

# The Children's Hospital at Westmead

## SWIMMING POOL SAFETY SYMPOSIUM

### **REPORT**

On Monday October 27<sup>th</sup>, The Children's Hospital at Westmead held a symposium to address the issue of child drowning and immersion incidents in private swimming pools in New South Wales.

The structure of the symposium consisted of three sessions of presentations and an open discussion. The sessions were: impact of paediatric drowning and non-fatal immersion, safety of portable swimming pools and swimming pool safety legislation. The program flyer, which includes the speakers of each session, can be found at Appendix A.

Thirty people attended the symposium representing government and non-government organisations. A list of attendees can be found at Appendix B.

### **Summary of Content Presented**

#### **Impact of paediatric drowning and non-fatal immersion in private swimming pools**

Drowning and non-fatal immersion in private swimming pools continues to be a significant cause of morbidity and mortality for children, especially young children. Over the last twenty years, good progress has been made in decreasing the number of children drowning in private swimming pools through a variety of measures. The importance of investigating the impact of non-fatal injury has only recently been recognised so we are still yet to describe the full extent of the problem.

#### **Drowning Deaths**

Across the country, in children under 5 years of age, there were 20 deaths by drowning over the 2013-2014 financial year, 12 of which were in private swimming pools. This represents a decrease of drowning deaths compared to the 10-year average of 31. In NSW, there were 4 deaths, a number which has remained stable over the last few years. New South Wales has a lower rate of drowning than Western Australia who has seen an upwards trend in the last three years. Queensland in recent years has had a lower drowning rate than New South Wales, except for last year when they had a spike in numbers.

#### **New South Wales Child Death Review Team child drowning in NSW private swimming pools 2007-2013**

- 53 children drowned in private swimming pools between 2007 and 2013
- Most were male and under 5 years of age
- Where pool type was known, most were in-ground.
- Most of the children drowned in a swimming pool at their own home.

- In most cases, the properties were owned by the child's family or extended family.

## Contributing Factors

- Inadequate Supervision
  - All of the children who drowned in private swimming pools did so in the absence of adult supervision.
  - Most children were reportedly unsupervised for 10 minutes or less
- Lack of Child Resistant Barrier
  - 23% of pools were unfenced
    - 8 of these were above-ground pools, all of which were required to have a barrier fence under the Swimming Pools Act.
    - Most children accessed the unfenced pool from the house without the knowledge of supervising adults.
- Defective Child Resistant Barrier
  - 74% of the pools were fenced
  - The safety barriers for over three-quarters (30) of these pools had one or more defects:
    - All 30 had reported issues with the gate or latch mechanism. This typically meant that the pool gate did not self-close.
    - 19 of the 30 barriers had additional defect(s), mostly related to the fencing:
      - broken palings, damage, gaps in wire, or did not meet minimum height requirements
      - structures close to the pool provided children with a climbable frame into the pool
  - 6 pools had compliant child safety barriers. The children were typically let into the pool area by an adult, or accessed the pool through gates that had been propped open.

The findings of the report led The Child Safety Review Team to make recommendations to government regarding implementation of pools safety legislation, especially regarding child resistant barriers:

- Councils to be able to identify properties with swimming pools where young children reside, in order to prioritise those premises for inspection
- Guidance for councils to assist them to develop their pool inspection programs
- Comprehensive education and awareness campaign to accompany the amendments to the legislation
- Monitoring implementation of changes to the Swimming Pools Act, including:
  - the number of pools registered
  - the number of pools inspected
  - the proportion of the inspected pools that were deemed non-compliant with the Act
  - the main defects identified
  - whether or not owners have rectified defects within a reasonable period of time
  - current challenges in implementation, and actions to address them
  - Public reporting on swimming pool inspection and compliance activity

## Immersion

A study examining long-term outcomes of children admitted to The Children's Hospital at Westmead following an immersion incident (in any location, including private swimming pools) is currently underway by Patricia Manglick from The Centre for Trauma Care, Prevention, Education and Research. The study aims to assess the health, behaviour and well-being of the children through behaviour assessments conducted over a period of five years following the incident.

Of the 95 children enrolled in the study between 2009 and 2013, 9 died in hospital and a further child died 6 months after the incident.

Preliminary analysis of the data led to the following observations:

- The most common location for immersion incidents in children was the home swimming pool
- Most incidents occurred in children under 4 years of age, with a predominance of males
- CPR was attempted at most incidents
- 10% of the cases were fatal
- 16% of children had neurological deficits (brain damage)
- The longer the immersion in water, the higher the risk of neurological deficits
- Children with a previous history of seizures had worse outcomes

## Safety of Portable Swimming Pools

Swimming pools classified as portable pools are: inflatable pools of any depth, soft-sided pools of any depth, and rigid-sided swimming pools less than 30cm in depth. These swimming pools are becoming increasingly popular due to their affordability and easy set-up. According to The Swimming Pools Act 1992, any swimming pools, including a portable swimming pool, which is greater than 30cm in depth requires a child resistant barrier (a pool fence). Focus groups conducted by the Kids Health Promotion Department at The Children's Hospital at Westmead revealed a lack of public awareness of this requirement. Unfenced portable pools are huge safety concern for young children.

According to data from the NSW Child Death Review Team, over a quarter (29%) of all child drowning deaths in NSW between 2007 and 2011 were in portable pools. Most of the portable pools were not fenced.

This prompted Kids Health to conduct a portable pool safety campaign in 2012-13 to raise awareness of the safety issues associated with portable pools and the legal requirement for fencing. Culturally and linguistically diverse community groups were targeted in addition to English-speaking communities. Posters, brochures, radio announcements and videos were developed. Assessment of the campaign showed that it had good impact on behaviour change, but limited community penetration.

A safety standard for portable pools was introduced 30<sup>th</sup> March 2014 to mandate safety warning labels on pools and packaging. The following safety warning is required to appear on pools greater than 30cm in depth, and the warning text without the image is required for the packaging:

## WARNING!

Children have drowned in portable swimming pools.

Ensure active adult supervision at all times.

Do not leave children unsupervised in or around the pool—keep them within arms' reach.

Pool fencing laws apply to this pool. Consult your local government authority for fencing requirements.



NSW Fair Trading compliance data reveals that retailers have been slow to implement the changes, and at September 2014, only 65% of retail outlets were fully compliant with the safety standard.

An area of remaining concern is online retailers. As retail packaging is not seen before the purchase of a portable pool, unscrupulous websites have side-stepped the purpose of the safety standard by not informing customers of the fencing requirement in their product description. Even high profile Australian retail websites such as ebay.com.au, despite advice from the Swimming Pool and Spa Association, perpetuate the lack of awareness of the need to have a fence in this manner.

International websites such as alibaba.com.au do not fall under the Australian Safety Standard, and remain a source of non-compliant portable pools into the Australian market.

### Swimming Pool Safety Legislation

The requirement of private swimming pools to be fenced, first introduced by The Swimming Pools Act 1990, has led to a decrease in the numbers of children drowning in swimming pools since that time. Over the years, pool safety legislation has undergone a number of amendments, with each set of changes only applying to new pools built. Thus, in New South Wales, different versions of the Swimming Pools Act, Regulations and Australian Standards apply to each swimming pool depending on when the pool was built.

The most recent review of the Swimming Pools Act was in 2012. The review was designed to improve compliance with swimming pool safety legislation. The amendments consisted of:

- The introduction of a state-wide online pools register with all swimming pool owners need required to register their pool
- Council development and implementation of an affordable swimming pool inspection program in consultation with their community
- All tourist/visitor accommodation sites and multi-occupancy dwellings with a swimming pool requiring a Certificate of Compliance of pool safety renewed every 3 years
- Swimming pool owners required to provide a valid swimming pool Certificate of Compliance prior to selling or leasing their property (due to be implemented 29 April 2015)

With approximately 6400 properties with swimming pools expected to be offered for sale or lease in NSW between January and March 2015, the Building Professionals Board is increasing the number of swimming pool inspectors available by creating a new E1 accreditation category. The details of the new accreditation category are still to be confirmed.

## Law Reform

Future reform of swimming pool safety legislation is inevitable. The extent to which the swimming pool safety legislation performs its function of keeping people safe in and around swimming pools, will depend on the content of the legislation and its enforcement.

Some concerns in the current legislation and potential areas of improvement are suggested:

- Greater emphasis on gates in legislation
  - Improve the manufacturing requirements for gates and gate fittings so these faults are reduced
  - This is urgent considering The Child Death Review Team finding of 30/30 inadequate pool fences involved in child drowning deaths had faulty gates
- One law for all pools
  - All swimming pools to comply with the same standard, regardless of age of pool, location of pool etc.
  - Five year time period to comply
  - Subsidy to comply for low-income households, pensioners
- Research-based fence height
  - Current fence and gate heights based on research conducted over 30 years ago
  - New research needs to be conducted
- Portable and inflatable pools fencing enforced
  - Portable pools to be sold with pool fencing as a package.
  - If fencing is not financially viable for purchasers and/or vendors, inflatable and portable pools should be taken off the market
- Mandatory training of inspectors
  - Mandatory training for all swimming pool inspectors and accredited certifiers
  - Independent body to regulate and approve course providers
  - Training modules developed in consultation with the Local Government Training Institute (LGTI) and the Australian Institute of Building Surveyors (AIBS), and local councils.
- Temporary fencing of all swimming pools during construction
- Pool inspections required for every swimming pool at least every 4 years
- Data on drowning and near-drowning
  - Ambulance staff and hospitals should be required to report all drowning and near-drowning incidents to NSW Health
  - Mandatory investigation should be undertaken by local councils of swimming pools where immersion incidents have occurred in children under five years of age

## Open Discussion

### Community Education

- 4 key components of pool safety:
  - Supervision
  - Pool fencing
  - Learn to swim
  - CPR
- Uncoordinated approach to community awareness and education: different organisations, different emphases
  - Potential to align safety messaging for greater impact and penetration; sacrifice branding to deliver one swimming pool safety message/ campaign
- Difficult to access members of the community who would most require from swimming pool safety education (people who own pools, people with young children)
- Potential of NSW Swimming Pools Register
  - use as a mechanism to contact all swimming pool owners for swimming pool safety education, discounted CPR lessons etc
  - not currently possible as contrary to Privacy Act
- Potential partners in opportunistic council notification of swimming pool defects/ provision of education
  - People who regularly visit homes (fire brigade/ swimming pool technician/ child and family health nurses)
- Lack of awareness of public of function of fence as child resistant, not child-proof
  - Penrith City Council uses YouTube clips of toddlers scaling standard pool fences to educate parents/ adults

### Portable Swimming Pools

- Impossible to enforce safety standard
  - No notification to council when purchased, therefore cannot inspect fence
  - Impracticality of collecting address of purchasers (takes time, pools can be transported to different sites of use)
- Suggestion of point of sale fencing compulsory with portable pool
- Suggestion of ban of smaller, inexpensive portable pools where fencing would not be financially viable
  - Emerging issue with lack of data on lethality of smaller, inexpensive inflatable pools
  - Current trend to smaller backyards means fewer in-ground pools and potentially many more portable pools
  - Effect of new Safety Standard labelling yet to be assessed
  - Should children have to drown before action is taken?
  - Possibility of Fair Trading to impose national ban

- The Child Death Review Team may be able to gather national data to support the suggestion to ban small, inexpensive portable pools
- Assessment of portable swimming pool safety should include morbidity, i.e. non-fatal immersion incidents

### Swimming Pool Safety Legislation

- Practicality of Safety Standard could be based on successful function of key components of child-resistant barrier
- Gates
  - Swimming Pool gates are a hot-spot for dysfunction
    - This is noted by swimming pool compliance officers and the impact of dysfunctional gates in causing child deaths in swimming pools is noted by The Child Death Review Team
  - Recent decrease in height standard for pool gate latch in Australian Standard is cause for concern
  - Manufacturing and functional standard for gates should be increased
    - Need to account for common activities such as children swinging on gates
    - Shifting ground levels can lead to defective latching- possible solution: gate section in fence could be part of same frame/ footing
    - Greater tolerance required in latching mechanism
- Swimming Pools Act Regulations
  - The Regulations are due for repeal in 2015
  - Submissions will be called for early 2015 with implementation in 2016
  - Potential for improvement of safety with review of regulations
- Concern over copyright nature of swimming pool safety legislation
  - The swimming pool safety legislation is based on the Australian Standards documents, which are copyright. This makes it difficult for the public to access the very laws they are expected to follow.
  - A possible solution would be to establish a legislative document which itself contains all the relevant information. The document would be easily accessible in electronic and hard copy without fee. This is similar to the approach the Queensland Government has taken, recently introducing Mandatory Part 3.4, the standalone pool fencing legislation document.
- E1 Swimming Pools Inspectors
  - concern over limit of power in addressing inadequate fencing. Will still need to refer to Local Council for enforcement so potentially more work for Council.
  - Mutual recognition of inspectors from other Australian states may lead to variations in inspector quality and may disadvantage local inspectors

# The Children's Hospital at Westmead

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Monday 27<sup>th</sup> October 2014

Lorimer Dods Lecture Theatre, The Children's Hospital at Westmead  
Hawkesbury Rd & Hainsworth St, Westmead

- 9.00      **Registration**
- 9.45      **Welcome**  
*Professor Danny Cass, Director of Trauma, The Children's Hospital at Westmead*
- 10.00     **Impact of paediatric drowning and near-drowning in private swimming pools**
- Immersion: long-term outcomes  
*Mrs Patricia Manglick, CTCPER, The Children's Hospital at Westmead*
- Ms Amy Peden, Royal Life Saving Society Australia*
- Drowning Deaths in Private Swimming Pools in NSW  
*Ms Kathryn McKenzie, Child Death Review Team*
- 11.00     **Morning Tea**
- 11.30     **Safety of portable swimming pools**
- Kids Can Drown Without a Sound  
*Ms Erin Simmonds, Kids Health Promotion, The Children's Hospital at Westmead*
- NSW Fair Trading Product Safety: Portable Pools  
*Mr Michael Cooper, Consumer Protection, NSW Fair Trading*
- Retailers and New Legislation  
*Dr Carla Ghisla, CTCPER, The Children's Hospital at Westmead*
- 12.30     **Lunch**



**13.15 Swimming pool safety legislation**

Swimming Pools Act 1992: 2012 Amendments

*Mr Grant Astill, Office of Local Government*

*Dr Gabrielle Wallace, Building Professionals Board*

Law Reform

*Dr Cathy Sherry, Faculty of Law, University of New South Wales*

*Mr Stephen Krimmer, Penrith City Council*

**14.30 Short break**

**14.45 Panel Discussion**

*The panel members will discuss strategies for increased swimming pool safety and answer questions from the audience.*

**15.30 Close & Afternoon Tea**

the  
children's  
hospital at Westmead



## Appendix B

Name	Organisation
Grant Astill	Office of Local Government
Bruce Begnell	Sutherland Shire Council
Kay Best	The Children's Hospital at Westmead
Craig Bieder	Sutherland Shire Council
Danny Cass	The Children's Hospital at Westmead
Michael Cooper	NSW Fair Trading
Kristy Coxon	The George Institute for Global Health
Spiros Dassakis	The Swimming Pool and Spa Association of NSW
Anne Deans	Youthsafe
Greg Forrest	Sutherland Shire Council
Carla Ghisla	The Children's Hospital at Westmead
Lachlan Jones	Australian Medical Association, New South Wales
Emily Klineberg	NSW Kids and Families
Stephen Krimmer	Penrith City Council
David Macallister	The Royal Life Saving Society NSW
Patricia Manglick	The Children's Hospital at Westmead
Kathryn McKenzie	NSW Ombudsman
Milena Mijas	The Royal Life Saving Society, New South Wales
Michael Morris	The Samuel Morris Foundation
Amy Peden	The Royal Life Saving Society- Australia
Stacie Powell	The Children's Hospital at Westmead
Frank Ross	The Children's Hospital at Westmead
Lisa Sakashita	Surf Life Saving
Justin Scarr	Royal Life Saving Society- Australia
Michael Sokolsky	NSW Police
Melissa Savage	Building Professionals Board
Cathy Sherry	Faculty of Law, University of New South Wales

Erin Simmonds	The Children's Hospital at Westmead
Gabrielle Wallace	Building Professionals Board
Jared Wilson	Austswim