



U.S. CONSUMER PRODUCT SAFETY COMMISSION  
WASHINGTON, DC

Swimming Pool Safety Hearing Agenda  
Phoenix, Arizona  
Tuesday, July 27, 2004  
9:00 a.m.  
(Lunch break taken mid-day)

*Welcoming Remarks*

The Honorable Hal Stratton, Chairman, U.S. CPSC  
Mr. Bob Khan, Assistant Chief, Phoenix Fire Department

*Oral Presentations*

**Panel #1**

- Mr. Bob Khan, Phoenix Fire Department, Phoenix, AZ
- Randy Ogden, Tucson Fire Department, Tucson, AZ
- Nancy T. Baker and James A. Baker, IV, McLean, VA

**Panel #2**

- Maureen Williams, National Drowning Prevention Alliance, Huntington Beach, CA
- Beth-Ellen Cody, National Safe Kids Campaign, Washington, DC
- Tiffaney Isaacson, Water Watchers at Phoenix Children's Hospital, Phoenix, AZ
- Dave Munsey, KSAZ Fox TV, Phoenix, AZ *(no statement)*

**Panel #3**

- Dr. Jeffrey Hill, St. Joseph's Hospital and Medical Center, Phoenix, AZ
- Dr. Jeffrey Weiss, American Academy of Pediatrics, Phoenix, AZ
- Cathleen Flynt, Glendale, AZ *(no statement)*

*Short Break*

**Panel #4**

- Marvin Teutsch, Roltec Services, Inc., Tempe, AZ
- John Fuller, Water Safety Rails, Scottsdale, AZ
- Keith Scriven, Innovators Unlimited, Fayetteville, NC

**Panel #5**

- Bob Hubbard, Hubbard Family Swim School, Phoenix, AZ
- K.J. Splash Gordon, Splash Babies, Phoenix, AZ
- Lana Whitehead, Swimkids USA, Inc., Mesa, AZ

**Panel #6**

- Dr. Mary Ellen Rimsza, Arizona State University, Tempe, AZ
- Katherine Foley, Salt River Project, Phoenix, AZ *(no statement)*
- Dr. T. Kent Denmark, Loma Linda University Medical Center & Children's Hospital, Loma Linda, CA

**Panel #7**

- Roger Gaffner, Aqua Safe, Inc., Houston, TX
- John Brown, Safety Solutions, Jensen Beach, FL
- Paul Pennington, Vac-Alert Industries, Ft. Pierce, FL
- Pam Westman, Cover-Pools, Inc., Salt Lake City, UT

**Panel #8**

- Carvin DiGiovanni, National Spa and Pool Institute
- Dr. Thomas Lachocki, Natl. Swimming Pool Foundation, Colorado Springs, CO
- Steve O'Brien, A.O. Smith Electrical Products Company, Tipp City, OH
- *ALAN MOSCHIONI (added to agenda 7/27)*

*Adjournment*

Chairman Hal Stratton

*Nancy T. Baker*

Nancy Baker  
Mother of Virginia Graeme Baker, deceased

Office of the Secretary  
U.S. Consumer Product Safety Commission  
Washington, D.C. 20207

***Re: Written Submission of Nancy Baker for the Commissions Public  
Hearing on July 27, 2004 in Phoenix, Arizona on suction entrapment.***

Good morning, my name is Nancy Baker and I would like to thank you for the opportunity to appear before you today to speak to you about the issue of swimming pool and spa drain suction entrapment and the scores of children that are killed, maimed or disabled every year by this completely preventable event.

On June 15, 2002, my daughter, Graeme died. She was 7 years old when her life ended. Her death certificate lists her cause of death as drowning. My child did not die in an accidental drowning. She was killed when she became stuck on the drain of a swimming pool spa. This drain had so much suction force that it took two adult males all of their strength to pull her from the drain.

Graeme was a strong and beautiful and healthy child. She was a member of our community swim and dive team who had been swimming unassisted since she was 3 years old. Her abilities as a swimmer are not what caused her to lose her life.

On that day in June, I took my five daughters to a graduation party being hosted by the family of a young man that my family knew. The party took place outdoors and was centered around my friend's pool/spa in their backyard. Graeme had come to the party dressed in her bathing suit and immediately entered the pool. Her sisters had gone inside to change so they could go swimming too. After being at the party for a short time, I looked for Graeme and noticed that she was not in the pool. A short time later, my 12 year old daughter came running towards me, terror in her eyes, to tell me that Graeme was in the hot tub underwater and would not come up. It was Jackie, Graeme's twin sister, that had found her there. I ran to the spa but could not see Graeme anywhere in the spa water. My daughter continued to insist that Graeme was in the spa. The bubbles generated by the spa and the color of the water were obscuring my vision.

I jumped into the spa and what I saw will haunt me for the rest of my life. It is one of those moments that leaves a permanent etching in your memory that I will never be able to erase. What I saw was Graeme's lifeless body, her limbs moving only due to the currents created by the bubbling water generated by the spa. The horror of this picture defies description. I immediately tried to pull Graeme from the spa but her body could not be moved. I remember thinking that she had been murdered as she appeared to be attached to the bottom of the spa, like she was tied down or someone had weighted her

down so she could not come up to the surface. I could not make sense of her being trapped at the bottom of the spa, what on earth could be holding her on the bottom. I simply had no frame of reference to help me comprehend this dilemma.

Two adult men at the party entered the spa and began trying to free Graeme from the bottom. They eventually were able to free her, only after pulling her so hard the drain cover itself broke free. Graeme's lifeless body was laid on the side of the pool and people began lifesaving efforts. It was surreal to watch these events occurring to my own daughter. Of course as we know today, Graeme was not able to be saved by the efforts of the people at the pool, paramedics or physicians at the hospital. Our Graeme was dead.

In the aftermath of Graeme's death, I struggled to understand how such a thing could happen. I could not comprehend how a child so well trained in swimming and so healthy and strong could fall victim to being stuck on a drain of a spa. It was an explanation that seemed to defy logic. What I have learned in my quest to understand this problem has not only horrified me but given me the resolve to make sure that Graeme's death will not be in vain. I and Graeme's dad, James Baker, will do all we can to insure that no other mother, father, sister, brother, grandmother, grandfather or anyone else has to endure the horror, loss and grief that my family continues to suffer from as I speak to you today.

For you see what I have learned since I began looking into this issue is that this very Commission has known that suction entrapment in pools and spas has been killing, disemboweling and maiming children since 1973. Not only has CPSC been aware of this issue but so have the manufacturers of swimming pool pumps, drains, drain covers and other swimming pool and spa equipment. There have been warnings, suggestions, investigations and studies that have occurred during these 31 years and yet hundreds of children have drowned, been disemboweled or are disabled as a result of being entrapped on the drains of pools and spas. These various safety efforts such as dual drains, vent pipes, modified drain covers, etc., although well intentioned, unfortunately in certain circumstances fail or are ineffective.

During the last 10 to 15 years there has been available to the industry a safety device that would essentially eliminate the risk of children being killed or injured due to suction entrapment. These devices are commonly referred to as safety vacuum release systems (SVRS). The various safety and construction methods that have been presented and used in the past by swimming pool pump manufactures and contractors, such as dual drains, vent pipes and anti-vortex drain covers, have not eliminated the problem of suction entrapment and children continue to die. The "SVRS" systems serve as a sort of back up fail safe system so that when these other safety designs fail, and we know they do, the SVRS will activate and relieve the suction from the drain, thus freeing any trapped child. A device like this on the drain of the spa that Graeme was stuck on would have saved her life.

Over the past years numerous efforts have been made to have the swimming pool and spa industry, including manufactures and contractors, adopt and accept this SVRS

safety systems. For reasons that are unclear the manufacturers and contractors continue to insist that the systems they have in place now are adequate and SVRS's are not needed. This position is taken in spite of the fact that the manufacturers and contractors know the current systems fail and that children continue to die. What is even more distressing is that the manufacturers' and contractors primary association, The National Spa and Pool Institute, has actively lobbied various state legislatures to keep the legislatures from amending the appropriate building codes in their states to require these SVRS devices be installed. Why? These devices range in cost from \$250 to as much as \$1,500 and perhaps more, but when compared to the overall cost of constructing a swimming pool/spa the cost is insignificant, especially when it will prevent the death of a child.

Just last summer I visited the largest retail pool supply company in the Washington, D.C. area. I asked the staff specifically how I could best avoid the danger of entrapment in my pool and spa and not one of the salespersons had any idea of what entrapment was, nor could they find, within the store, any literature or guidelines on the subject. This sort of conduct by an industry tells me that unless it is forced to do so it will not take the steps necessary to protect swimmers, and in particular children, from the known hazard of suction entrapment.

My little girl was beginning her life and it was tragically cut short. Our lives have been inalterably changed by the circumstances of her senseless death. I intend to do everything within my power to make sure that no other child and no other family ever sustains a loss of the magnitude that my family has suffered. These deaths are preventable and that alone makes her loss all the more difficult and infuriating to accept. I cannot accept that there are pools and spas being used and constructed today with equipment designed and installed that can lead to death, evisceration or permanent injury of innocent and unknowing victims and such profound agony for their survivors. The industry and its association have exhibited a total unwillingness to address this problem voluntarily and as a result hundreds of additional children have died. I am here to urge you to stop these senseless deaths and mandate appropriate changes to the building codes of this country to see that this suffering ends. You have the power to save lives, please do not sit idly by and continue to watch these children die.

Thank you.

## Research Supporting Isolation Fencing as the Primary Barrier

Presented by Maureen Williams  
Founder, National Drowning Prevention Alliance  
Public Relations Manager, D&D Technologies

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I'm speaking today in support of barrier codes and laws promoting fencing as the primary barrier to protect children from drowning. Permanent isolation fencing has been shown to be the most effective barrier to keep toddlers from drowning in swimming pools.

Removable mesh fencing can also be very effective, when it's left in place. It's highly recommended that removable fencing include a self-closing, self-latching gate as you see in the center photo. In the top left photo, you see what must be done if the fence doesn't include a gate.

### **Studies illustrating the effectiveness of isolation fencing**

Studies both in Australia and the U.S. 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.

#### **1) Australian studies:**

In the Australian state of Queensland, it has been mandatory since 1992 for all swimming pools to comply with the Australian Standard for Pool Fencing, with new pools requiring four-sided isolation fencing between the house and the pool, but with existing pools having less stringent requirements.

An Australian study concluded that less than 5% of drownings take place in pools that have 4-sided fencing and effective, self-closing gates in good working order. (See Mater Clinical Epidemiology Centre Injury Bulletin No. 62, November 2000, Dr. Robert Pitt et al.)

- Pool fencing legislation in Australia has led to a significant decrease in toddler drownings.
- In this study reported by Dr. Robert Pitt, only 16% of homes in which toddlers drowned complied with pool fencing laws. Of the children who drowned in these homes, one child climbed the fence. Other homes had gates open.
- The study also discussed the difficulty in enforcing codes, as drownings continued after legislation. Among total drownings: 32% of the pools were unfenced, 43% had a non-compliant fence or gate, 24% had 3-sided fencing only.
- In the majority of cases studied, the responsible adult had no idea the child was near the pool.

#### **2) "Pediatrics" Journal article - Feb. 2003, Mark Stevenson, PhD, et al**

- In the February 2003 issue of the AAP's journal "Pediatrics," Dr. Mark Stevenson documented a study that showed that almost two thirds of the swimming pools in which children drowned had only 3-sided fencing. The study showed an almost 2-fold increased risk of a child's drowning in a pool with 3-sided vs. 4-sided fencing.
- This research was also completed in Western Australia, evaluating effectiveness of legislation enacted in that country (12-year observational period: 1988-2000--50 drownings of children under 5)

#### **3) 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.
- As stated in the Harborview report, case-control studies examined pool fencing intervention, showing that pool fencing significantly reduces the risk of drowning.
- Harborview researchers studied perimeter (property-line) fencing, and determined that isolation fencing is much more effective in reducing the risk of drowning.
- In a study released April, 2003, the Arizona Child Fatality Review Program reported that, although adequate pool fencing is not the only solution to preventing backyard pool drownings, there were

only six deaths out of the 173 studied that occurred in backyard pools in which it was known that there was an adequate pool fence that had a properly functioning locked gate. Of these, at least two children had access through a doggie door.

#### 4) AAP – Prevention of Injury Policy - 2003

- The AAP's Prevention of Injury Policy, issued in 2003, states that "Installation of 4-sided fencing that isolates the pool from the house and yard is effective in preventing more than 50% of swimming pool drownings among young children."

#### 5) 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

Latches illustrated are D&D Technologies' Magna-Latch, which is on 70% of pool gates in Australia, and D&D's Tru-Close, self-closing hinge.

#### 6) Fencing Legislation

- My research has shown that no US state has a code that mandates fencing, with no other options.
- Many states, including California, have barrier code requirements only for new pools, and a door alarm, an automatic door closer, or a rigid cover can substitute for four-sided fencing
- Certain cities or counties throughout the U.S. have mandated isolation fencing around pools, but few of these codes are enforced except for new pools. Enforcement is a tough issue everywhere.

The scene shown in this slide is even more frightening when you learn that an investigator took this photo two months after a child nearly drowned in this pool.

#### The bottom line:

- In the Australian study, the authors concluded that in not one case did a child who drowned gain unaided access to a pool fitted with a fully functional gate and fence that met the Australian Standard. Where children gained access to fenced pools, the majority did so via faulty or inadequate gates, or through gates that were propped open. Door locks and supervision were inadequate prevention strategies.
- 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 father of a child who drowned expressed the need for barriers most succinctly when he told me, "I'm not going to chain my daughter to the sink while I'm taking a shower."

#### Priorities for CPSC's Consideration:

- Change Safety Barrier Guidelines for Home Pools specification to read "...maximum clearance at the bottom of the barrier should not exceed 2 inches above grade," coinciding with the ICC codes.
- Research whether or not the configuration described in the Barrier Guidelines, whereby the latch is mounted on the inside of a shorter gate, is effective.
- Provide evidence to the ICC (by 8/20/04 deadline) that the 2003 IRC and IBC, which specify maximum chain link mesh size of 2.25 inches, should be changed to specify 1.25 inches.
- Address the relatively new type of "temporary" inflatable above-ground pools sold at home centers and discount stores. These pools can be as large as 48" deep and 18 ft. wide, or 42" deep x 24 ft.
- Provide testing and research effectiveness of layers of protection, including isolation fencing, automatic covers, all types of alarms, nets, door self-closers, etc. in home settings.

### **Research Supporting Isolation Fencing as the Primary Barrier**

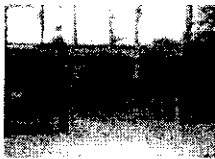
Presented by Maureen Williams  
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(800) 716-0888, ext. 292  
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### **Isolation Fencing - Permanent**



### **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, isolation pool fencing in working order could have prevented 90% of deaths.

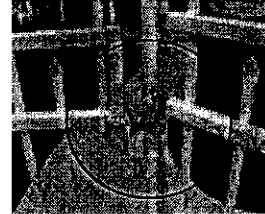


## AAP – Prevention of Injury Policy

- Policy, issued in 2003, states that "Installation of 4-sided fencing that isolates the pool from the house and yard is effective in preventing more than 50% of swimming pool drownings among young children."

## The Weakest Link

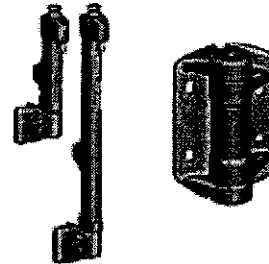
- The weakest link in the strongest fence is a gate that won't close first time, every time.
- Beware of rusty gravity latches



## Latch release must be out of child's reach

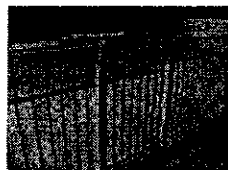


## Gate must be self-closing, self-latching



## Fencing legislation

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



## 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."

## Priorities for CPSC's Consideration

- Change Safety Barrier Guidelines for Home Pools to read "...bottom of barrier should not exceed 2 inches above grade.
- Research latch mounting configuration.
- Provide evidence to ICC that maximum chain link mesh size should be 2.25 inches
- Address need for barriers around large inflatable above ground pools.
- Provide testing and research effectiveness of layers of protection in home settings.

## The Ultimate Bottom Line – Safe Kids!





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President and CEO  
Marie K. Erchelberger, M.D.

**WRITTEN STATEMENT OF  
BETH-ELLEN CODY, M.P.H.,  
INJURY EPIDEMIOLOGY MANAGER,  
NATIONAL SAFE KIDS CAMPAIGN  
ON  
SWIMMING POOL SAFETY**

**July 27, 2004**

**Public Field Hearing**

**Phoenix, Arizona**

**U.S. Consumer Product Safety Commission**

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**WRITTEN STATEMENT OF  
BETH-ELLEN CODY, M.P.H, INJURY EPIDEMIOLOGY MANAGER  
NATIONAL SAFE KIDS CAMPAIGN  
ON  
SWIMMING POOL SAFETY**

My name is Beth- Ellen Cody, and I am the Injury Epidemiology Manager for the National SAFE KIDS Campaign. It is my pleasure to testify before the U.S. Consumer Product Safety Commission today. Mr. Chairman, thank you for allowing me to address the important topic of swimming pool safety and for dedicating CPSC resources to reducing the rate of residential childhood drownings.

**I. History of the National SAFE KIDS Campaign**

As you know, the National SAFE KIDS Campaign is the first and only national organization dedicated solely to addressing an often under recognized problem: *More children ages 14 and under are being killed by what people call "accidents" (motor vehicle crashes, fires, drownings and other injuries) than by any other cause.*

For well over a decade, the National SAFE KIDS Campaign has focused on this problem through the work of its national headquarters and its more than 300 state and local SAFE KIDS coalitions. SAFE KIDS relies on developing injury prevention strategies that work in the real world – conducting public outreach and awareness campaigns, organizing and implementing hands-on grassroots events, and working to make injury prevention a public policy priority.

The ongoing work of SAFE KIDS coalitions reaching out to local communities with injury prevention messages has contributed to the more than 40 percent decline in the childhood unintentional injury death rate during the past 15 years. However, with one out of every five children – or nearly 12 million children ages 14 and under – sustaining injuries serious enough to require medical attention each year, SAFE KIDS remains committed to reducing unintentional injury by implementing prevention strategies and increasing public awareness of the problem and its solutions.

**II. Background on Childhood Drowning**

While water recreation provides hours of enjoyment and exercise for children, water and children can be a deadly mix when an unsafe environment, inadequate supervision or improperly used safety gear is also present. Drowning remains the second leading cause of injury-related death among children ages 1 to 14, despite a 40 percent decline in the childhood drowning death rate from 1987 to 2001. Latest available national data indicate that, in 2001, at least 859 children ages 14 and under died as a result of unintentional drowning and, in 2002, an estimated 2,700 children in this age group were treated in hospital emergency rooms for near-drowning.

Drowning can occur in a variety of circumstances – during water recreational activities (such as swimming and boating) or when a young child is left unsupervised for a short time in the bathtub or around the home with access to a nearby pool or spa. Drowning, which can happen in as little as one inch of water, is usually quick and silent. A child will lose consciousness two minutes after submersion, with irreversible brain damage occurring within four to six minutes. The majority of children who survive without neurological consequences are discovered within two minutes of submersion, and most children who die are found after 10 minutes.

For children who do survive, the consequences of near-drowning can be devastating. As many as 20 percent of near-drowning survivors suffer severe, permanent neurological disability, the effects of which often result in long-lasting psychological and emotional trauma for the child, his or her family and their community.

### **III. National SAFE KIDS Campaign's Water Safety Initiative**

#### **A. SAFE KIDS Week 2004: *Splash Into Safety***

As a result of these alarming statistics, the National SAFE KIDS Campaign launched a water safety initiative, *Splash Into Safety*, during SAFE KIDS Week this past May.

Key to our efforts was the release of our new research study, *Clear Danger: A National Study of Childhood Drowning and Related Attitudes and Behaviors*. Our goal: to better understand why kids drown and what can be done to prevent these needless tragedies.

The report examined the circumstances of drowning deaths occurring in 2000 and 2001 among 496 children using data from Child Death Review Teams in 17 states. SAFE KIDS also commissioned nationally representative surveys of parents of children ages 14 and under to determine their knowledge, attitudes and behaviors concerning water safety.

#### **B. Key Findings of *Clear Danger: A National Study of Childhood Drowning and Related Attitudes and Behaviors***

As residential swimming pools are the focus of the CPSC's water safety efforts, the following study findings are most relevant for today's hearing:

##### **☞ Nine out of ten children who drowned were being supervised.**

In 88 percent of drowning cases reviewed, the victim was under some form of supervision when he or she drowned – in most cases, being supervised by a family member. Supervision was defined as being in the care of another individual, not necessarily in his or her direct line of sight and not limited to supervision of water recreation. Forty-six percent of drowning victims were in the care of a parent at the time of the incident. Twenty-six percent were in the care of a relative other than a parent, including 5 percent in the care of a sibling younger than 18 years of age and

6 percent in the care of a grandparent. These results are consistent with past studies indicating that childhood drownings and near-drownings typically occur when a child is left unattended or during a brief lapse in supervision.

In our survey, nearly all parents (94 percent) reported that they always actively supervise their children while swimming. However, deeper examination revealed that parents participated in a variety of distracting behaviors while supervising, including talking to others (38 percent), reading (18 percent), eating (17 percent), talking on the phone (11 percent) and even closing their eyes and relaxing (4 percent).

✍ **Younger children (ages 4 and under) were most likely to drown in home settings (26 percent) and pools (44 percent).**

Of all drownings reviewed, 39 percent occurred in pools (14 percent residential, 7 percent community and 18 percent of unknown type). Eighteen percent occurred in and around the home, in places such as bathtubs, buckets and spas.

Where barriers to pools were examined in connection with pool drownings, 38 percent occurred at pools known to have perimeter fencing and 28 percent occurred at pools with isolation fencing (a fence completely separating the pool area from the house and the rest of the property). In 36 cases the existence of barriers was undetermined. The presence of measures such as self-closing and self-latching gates in specific drowning cases could not be determined in conjunction with fencing type. However, in reviewed deaths where barriers were known to be breached, 63 percent of victims entered through an open or unlocked gate.

Our survey revealed that 78 percent of all parents and 69 percent of pool-owning parents felt that multiple barriers around pools were necessary to prevent drowning. While 98 percent of pool- or spa-owning parents reported that they have taken adequate steps to ensure children's safety, most reported a lack of the actual environmental modifications required. Nearly two-thirds (61 percent) of pool- and spa-owning parents have no isolation fencing, and 43 percent have no self-closing and self-latching gates. Pool-owning parents are even less likely to have other important safety devices near their pool – 82 percent have no shepherd's hook, 73 percent have no posted CPR instructions and 64 percent have no phone with emergency numbers.

✍ **Some parents mistakenly believe that toys and swimming aids can protect their children from drowning.**

Nineteen percent of parents believe that air-filled water wings can protect children, and 14 percent believe that air-filled inner tubes protect them. These items are not approved as safety devices to protect against drowning and should never be used for that purpose.

#### IV. SAFE KIDS Recommendations to the CPSC to Address Child Residential Swimming Pool Safety for Children Under Age 5

##### A. CPSC Public Education Efforts

SAFE KIDS applauds the CPSC for its efforts to educate the public about the importance of water safety. In order to drive visibility to this issue, SAFE KIDS suggests the CPSC hold a high-profile drowning prevention awareness event before the start of swim season, similar to the CPSC's fireworks safety demonstration in advance of the fourth of July.

Based on our research, SAFE KIDS recommends that the CPSC incorporate the following messages into future public education efforts:

☞ ***Drowning prevention requires a multifaceted strategy.***

Drowning is a complex issue with no single safety device or solution that works in all cases. Water safety requires a multifaceted strategy, including *active supervision by a designated adult, safe water environments, proper gear and education*, to ensure children's safety in and around water. The CPSC should stress these principles when conducting outreach to the public.

☞ ***Caregivers must learn the proper way to supervise their children around water.***

Adults must improve the quality of their supervision of children around water. Our survey results indicated that while nearly all parents said they always actively supervise their children while swimming, parents are participating in a variety of distracting behaviors while supervising. The CPSC should undertake a public education campaign about the importance of proper supervision – emphasizing the necessity of maintaining auditory and visual contact and being in close physical proximity to their children, in case emergency intervention is needed.

In addition, several of our coalitions have adopted *Water Watcher* programs in their communities. These initiatives promote the seriousness of the responsibility of supervision. A designated adult is charged with being a "Water Watcher" for a specific period of time, and his or her sole responsibility is to constantly observe children in or near the water. A sturdy, waterproof "Water Watcher" identification card is worn around the neck to indicate that he or she is "on duty." The card is worn until all children are out of the water or the supervision responsibility has rotated to another adult. SAFE KIDS suggests that the CPSC include the *Water Watcher* program in its supervision messaging to parents and caregivers. Emphasis on supervision of young children around any kind of water should be a central tenet of all CPSC drowning prevention initiatives.

☞ ***Pool owners need to be educated about proper environmental modifications.***

Studies show that installation and proper use of four-sided fencing could prevent 50 to 90 percent of childhood residential swimming pool drownings and near-drownings. Other environmental modifications, such as self-closing and self-latching gates, can also help prevent children from gaining access to swimming pools. The CPSC and the pool and spa industry

should work together to target pool owners and encourage them to install multiple layers of protection around home pools.

☞ *Adults must correctly and consistently use barriers that are in place.*

While it is important to educate pool owners about environmental modifications, also critical to this effort is the promotion of correct and consistent use of these barriers. The CPSC's educational efforts should emphasize not only the importance of installing isolation fencing with self-closing, self-latching gates, but also proper use of these barriers at all times. Specifically, the CPSC should focus on the importance of never propping open a gate to a pool barrier or closing, but not locking, a gate.

#### **B. Revision of CPSC Materials**

SAFE KIDS strongly recommends that these safety messages be incorporated into the CPSC's publications, such as *Safety Barrier Guidelines for Home Pools*. In particular, we hope that the CPSC would include the following in the future revision of this guide:

- ☞ The importance of active supervision (actively watching children without participating in distracting behaviors);
- ☞ The need for isolation fencing, rather than perimeter fencing;
- ☞ Correct use and maintenance of barriers, with a list of "don'ts" for each type of barrier;
- ☞ Improved imagery, such as aerial-view diagrams of various pool/fence/home layouts.

#### **C. Further Research by the CPSC into the Circumstances of Drowning**

The CPSC plays an integral role in supporting and conducting research regarding the circumstances of drowning. SAFE KIDS strongly recommends that the CPSC conduct further research into why and how kids drown. Because limited data is available on this topic, the CPSC should consider partnering with organizations such as the National Maternal and Child Health Center for Child Death Review – which assisted SAFE KIDS with our study – to investigate drownings further. State and local Child Death Review Teams are critical sources of information that could supplement the CPSC's existing drowning research.

#### **D. Exploration of Exercising Jurisdiction Over the Pool Environment**

To date, only four states (Arizona, California, Florida and Oregon) and some communities have enacted safety laws requiring some type of fencing around residential swimming pools. It would be a quicker and more effective way to require four-sided fencing for private and community pools through the CPSC regulatory process. Presently, the CPSC has jurisdiction over the pool



itself and the non-chemical products used for its care and maintenance. The agency, however, may be able to exercise additional authority if the swimming pool environment is viewed as the consumer product, as opposed to only the pool and the related components and products. If the CPSC was able and willing to use this expanded jurisdiction, the agency could require full perimeter isolation fencing with self-closing and self-latching gates around residential and community pools across the nation all at once, instead of waiting for each state to address the issue on an individual basis.

The CPSC clearly has the power to mandate product modifications in order to restrict use and access by children. The agency has done this in the past by making products child resistant, such as cigarette lighters, over-the-counter medications and baby oil containers. The CPSC could use this same authority by treating the swimming pool as part of a larger swimming product, including the pool, the deck and the fencing touching and surrounding the deck. If viewed in this manner, the agency could require changes to the swimming environment that could help protect children from drowning. (If the CPSC is unable or unwilling to exercise this influence to the pool environment, perhaps the agency has the power to require a cover on the pool itself.)

SAFE KIDS is not, at this time, recommending this exercise of jurisdiction. It would, however, suggest that the agency explore this possibility as an option.

## **V. Conclusion**

SAFE KIDS commends the CPSC for convening this series of public field hearings. Throughout the year, SAFE KIDS and our coalition network will increase our public education efforts to protect children in and around water. We look forward to partnering with the CPSC on any initiatives that result from these hearings.

TESTIMONY TEXT  
TIFFANEY ISAACSON

My name is Tiffaney Isaacson, and I am the Water Safety Coordinator for Water Watchers at Phoenix Children's Hospital. Our program has been addressing child drownings in Maricopa County for more than five years.

Thank you for taking the time to address child drownings. As a leading cause of injury-related death for children, and a cause of death that can be prevented with basic efforts, the potential impact of your work today is incredible.

Effective injury prevention comes from education. With effective education, change will follow. First I'd like to tell you about *what* we say in our educational efforts, then I'd like to tell you *how* we get our message across.

We have a great number of drowning incidents to study in Arizona, unfortunately. Every incident involves both a supervision lapse, and the failure, or lack, of a barrier. Supervision is a key strategy, and parents should always be reminded about its importance. But emphasizing supervision alone is ineffective. The area where most efforts fall woefully behind, the area the CSPC can truly make progress and save lives, is barriers.

To prevent drownings, we have to change the way that we think about this issue. We have to understand this important concept: a pool fence is equivalent to a seat belt in protecting children from drowning.

Consider the following factors:

- The majority of drownings take place in swimming pools.
- Most swimming pool drownings do *not* occur when a child is expected to be in or near the pool.
- No other device has been tested and proven by research more effective than pool fences in preventing drownings.
- Many parents do not understand the swift nature of drownings, and believe that their children are not at risk. Due to this lack of understanding, parents reject pool fences and choose to rely upon their ability to provide *constant* supervision...a nearly impossible feat.

These factors put the United States in the same place with pool fences as we were with seat belts twenty years ago. With increased education, research, and legislation, behaviors and attitudes changed. Lives were saved. The same can happen with drownings.

How can we educate the public? I'd like to give you an example.

*Water Safety Day* is our annual event, and it is made possible by local sponsors such as Valley Toyota Dealers and SRP. At Water Safety Day, we teach children drowning prevention at our local community colleges. This year, Mesa Community College hosted 1200 first graders. Through hands-on activities, the children learned about water safety in a fun, stimulating environment. Through media coverage and community involvement, we were able to take the safety message home to parents and caregivers.

*Water Safety is for YOU* is a curriculum program which was piloted with the children who participated in the event. By teaching water safety in the classroom, in the context of existing Arizona State academic standards, we were able to give teachers a program which they implemented without ignoring existing priorities. The curriculum program will be launched for the entire community in the next two weeks.

By educating children, we are addressing a group who is currently at risk for drowning themselves, a group who may supervise younger siblings around water. We are also educating the parents of tomorrow. Finally, by providing an engaging program that the children take home to their parents, we are able to educate the entire family.

Do these programs work? Yes. Not only did we receive positive feedback from the teachers and students, but community demand for the event increases every year. Additionally, as we discovered when SRP and Ellison Research donated the funds and services to evaluate the curriculum, there was a statistically significant change in knowledge levels.

The evaluations told us:

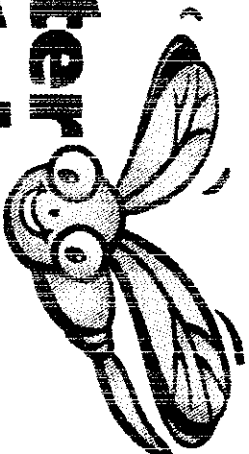
- that the children found the program interesting and engaging
- in the pre-test, children knew that drownings can occur in toilets and buckets 18 and 20 percent of the time, respectively. In the post-test the numbers of children who realized this risk were 82 and 83 percent, respectively. This increased knowledge can help them to recognize hazards in their own homes and protect younger siblings.
- in the pre-test, only 16 percent of the children realized that they should *not* jump into the water to help someone who falls into a pool. In the post-test, 79 percent of the children realized that they should not jump into the water.
- finally, 77 percent of children in the pretest said that pools should have fences. In the post-test, 97 percent said that pools should have fences. By starting early to provide positive attitudes about barriers, we have encouraged proper use of barriers today and increased the chances that these children will choose fences when they become pool owners and parents.

The CPSC can take many steps to reduce child drownings, including:

- education about the nature of drownings and effective prevention
- providing solid product advice and data about
  - the most effective types of fences and gates
  - the best ways to make fences affordable, effective, and attractive
  - how effective additional types of barriers are

The need is great, the time is now. Every year in our community alone, we lose more children than you will find in an average kindergarten class. The impact of those deaths is too great to tolerate, both upon families and friends, and upon our entire community and nation.

Thank you.



# Water Watchers



PHOENIX  
CHILDREN'S  
HOSPITAL

Drowning Prevention

# EFFECTIVE DROWNING PREVENTION STRATEGIES

WATER WATCHERS

AT PHOENIX CHILDREN'S HOSPITAL

Tifaney Isaacson, Water Safety Coordinator

# CHILD DROWNINGS

- A leading cause of injury-related death for children
- Preventable with basic efforts
  - Effective injury prevention: comes from education
- Two factors present in incidents:
  - Lapse in supervision
  - Failure, or lack, of barrier
- Supervision: key strategy
  - Ineffective by itself

# POOL FENCES

- **EQUIVALENT TO SEAT BELTS**
  - Most drownings
    - occur in pools
    - when a child is not expected to be in or near the pool
  - No other device tested and proven by research like pool fences
  - Parents don't understand the risk
- Effectiveness and lack of understanding make current attitudes about barriers equivalent to attitudes about seat belts 20 years ago

# EFFECTIVE EDUCATION

- **Water Safety Day**
  - Annual event, geared toward children
    - Hands-on activities, active, engaging learning
  - 1200 first graders present
  - Media coverage and community involvement reach caregivers



# EFFECTIVE EDUCATION

- **Water Safety is for YOU**
  - Curriculum program, meets Arizona academic standards
  - Piloted with children at event, available to entire community in two weeks



# EDUCATING CHILDREN

- Addresses those currently at risk, those who may currently supervise younger siblings
- Educates the parents of tomorrow
- Effective?
  - Positive feedback
  - Learning evaluations

# LEARNING EVALUATION RESULTS

- Interesting and engaging program
- Increase in knowledge about
  - Places where drownings occur
    - From 18 and 20 percent who realized drownings can occur in toilets and buckets to 82 and 83 percent
  - What to do in an emergency
    - From 16 percent who realized they should *not* jump into the pool to 79 percent
  - The importance of pool fences
    - From 77 percent who said pools should have fences to 97 percent
      - Encouraging proper use of barriers today
      - Increase in likelihood of purchasing and using pool fences in the future

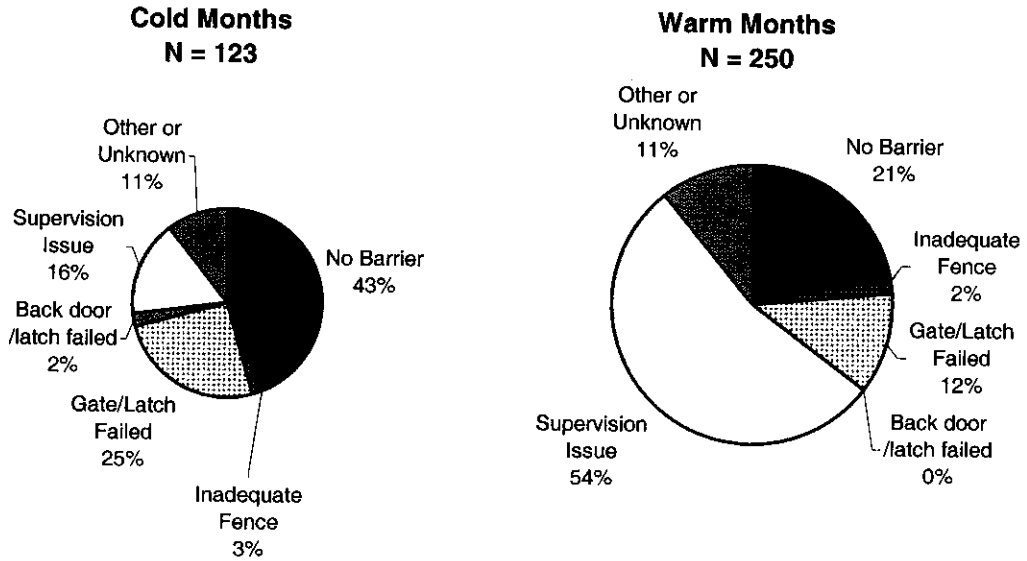
# CONSUMER PRODUCT SAFETY COMMISSION - IMPACT

- Education
  - Nature of drownings
  - Effective prevention-  
BARRIERS
- Advice and data for  
consumers
  - Most effective types of  
fences and gates
  - Best ways to make  
fences affordable,  
effective, and attractive
  - How effective additional  
types of barriers are

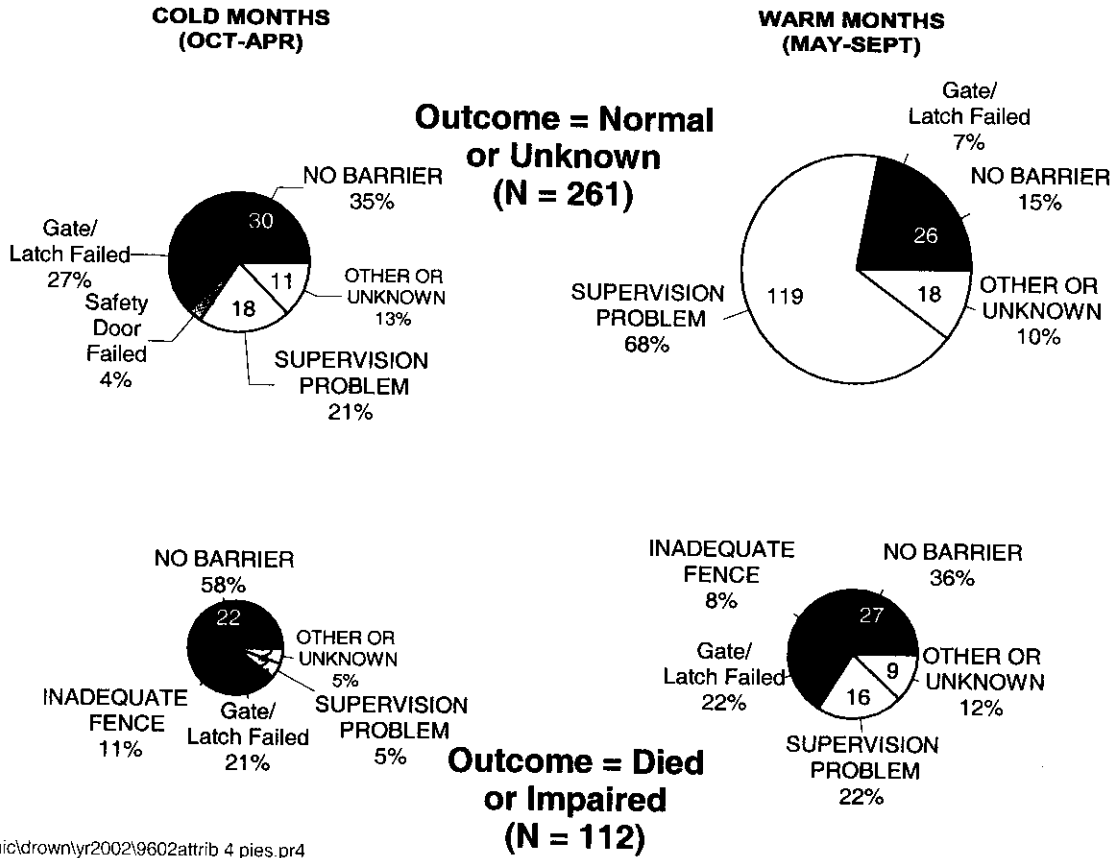


*Dr. Jeffrey Hill*

**Figure 8. Attributed cause (count and percent) of drowning or near-drowning incidents in pools among children, 0-4 years old, Maricopa County, 1996-2002. All outcomes (alive, impaired, died, and unknown) are included in these charts.**



**Figure 10. Comparison of the single attributed cause of incidents in pools, according to time of year (cold vs warm months) and outcome of the child (normal and unknown vs. died and impaired). This figure analyzes cases occurring in 1996-2002. Data are derived from reports submitted by fire departments in Maricopa County.**





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**TESTIMONY TO**

**THE**

**CONSUMER PROTECTION SAFETY COMMISSON**

**BY JEFFERY WEISS, MD, FAAP**

**ON BEHALF OF**

**THE AMERICAN ACADEMY OF PEDATRICS**

**JULY 27, 2004**

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I am Jeffery Weiss, MD, FAAP, a member of the American Academy of Pediatrics' (AAP) Committee on Injury, Violence and Poison Prevention (COIVPP) and a practicing pediatrician at Phoenix Children's Hospital in Phoenix, Arizona. I am pleased to be able to present testimony on behalf of the AAP before the Consumer Product Safety Commission (CPSC). Thank you, Mr. Chairman and Commissioners, for inviting the AAP to participate in this important hearing on swimming pool drownings.

The American Academy of Pediatrics is an organization of more than 60,000 primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists dedicated to the health, safety, and well being of infants, children, adolescents and young adults. The AAP has a long-standing commitment to protecting young people from injuries and record of numerous successful advocacy and educational efforts on injury prevention such as car safety seats, bicycle helmets, and child-resistant packaging. We also have enjoyed many years of collaboration with the CPSC to prevent product-related and other injuries. The AAP appreciates this opportunity to speak on behalf of America's children and adolescents and those who care for them.

### **1. Data on drowning and near-drowning in residential swimming pools and spas.**

As you know, drowning is a leading cause of injury-related death in children. In 2000, more than 1400 US children younger than 20 years drowned. Ninety one percent of these deaths were unintentional and were not related to boating. From 1990 to 2001, drowning was the second leading cause of unintentional injury death among US children between the ages of 1 and 19.<sup>1</sup> Among toddlers 12 to 23 months of age, it was the leading cause of injury death and the second leading cause of death overall. For each drowning death, it is estimated that at least 1 to 4 children suffer a serious nonfatal submersion event, many of which leave children with permanent disabilities. In 2001, the death rate and number of drowning deaths was highest for the 0-4 year old age group.<sup>1</sup>

Rates of drowning vary with gender, age, socioeconomic status and race.<sup>2-4</sup> After one year of age, males are at greater risk than females. Among females, drowning rates peak at one to two years of age and decrease thereafter. Among males, there are peaks in both the toddler and adolescent age groups. For all ages combined, drowning rates vary inversely with per capita income.<sup>2</sup> However, a study conducted in California found that drownings of children younger than 10 years were highest in cities or regions with higher median family incomes.<sup>5</sup> Therefore, the higher drowning rates in more affluent communities are likely attributable to increased exposure to residential swimming pools.

Analyses of all childhood drownings in the US in 1995 showed that children between 1 and 4 years were most likely to drown in swimming pools (58% of drownings among 1- to 2-year-olds and 51% among 3- and 4-year-olds).<sup>6</sup> A multistate CPSC study revealed that most children younger than 5 years who drowned or nearly drowned did so by entering the pool from their home through the unprotected side of the pool (the side of the pool that directly faces the house, with no intervening fence).<sup>7</sup> Most children were last seen in the home and were out of the parent's or caregiver's eye contact for only a moment, and the immersion was silent. Lack of adequate supervision has been found to be an important factor in most swimming pool drownings.<sup>8</sup>

**The American Academy of Pediatrics recommends systematic reporting of information on the circumstances of immersion events. Consistent documentation of this information is the critical first step in the development of local and state surveillance systems needed to guide design of preventive strategies appropriate for the geographic area. The AAP recommends that CPSC conducts further studies on childhood drownings.**

Unfortunately, current data collection strategies for drowning and near-drowning events vary tremendously. For example, a National SAFE KIDS Campaign survey of 17 states' Child Death Review Teams elicited information on 496 drowning deaths. Many of these death reports lacked information on the primary supervisor (data available for 60% of reports); child's location before drowning (31%); presence of lifeguard (30%); intent to be in water (34%); barriers present (47% of 169 pool drownings); how layers of protection were breached (18% of 169 pool drownings); and swimming ability (52% of 358 drownings not in bathtubs, toilets, and buckets).<sup>9</sup> Many Child Death Review Teams do not even collect information on drowning or other unintentional injury deaths. The AAP recommends a comprehensive death investigation, including a scene investigation, in all unexpected and/or traumatic deaths.<sup>10</sup> Collection of such data could greatly improve our knowledge about the circumstances in which children drown.

In addition to working towards consistent documentation of information on drowning incidents, the AAP suggests that the CPSC consider a special, in-depth study on drowning, which could provide needed information on the circumstances and environment of childhood drownings. The CPSC could collaborate with other federal agencies such as the Centers for Disease Control and Prevention (CDC) and National Institutes of Health (NIH) on this study. For a limited period of time, the following data elements could be added to reports of drownings and near drownings in pools in the National Electronic Injury Surveillance System (NEISS) and Medical Examiners and Coroners Alert Project (MECAP) databases:

1. What type of pool/spa? (in ground, above ground, wading pool, spa)
2. Is there a fence? If so, does it completely isolate the pool? What type? (chain-link, wooden slats, iron bars, mesh, etc.) Are there any gaps?
3. Is there a self closing, self-latching gate? If so, is it in working order?
4. Other than a fence, were there any other barriers? (pool cover, laser beam, pool alarm, locks on back doors of house, etc.)
5. How did the child get into pool area? (may be multiple responses)
  - a. gate malfunctioned (did not close or lock properly)
  - b. gate was intentionally or unintentionally propped open
  - c. child climbed over or under isolation fence (if climbed over, what was height of fence?)
  - d. child accessed pool area from house (unlocked door, window, or pet door)
  - e. child crossed an unfenced property line
  - f. child was within property line (ie, in back yard), but pool had no isolation fence
  - g. child was already within fenced pool area when entered pool
  - h. child was swimming at time of incident
6. Victim's swimming ability. Did the victim have formal swimming lessons?
7. Was head trauma, entanglement or hair entanglement involved?

## **2. Regional/local pool barrier codes, laws, and regulations.**



**The American Academy of Pediatrics encourages the passage of state and local legislation to mandate isolation pool fencing for new and existing residential pools.**

Compared to strict laws, governmental inspections, and computerized swimming pool registries used in parts of Australia and New Zealand, most fence ordinances in the United States contain loopholes and are rarely enforced. Unfortunately, CPSC has little or no jurisdiction to deal with this enforcement issue. However, groups like the AAP can continue their advocacy efforts to ensure more effective pool fencing laws, and the CPSC can support us in these efforts by conducting and funding various fence-related studies, as described below. Research into effective enforcement mechanisms would also be useful.

### **3. Effectiveness of pool barriers and other protective products.**

**The American Academy of Pediatrics recommends that 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. Some types of pool covers, such as solar covers, should not be used as a means of protection.**

#### **Four-Sided Fencing**

The most effective way to prevent toddler swimming pool drowning is to erect a fence that completely isolates the pool from the house and the rest of the yard area. Fences should be at least 4 feet high, and no opening under the fence or between uprights should be more than 4 inches. Gates should be self-latching and self-closing, should open away from the pool, and should be checked often to ensure good working order.

Installation of 4-sided fencing that isolates the pool from the house and the yard has been shown to decrease the number of pool immersion injuries among young children by more than 50%.<sup>11, 12, 13</sup> An Australian study showed that fences that allow access to the pool area from the back of the house or from windows have been shown to have almost a two-fold greater drowning risk than with 4-sided isolation fences.<sup>14</sup> In the same study from Australia, it was found that in every case where a child drowned in a pool with 4-sided isolation fencing, the reason was that the pool gate was either propped open or there was a fault with the self-closing/latching mechanism of the pool gate.<sup>14</sup>

Children's ability to climb fences varies with the type of fence. In one study, chain-link fences were easily scaled by young children, whereas ornamental iron bar fences, which retain visibility, proved to be more difficult to climb.<sup>15</sup> The CPSC has already published safety barrier guidelines for home swimming pools. Since the majority of toddlers drown in pools where there is no fence or where the gate is propped open or broken, it seems unnecessary to explore fence design and climbability to any great extent. However, the CPSC could develop standards that ensure gates do not fail with respect to the self-closing and latching/locking mechanisms. Additionally, standards for gate design should require some type of alarm to indicate if the gate has been propped open for more than a few seconds.

A recent report from the National Safe Kids Campaign indicates that nearly two-thirds (61%) of pool-owning parents have no isolation fencing and 43% have no self-closing, self-latching gate. What may be even more troubling is that almost all (98%) of these pool- and spa-owning parents report that they have taken adequate steps to ensure their children's safety, and 69% of pool-owning parents acknowledged that multiple barriers around pools are necessary to prevent drowning.<sup>9</sup> This disconnect between knowledge, perceived correct behavior, and actual incorrect behavior warrants more examination.

Little information is available to explain why families with pools and children do not erect fences. It may be that parents do not recognize the water-related risks, or that they feel a fence is very ugly or too expensive. It seems appropriate that CPSC fund research to determine the reasons that people do not erect fences and to try to determine if fences can be made less expensive and more attractive without sacrificing safety.

### **Pool Alarms , Pool Covers, and Other Barrier Systems**

Although pool alarms and rigid pool covers may provide additional layers of protection, they should not be used in place of a 4-sided fence, because they are not likely to be used appropriately and consistently. Further, some types of pool covers present an additional hazard for young children. A 1986 study conducted by the CPSC found that, of 142 drownings or near-drownings in swimming pools, 8 involved pool covers. The scenarios generally involved children discovered under nonrigid pool covers (e.g., solar or plastic covers) after apparently trying to walk on the covered pool.<sup>7</sup> Thus, these types of covers may actually increase the risk of a poor outcome, because a submerged child under the cover would be hidden from view, delaying rescue.<sup>16</sup>

In recent years, many new technologies (laser beams, water motion detectors, pool nets and covers) have been introduced to the market, sometimes advertised as an alternative to a pool fence. CPSC should undertake or fund studies to determine if these devices actually work, if they can safely substitute for a fence, or if their use in conjunction with a pool fence results in added protective value.

In Maricopa County in 2002, only 2 of the 66 drowning or near-drowning events for children 0-4 occurred in an above-ground pool.<sup>17</sup> In contrast, in a recently published study from New York State (1988-94), 52% of the 77 drowning deaths in this age group occurred in above-ground pools. Often the ladder was left in the "down" position.<sup>18</sup> More data regarding the frequency of above-ground pool drowning is needed along with research regarding the most effective barrier systems for this type of pool.

### **4. Educational approaches.**

Educating the public is a must in the prevention of water injuries. The American Academy of Pediatrics would like to work with CPSC to develop, disseminate, and evaluate educational materials for parents. These educational materials should focus on 3 key messages: fencing, supervision, and CPR. Educational messages can be delivered in a variety of ways. The AAP can certainly continue to work with its member pediatricians to include water safety counseling in routine well-child care, with a particular emphasis on pool safety for families that have swimming pools. Other creative approaches to dissemination of the educational messages should also be tried

and evaluated. For example, pool service companies and their employees could provide families with educational materials when they service residential pools; these individuals would have the ideal opportunity to observe if a pool has inadequate fencing.

## Fencing

**The American Academy of Pediatrics recommends that families be educated about installing an isolation fence that prevents direct access to the pool from the house. Such education should include the following points:**

- **The fence should be at least 4 feet high (or greater if required by local ordinance).**
- **The fence should be climb-resistant. For example, chain-link fences are easily scaled by young children, whereas ornamental iron bar fences are more difficult to climb.**
- **The distance between the bottom of the fence and the ground should be less than 4 inches. The distance between vertical members of the fence also should be less than 4 inches.**
- **The gate is the single most important component of the fence. It should be self-latching and self-closing, should open away from the pool, and should be checked often to ensure good working order.**
- **Families can also be advised to consider supplemental pool alarms and rigid pool covers as additional layers of protection; however, neither alarms nor pool covers are a substitute for adequate fencing.**

Educational materials addressing fencing should stress not only the need for isolation fencing, but also contain practical information (photos, costs, durability, ease of installation, etc.) about the types of fences, gates, and latching/locking mechanism that are currently available on the market. Promotional giveaways of pool fences might make installation more feasible for some families and could serve as a marketing opportunity for fencing companies.

## Supervision

**The American Academy of Pediatrics recommends education of parents and caregivers that they should never—even for a moment—leave children alone or in the care of another young child while in pools, spas, or wading pools. Such education should include the following points:**

- **Whenever infants and toddlers are in or around water, be it at their own home, the home of a neighbor, a party, or elsewhere, a supervising adult should be within an arm's length providing "touch supervision."**
- **The attention of the supervising adult should be focused on the child, and the adult should not be engaged in other distracting activities, such as talking on the telephone, socializing, or tending to household chores.**
- **Children are generally not developmentally ready for formal swimming lessons until after their fourth birthday. Swimming lessons will not provide "drown proofing" for children of any age.**

We cannot stress too often the lack of adequate supervision has been found to be an important factor in most swimming pool drownings.<sup>8</sup> In most cases, the adult reports leaving the child for a short time to answer the phone or attend to something else. By educating adults that they should only be

an “arm’s length” away from the child at all times in proximity to a pool can prevent a drowning or near-drowning.

Some programs have promoted the idea of a designated “watcher” in the pool area, an adult who is responsible for nothing other than watching children in the pool until he hands off responsibility to another adult. This concept merits evaluation. Also, more research is needed to formalize knowledge about what constitutes adequate supervision.

## **Resuscitation and Rescue**

**The American Academy of Pediatrics recommends that parents, caregivers, and pool owners learn CPR and keep a telephone and equipment approved by the US Coast Guard (e.g., life preservers, life jackets, shepherd’s crook) at poolside.**

Immediate resuscitation at the site of a submersion incident, before the arrival of paramedics, is an important secondary prevention measure and is associated with significantly better neurologic outcomes. However, the recent SAFE KIDS report indicates that 82% of pool-owning parents have no shepherd’s hook, 73% do not have CPR instructions posted, and 64% do not have a phone with emergency numbers by the pool.<sup>9</sup> Clearly, this is an area in which improved education is needed. On a more positive note, the SAFE KIDS report shows that 70% of parents have been trained in infant and child CPR.

## **5. Role for CPSC.**

As advocates for the safety of children, the American Academy of Pediatrics suggests that the CPSC undertake the following to help address child drownings in swimming pools:

- Work with the American Academy of Pediatrics to develop, disseminate, and evaluate educational materials for parents, focusing on the 3 key messages of fencing, supervision, and CPR.
- Collaborate with the CDC, NIH, and other appropriate groups to conduct and/or fund research on pool safety, addressing issues such as:
  - The circumstances and environment of childhood drownings, to be examined through a special, in-depth study in which specific data elements are added to NEISS and MECAP reports of drownings and near drownings for a limited period of time
  - Effective enforcement mechanisms for pool fencing laws
  - The reasons why families do not install 4-sided fencing and whether fences can be made less expensive and more attractive without sacrificing safety
  - Whether and how effectively new pool barrier technologies work
  - The frequency of above-ground pool drowning and the most effective barrier systems for this type of pool
  - Formalized knowledge about what constitutes adequate supervision
- Work with the Health Resources and Services Administration/Maternal and Child Health Bureau-funded National MCH Center for Child Death Review to encourage Child Death Review Team investigation of all childhood injuries deaths including drownings.
- Develop standards for gate design to improve self-closing and latching.

## Conclusion

Mr. Chairman, Commissioners, thank you again for the opportunity to discuss this important safety issue with you. As pediatricians, we will and we must continue to educate our patients, their parents, and the general public about the hazards pool create for young children. We would welcome the opportunity to work with you further in carrying out the important goal of reducing drownings and near drownings.

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  - <sup>16</sup>. Harborview Medical Center, Injury Prevention and Research Center. *Systematic Reviews of Childhood Injury Prevention Interventions: Drowning*. Available at: <http://depts.washington.edu/hiprc/childinjury>. Accessed February 3, 2003
  - <sup>17</sup>. AZ Department of Health Services, Bureau of Public Health Statistics. Water-related incidents in Maricopa County, 2002. Epidemiologic Report Number 2003:1
  - <sup>18</sup>. Browne ML, Lewis-Michl EL, Stark AD. Unintentional drownings among New York State residents, 1988-1994. *Public Health Reports* 2003;118:448-58

*Marvin Teutsch*

July 27, 2004

US Consumer Product Safety Commission  
Rockelle Hammond – Office of the Secretary  
301-504-6833

Public Field Hearing – Phoenix, AZ 7-27-04

Topic Area: Swimming Pool Barrier Products

My name is Marvin Teutsch. I am president of Roltec Services, a swimming pool barrier contractor. I am a mechanical engineer and I have worked in the pool barrier industry for 11 years. I, like everyone else here, am concerned about the safety of young children around residential swimming pools. The State of Arizona is also very concerned about their safety.

In 1991 Arizona enacted a law requiring all residential swimming pools to have prescribed safety barriers sufficient to prevent small children from gaining access to a swimming pool. Individual municipalities were allowed to pass their own pool barrier codes that were either equal to or more stringent than the state code. So over the years the codes have been massaged to be more suitable to the public's tastes. Primarily that allows pool owners to make choices of how they will meet the barrier code. The various codes now allow: dedicated fences around a pool; whole yard fences with self-closing, self-latching doors from the residence to the yard and window restrictors; and door alarms.

Since people do not like to be told what to do by government, the ability to make choices has made the codes more palatable to pool owners.

There are at least three lines of defense preventing drowning of children. The primary barrier is adult supervision. When that breaks down there needs to be other barriers in place – known as layered protection. The barrier between indoors and outside is the second most crucial defense. If the child can't get into the backyard he can't get into the pool. Self-closing, self-latching doors and window restrictors provide that barrier. The third line of defense is usually a dedicated fence around the pool. Many people install a pool fence so they can allow children to play in the rest of the yard without getting to the pool. This is a big mistake because fences are not the obstacles that they seem to be.

Channel 3 ran a public service ad in 2001 showing a three year old girl scaling an approved fence like a monkey. She gripped the fence bars with her hands and toes and went up and over in seconds. It is frightening to see.

I have reviewed reams of reports on drownings and their apparent causes. In most cases of child drownings there was a breakdown or lack of adult supervision or a failure of a dedicated pool fence. Often pool fence gates are propped open or the self-closing self-latching feature doesn't work. I have seen no reports of drownings due to a failure of self-closing self-latching doors.

When the state enacted the pool barrier code it was a good start but it left out an important step – required maintenance of the barrier after installation. Fences are remote from the house and the gates are not used daily. Consequently a gate latch failure can go unnoticed and unrepaired for some time. However, a self-closing self-latching door is integral with the house and a failure will be quickly noticed and repaired. This better maintenance may be the reason for the excellent safety performance of self-closing, self-latching doors.

Mandatory periodic inspections of pool barriers might add to their safety record.

I will be happy to answer any questions you might have either now or later. Thank you for your time.

*Marvin Teutsch*

## **Water Safety Rails**

“Protecting our future, Enhancing our pools”

*John Fuller*- President  
7608 E. Osborn Rd.  
Scottsdale AZ 85251  
fjohnrock@msn.com  
(480) 251-2710

July,27,2004

**An insight of drowning prevention, unveiling a method that is revolutionary**

### **Biography-**

John is a fifth generation in Arizona. Experienced contractor that acquired his carrier from the pioneering spirit of his grandfather before him. In the year 1988 he lost his son of 3 years of age to a drowning incident. Which has become the inspiration for the system developed Water Safety Rails that has been designed to help and aid a child once he has already fallen into a pool.

Water Safety Rails has been working closely with Departments of Drowning Prevention and Coalitions to help advice the public of the method that fills the missing piece of the puzzle. We have come to understand something else needs to be done to prevent the drowning rate that still persists at such high numbers.

Along with product installation there is a water safety program that is being designed for the whole family to educate in cautious safety and drowning recovery. Our goal is to reach every family in our communities and Internationally to aid in the understanding of “education” being the key to success.

### **A**

#### **Discussion-**

We have knowledge of wonderful programs like “Stop, Block and Watch” which have help in educating the public on awareness. But we all have come to the understanding of the still low success rate to prevent children from drowning. So far we have had 21 children drown in Arizona alone. Our program does not take away any of the needed essentials that have already been put in place for prevention . But it will only enhance the opportunities a child will have at his reach to help himself. By providing a chance and time for parental intervention for rescue or his own survival.

What is Water Safety Rails, how does it work?

### **B**

Death Prevention,

- 1) Parental Supervision
- 2) Adequate Pool Barriers
- 3) Water Safety Rails
- 4) Water Survival Skills



## C

The program is developed to teach a child to “**Stop, Reach and Pull**”,

- 1) How it works and why?
- 2) How it fills the missing piece of the puzzle.
- 3) Education is the key to success.

## D

Conclusion,

The Consumer Product Safety Commission should develop regulations to have safety measures like Water safety Rails placed in every new or existing pool and agencies to ensure the enforcement of these. And we should all help in educating the children at an early age to reduce the likelihood of drowning incidents and to ensure no chances of failure. Public awareness and Safety Campaigns will also help in regaining the safety of our children through education and determination.

## **" Swimming Pool Hearing; Phoenix "**

**Text: The Lifeguard System..... A New Approach.**

The LGS is a device used to prevent pool deaths. The way it works is really fascinating. A grated hard plastic mat is connected to a pair of high-powered winches that when energized, will bring the victim to the top of the pool safely. The mat operates from a remote " motor control system" out side the pool. When the pool is not in use, the mat can be raised to the top and locked securely in place. " NO MORE ACCIDENTAL DROWNINGS IN AN UNSECURED BODY OF WATER ". There are many electronic safety features that can be added, including alarms that can be activated after the mat is raised. The mat also covers the drain area of the pool, thus eliminating any contact with the drain. For more information go to our web site at: [freewebs.com/innovatorsunlimited](http://freewebs.com/innovatorsunlimited).

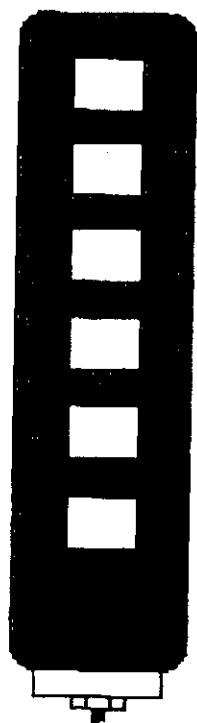
**Keith Scriven**

## **" Swimming Pool Hearing; Phoenix "**

**TEXT: The Lifeguard System..... The Benefits.**

- **Save the lives of thousands of children each year**
- **Saves billions of dollars**
- **Will promote growth in the swimming pool Industry**
- **Create jobs for expanding businesses**
- **Reduce death claims paid by insurance companies**
- **Boost the economy all over the nation and the world**

**" What is there left to think about..... Let's do it ! "**



← Raise Platform

← Lower Platform

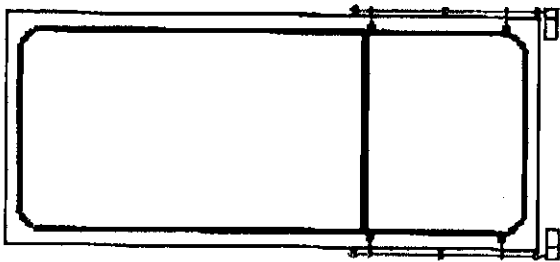
← Jog Up

← Jog Down

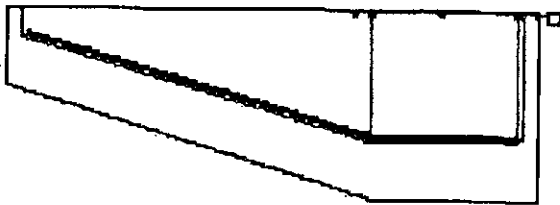
← Alarm Reset

← E-Stop

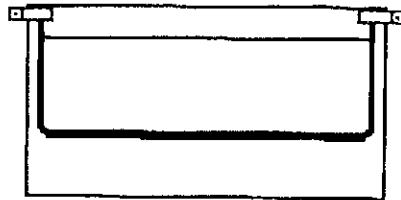
L.G.S. Control Center



***Top View***



***Side View***



***Front View***

**Company: Innovators Unlimited**  
**President: Keith Scriven**  
**Product: The Lifeguard System**  
**Address: 6728 Carloway Drive**  
**City: Fayetteville, North Carolina, 28304**  
**Telephone: 910-867-8044**  
**E-mail Address: [kscri23194@aol.com](mailto:kscri23194@aol.com)**

## **The Role of the Swim School Industry in Drowning Prevention**

**Bob Hubbard**

**Hubbard Family Swim School -- Owner**

**United States Swim School Assn -- Vice Pres / President-Elect**

Thank you for the opportunity to speak with you today. I'm Bob Hubbard, co-owner, with my wife Kathy, of the Hubbard Family Swim School. We are currently teaching 3,000 children a week in our indoor facility here in Phoenix. I also serve as the Vice-President/President-Elect of the United States Swim School Association. The 300+ member schools of the Association teach 500,000 children a year providing more than 5 million swim lessons.

I'd like to share three recommendations with you today.

1. There must be a coordinated effort and message across the country to highlight the need for increased education about pool safety.
2. Research must be done to establish the benefits or risks of exposing children under the age of four to swim lessons.
3. Corporate America and our city governments must become more involved in educating our country's parents and children about pool safety and be committed to providing swim lessons to everyone as skills to last a lifetime.

I have daily exposure and interaction with the learn to swim effort in the battle against infant drowning. My perspective is different than some in our industry. I've had first hand experience of a near drowning event in my own immediate family.

Twelve years ago my wife and her sister found my two-year-old nephew at the bottom of our pool. It is a story we've heard over and over. My wife, her sister and grandma were at our house trying clothes on some of the younger children. My wife's sister sensed her 2 year old was missing - where's Tommy?

Seven months pregnant, the first place she looked was the back yard pool. She saw him on the bottom, jumped in and pulled him up. She started CPR. The firemen were there in minutes. Tommy was breathing. It was off to St. Joe's hospital. Thankfully today he is an active fourteen-year raising havoc as he enters high school.

At that time I was a "swimming" professional, Director of the Phoenix Swim Club, with 1,200 athletes a day using our 50-meter and 25-meter pools, training room and soccer field and running track. We offered swim lessons. My wife and her sister are both former collegiate swimmers, college educated who loved this child. How did it happen? Well, he wandered out of the room, went to the back door, pulled a chair over, and unlocked the back sliding door. Our fence was being "repaired", it was winter and the workmen were on a 30-minute lunch break, sitting in the grass in our front yard. He just walked in to the pool and was lucky that his mom "sensed" his absence.

I firmly believe that this can happen to any child from any family. In our community there are some statistics that point to socio-economic factors of neighborhood or culture but this reality of children drowning reaches into every level of income and type of family around the country.

In the play, *Le Miserables*, Jean Ville Jean agonized over the question, "Who am I?" As a member of the Drowning Coalition and as a swim school owner I find myself questioning where I fit in to this group.

I am an educator!! In our swim school business we teach many things. We teach parenting skills to new parents of infants and toddlers. We teach our staff, young and old, how to teach swimming skills to parents, caretakers, and their students. We teach, we teach, we teach.

The most important things we teach every day are a love and respect for the water. We share our love and our understanding of the aquatic environment with parents and children. Our belief is that you are lost without knowledge. As a member of the United States Swim School Association, I am in awe of the many of our members who have decades of experience teaching children how to swim and respect the water from an unbelievable variety of facilities; large facilities like ours, rented hotel pools, backyard pools, or sharing space at municipal pools.

As you travel around the world and study the swim school industry you discover a dedication to teaching. A love of the water and a love for the kids. A sharing of skills to last a lifetime. Lives dedicated to doing small things with great love. There is a tremendous desire to instill that love and respect for the water in the children who participate in swim lesson programs.



Why do I share with you this emphasis on love? Because as you leave here today, and we all return to our lives and continue to work on the challenges we face in this battle, I would love for you to understand the importance of your friends in the learn to swim world as allies in this battle. We are people who are committed to teaching. We are a critical asset in this battle.

We are also having a huge impact - already!

What about swim schools? What roll can they play? In our one 10,000 square foot facility we've had more than 6,000 children take swim lessons from us last year alone. Currently we have over 1,000 children under the age of 3 in our swim program every week. Today we have more than 3,000 children per week in our programs and I would hazard a guess that the 14 members of the United States Swim Schools in Arizona teach more than 5,000 children every week all year long.

Nationally, more than 500,000 children participate in swim lesson thru the United States Swim School Association every week, all year long. We are having an impact. In 2003, our Association Members taught more than 5 million swim lessons. Many of those to children below the age of 4.

In my opinion, EDUCATION is the key to drowning prevention.

The American Academy of Pediatrics in their policy statement on Swimming Programs for Infants and Toddlers states: Children are not developmentally ready for swimming lessons until after their fourth birthday. Aquatic programs for Infants and toddlers have not been shown to decrease the risk of drowning....

There is no research to support the theory that swim lessons increase the risk for these children. I would argue that exposure to the water in swim lessons increases a child's awareness of the risks and benefits of the water and makes them safer - not safe.

In your notice of public hearings for today, the Consumer Product Safety Commission states:

- + That swimming pools can be dangerous to young children
- + In 1999 and 2000 an average of 250 children under 5 years old drowned
- + In the CPSC 1980's study of Infant submersion incidents indicated that most of the victims were between the ages of 1 and 3 years old.

We will not solve the problem if the medical community in this country continues to encourage the parents of the most likely victims of drowning to keep them away from the programs that educate them and their children about the aquatic environment.

The CPSC statistics highlight that their concern is for children under the age of 5 yet the American Pediatric Association discourages parents from exposing their children to swim lessons for reasons that we see everyday, in our building, to be completely unfounded. Children under the age of 4 can swim, can swim well, and we also firmly believe, from experience that parents who put the effort in to their learning environment are not more complacent. In fact they are more aware because they understand the limits of their children's ability.

We need to educate parents how to create a safe environment around their homes and pools with fences and gates and locks and alarms and windows, etc.

We need to educate our parents and kids in CPR and First Aid and how to act safely around the water, we can teach "Reach and Throw - Don't Go" but we have to put the kids in the water. We need to figure out where to find the money for each community pool to offer high quality swim lessons. And I'll tell you another thing; it isn't going to happen in eight lessons for two weeks of Monday thru Thursday classes for one half hour. That's four hours of instruction. Could you learn to do anything with confidence in four hours?

In Australia, swim lessons are part of a school's curriculum. The children are sent out to the swim school one time a week ALL year long. Laurie Lawrence has championed the "Stay Alive, Do The Five" program which has had a huge impact on Australian youngsters. The program is offered in the schools and in the community centers throughout the country. It is a cohesive national message.

Stay Alive, Do The Five.

Fence the pool, Shut the gate,

Teach your kids to swim - It's great!

Supervise - Watch your Mate, Learn how to Resuscitate!

Laurie Lawrence is amazing and a national spokesman for swim safety but you know what he has besides his Kids Alive program? He has \$250,000 from McDonalds to support his pool safety learn to swim message. Lunch trays at McDonalds provide a water safety message. Two million given out! We need to

think like that here. We need to convince corporate America that this is an important issue BUT - BUT- BUT we can't do it based on fear alone. Our message can't be only barriers, barriers, barriers!! Barriers alone don't work! Almost every single day as a swim school owner I hear a parent call in and tell us, "My child almost drowned! We need lessons." We have learned to ask, "Was he hospitalized?" The answer is usually, no, he fell off the step and was under water! We have terrorized our parents with many of the anti-drowning campaigns to the point that they cannot see their kids go under water without having nightmares!

We must support a national campaign that we can all get behind and support. It is neither important nor productive for each community to have its own message.

The Swim for Life Foundation has created the Safer 3 message.

#### Safer Water

Install, Maintain, and Utilize proper fencing, gates, gate latches, alarms, and other safety equipment around pool

#### Safer Kids

Constant adult supervision. Swim skill attainment through on-going qualified instruction. Learn proper behavior in and around water.

#### Safer Response

Learn CPR, First Aid, and rescue techniques. Keep an emergency action plan and a phone by the pool at all times.

We need to educate our children. Being in the water with an adult in a controlled environment is a great place to learn that there are consequences for stepping off the pool edge. We have 3,000 children walking on our pool deck every week, most of them under five years of age and they never jump in without being invited. Why? They understand where the edge of the pool is and what happens when they violate that boundary.

Can a child who has taken swim lessons drown?

Yes!

Will a mother or father think their child has more skills than the child really has?

Possibly.

But, if we do our jobs, we can have a huge impact week after week by educating parents. They have to be vigilant around the water. NO ONE is ever safe. At Arizona State University, for swim team practice, they keep a lifeguard in the chair.

As parents, in home environments, we teach our children many things. We all have stoves in our homes. Occasionally a child will burn themselves on a stove or pull over a boiling pot of water. Why don't we fence off our stoves? We teach our children how to act around a stove. We teach them not to run into the street. We teach them to ride in car seats. We teach them to wear bicycle helmets. Let's teach them to swim!

To summarize, I would encourage the CPSC to:

1. Work to create a consistent message that will catch the attention of all of our parents and caregivers. Let's do the Safer Three: Safer Kids, Safer Water, Safer Response.
2. Fund the research to establish the benefits or risks of Infant/Toddler Swim Lessons so the American Pediatric Association can support the learn to swim aspects of the battle.
3. Make the issue of childhood drowning a national priority along with seat belts, car seats, and bicycle helmets.

Our goal as swim instructors is to instill, in every child whom we teach, a love and respect for the water.

As representatives of swim lesson teachers, we continue to believe that we are a vital component in the battle against childhood drowning.

I encourage you to reach out to the "Learn to Swim" world. Keeping infants away from the water is not the answer. Waiting until they are four years old to introduce swim instruction is too late.

My hope as we leave here today is that you challenge us to help. We're here, we've got the experience, and want to be part of the fight.

I encourage you to open the doors so that we can walk through them together. This battle is too big to leave swim lesson community on the outside.

Resources and References:

United States Swim School Association  
[www.usswimschools.org](http://www.usswimschools.org)

Swim Australia  
[www.swimaustralia.com.au](http://www.swimaustralia.com.au)

Stay Alive Do The Five  
[www.kidsalive.com.au](http://www.kidsalive.com.au)

Hubbard Family Swim School  
[www.hubbardswim.com](http://www.hubbardswim.com)  
602 971 4022  
13832 North 32<sup>nd</sup> Street  
Suite 100  
Phoenix, Arizona 85032

Hi There, Welcome to SplashBabies.

I am SupervisorMan.

There Are Many Precautions to Take to Prevent  
Senseless Drownings.

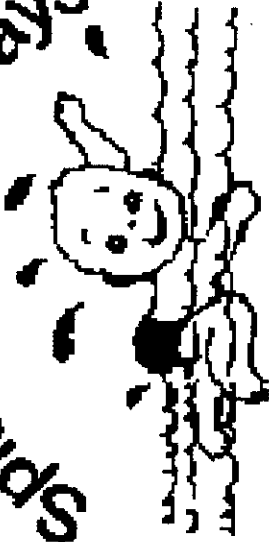
Come With Me on a Tour Through  
SplashBabies Drown-Prevention & Water Safety Rule Book.

I am Also Here to Let You Know, That There is Nothing More Safe Than  
Having ME Around When it Comes to  
Supervising Children Around Water.

Together, We Can Make a Difference and  
Save Lives



# SplashBaby Says



“Children Aren’t Water Proof”  
“Always Watch Children Around Water”

Follow These Simple

*Splash Babies Pool Rules*

and...

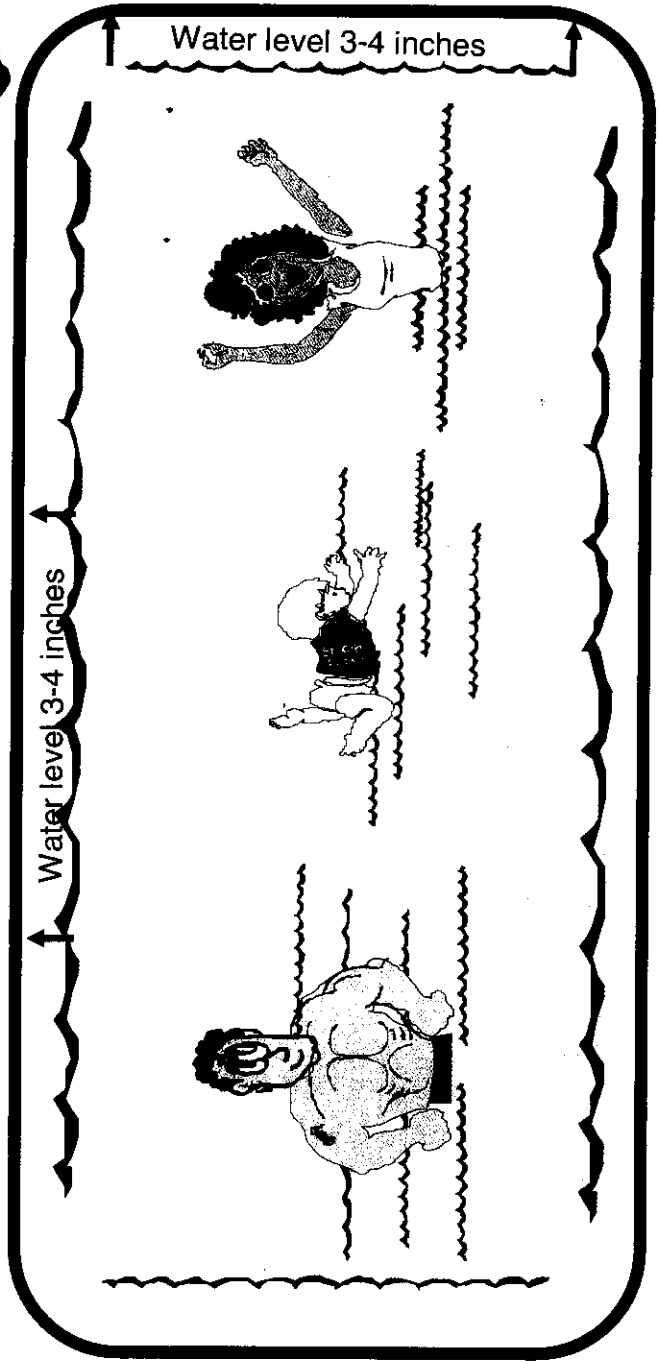
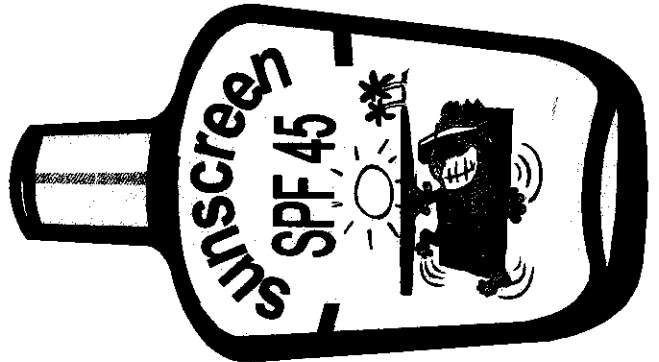
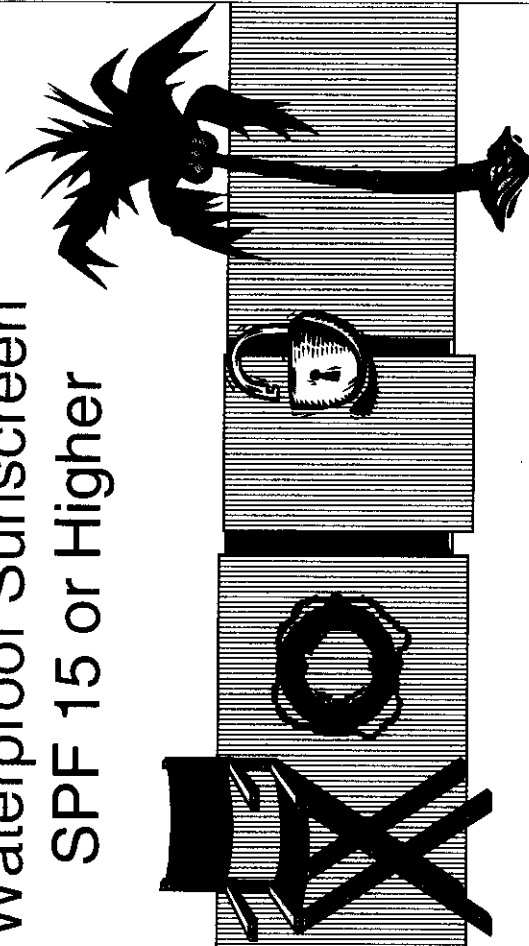
Be Water Safe!

1. Always Lather up With Waterproof Sunscreen SPF 15 or higher
2. Learn Drown Prevention & Water Safety at An Early Age
3. Have a Fence Around your Pool and Never Leave *The Gate.. Unlatched or Unlocked*
4. Do Not Keep Toys Near the Pool *When Not In Use*
5. Keep a *Long Handled Hook & Safety Ring* Near The Pool
6. Always Have a *Charged Cordless Phone* by The Pool for Emergencies
7. Do Not Leave *Chairs or Tables* Near the Pool Fence
8. Learn *CPR* with Your Children and How To *Dial 911*
9. Keep Water Level *3-4 inches* From the *Top Of Pool Ledge*
10. Maintain Proper level of Pool Chemicals for Clean Healthy Water and... Store Them Safely Away From Pool Area
11. Never Swim Alone
12. Have a Designated Adult “*On Duty*” Watching Swimmers and Rotate Watch Duties Often

SplashBaby Says



Always Lather-up With  
Waterproof Sunscreen  
SPF 15 or Higher

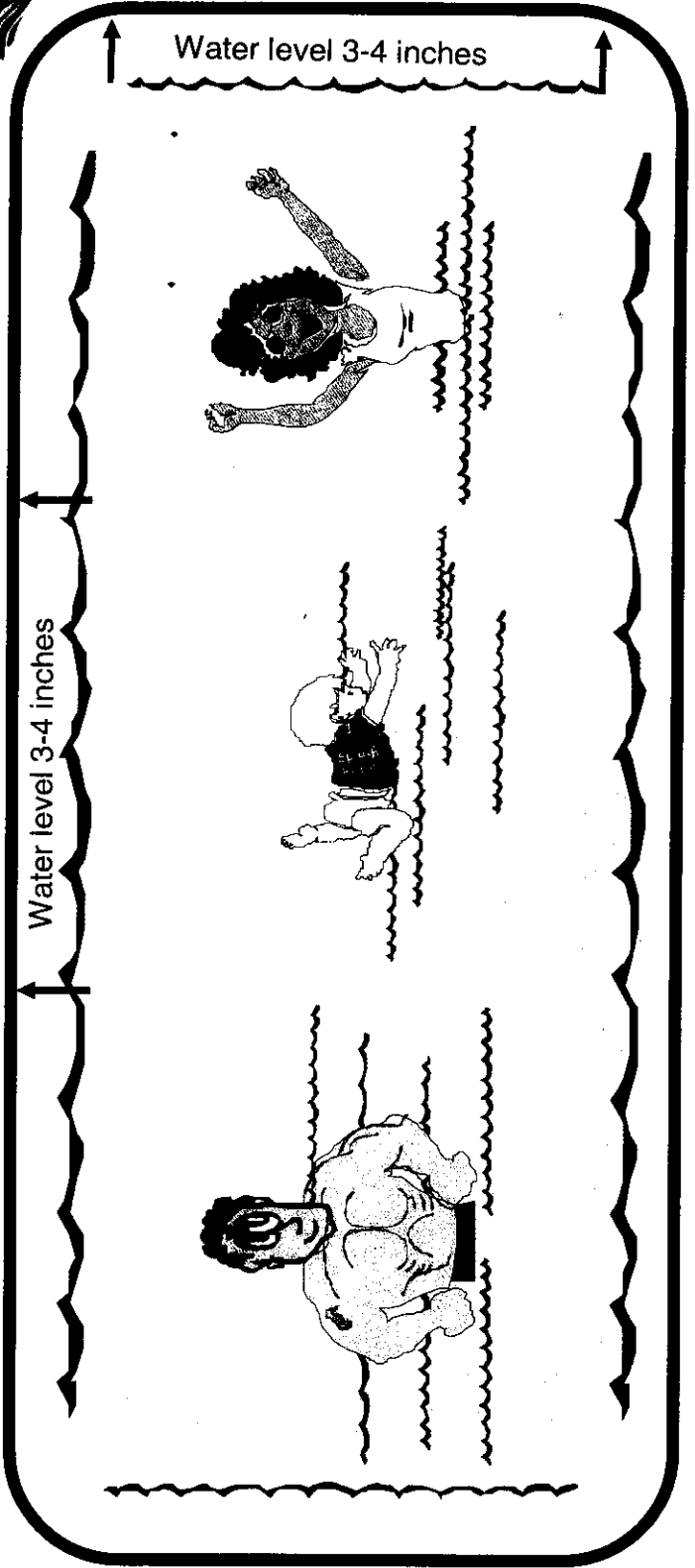
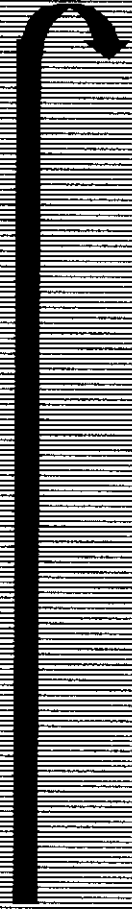
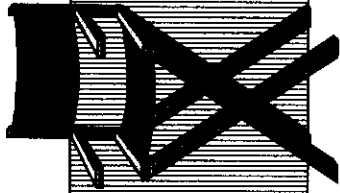




SplashBaby Says

# Learn Drown Prevention & Water Safety

at  
An Early Age

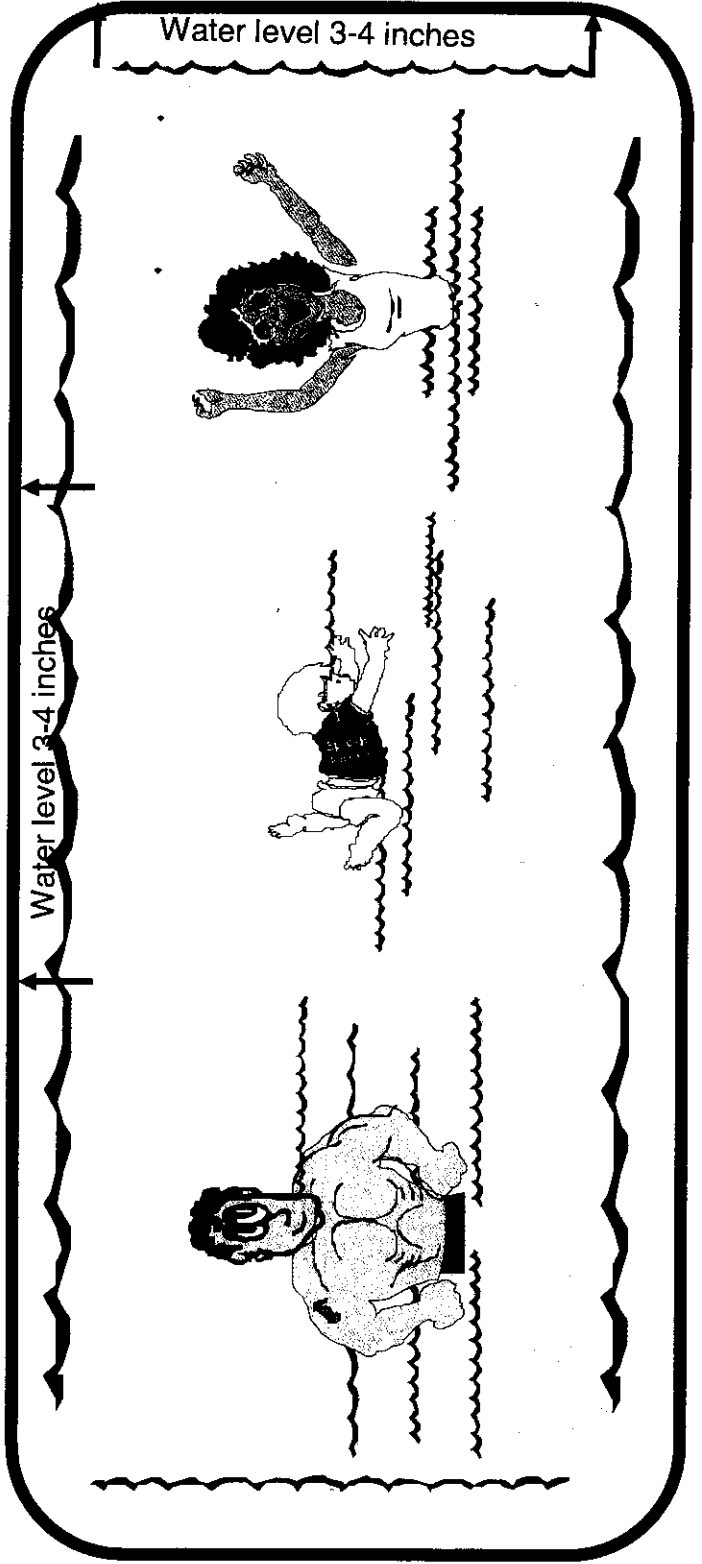
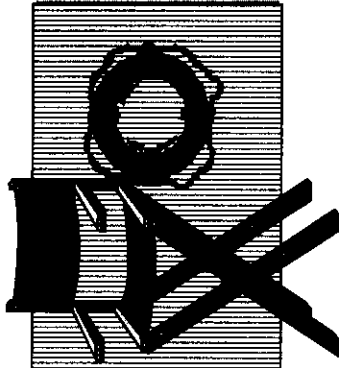
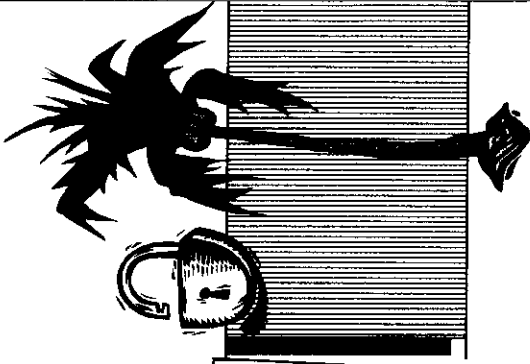


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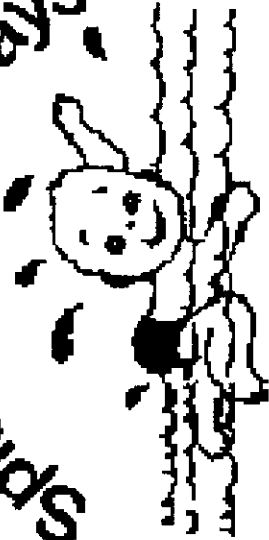


Have a Fence Around your Pool  
and

Never Leave your Gate  
Unlatched or Unlocked



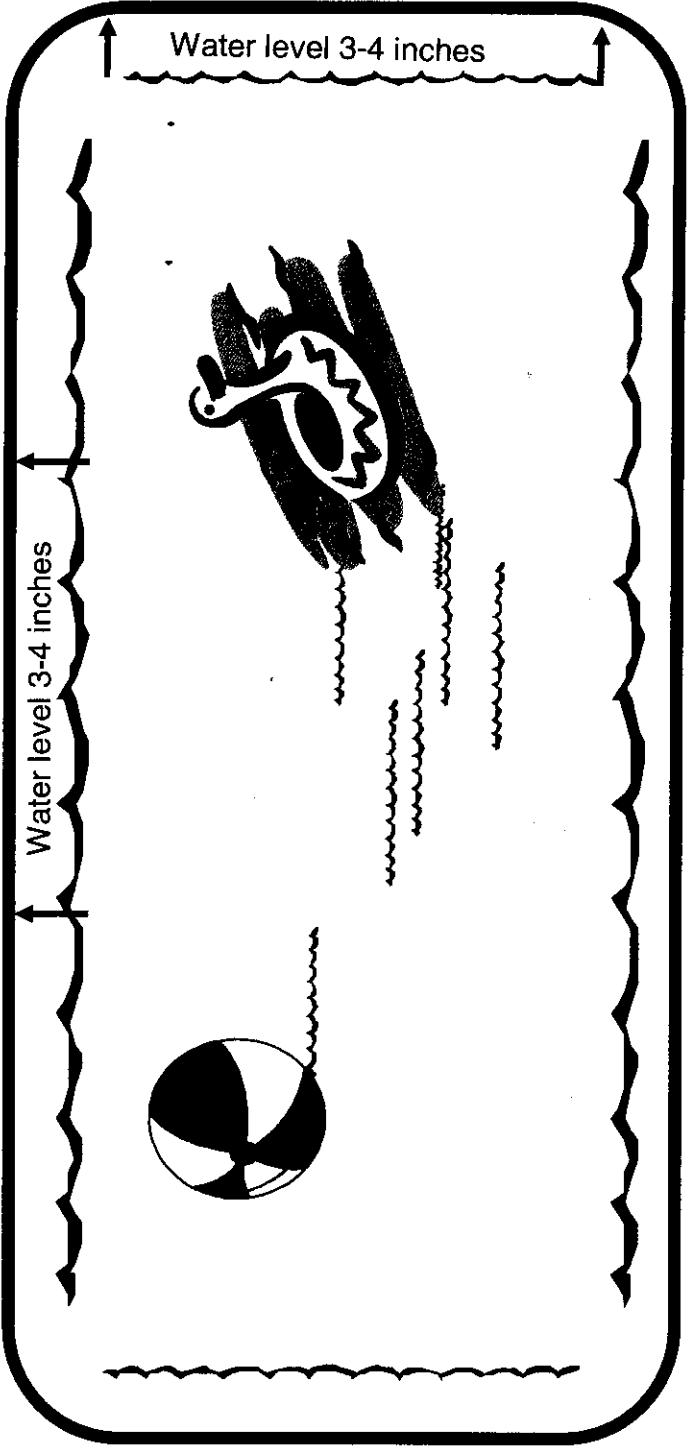
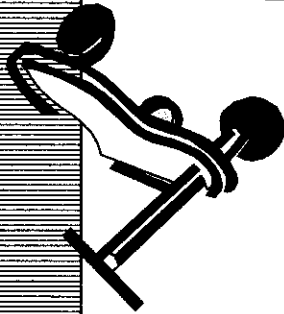
Splash Baby Says



Do Not

Leave Toys Near the Pool

When Not in Use



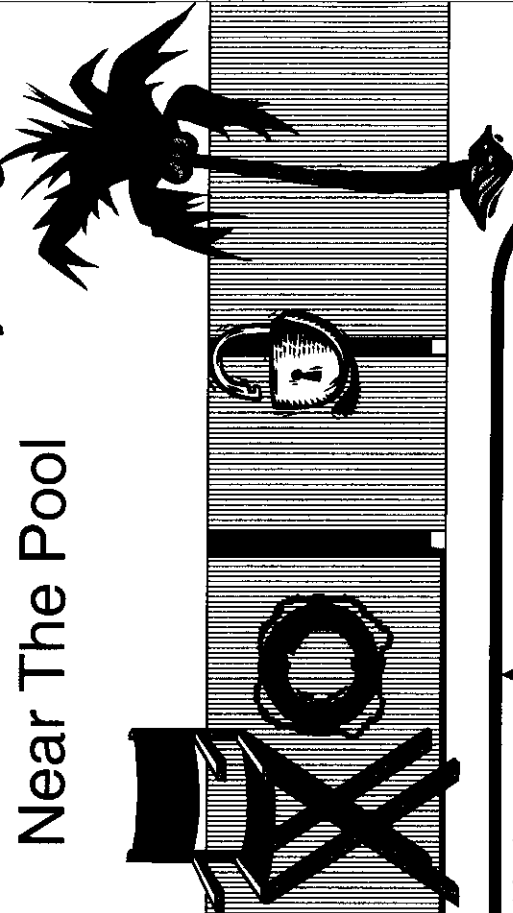
Splash Baby Says



Keep a...

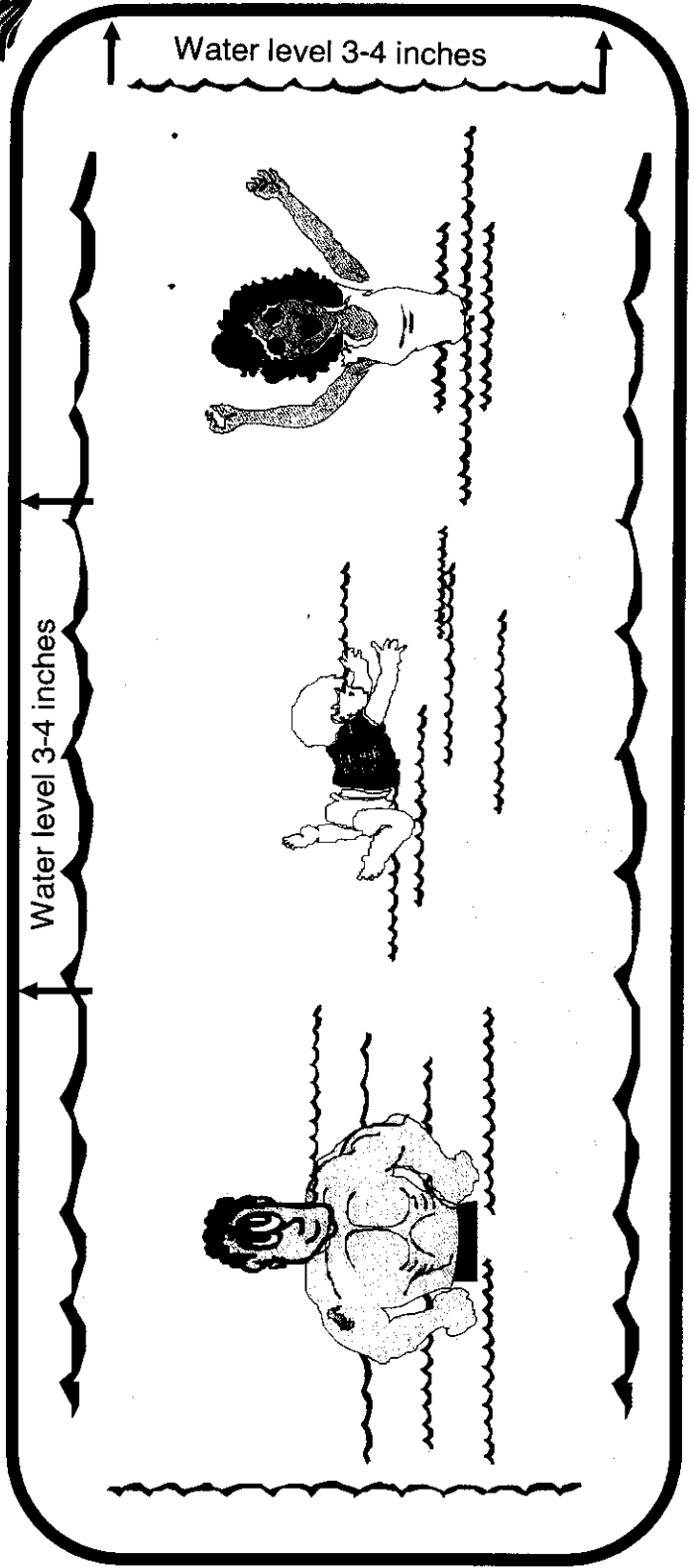
Long Handled Hook & Safety Ring

Near The Pool



Water level 3-4 inches

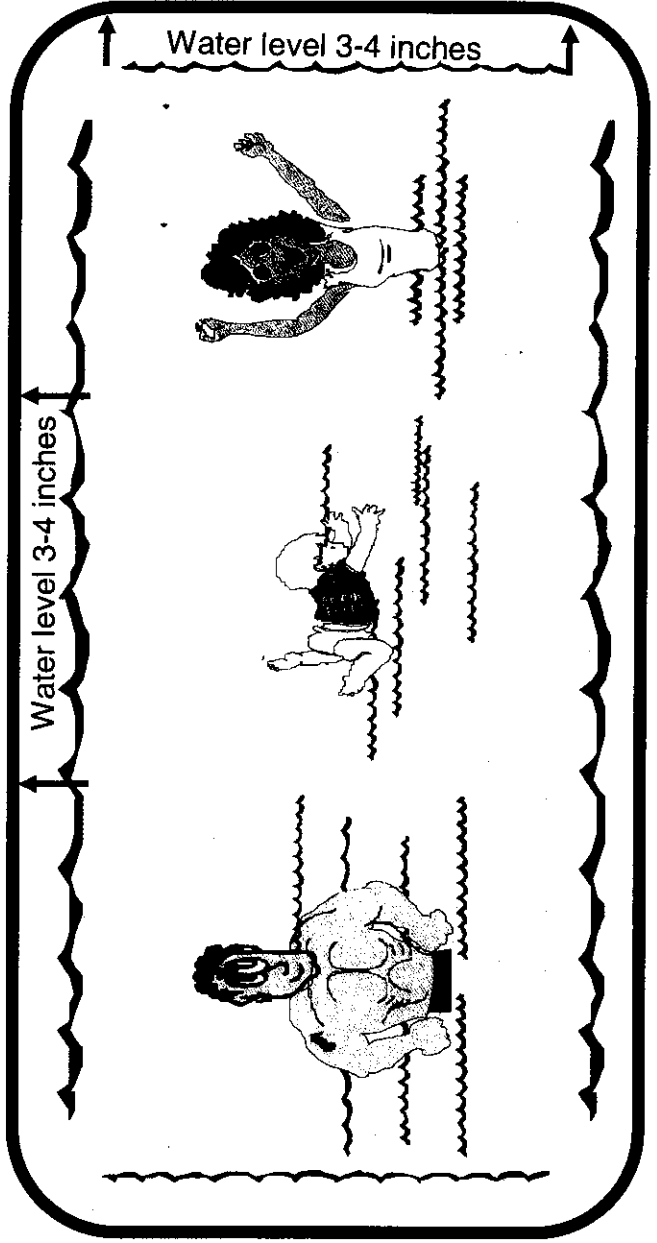
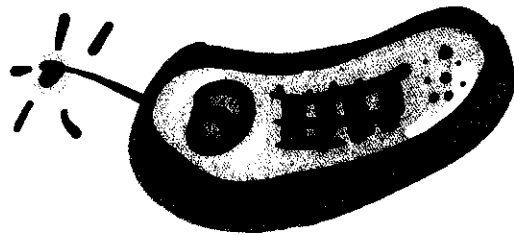
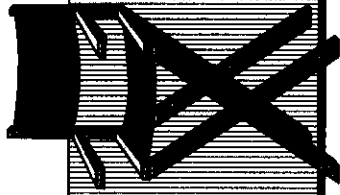
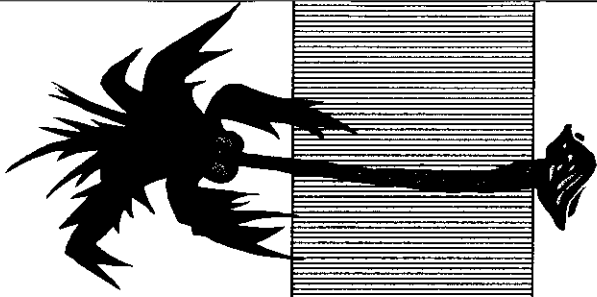
Water level 3-4 inches



SplashBaby Says



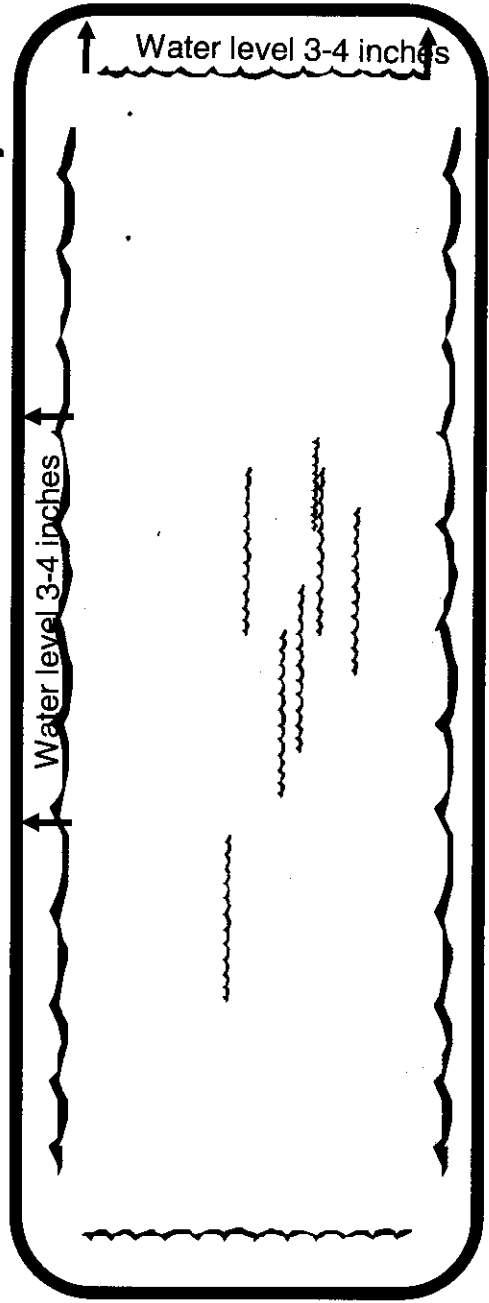
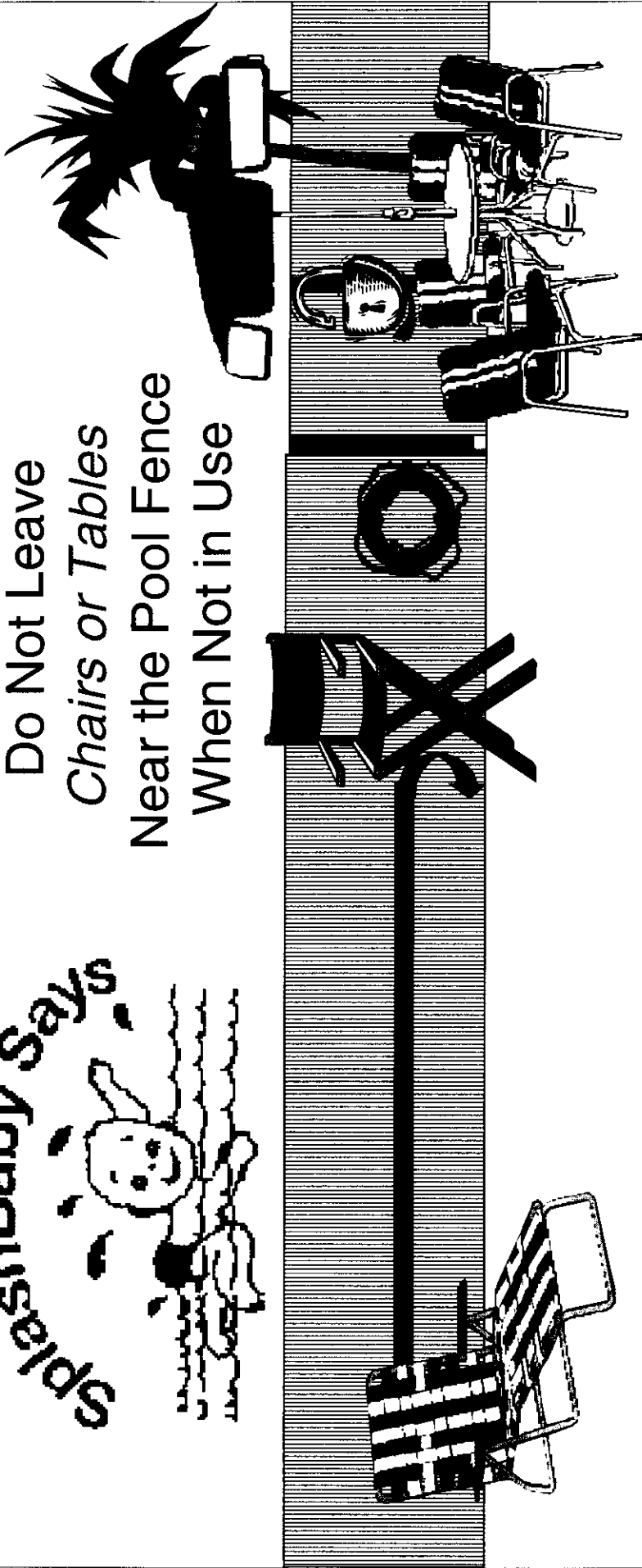
Always Have a  
Charged Cordless Phone  
By The Pool for Emergencies



Splash Baby Says

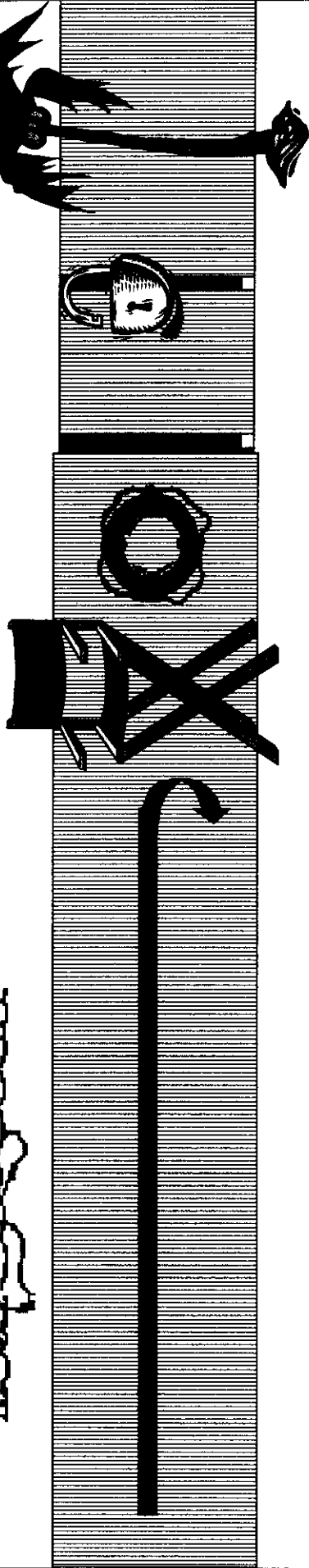


Do Not Leave  
Chairs or Tables  
Near the Pool Fence  
When Not in Use





# Learn the A-B-C's of CPR With Your Children and How To Dial 9-1-1



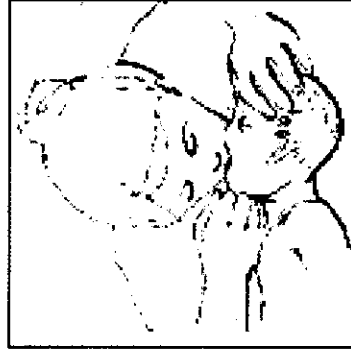
**Dial 9-1-1**



**A**  
Open The  
Airway



**B**  
Give 2  
Gentle Breaths



**C**  
Give 5  
Compressions



**Repeat**  
till help arrives

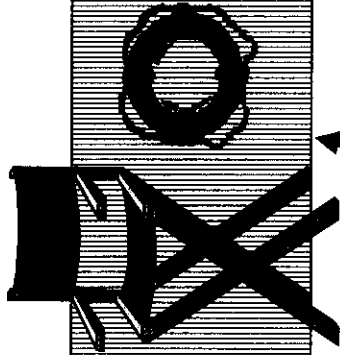


SplashBaby Says

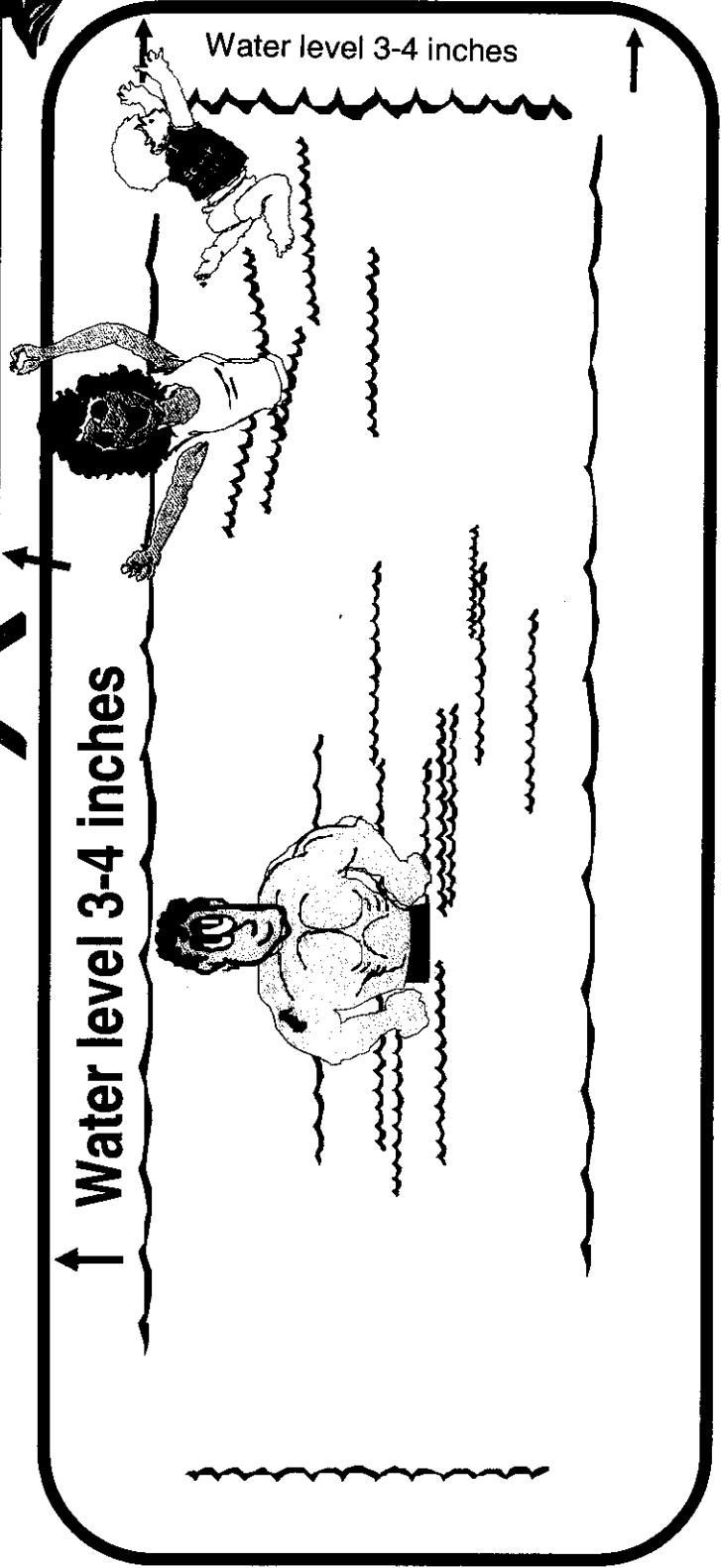


Keep Water Level  
3- 4 inches

From the  
Top Of Pool Ledge



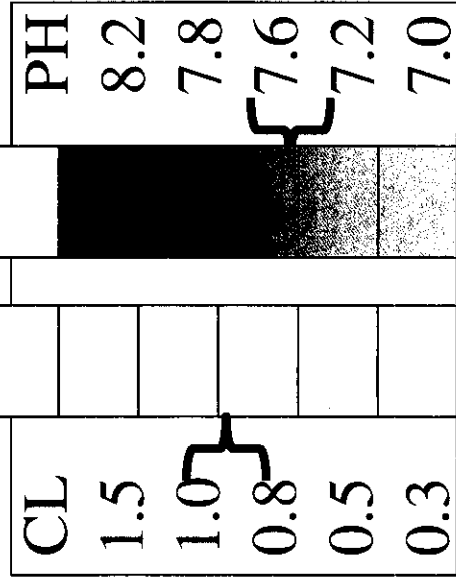
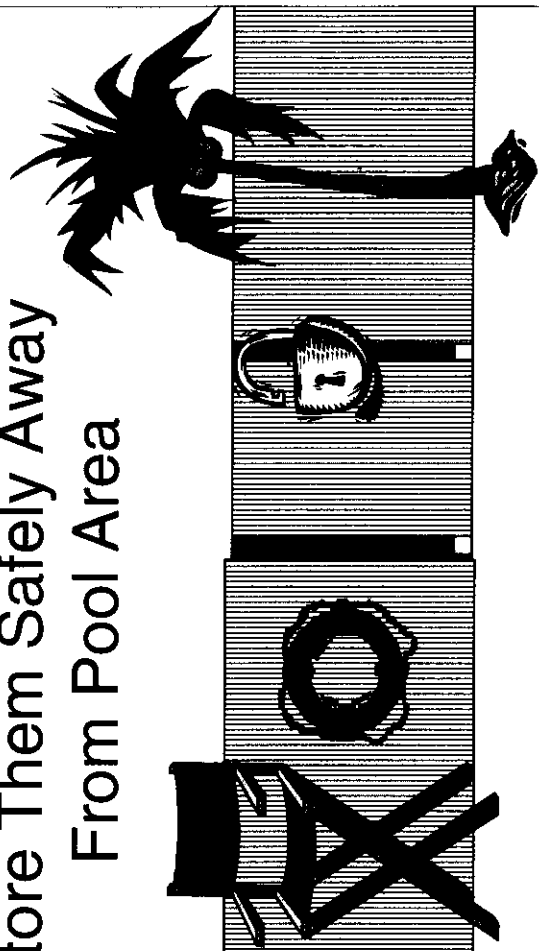
↑ Water level 3-4 inches



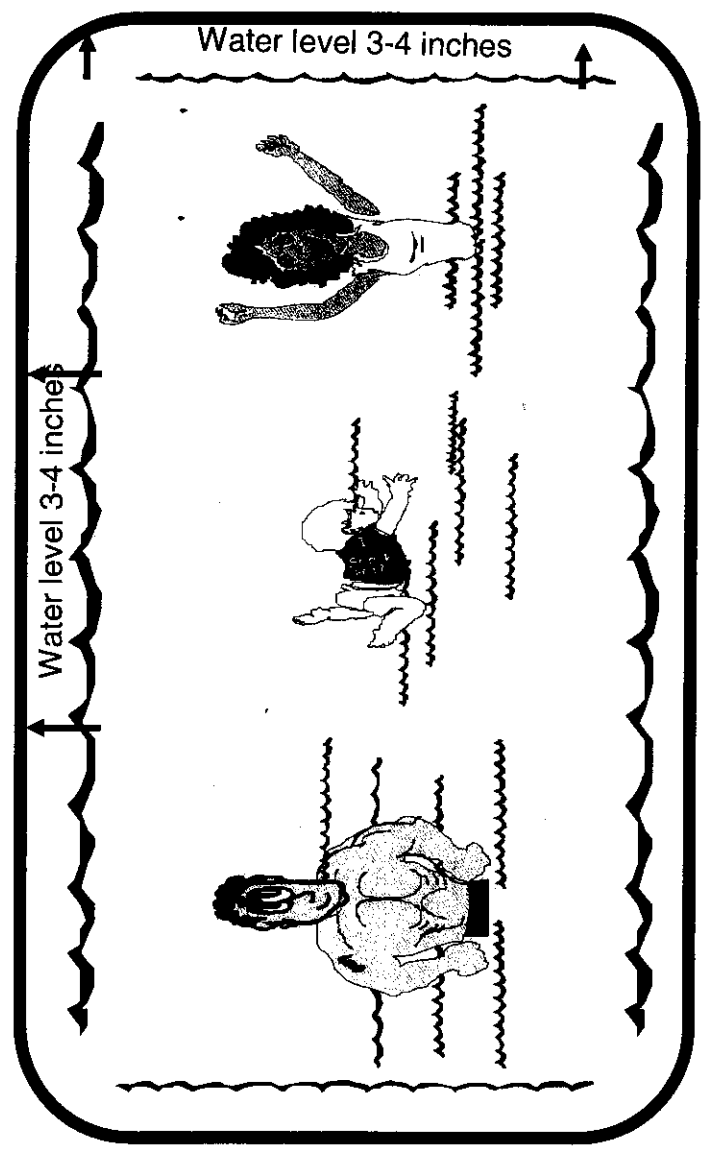




Maintain Proper Level of Pool Chemicals  
for Clean Healthy Water and...  
Store Them Safely Away  
From Pool Area



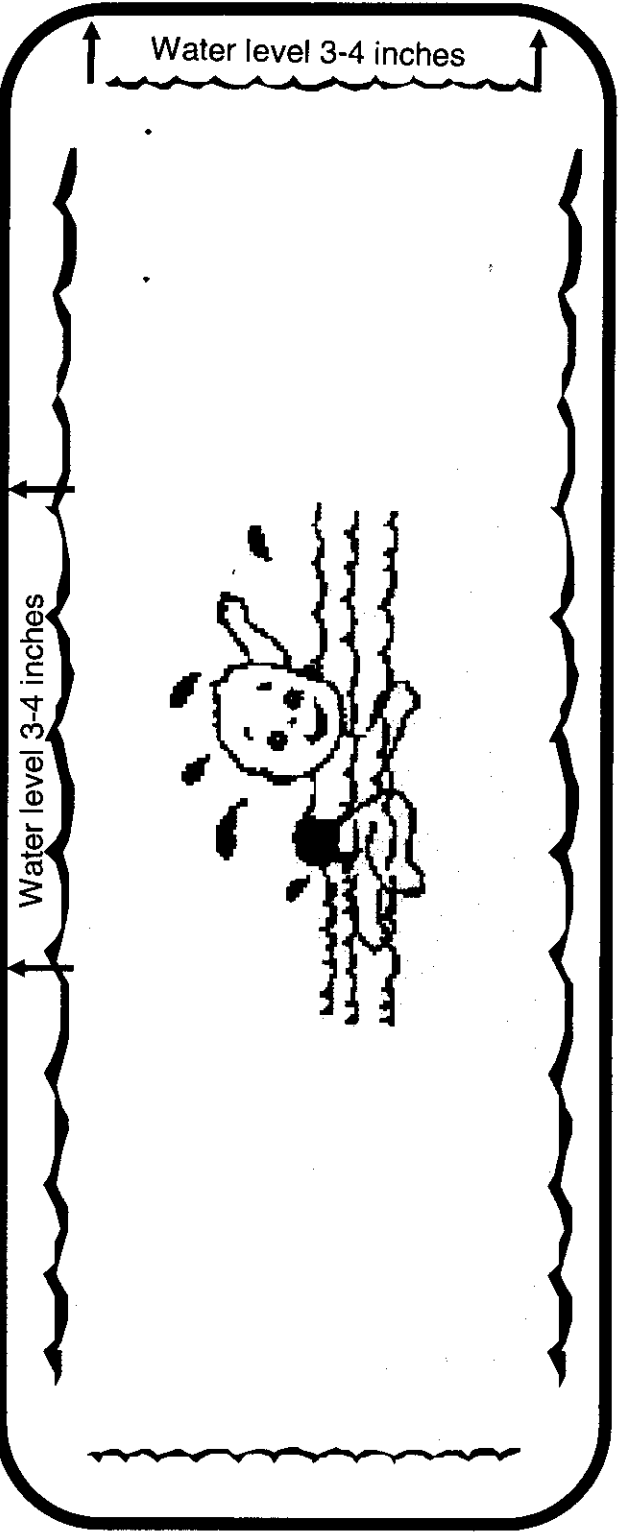
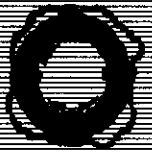
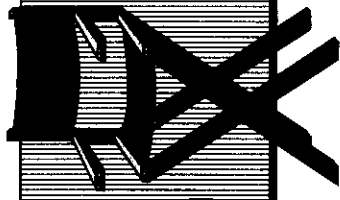
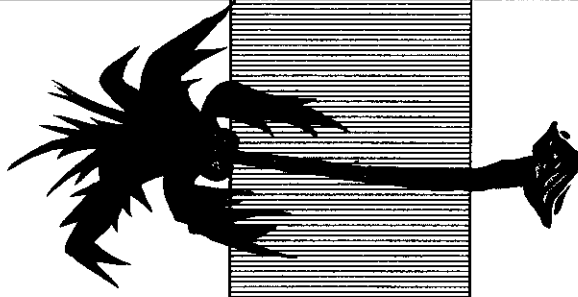
Chlorine PH  
1.0 } Ideal  
0.8 }



SplashBaby Says



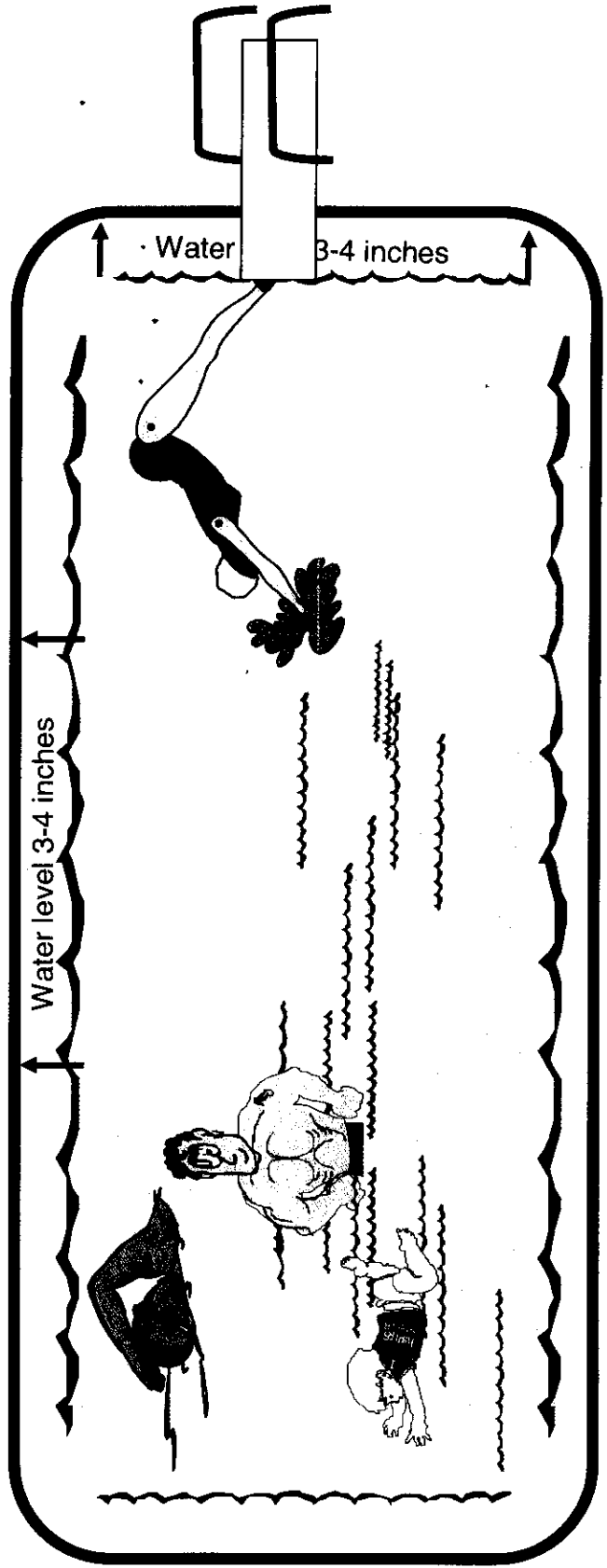
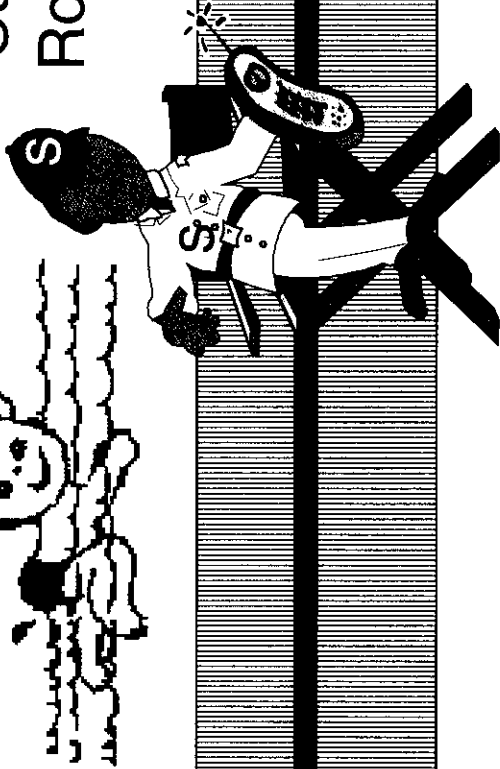
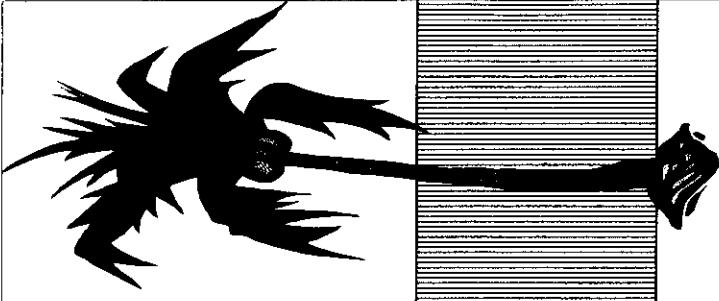
Never Swim Alone !!



SplashBaby Says



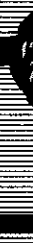
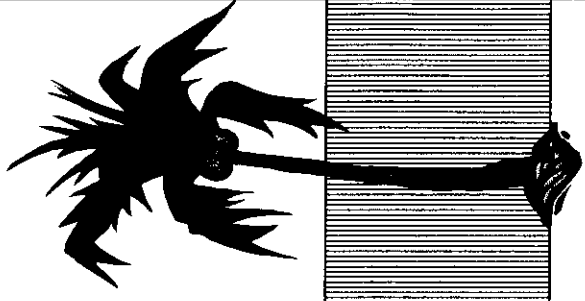
# Have a Designated Adult "On Pool Watch" Supervising Swimmers and Rotate "Watch Duties" Often



SplashBaby Says



Wear One Of These Badges  
While On Pool Watch as  
"SupervisorMan"



**SUPERVISORMAN  
IS  
ON DUTY**



**FOR YOUR SAFETY**

**LOOK AT ME!**



**I'M SWIMMING**

Never Leave  
Children Unattended  
Around Any Water.

Everybody Should Have  
a Copy of Splash's Book  
I Need to Get One Too!

SplashBaby Says



## Splash

### Drown Prevention

1. Always Lather up With Waterproof Sunscreen SPF 15 or higher
2. Learn Drown Prevention & Water Safety at An Early Age
3. Have a Fence Around your Pool and Never Leave The Gate.. Unlatched or Unlocked
4. Do Not Keep Toys Near the Pool When Not In Use
5. Keep a Long Handled Hook & Safety Ring Near The Pool
6. Always Have a Charged Cordless Phone by The Pool for Emergencies

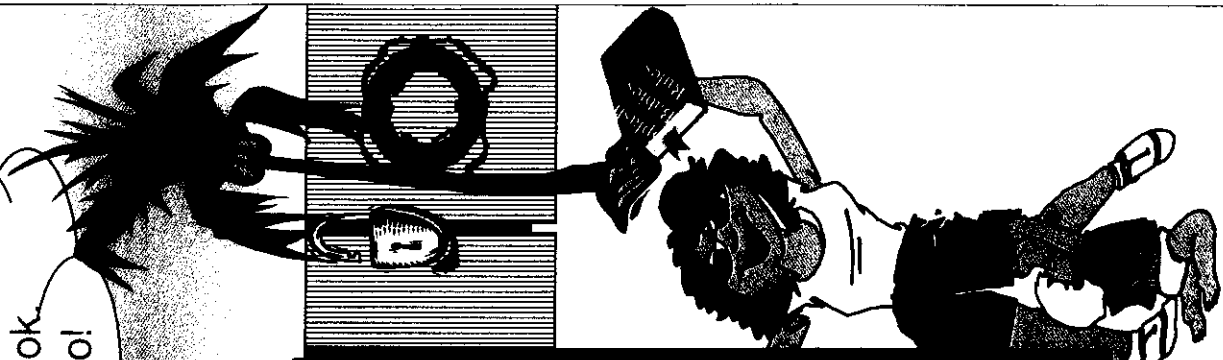
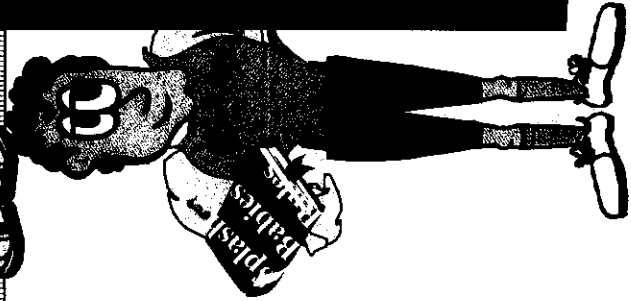
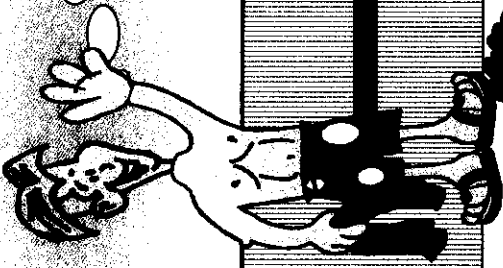
SplashBaby Says



## Babies

### Water Safety

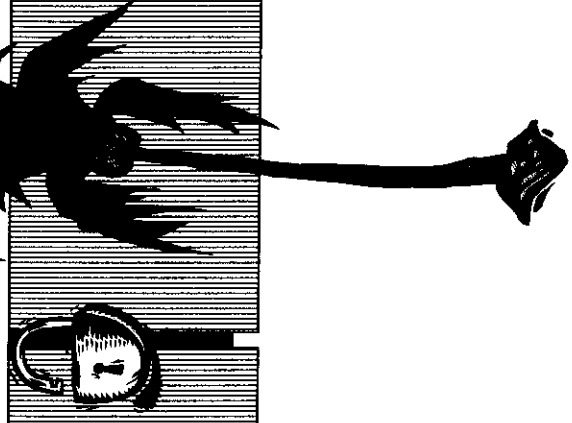
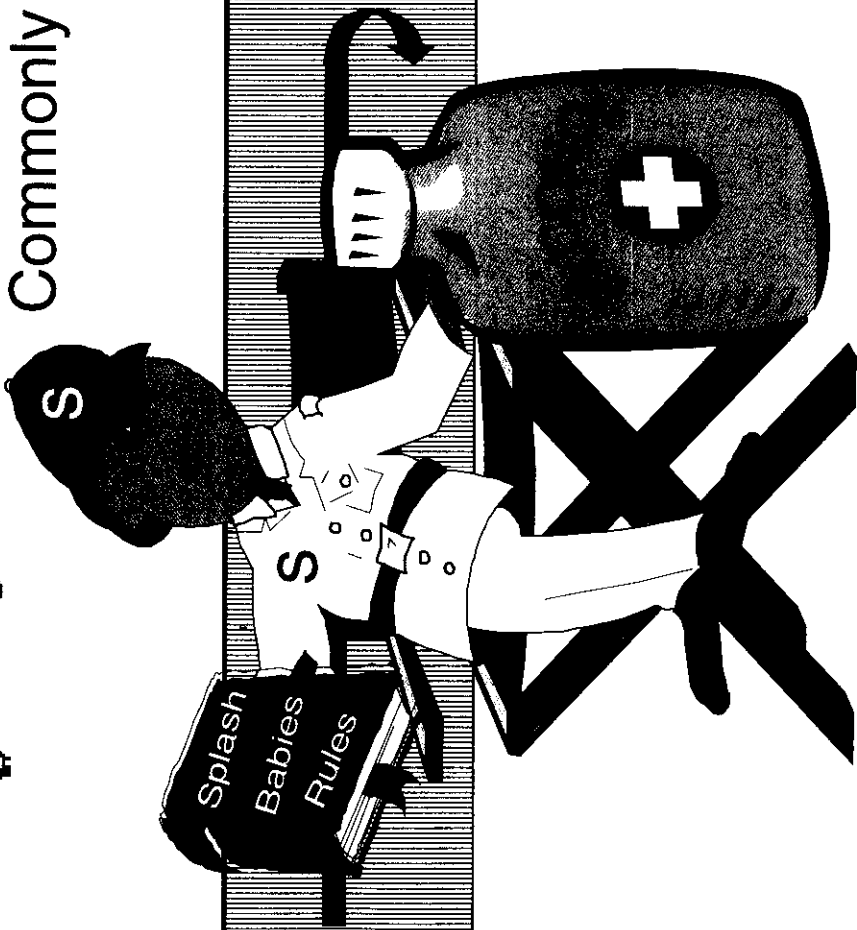
7. Do Not Leave Chairs or Tables Near the Pool Fence
8. Learn CPR with Your Children and How To Dial 911
9. Keep Water Level 3-4inches From the Top Of Pool Ledge
10. Maintain Proper level of Pool Chemicals for Clean Healthy Water and... Store Them Safely Away From Pool Area
11. Never Swim Alone
12. Have a Designated Adult "On Duty" Watching Swimmers and Rotate Watch Duties Often

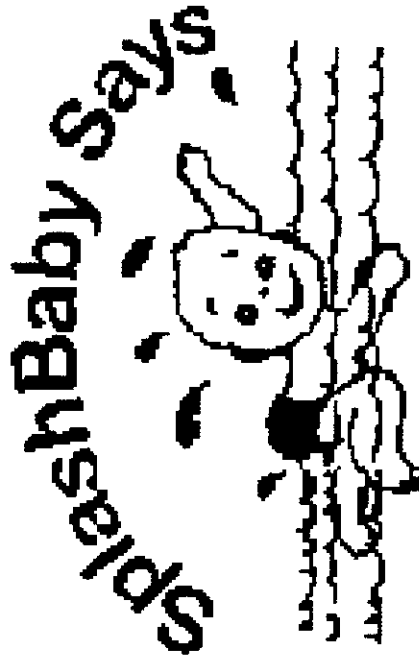


SplashBaby Says



One More Thing Before We Go..  
After Swimming,  
Pour a Cap Full of Alcohol  
In The Ears Of All Swimmers,  
To Prevent Outer Ear Infections  
Commonly Known as Swimmers Ear.





For More Information  
On  
Drown-Prevention  
&  
Water Safety  
contact  
K.J. "Splash" Gordon  
@

[splashbabies@yahoo.com](mailto:splashbabies@yahoo.com)

Visit SplashBabies On-Line  
@

<http://www.geocities.com/splashbabies>

Read "The Adventure Of SupervisorMan"  
@

<http://www.geocities.com/imsupervisorman>