



## Private Residential Pools and Spas

### Drowning Facts and Prevention Tips for Building Departments

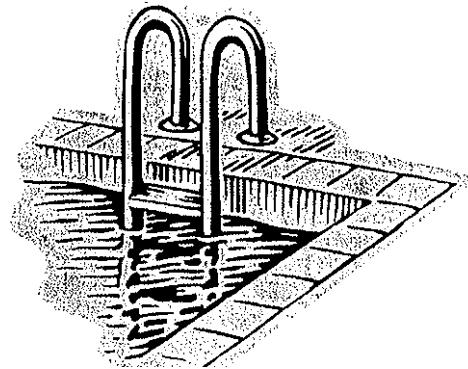
#### **Did You Know...**

Drowning is the second-leading cause of injury-related death for children ages 1 to 14 years in the US

About 280 children under age 5 drown in residential swimming pools annually

Each year in Washington, drowning accounts for an average of 24 deaths, 26 hospitalizations for near-drowning, and 110 visits to the emergency room for children ages 0-17

Among children ages 1-4 years, most drownings occur in residential swimming pools. Most young children who drowned in pools were last seen in the home, had been out of sight less than 5 minutes, and were in the care of one or both parents at the time. (*Washington State Dept of Health*)



Children are attracted to water. They can easily slip out a door to the pool or spa and fall in if there is no barrier. Once a child falls into the water, they usually don't scream or holler for help, they simply slip under the water quietly.

#### **Drowning deaths can be easily prevented: INSTALL PROPER BARRIERS AROUND POOLS AND SPAS**

Research shows that installing 4-sided fencing is one of the most effective ways to prevent drowning.

- Fencing should be at least 4 feet high surrounding **all 4 sides** of the pool or spa. Gates need to be out of a child's reach and be self-latching and self-closing.
- Although approved power safety covers with protected locks may serve as good barriers, follow the manufacturer's instructions to prevent a child becoming trapped under the cover. Lightweight pool covers are not solid and should not be used for safety purposes.
- Doors that have direct access to the pool or spa need to be equipped with an alarm that emits a loud audible warning when the door or screen is open. It should activate within 7 seconds of the door or screen opening and continue for a minimum of 30 seconds. Deactivation of the alarm will not be for more than 15 seconds, and all deactivation switches will be located **at least 54 inches** above the threshold of the door

#### **For new residential pools and spas, the Washington Code requirements are:**

- For any recreational pool with water **2 feet** (0.6 m) in depth or greater. The top of the barrier shall be at least **4 feet (1.2 m)** above grade measured on the side of the barrier that faces away from the swimming pool.
- Gaps between the bottom of the fence and the ground should be less than **2 inches (51 mm)**.
- Any opening in the barrier should not allow passage of a 4-inch-diameter (**102 mm**) sphere. Solid barriers which do not have openings, such as masonry or stone wall, shall not contain indentations or protrusions  $>\frac{1}{2}$ " (normal construction tolerances).

Where the barrier is composed of horizontal and vertical members and the distance between the tops of the

horizontal members is less than **45 inches (1.14 m)**, the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed  $1\frac{3}{4}$  inches. If the tops of the horizontal members are greater than 45 inches apart, vertical spacing shall not exceed 4 inches.

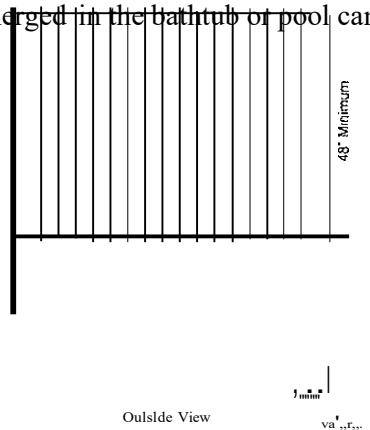
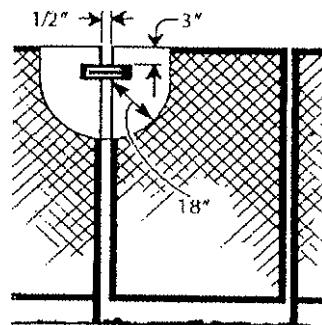
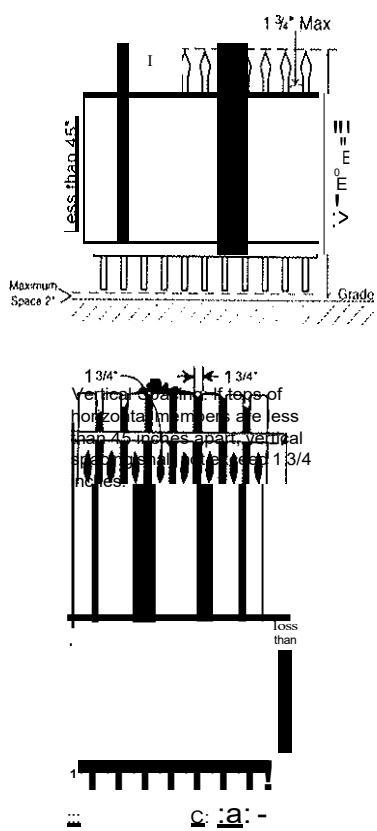
**RESTRICT ACCESS TO THE POOL** – The Association of Pool and Spa Professionals (APSP) recommends being aware of objects (like tables and chairs) that may allow children to climb over barriers and reach the pool or spa. In addition, tree limbs and overhanging roofs should be removed or made inaccessible in order to prevent contact with the pool or spa.

**MORE SUPERVISION** -Supervision is one of the most important tools for preventing drowning. According to *Safe Kids USA*, drowning is a quick and silent killer. In the time it takes to:

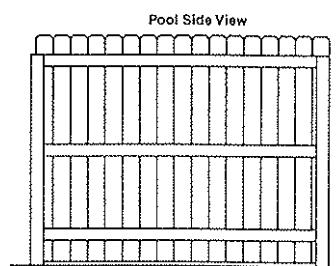
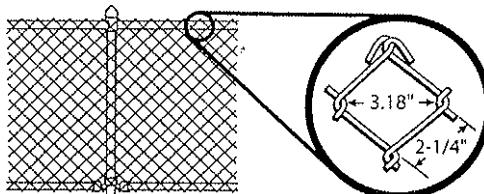
... cross the room for a towel (10 seconds), a child can become submerged.

...answer the phone (2 minutes), a child can lose consciousness.

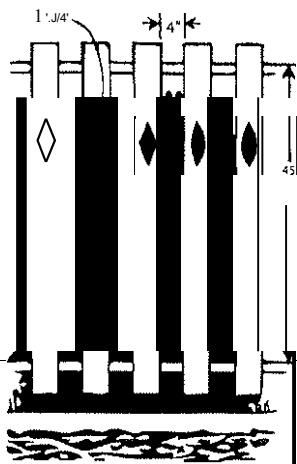
...sign for a package at your front door (4 to 6 minutes), a child submerged in the bathtub or pool can sustain permanent brain damage.



For a chain link fence:  
The mesh size shall not exceed 2.25 inches square with a 3.18 inches across.



Vertical Spacing: If tops of horizontal members are less than 45 inches apart, vertical spacing shall not exceed 4 inches.



More information located at:

**Your local public health department** - <http://www.doh.wa.gov/LHJMap.htm>

**Your local building official** - <http://www.waho.org/jurisdiction/map.htm>

**Washington State Building Code Council** - <http://www.sbcc.wa.gov/sbccindx.html>

**Injury and Violence Prevention, Public Health - Seattle & King County**

**Pool and Water Safety** <http://www.metrokc.gov/HEALTH/injury/drowning.htm>

**Children's Hospital and Regional Medical Center**

**Drowning Prevention and Water Safety Information**

[www.seattlechildrens.org/dp/](http://www.seattlechildrens.org/dp/) or [www.drowning-prevention.org](http://www.drowning-prevention.org)

**U.S. Consumer Safety Product Commission** - safety tips <http://www.cpsc.gov/ips.html>

**Association of Pool and Spa Professionals** - [www.theapsp.org](http://www.theapsp.org)

**Safe Kids USA** - <http://www.usa.safekids.org/index.cfm>

**Injury Fact Sheets** [http://www.usa.safekids.org/documents/Drowning\\_facts.pdf](http://www.usa.safekids.org/documents/Drowning_facts.pdf)

**Clear Danger: A National Study of Childhood Drowning and Related Attitudes and Behaviors (2004)** - <http://www.usa.safekids.org/NSKW.cfm>