA practice could be studied to assist with producing a new compliance document with diagrams of alternative pool fencing arrangements.



John Honore, Geoff Bohman and Larry Ogden, NZ Master Pool Builders Guild

John Honore, Geoff Bonham and Larry Ogden from the NZ Master Pool Builders Guild stressed the fact that there should be consultation with the pool industry before any submissions or promotions are instigated. This would help address the issue of the thousands of spa pools sold each year which are not applying for consents. They said that in 1987 the majority of spa pools were inground, now 99% of spas on the market are portable. Since 1994 there has been no drowning on a spa pool with a lockable cover.

John Steadman, Thomas & Co., Barristers and Solicitors, New Lynn

John Steadman from Thomas & Co., New Lynn, proposed that even though the Building Industry Authority had put out a determination on the isolation fencing of pools, that it was not legally binding and that it was not up to the Councils to change their legislation.

Immediate Pool Area is defined as:

“The land in or on which the pool is situated and so much of the surrounding area as is used for activities or purposes carried on in conjunction with the use of a pool”

Fencing of Swimming Pools Bill 1985

“It is envisaged that changing sheds and barbecue areas would ordinarily be within the immediate pool area, while a vegetable garden would not.”

NSW – Swimming Pools Act 1992

18 Owner may decide where required child-resistant barrier is to be located

The owner of any premises in or on which an outdoor swimming pool is situated may, subject to the other provisions of this Part, determine where any child-resistant barrier required by this Part is located.

Paul Beck, Private Pool Owner

Paul Beck, a private pool owner, discussed his problems about how they thought they had done everything possible to have their pool comply with their local Council, but that the ‘goal posts’ had now changed and the pool no longer complied. He said that his pool was used by his family and should not have to be ‘ring-fenced’. He also said the immediate pool area needs to be defined.

Ian Godfrey, Manukau City Council and Warwick Robertson, North Shore City Council

Ian Godfrey from Manukau City Council and Warwick Robertson from North Shore City Council explained that if an incident were to occur in a pool that they had passed for compliance, and they did not take into account the determinations from the BIA, then they would be held responsible.

Ian talked about pools being a significant water hazard, that 87% of children drown when they are legitimately on the property and that it was totally impossible for parents to supervise their children 24 hours per day. Children have a right to protection. He also explained that new information and data showed that isolation fencing was much safer than 3-sided fencing, and if they required isolation fencing for new pools, it would be negligent of them to ignore the existing pools with 3-sided fencing.

He said the two leading causes in Manukau for swimming pool drownings were defective gates and doors leading to pools directly from the house area. He said it was a concern that around 5000 spa pools are being sold in the Auckland region each year and that only 80-100 building consents had been issued region wide.

Warwick Robertson said the immediate pool area should be determined by what you are using it for as opposed to size. The BIA determination mentions area around the pool. If Clause F4 comes out of the Building Act then compliance reverts to the schedule. If it is impossible to fence then bolts and self-locking doors are acceptable. Isolation fencing of pools should be mandatory but if this is impossible then there is a need to look at other layers of protection.

The Legislation

- Two Acts of Parliament deal with pools:
 - Ø Fencing of Swimming Pools Act 1987
 - Ø Building Act 1991
- Under the Building Act, the Building Industry Authority makes determinations on the application of the Building Code
- Councils are legally obliged to apply B.I.A determinations as they relate to the Fencing of Swimming Pools Act.

New Requirements

- Two B.I.A determinations affect the way the Fencing of Swimming Pools Act is now applied. This means:
 - Ø lockable spa covers are no longer accepted as an alternative to compliant pool fencing;
 - Ø folding and sliding doors opening into the immediate pool area are generally no longer permitted unless they are self-closing & self-latching and open away from the pool.

Fencing of Swimming Pools Act

- 'Immediate pool area' needs to be redefined
- What is 'reasonable' or 'unreasonable'?

Councils' Concerns

- Two Acts governing pool requirements is an anomaly.

- Causes confusion and difficulties with education and enforcement.
- Need to work together to encourage Government to review current legislation so there is one set of clear rules that can provide pool owners with practical solutions.

Future Legislation

- An inclusive & cohesive approach required for any changes to the law
- Must meet the intent of the Act to protect young children from the danger of drowning
- Should consider international legislative trends:
 - Ø wide international support for isolation or four-sided pool fencing.
 - Ø where this is not practical, other layers of protection may be insisted upon e.g. door alarms, pool alarms, and approved motorized covers.

Dr Ian Calhaem

Dr Ian Calhaem presented a very interesting model and information on self locking spa pool covers and Warwick Robertson from North Shore City also said they were addressing this issue to see whether these covers could obtain consents.

Self locking Spa Pool Covers

Who am I?

- First
 - I am NOT a lawyer
 - I am NOT working for any particular party
- But...
 - I am interested in Risk Management
 - I have worked with the law for many years
 - I designed the NZ Statutes Database

Agenda

- Legislation
- The Exemption Clause
- Risk Management Analysis
- A Practical application of the results

If time permits...

- Can Risk management be applied to other areas of the Act e.g. fencing

Current Legislation

- Fencing of Swimming Pools Act 1987
- Amendment Act 1989
- Building Act 1991
 - Building Industry Authority
 - Code F4 – Safety from Falling

Proposed Legislation

- Building Bill 2003
 - Intended to incorporate FSPA 1987
 - Deferred until immediate Building Act issues dealt with
 - Legislation to be introduced by means of Supplementary Order Paper. (Hon Lianne Daiziel pers. comm.)

- Building Industry Authority
 - Redefines role
 - Building Code to be updated within 2 years
 - Schedule 1
 - Clarifies that “fence” defined in FSPA 1987 requires building consent
 - Schedule 4
 - Repeals and redefines “fence” under FSPA 1987
 - Bring definition into line with Building Act
 - Includes Gates and Doors as part of the fence

BIA Determinations

- 2002/10
 - Lockable cover as a safety barrier for a spa pool
- 2003/06
 - Sliding and sliding-folding doors giving access to a swimming pool

How did I get involved?

- Saw a TV clip stating ...
 - the law had changed requiring spa pools to be fenced instead of having a lockable cover
 - Existing pool owners were exempt
- In terms of Risk management this did not make sense
 - Either lockable covers were safe or not safe

Were the Councils Correct?

- BIA makes determinations for a particular case – not a general rule.
- Determinations can be used a guideline by Territorial Authorities
- Territorial Authorities are free to make their own bylaws
 - BUT are they doing so?
 - Or are they “hiding” behind the BIA determinations?

Investigation

- I asked lots of questions
- Different Councils gave me different answers
- Everyone keen to assist but I found widely varying interpretations of the Act

Clause 6 of the FSPA

- Special Exemptions...
 - A Territorial Authority may by resolution grant an exemption...

...would not “significantly increase danger to young children”

How to quantify “significant increase danger”

- Safety is freedom from danger
- Safety not an absolute concept
- All activities carry an element of risk
- Activity considered safe if likelihood of harm is so remote that it does not evoke irrational apprehension
- Belief in safety often far from rational

What is Danger?

- Familiarity leads to mistaken belief in safety
- Unfamiliar hazards seem more dangerous than they really are

The Principle Act exists to “promote the safety of young children by requiring the fencing of certain swimming pools.”

To analyse any situation it is necessary to consider the Risks involved and the management of them.

Risk Management

- People
- Equipment
- Environment

People

- | | |
|---------------------------|----------------------------|
| • Forget to lock | Make self locking |
| • Interruption e.g. phone | |
| • Complacency | Label cover as reminder |
| • Change of owner | Appropriate health warning |
| • Medical condition | |

Equipment

- | | |
|----------------------------------|------------------------------------|
| • Cover difficult to replace | Hinge to make easy to replace |
| • Not easy to lock | Make self locking – without key |
| • Requires key to lock | Require key to unlock |
| • Cover to support external load | Cover to support child plus adults |
| • Water on top of cover | Slope top of cover |

Environment

- | | |
|----------------------------------------------------------|----------------------------------------------------------------|
| • Fencing able to be climbed | Statistics show lockage covers reduce risk –
make mandatory |
| • Gaps | Define maximum gap size |
| • Floating cover allows child to be trapped beneath | |
| • Sliding doors allowed – don't have to be self latching | Do not rely on sliding doors for barrier |

Statistics

- No preschooler has drowned in a covered spa pool since 1994 when lockable covers became common
- Since 1997 there have been 10 drownings in spa pools, 2 accessed through sliding doors
- Since 1995 the number of spa pools has increased at ~5000 per year but drownings in covered spa pools remains zero

Results of analysis - requirements

- A locking cover
- Label to indicate that it is part of a safety barrier and therefore must be locked at all times when not in use
- Label with health warnings
- Where cover forms the sole safety barrier it should be **self-locking**

Conclusion

It is my opinion that not only should a lockable spa pool cover be a permitted form of promoting the safety of young children around spa pools, but it should be encouraged as the preferred method, provided it is

- Self locking and
- Hinged so that it cannot be removed
- Conforms to an appropriate Standard

Practical Application

- I shifted house and wanted to install a spa pool
- I considered all factors and concluded that a hinged self locking cover was the safest option
- I designed and fitted a self locking cover
- I successfully applied to Auckland City Council for an exemption under Clause 6 of the FSPA

Making a cover self latching





Enhancements

- Self aligning
- Key drops out
- Replace metal springs with plastic

Result

- Cheap
- Easily retrofitted to existing pools
- Fits a wide range of models

Summary

- I propose
 - Councils apply Risk Management techniques to applications for exemption
 - Encourage spa pool owners to install self locking covers
 - Make cost of application for exemption low to encourage owners to register

Fencing as a Safety barrier - Risk management analysis

Undesired Event

Drowning in swimming pools with particular emphasis on children under 6 yrs

Contributing Factors

People

- | | |
|---------------------------|------------------------|
| • Forget to lock | Make self-locking |
| • Interruption e.g. phone | |
| • Complacency | Review every two years |
| • Change of owner | |
| • Medical condition | Label |

Contributing Factors

Equipment

- | | |
|----------------------------------|--------------------------------------------------------|
| • Fence climbable | Height of fence
No foot holds
No horizontal bars |
| • Number of entry points (gates) | Minimise
Viewable |
| • Gates left open | Make self-lockable |

Contributing Factors

Environment

- | | |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| • Gaps large enough for child to enter | Define minimum gap size |
| • Other activities distract from supervision | Position activities such as BBQ
close to the pool
Position activities such as vegetable
garden outside area |

Immediate Pool Area/Surround

- Area defined in FSPA
 - Land in or on which the pool is situated and so much of the surrounding area as is used for activities or purposes carried out in conjunction with the use of the pool
- Surround wording used in Code F4 3.5(a)
- DIA Guideline to FSPA
 - Pool, decking, changing sheds, but excluding
 - Vegetable garden, clothes line, BBQ area, sandpit, slide or swing.

Section 3: Minutes from Public Debate

Public discussion chaired by Dr Ian Hassall centred on the two main issues of lockable covers for spa pools and the need for a unified definition for the Immediate Pool area.

Ian suggested that promotion was most important in dealing with what works in preventative measures in terms of dealing with child drownings and asked the group to look at the body of water through the eyes of a child, then to evaluate what needs to be done to ensure safety.

Ewan Higham, Franklin District Council raised the issue with the Master Pool Guild that often pools were installed, left with owners for some time, filled with water, before the owners applied for consent. He asked the Guild to ensure owners had consent before the pools were filled. The Pool Guild replied that all members of the Guild ensured pools had consent before pools were filled but not all pool builders were members of the Guild. They also mentioned that vinyl pools need to be filled immediately so Pool Guild members ensured there was temporary fencing.

Action Point – It may be appropriate to issue conditions on consents on filling pools, the owner or the installer of the pool is responsible under the Building Act.

Councils should know who the installer is through the Consent so each Council can police irresponsible installers.

Gael Brooks, Child Safety Foundation NZ said that it was important that fences and gates were closed. The most important point was that there was education to parents on supervision. All organisations needed to take responsibility for education.

Dale Petrovich, Hot Spring Spas says that education is working. The statistics from Water Safety NZ show that the same number of people are drowning in compliant pools as non-compliant pools, and that since 1985 there have been no drownings in spa pools with lockable covers. There has been no recorded drowning anywhere in the world with a locked or unlocked cover. The portable spa pools sit about 900mm off the ground and generally children cannot climb into these until they are approximately four years old.

Geoff Bonham, Leisure Time Spa and Pool Covers commented that under Clause 6 of the legislation, Councils can still give exemptions for lockable spa covers despite the BIA determination. Councils won't get assistance in compliance from the industry unless the legislation in place is practical.

Ian Hassall asked the question 'Are children drowning in spa pools?'

Ian Calhaem replied that from Jan 1985 to Aug 2002 there were 25 drownings in public and home spa pools. Four of these had a cover. Since the introduction of lockable covers in 1995 there have been no drownings in spa pools with a cover.

Neville Exler, Waitakere City Council said that they had received a letter from Ministry of Internal Affairs saying that Councils were unable to offer exemptions for lockable covers due to the human factors required to replace the cover.

Ian Godfrey, Manukau City Council said the old style covers did provide a risk to young children because they were bulky, heavy and hard to put back on. This was where the

human factor came into effect. The 1992 correspondence from Dept of Internal Affairs also held with that view. However the BIA rightly or wrongly had given guidelines which they were obliged to comply with.

John Wren, Safekids talked about the injury prevention theories of isolation, minimisation and elimination of risks. The FoSP Act is the only proven reliable method of isolation in terms of keeping young children out of spa pools. The technological changes over the last few years may also be reliable but we don't know for sure. Can children be trapped under these self-locking covers? The only reliable records regarding the scenarios of spa and pool drownings are the coronial records of which Safekids has data from Jan 2000 to July 2002.

Warwick Robertson, North Shore City said that North Shore Cit Council is ready to take a test case with self locking covers to the BIA to test their compliance under the Act.

Geoff Bonham showed the magazine, 'Building Business – Your Building Guide' which quotes that exemptions are allowed for lockable covers.

Neil Runciman, Frontier Pools said that he had three pool instalments being held up for pool fencing issues because the FoSP Act has changed – but the Act has not changed. He asked that pool builders be involved with decisions in any changed that Councils make in interpreting the FoSP Act.

Bob deLeur, Auckland City Council said that that the BIA Determinations were to provide guidelines. Therefore Councils can be held responsible if any incident were to occur and they had allowed an exemption.

Ian Calhaem replied that it was related to him by Hamish Handley from the BIA that it is a guideline, but for a particular situation only, and that it did not change the responsibility of any Council in any way.

Warwick Robertson said that at their Council had held a recent meeting with North Shore pool builders/fencers and other interested parties. It appeared that there were two typed of pool owners, those with children under six years and those without young children. Those without young children did not want to fence their pools beyond boundary fencing.

Clive Regdon, Spa Association asked who is writing the law for the new regulations. **Grant Kamau** replied that the Ministry of Economic Development has a working group. **Ian Godfrey** added that the building Bill will come into effect in July 2004. There will be a Supplementary Bill which the public will have a short time to make submissions to.

Susie Feildhouse, Aquanaut Swim School agreed on the need for regulation to a point but with the increased regulation some parents become complacent about the requirement for supervision.

Linda Beck, Pool Owner suggested that the process is wrong and that the fence should be a requirement as part of the Building Consent. The Council staff replied that it was.

Kevin Moran, Chairman of WaterSafe Auckland summed up the discussion by saying that WaterSafe Auckland is about networking with people with a genuine interest in water safety. He invited all attendees to join WAI. He reinforced the need to collaborate to solve the issues.

Section 4: Recommendations – Where to from here?

The injury prevention theory is to eliminate, isolate and minimise risk. Obviously we cannot eliminate swimming and spa pools. Isolated fencing is the preferred method of isolating swimming pools but it is not working for portable spa pools in that 5000 odd spa pools are being sold in the Auckland region with out consents. WAI promotes isolated fencing of pools as the preferred method of isolating the danger of swimming pools (see attached document on Isolated Pool Fencing).

WAI needs to investigate issues surrounding spa pools. New technology such as self-locking spa pool covers needs to be explored to determine their merits in minimising risks of portable spa pools. Data of hospitalisation and drowning incidents comparing spa and swimming pools needs to be completed to assess the relative danger of spa pools.

A further meeting will be held late Feb/March to try to reach a region wide consensus on isolated pool fencing, immediate pool area definition and exemptions for lockable spa covers and therefore a regional strategy to influence a practical interpretation to the legislation. This should include representation from StarShip Hospital (spa pool drowning/hospitalisations and physiological issues of incidents in spa pools), architectural school, Ian Calhaem and other new technologies.



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Rationale for Fencing of Immediate Pool Area

Written by Teresa Stanley, MBsSt, BSc, DipT(PE), WaterSafe Auckland Inc. and Ian Godfrey, Senior Building Advisor, Manukau City Council

October 2003

Background

Internationally New Zealand has one of the highest rates of drowning. The crude unintentional drowning rate for New Zealand from 1980 to 1994 has been calculated at 4.4 deaths per 100 000 person years which is 2.2 times the Australian rate for 1992 to 1997 which is estimated to be 2.0 deaths per 100 000 (Langley et al, 2000).

Drowning is the second leading cause of unintentional injury death for preschoolers in New Zealand. On average, one preschooler drowns every month. In the ten years up to and including 1998, 112 preschoolers drowned. In the same period of time 463 preschoolers were discharged from public hospitals after a stay of more than 24 hours due to near-drowning or submersion, 136 of these children were in the Auckland region (Kypri et al, 2000, 2001; IPRU, 2002).

Nationally, around 40% of the pre school drownings occur in private swimming pools (Safekids, 2000), however the Auckland region shows a higher percentage of almost 50% for the period from 1998 to 2002 (WSNZ, 2003). A New South Wales study (Williamson et al, 2002) of preschool drowning using coronial data showed that swimming pools were the single most common location for preschool drowning (41.5%). Up to twenty per cent of these children suffer brain damage as a result of a serious immersion incident (Stevenson, 2003).

A study conducted by the US Consumer Product Safety Commission to find out how child drowning incidents occur showed that supervision can and does fail, 69% of the time. The study published in 'Lifesaver' (2002) was directed at children less than five years who had drowned in swimming pools in Arizona, California and Florida.

Of greater concern was the relatively brief time since the children had last been seen, 77% of the children had been seen five minutes or less before being missed and later found in the pool.. When asked what activity the person responsible for supervision was involved with at the time, 39% were doing chores, 18% were socialising and 9% were busy on the telephone (Life Saver, 2002).

In a recent study of incidents of children at risk around water over a third of the incidents (24 out of 62, or 38.7%) occurred without any supervision, when the caregiver left the child unsupervised even temporarily. Nearly half the incidents (30 or 48.4%) occurred with indirect supervision from their caregiver and only eight of the incidents (12.9%) occurred with direct supervision with the adult being within sight and reach of the preschooler (Stanley, 2003).

In the same study over half the incidents (53.2%) took place in public or private swimming or spa pools. The results showed that while over half (51.5%) of the preschoolers were left in the water, just under half (45.5%) of the preschoolers were left without any adult supervision. This is higher than any other setting which may be due to a perceived lack of danger at the pool. Almost one fifth of the swimming pool incidents involved a lack of use or incorrect use of pool fencing or gates.

Aquatic programmes for preschoolers, another traditional method used to assist in the safety of preschoolers around water, has not been shown to reduce the risk of drowning (American Academy of Paediatrics, 2000), although anecdotally there have been numerous cases whereby preschoolers have survived precious seconds which have enabled an adult to rescue them. The most common age for children to drown in pools is the one to two year age group (WSNZ, 2002, Williamson et al, 2002). Generally children are not capable of learning skills that could save their own lives at that age (American Academy of Paediatrics, 2000). Thus, the primary environmental method for reduction of preschool drowning remains fencing of the pool (Dowd et al, 2002). The Fencing of Swimming Pools Act (1987) was introduced to reduce preschool drowning.

Pool Fencing Definitions

Perimeter fencing – the boundary of the house has a fence restricting access to the property but there is no restriction of physical access from the house to the pool.

3-Sided Fencing – a fence and building wall restricts access to the pool but there is restricted access via a house-door from the house to the pool.

Fencing of Immediate Pool Area - requires the isolation of the pool from a dwelling. Where walls of a dwelling are used they should not include access through doors, window could be permitted with restrictor stays.

Preschool Child Swimming Pool Statistics

In Queensland, Australia in the decade from 1992 to 2001, 56 children aged under five years drowned in private in ground pools and spas. Fifty of the cases could be classified in terms of pool fencing. Of the 50, 26% of the preschool deaths occurred in unfenced pools and 22% of the deaths were due to defective house doors that gave access to the immediate pool area (3-sided fenced pools) (Barker et al, 2003). Overall 76% of the preschool drowning was attributed to non-existent or defective fencing.

Since the introduction of the Fencing of Swimming Pools Act (1987) the average number of preschool deaths from drowning in domestic pools has dropped from as high as 20 to an average of 12 deaths per year, of which an average of six to seven occur in private pools each year.

In a Cochrane Review (Thompson and Rivara, 2003) it was concluded that isolation fencing (enclosing pool only) is superior to perimeter fencing (enclosing property and pool) because perimeter fencing allows access to the pool area through the house

Three published studies were reviewed. The results showed that pool fencing significantly reduces the risk of drowning. The odds ratio (OR) for the risk of drowning or near drowning in a fenced pool compared to an unfenced pool is 0.27 (95% confidence interval [95%CI] 0.16-0.47). Isolation

fencing (enclosing pool only) is superior to perimeter fencing (enclosing property and pool) because perimeter fencing allows access to the pool area through the house. The OR for the risk of drowning in a pool with isolation fencing compared to a pool with three-sided fencing is 0.17 (95% CI 0.07-0.44).

The Reviewers' concluded that pool fences should have a self latching and self closing gate and should isolate the pool from the house (i.e. four-sided fencing). Legislation should require isolation fencing with secure, self-latching gates for all pools, and should be retrospective existing pools, in order to be effective.

Current Situation

In the Auckland region, all of the seven Local Authorities are now requiring, where practicable, isolation of pools (immediate pool area) from the dwelling with a complying pool fence.

Benefits of Fencing of Immediate Pool Area

- Ø It is totally impossible for parents or caregivers to supervise their children every minute of the day, and therefore a fence is the most effective way to prevent access of unsupervised preschool children to private swimming pools.
- Ø **Pool fences safeguard a child when a parent or caregiver is not in a position to supervise.**
- Ø Pool fencing provides a static barrier around a pool that reduces the chance of young children gaining access to a pool. There is another aspect of fencing that is more effective than doors opening directly onto pools, the self-closing and self-latching gates. The Act recognises that the same level of protection is not technically feasible with house doors, that is self-closing and self-latching house doors are not readily available and so an action is required to ensure the door is closed and bolted. This is an active rather than a passive measure and open to failure.
- Ø **Fencing of the immediate pool area removes the need for an action to be taken to close any doors such as ranch sliders or French doors that may open to the pool area**

Recommendation

WaterSafe Auckland strongly recommends that pools should be isolated from the house (i.e., four-sided or isolated pool fencing).

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