

# *Fences, Gates and Latches*

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# Introduction

- Value of Barriers in Saving Toddlers' Lives
- Involvement in drowning prevention



# Drowning Statistics

- The real numbers?
- Drownings not reportable
- Need for better methods for capturing information

# Research

- Australia
- US (Harborview, Seattle & Arizona Child Fatality Review Program)
- AAP
- Terms need better definition:  
property line vs. perimeter
- Fencing only barrier with proven effectiveness

# Types of barriers

- Permanent fences
- Removable or mesh fences
- Other types of barriers: Alarms, Covers, Self-closing doors, Safety Turtle, laser systems, nets, etc.

# Isolation Fencing - Permanent



# Removable or Mesh Fencing



# Australian Studies

- Injury Bulletin, November 2000
- Pool fencing legislation = significant decrease in toddler drownings
- Drownings continued - Total drownings: 32% unfenced, 38% non-compliant gate, 24% 3-sided fencing only, 5% non-compliant fencing
- Difficulty in enforcing codes

# *Pediatrics* Journal Article

Feb. 2003, Mark Stevenson, PhD, et al

- 52% of pools inspected after a drowning event found to be compliant with legislation on barrier fencing
- 70% had 3-sided fencing (passed code if pre-1992)
- Of these, in 43%, children gained access to the pool through the house
- Another 43% gained access thru propped open pool gate
- In 14%, inadequate supervision contributing factor

# U.S. Studies

- A study by the Harborview Medical Center Injury Prevention and Research Center in Seattle, Washington, confirmed the findings in the Australian study.
- In a study released April, 2003, the Arizona Child Fatality Review Program reported that out of 173 children who drowned in backyard pools since 1995, appropriate supervision and pool fencing could have prevented 90% of deaths.

# *AAP Technical Report*

- Drowning and near-drowning major causes of childhood morbidity and mortality
- Risk factors
- Location and circumstances
- Swimming ability

# AAP – Prevention of Injury Policy

- Four-Sided Fencing
- Pool Alarms and Pool Covers
- Swimming Instruction
- Supervision/Lifeguards
- Resuscitation
- Personal Flotation Devices

# ASTM Standard Guide for Fences for Residential Outdoor Swimming Pools, Hot Tubs and Spas F1908-98

- Closely follows CPSC recommendations
- Requires a minimum 48" isolation fence, with a self-closing, self-latching gate
- Latch release at 54", or mounted on the pool side of the gate.

# ASTM (draft) Standard Guide for Fences for Non-Residential Outdoor Swimming Pools, Hot Tubs and Spas

- Requires that the top of the fence shall be a minimum of 96 inches above grade.
- Standards don't have the effect of law, but state and local building codes frequently require compliance with ASTM standards

# ASTM Standard (draft) for self-closing, self-latching gates

- New standard can be referenced in any other standard, including standard for mesh (removable) fencing
- Defines self-closing and self-latching, setting parameters for testing to ensure gate will self-close and self-latch

# The Weakest Link

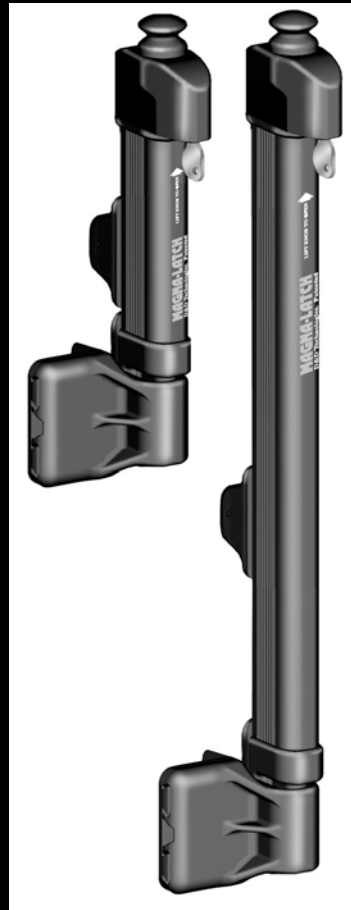
- The weakest link in the strongest fence is a gate that won't close first time, every time
- Beware of rusty gravity latches



# Latch release must be out of child's reach



# Gate must be self-closing, self-latching



# Fencing legislation

- Research has shown that no state in US has mandatory fencing codes
- Most codes offer several choices as an “out”





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# The Bottom Line

- Studies both in Australia and overseas have shown that **isolation fencing** of swimming pools is **highly effective** in reducing child drownings, with the most **important element** being a **secure, self-closing and self-latching gate**.

# The Bottom Line

Australian legislative advocates said, and most of us realize, that “While adequate **supervision** of children is **essential** in ensuring child safety, it is **unrealistic** to expect that there will not be **moments** when children are **unsighted** by parents or supervisors. For this reason, **environmental safeguards** which provide **passive protection** are necessary.”

# The Bottom Line

1. In a policy statement issued August, 2003, the AAP says, “If a home has a residential swimming pool, it should be surrounded by a fence that prevents direct access to the pool from the house. Rigid, motorized pool covers, pool alarms, and other protective devices, which may offer some protection if used appropriately and consistently, are not a substitute for 4-sided fencing.”

# The Ultimate Bottom Line – Safe Kids!

