



# ENA Injury Prevention Institute/EN CARE

Changing behavior. Saving lives.



## WATER SAFETY FACTS

### Deaths and Injuries:

- Drowning remains the second leading cause of injury-related death among children ages 1 to 14.<sup>1,2,3</sup>
- Children ages 4 and under have the highest drowning death rate (two to three times greater than other age groups) and account for 80% of home drownings. These drownings most often happen in swimming pools and bathtubs in the child's own home or in the home of a relative.<sup>2,3</sup>
- For every child 14 years and younger who dies from drowning, five receive emergency department care for near-drowning or non-fatal submersion injuries. Half of those seen in the emergency department require hospitalization.<sup>1</sup>
- Near-drownings have high fatality rates - 15% of children admitted die in the hospital. As many as 20% of near-drowning survivors suffer severe, permanent, neurological disability.<sup>2,4</sup>
- Many parents do not realize that young children tend not to splash or make noise when they get into trouble in the water and frequently drown soundlessly.<sup>3,5,6</sup>
- Alcohol use is a major contributing factor in 25% to 50% of adolescent and adult deaths from drowning.<sup>3,7</sup>

### When and Where Drownings and Near-Drownings Occur:

- Children under one year of age most often drown in bathtubs, buckets, and toilets.<sup>1,2,3,4,7</sup>
- Children ages 1 to 4 years most often drown in swimming pools, hot tubs, and spas.<sup>1,3,5,7</sup>
- More than 85% of drownings among children ages 1 to 4 are pool-related.<sup>1,2</sup>
- Children ages 5 to 14 most often drown in swimming pools and open water (lakes and rivers).<sup>2,8,7</sup>
- Most children who drown in pools were last seen in the house and had been out of sight for 5 minutes or less. Many were in the care of one or both parents.<sup>2,8,9</sup>
- Drowning fatality rates are higher in southern and western states than in other regions of the United States. Rural areas have higher death rates than urban or suburban areas, in part due to decreased access to emergency medical care.<sup>2</sup>
- Male children have a drowning rate two to four times that of female children. However, females have a bathtub drowning rate twice that of males.<sup>2</sup>

Last updated August 30, 2006

*Emergency nurses have an obligation to educate other health professionals and the public on healthy and safe lifestyles. In emergency departments, much of the traumas that are seen are preventable. It is often impossible to repair the broken bodies and shattered lives that result from trauma. A general goal of the ENA Injury Prevention Institute /EN CARE is to reduce preventable injuries and deaths by raising awareness, providing education, and promoting healthy lifestyles.*

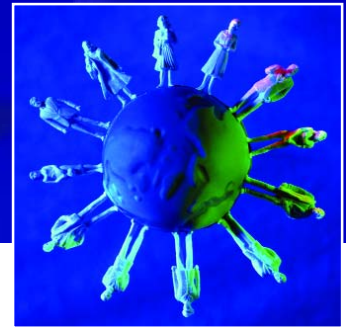


ENA Injury Prevention Institute/EN CARE  
915 Lee Street, Des Plaines, Illinois 60016-6569  
Phone: 847- 460-4112 Fax: (847) 460-4005  
E-mail: ipinstitute@ena.org



# ENA Injury Prevention Institute/EN CARE

Changing behavior. Saving lives.



## WATER SAFETY PREVENTION TIPS

Drownings can occur in many different circumstances – during water recreational activities (such as swimming or boating) or when a young child is left unsupervised for even a short time.

- So! Never leave a child alone around water, even for a moment.

Research shows there is no one device or solution that can prevent all childhood drownings. The best strategy includes all of the following:

- Active supervision by a designated adult
- “Barriers” or “layers of protection” ... to buy the adult time to find the child
- Classes and education about how to prevent childhood drownings as well as how to perform infant/child CPR.<sup>3,10,11</sup>

### Inside the Home

Never leave a child unsupervised in or around water in the home.<sup>2,12</sup>

To prevent drowning in toilets, young children should never have unsupervised access to bathrooms. Consider a latch on the outside of the bathroom door to prevent small children from accessing toilets, bathtubs, and basins. Put safety locks on all household toilets.<sup>13</sup>

Empty buckets and bathtubs immediately after use and turn containers upside down.<sup>3,14,15</sup>

It takes only a few seconds and an inch of water for a child to drown.<sup>2,3</sup>

### Outside the Home

An adult should always watch and monitor children closely. This means without any other distracting activity.<sup>5,6,11,13,15</sup>

Install a fence around any back yard pool or spa. The fence should be at least 4 feet tall with self-closing and self-latching gates and difficult for a child to climb. The latch should be high on the gate where it is not reachable by children. The fence should completely isolate the pool or spa from the rest of the yard and house. Prevent children from having direct access to a swimming pool.<sup>6,13</sup>

For above ground pools, steps and ladders to the pool should be secured, locked, or removed when the pool is not in use.<sup>3,13</sup>

Keep rescue equipment by the pool and be sure a phone (including a list of emergency numbers) or cellular phone is at poolside.<sup>6,13</sup>

Remove toys from in and around the pool when not in use so children will not attempt to reach for them.<sup>3,6</sup>

To prevent body and hair entrapment/entanglement, have a qualified pool professional inspect the drain suction fitting and covers on the pool and spa to assure that they are the proper size/fit, properly attached, and meet current safety standards.<sup>2,11</sup> Do not use air-filled swim aids (such as “water wings” or “tubes”) to replace Coast Guard approved life preservers or life jackets. They give a false sense of security and increase the chances of drowning.<sup>13,15</sup>

Teach children 4 years of age and older how to swim.

- Use qualified swim instructors.<sup>3</sup>
- Remember: Knowing how to swim does not make a child “drown proof.”<sup>3</sup>
- Children should be taught to always swim with a buddy. No one, not even adults, should swim alone or unsupervised.<sup>3,11,15</sup>

Do not allow young children to use spas and hot tubs; they are dangerous for young children who can easily drown or become overheated in them.<sup>10,11</sup>

Never drink alcohol before swimming or while swimming or boating. Talk to teens about the dangers of mixing alcohol with swimming, boating, and water skiing.<sup>3</sup>

Check the water depth before entering.

- The American Red Cross recommends at least 9 feet of depth for safe diving and jumping.<sup>3</sup>
- Stay in designated swimming areas.<sup>3</sup>
- Look before you leap! Never dive headfirst into unknown waters.<sup>3,11</sup>
- The cold season has special risks – walking, skating, or riding on weak or thawing ice on any body of water can have tragic consequences.<sup>13</sup>

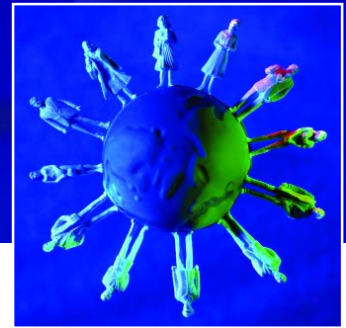


ENA Injury Prevention Institute/EN CARE  
915 Lee Street, Des Plaines, Illinois 60016-6569  
Phone: 847- 460-4112 Fax: (847) 460-4005  
E-mail: ipinstitute@ena.org



# ENA Injury Prevention Institute/EN CARE

Changing behavior. Saving lives.



## WATER SAFETY

### REFERENCES

1. Center for Disease Control and Prevention (2003). Water-Related Injuries. Retrieved February 8, 2004, from <http://www.cdc.gov/ncipc/factsheets/drown.htm>
2. Connecticut Safe Kids (2002, May). Drowning fact sheet. Retrieved February 10, 2004, from [http://www.ctsafekids.org/Fact\\_Sheets/](http://www.ctsafekids.org/Fact_Sheets/)
3. Lassman, J. (2002). Water safety. *Journal of Emergency Nursing*, 28(3), 241-243.
4. US Coast Guard (2002). Boating Statistics 2002. Retrieved February 20, 2004, from [http://www.uscgboating.org/statistics/accident\\_stats.htm](http://www.uscgboating.org/statistics/accident_stats.htm)
5. US Consumer Product Safety Commission (CPSC) (2003, July). CPSC warns backyard pool drowning "quickly and silently.". Retrieved February 5, 2004, from <http://www.cpsc.gov/CPSCPUB/PREREL/prhtml03/03151.html>
6. US Consumer Product Safety Commission (CPSC) (2006, May). As Pools Open for Summer, Young Children Face Drowning Risks. Retrieved July 13, 2006, from <http://www.cpsc.gov/cpscpub/prerel/prhtml06/06164.html>
7. University of San Francisco (1995). Statistics on pediatric drownings. Retrieved February 10, 2004, from <http://www.med.usf.edu/CLASS/Julie/Statistics.htm>
8. National Safety Kids Campaign (2004). Drowning fact sheet. Retrieved February 15, 2004, from [http://www.usa.safekids.org/tier3\\_cd.cfm?content\\_item\\_id=353&folder\\_id=181](http://www.usa.safekids.org/tier3_cd.cfm?content_item_id=353&folder_id=181)
9. Center for Disease Control and Prevention (2002). Water-related injuries. Retrieved February 8, 2004, from [http://www.cdc.gov/ncipc/fact\\_book/30\\_waterrelated\\_injuries.htm](http://www.cdc.gov/ncipc/fact_book/30_waterrelated_injuries.htm)
10. American Academy of Pediatrics (2000). Water Safety. Retrieved February 10, 2004, from [http://www.medem.com/search/article\\_display.cfm?path=\\TANQUERAY\M\\_ContentItem&mstr=/M\\_ContentItem/ZZZ7IV4O97C.html&soc=AAP&srch\\_typ=NAV\\_SERCH](http://www.medem.com/search/article_display.cfm?path=\\TANQUERAY\M_ContentItem&mstr=/M_ContentItem/ZZZ7IV4O97C.html&soc=AAP&srch_typ=NAV_SERCH)
11. Cuyahoga County Family and Children First Council (2003). Protecting our future: Water safety. Retrieved July 14, 2006, from <http://protectingourfuture.cuyahogacounty.us/factsheets/childsafety/water.htm>
12. National Safety Kids Campaign (2003, May). Report to the nation: Trends in unintentional childhood injury mortality, 1987-2000.
13. American Academy of Pediatrics (2003). Vigilance needed to prevent tragedies in the water. Retrieved February 8, 2004, from [http://www.medem.com/search/article\\_display.cfm?path=\\TANQUERAY\M\\_ContentItem&mstr=/M\\_ContentItem/ZZZBTJ9A0JD.html&soc=AAP&srch\\_typ=NAV\\_SERCH](http://www.medem.com/search/article_display.cfm?path=\\TANQUERAY\M_ContentItem&mstr=/M_ContentItem/ZZZBTJ9A0JD.html&soc=AAP&srch_typ=NAV_SERCH)
14. Brenner, R. A. (2003). Prevention of drowning in infants, children, and adolescents. *The American Academy of Pediatrics*, 112(2), 437-440.
15. Powell, E. C., Tanz, R. R., Uyeddas, A., Gaffney, B., & Sheehan, K.M. (2000). Injury prevention education using pictorial information. Retrieved February 10, 2004, from <http://www.pediatrics.org/cgi/content/full/105/1/e16>



ENA Injury Prevention Institute/EN CARE  
915 Lee Street, Des Plaines, Illinois 60016-6569  
Phone: 847- 460-4112 Fax: (847) 460-4005  
E-mail: [ipinstitute@ena.org](mailto:ipinstitute@ena.org)