

Swimming Pool Safety

Preventing the Preventable

Every year, hundreds of children drown in residential swimming pools. In addition, thousands of children suffer near-drowning, sometimes with permanent consequences. The U.S. Consumer Product Safety Commission (CPSC) has recently launched public hearings on swimming pool safety. Their strategic goal is to reduce the rate of drownings of children under age 5 by ten percent over the next ten years.

Drowning and Near-drowning Statistics

The statistics show that drowning and near-drowning of children in residential pools is happening at an alarming rate. There is a common theme to these accidents: Most of the drownings and near-drownings happened while the child was being supervised by one or both parents; 69 percent of the children were not expected to be in or near the pool, but were found drowned or submerged in the water; 77 percent of the accident victims had been missing for five minutes or less when they were found in the pool.

Here is what we can learn from these statistics:

- Young children and toddlers move faster than you think.
- Drownings and near-drownings can happen in an instant.
- Swimming pool drownings are silent. You won't hear a call for help.
- These accidents are preventable.

Barriers

There is overwhelming consensus among experts that the best way to improve these statistics is through construction and maintenance of effective barriers to prevent access to the pool area. Look carefully at the barrier around the pool. The barrier should prevent a child from climbing over, crawling under or passing through. Here are a few things to consider:

Continuous: The barrier should be continuous around the pool. Shrubs are not an acceptable barrier.

Door from House to Pool Area: Where the wall of the house makes up part of the barrier, there is usually a door that leads from the house directly into the pool area. This door should have an alarm that sounds immediately when the door is opened. Typically the alarm is set up with a bypass switch or keypad located out of reach of children. The bypass switch deactivates the alarm for a single opening of the door and then resets.

Gates: The gate to the pool area should be self-closing and self-latching and should have a locking mechanism. The latch should be located out of reach of children. In addition, the gate should open out from the pool area so a toddler leaning on an 'almost latched' gate will close the gate.

Barrier Height: The barrier (fence) should be at least 48 inches high. Look for anything that could negate the height of the barrier such as a bench, storage bin or tree next to the barrier. The barrier should come to within 4 inches of the ground in all areas.

Vertical Members: Vertical members of a fence should be spaced close enough together to prevent a child from squeezing through. Four inches is the maximum opening size.

Climbable: The design of your barrier may make it easy to climb. For example, the standard chain link fence is too easy to climb. Here are a few guidelines:

- Most fences are designed with some horizontal components to support the vertical components. Horizontal components of a fence make the fence climbable. If the tops of the horizontal members are more than 45 inches apart, there is no problem. If the tops of the horizontal members are less than 45 inches apart, you need to do something to make it more difficult to climb. The recommended way to make the fence less climbable is to put the horizontal components on the pool side of the fence and then reduce the spacing between vertical members to a maximum of 1¾ inches so the child cannot get a foot through and onto the horizontal member.
- Any decorative cutouts should be a maximum of 1¾ inches wide so a child can't use this to get a foothold.
- Both chain-link fence and lattice fence pose a problem because they are easy to climb if the openings are large. For lattice, make sure the opening size (diagonal) is a maximum of 1¾ inches. For chain-link fence, the mesh size should be a maximum of 1¼ inches. Larger mesh sizes can be used if slats are inserted into the mesh openings to reduce the opening size to a maximum of 1¾ inches. The slats must be attached at the top and the bottom.

Pool Safety Covers

A safety cover can be used to increase the safety of the pool. When in place, these covers will prevent kids from falling into an unattended pool. Keep in mind, these are not standard pool covers. They are designed specifically for this purpose.

Educate Yourself

- All of the suggestions above will not make your pool child proof. They are simply to stack the odds in your favor. There is no question that supervision of your children is the most important consideration. Educate all people involved with caring for your children about the dangers.
- If you notice your child is missing, check the pool first.
- Learn cardio pulmonary resuscitation (CPR).
- Learn more about this issue. This document is based on information collected from the Consumer Product and Safety Commission. They have more information you need to know including: above ground pools; spas; pool and spa entrapment hazards.

References

- CPSC publication No 359 – How to plan for the unexpected
- CPSC publication No 362 – Safety Barrier Guidelines for Home Pools
- CPSC news release - #04-165, June 21, 2004. Public Hearing in Tampa Florida on Swimming Pool Safety.