# Drowning Prevention for Young Children

### It doesn't take a super hero to stop a killer!

Each year almost 6,000 people receive emergency care or hospitalization for drowning. Half of those are under age 4. In fact, children 1-4 years die from drowning more than any other type of injury. Use this brief to find out where and when drowning occurs and how you can prevent it.

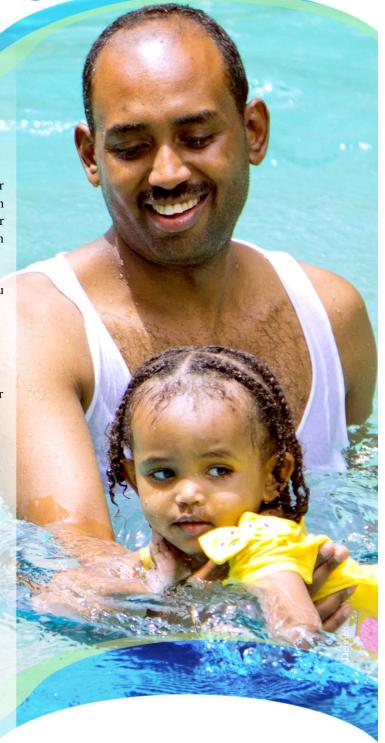
Real drowning is sneakier than television drowning. You will not see splashing or hear a child call for help.

**Drowning is quiet.** Children that cannot breathe cannot speak or yell. Drowning victims reflexively use their arms to press down on the water as they attempt to push their mouths up for breath. They do not signal danger by waving their arms high above the water.

**Drowning is quick.** In most situations, unconsciousness occurs in two minutes or less.<sup>2</sup> When water is extremely cold, the drowning process may take longer.<sup>3</sup>

All children are at risk, but drowning occurs in some groups at higher rates. Foreign born children and children in ethnic minorities drown at higher rates<sup>1,4,5</sup>, likely because they have less ability to pay for and access high quality child care and water safety resources. More boys drown than girls do, especially as they get older.<sup>1</sup> Children with medical conditions, such as autism and epilepsy, are also at greater risk of drowning than the general population.<sup>6-9</sup>

We can eliminate almost all drowning with close supervision, education, and better regulation.<sup>10</sup>



To keep children safe around water, use multiple layers of protection.

Never rely on people or objects that convey false security.

## Bath time

The first drowning hazard most children face is indoors. Infant drowning most often occurs when an adult caregiver steps away from the child.<sup>10</sup> Young children should never be unattended around tubs, buckets, toilets, fish tanks, or any type of liquid container.

#### Layers of protection

#### Avoid baths at hectic times.

Children in water need undivided attention. Do not try to multi-task during baths. Turn off your stove, your TV, your phone, or anything else that might tempt you away from a bathing child even for a few seconds.

#### Get everything ready first.

Keep a checklist of all the items you use before bath time. Gather these

items and put them in arm's reach of the tub before you draw the water. If you care for more than one child, it is best to do baths when another adult can help with supervision. If you are a lone caregiver, set up other children with books or toys in eyesight near you.

**Keep hands on at all times.** Stay in arm's reach of the bathing child at all times. If you need to step away, lift the child out of the water, wrap her in a towel, and take her with you.

**Empty or secure liquids after use.** Empty bathtubs immediately after use. Also, empty other liquid containers, such as water tables, buckets and ice chests when not in use. Keep toilet lids down and use child-safety latches on bathroom doors.

# Bath Prep Basket Towel Wash cloth Bath gel Digner

# Wash cloth Bath gel Diaper Pacifier Diaper cream Rubber duc

#### False security

**Bath seats or rings.** Some caregivers believe that bath seats or water rings make children safer. Unfortunately, these caregivers are more likely to leave children unsupervised. Although seats and rings may help you handle a soapy child, they are not drowning prevention devices. These seats can tip over, planting the child's face in the water. Children may also slip through leg openings or climb out of the seats.

**Other children watching.** Drowning occurs in the presence of other children in or near the bath. <sup>12</sup> Siblings or older children cannot reliably supervise younger children around water.

# Pools, spas, outdoors

Children 1 year and older are more likely to drown in pools, spas, and natural bodies water, such as lakes and streams.<sup>13</sup> More children under age 4 die in swimming pools than any other type of water source.<sup>1</sup> Fatal drowning often occurs within a few feet of a person that could help. Caregivers should confirm that there are multiple barriers between unsupervised children and water, that proper safety devices are in use during water activities, and that children are continuously monitored.

#### Layers of Protection

Suggest formal swimming instruction. The American Academy of Pediatrics (AAP) now supports parental decisions to provide swimming lessons for children 1-4 years old.<sup>14</sup>

This is a recent shift. The AAP formerly advised against swimming lessons for children under 4 because of rare health risks related to pool chemicals. However, studies from 2009 and 2010 showed that formal swimming instruction significantly reduces the odds of fatal drowning.<sup>15,16</sup>

Ask families to consider swimming instruction, but keep in mind that some families are less comfortable around water than others. Parents may resist swimming lessons because they fear water and believe swimming lessons will increase drowning risk. <sup>17,18</sup> Emphasize long-term protection that swimming lessons offer against drowning.



Some swim programs have claimed to make children, even infants, drown-proof. This is a false claim. Although swimming instruction may make children safer, additional layers of protection must always be used.

Verify safety equipment. Pools and spas should be contained by high, four-sided, non-climbable isolation fences. Three-sided fences that have open access from a house or a clubhouse are not adequate barriers for unsupervised children.<sup>19</sup> Gates to the water should be self-closing and self-latching. Pools and spas also need to be outfitted with devices that prevent strong suction and underwater entrapment. Drain covers, unblockable drains, and safety vacuum-release systems are required by law in all U.S. public pools and spas. The law is called the Virginia Graeme Baker Pool & Spa Safety Act. In public places, ask the pool operator how the facilities meet this law. Private pools and spas may not have these safety devices in place, so look first and ask questions before you swim. If you see uncovered drains, keep children out of the water.

#### **Use approved Personal Flotation Devices.**

The United States Coast Guard approves personal flotation devices (also known as PFDs, life jackets, or life vests) that are properly manufactured for drowning prevention. There are different kinds of PFDs depending on body weight and type of water you will be around. Carefully read documentation to verify good match. These devices often have multiple zippers, straps, and fasteners. All must be fastened correctly for the device to function.

**Select safer sites.** Swim only in designated swimming areas. It is better to swim when and where a lifeguard is on duty. If outdoors, heed all posted warnings about weather, currents, tides, and waves.

**Stay alert and in touch.** Be close enough to touch young children in or near water. Do not avert your eyes



to read a magazine, to text, or to talk to a friend, even if you are bored. If you need to get a snack or take a bathroom break, use a buddy system with another adult. Make sure buddies know when their watch begins. If you cannot ask another adult to take over, remove children from the water and bring them with you.

Accidents increase when caregivers drink alcohol around water.<sup>20</sup> Although water activities may be involved with a party or a vacation, refrain from drinking alcohol, which impairs judgment and reflexes. Sun and heat intensify alcohol's effects.

#### **False Security**

**Float devices.** Inflatable or foam devices such as tubes, rafts, or water wings are not reliable for water safety. These items do not always keep a child's head above water. Children can fall out or be entrapped by some float devices.

**Pool covers.** Pool covers may not be able to hold the weight of the child. Children can still fall through them and become trapped underneath.

**Portable pools or shallow pools.** Portable pools can be purchased cheaply but may not have adequate safety warnings attached to use and installation.<sup>21</sup> It does not matter if the pool is deep enough to swim in or if it is just for wading. All pools present drowning risks. Nearly all children that drown in portable pools are under age 5 and in their own yards.<sup>21</sup> Portable pools need to be emptied after every use or secured with the same barriers recommended for built-in pools and spas.

# In your child care

Child care providers are in a unique position to share and model water safety.

Look for teachable moments to provide information about water hazards and safety practices with families.

#### Do more than the minimum.

Pool swimming with children aged 1-4 is prohibited by child care regulation in some states. Forty states have requirements about supervision during swimming and water activities built into child care licensing. Requirements often vary by age of children and by the program setting, whether home- or center-based. While most of those states have child-staff ratio requirements specific to water activities, only three states specify that those staff must be able to see children at all times.<sup>22</sup> Expect to do more than what your state's minimum licensing requires. The nationally recommended ratio for water activities is one adult caregiver for each child.<sup>23</sup>

#### Learn and maintain CPR skills.

Children who have drowned are more likely to have good outcomes if a bystander performs CPR right away.<sup>24,25</sup> If you run a child care program, have staff get trained and certified. Some states offer free courses or reimburse licensed child care programs that pay for CPR courses. Ask your licensing or resource and referral agencies about these opportunities.

Do not delay in resuscitating a child without a pulse. If you are a lone rescuer with no one else around, 2010 protocol is to perform CPR for 2 minutes before calling 911.<sup>26</sup> Recommended practices may change from one year to the next based on updated science, so keep your certification up-to-date.

#### Don't assume parents learn water safety elsewhere.

As a child care provider, you may be the first one to educate parents about water safety. A survey of American pediatricians found that only 18% had been trained in drowning prevention during residency, and only half advised parents about water safety during routine visits.<sup>27</sup>

#### Identify local swimming and CPR resources.

Be aware of community centers or pools that provide swimming and CPR instruction in your community. Share these opportunities with families you serve. Use the water safety resources on the following page to get started.

## Water safety resources

#### National standards for child care

National Resource Center for Health and Safety in Child Care and Early Education
National Health and Safety Performance Standards Guidelines for Early Care and Education
Programs, 3rd Edition.

cfoc.nrckids.org

Refer to these sections:

1.1.1.5 Ratios and Supervision for Swimming, Wading, and Water Play

2.2.0.4 Supervision Near Bodies of Water

#### Pool safety practices and laws

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

#### **CPR** info and class locator

**American Heart Association** heart.org

#### **CPR/swimming instruction**

American Red Cross redcross.org 800-RED-CROSS

#### Personal Flotation Device (PFD) guidance

U.S. Coast Guard

http://www.uscg.mil/hq/cg5/cg5214/pfdselection.asp#commercialpfd

#### **Child care Resource & Referral agencies**

**Child Care Aware** childcareaware.org

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