

# Hidden Hazards An Exploration of Open Water Drowning and Risks for Children May 2018





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Open water, which includes both natural and man-made bodies of water (such as lakes, rivers, reservoirs and retention ponds), has hidden hazards that increase the risk of drowning.

## **Executive Summary**

During the warm weather months, families across the country will be spending more time enjoying lakes, ponds, rivers and ocean beaches. Being aware of the risks those open waters pose, and taking extra precautions, can keep those outings fun and prevent the tragedy of a drowning.

Tragically, more than 1,000 children fatally drowned in 2016, the highest rate of drowning deaths since 2011.<sup>1</sup> And that number severely underrepresents the scope of the problem. While 1,000 children fatally drowned, an estimated 7,000 more ended up in the emergency room (ER) because of a drowning scare.<sup>1-2</sup> That means a minimum of 150 families a week were impacted by a tragic or frightening drowning event. Additionally, there are countless non-fatal drowning incidents that are not captured in ER data because a child is rescued on site.

Safe Kids Worldwide (SKW) and Make Safe Happen, a program of Nationwide, have joined forces to better understand the scope of the problem. This report focuses on drowning in open water settings. The goal is to help parents and caregivers more fully appreciate the nature of open water and to help families protect kids from the dangers open water poses.

While drowning in swimming pools gets significant attention, the fact is that more children and teens fatally drown in open water. There is also an alarming difference in the number of fatal drownings in open water by gender. More than 8 in 10 fatal open water drowning victims among children 0-19 years are male.<sup>1</sup> The risk also increases with age, with children ages 15-19 years making up nearly half of open water deaths.<sup>1</sup>

Another disturbing disparity relates to race and ethnicity. American Indian/ Alaskan Native and Black/African American children fatally drown at higher rates than other races/ethnicities in open water,<sup>1</sup> an issue that needs far more attention and preventative action.

One factor contributing to drowning may be the expectation that because a child is able to swim in a pool, he/she will be safe in open water. However, open water, which includes both natural and man-made bodies of water (including lakes, rivers, reservoirs and retention ponds), has hidden hazards that increase the risk of drowning. These include sudden drop-offs, dangerous currents, vegetation and rocks, colder temperatures, difficult-tojudge distances, limited visibility and more. These differences from the pool setting make it important that parents go to designated recreational areas whenever possible and consider the following tips:

- Watch kids when they are in or around water, without being distracted. Keep young children and inexperienced swimmers within arm's reach of an adult. Make sure older children swim with a partner every time.
- **Designate a Water Watcher.** When several responsible adults are present, choose one to watch children in or near the water for a certain period of time, such as 15 minutes. Adults can take turns with this assigned responsibility.
- Make sure children learn how to swim. Every child is different, so enroll children in swim lessons when they are ready. Consider their age, development and how often they are around water when deciding if they are ready.

#### • Make sure kids learn these five water survival skills and are able to:

- step or jump into water over their head and return to the surface;
- turn around and orient to safety;
- float or tread water;
- combine breathing with forward movement in the water; and
- exit the water.
- Teach children that swimming in open water is different from swimming in a pool. Be aware of situations that are unique to open water, such as limited visibility, depth, uneven surfaces, currents and undertow. These potential hazards can make swimming in open water more challenging than swimming in a pool.
- Wear a U.S. Coast Guard-approved life jacket when boating or participating in other recreational activities on the water. Children should wear a U.S. Coast Guard-approved personal floatation device (PFD) appropriate for their weight and the water activity. For younger children, choose a PFD with both a collar for head support and a strap between the legs.
- Keep weak- and non-swimmers in PFDs when they are around water. Swimming aids and water toys, such as water wings and inflatable water rings, do not prevent drowning.
- Use designated swimming areas and recreational areas whenever possible. Professionals have assessed these areas, and there are usually signs posted regarding hazards and the presence of lifeguards.
- Learn basic water rescue skills and CPR. It is important to know how to respond in an emergency without putting yourself at risk. Learning basic rescue skills and cardiopulmonary resuscitation (CPR) may help you save a child's life.

Drowning is defined as the "process of experiencing respiratory impairment from submersion/ immersion in liquid." It can result in three possible outcomes: fatal drowning, non-fatal drowning resulting in an illness or injury and non-fatal drowning without an illness or injury.4

## Introduction

Memorial Day weekend marks the start of the swimming season for much of the United States. For most, it will be a time of recreation and enjoyment. But unfortunately, about 1,000 children ages 0-19—19 per week—will fatally drown in the year ahead, with an estimated 70 percent of those drownings occurring between May and August.<sup>1</sup>

Drowning is one of the three leading causes of unintentional injury death for all children ages 0-19 years.<sup>2</sup> It is the number one cause of injury death for children ages 1-4, the number two cause of injury death for children 5-14 years of age, and the number three cause of injury death for children 15-19 years of age, as well as for children under 1.<sup>2</sup> The medical costs of childhood drowning in the U.S. were an estimated \$68.5 million in 2015.<sup>3</sup>

The most common setting where children in the U.S. drown is open water. In 2016, open water drownings made up 43 percent of fatal childhood drownings, compared to 38 percent in pools, 9 percent in bathtubs and 10 percent unspecified.<sup>1</sup> Open water is a broad term that covers both natural bodies of water such as lakes, oceans, rivers, creeks, streams and naturally occurring ponds, as well as man-made settings such as aqueducts, reservoirs, retention ponds, garden ponds and irrigation canals. As a result, when thinking about drowning prevention in open water, parents need to consider different risk situations including both planned occasions where the family is participating in water activities, such as a day at the lake or beach, as well as sources of open water in and around areas where children might play in their neighborhood, such as an irrigation or drainage ditch or a retention pond in the middle of a suburb. Because these sources of open water vary, so do the hazards involved.

With the support of Make Safe Happen, a program of Nationwide, Safe Kids Worldwide (SKW) sought to better understand patterns of open water drowning among children, as well as to explore the increased risks that open water poses to children and families. SKW also has advice and tips to help minimize those risks.



## Recognizing Drowning

Contrary to the popular stereotype of a drowning person yelling, splashing and waving, drowning is typically quick and quiet when it occurs.12 When a child begins to struggle in the water, something called the instinctive drowning response kicks in.<sup>13</sup> Older children cannot wave their arms because they instinctively extend their arms to the side and press down on the water to try and lift their bodies up so their mouth is above the water. Younger children do not have the strength to do this, so remain with their face in the water with little to no movement in their arms and legs. Nor can children yell: They are struggling to keep their mouths above water and only have time to grab a guick breath before the cycle repeats. Eventually they tire out, cannot fight to stay above water and stay submerged.<sup>13-14</sup> This struggle typically takes only minutes. Once the instinctive drowning response begins, it can take less than 20 seconds for a child to sink below the surface.<sup>15</sup> Brain damage can occur within five minutes of being submerged under water, and with each minute a child is submerged, the severity of the outcome worsens.16-17

## **Overall Drowning Trends**

The number of fatal drownings among children ages 0-19 has decreased by 28 percent since 2000 overall. But that trend reversed between 2015 and 2016, when there was a 14 percent increase in fatal drownings. (Figure 1).<sup>1</sup> The 1,002 deaths in 2016 was the highest number in five years.

Figure 1. Despite a 28 percent decrease since 2000, 2016 saw the biggest increase in fatal drowning in five years<sup>1</sup>



Beyond the numbers of fatal drownings, there are many more non-fatal incidents. Three-year average data for 2013-2015 from one source suggest that for every fatal child drowning, nearly seven children are seen in the emergency room (ER) because of a non-fatal drowning incident.<sup>1-2</sup> Other estimates put the number as high as 11,000-13,000 visits.<sup>5</sup> When children do reach the health care system, it is usually serious: Estimates suggest that between 17 to 36 percent of non-fatal drowning incidents presenting at the ER result in hospitalization.<sup>2,5</sup> Non-fatal drowning can have serious long-term consequences due to hypoxia and subsequent brain damage.<sup>6-8</sup>

While these figures suggest that every week at least 150 families experience a frightening or tragic drowning scare, the true number is likely greater. Because many non-fatal drowning victims are rescued on site and do not come in contact with the medical system, the actual number of families affected is likely significantly larger.<sup>9-10</sup> The lack of data capturing the whole picture is one of the current challenges of addressing the drowning issue in the U.S. The remainder of this report addresses fatal drownings, where the most complete data are available.

## **Open Water Fatalities**

When the fatal drowning trend is examined by setting, open water drowning is most common. In 2016, open water drownings made up 43 percent of childhood drownings. Pool drownings made up 38 percent, other unspecified settings 10 percent and bathtub drownings 9 percent (Figure 2).<sup>1</sup> Further, there has been little change in open water drownings over the past 17 years (Figure 3). While overall drownings have decreased by 28 percent, open water drownings have only decreased by 13 percent.<sup>1</sup>





\*Open water includes drowning that occurred when the child was already in natural water, fell into natural water, other specified body of water (e.g., reservoir) or was in a boat. It excludes drowning that occurred in a bathtub or pool. \*\*Other includes unspecified settings, but excludes deaths related to floods.





Figure 3. Open water drownings in children and teens have only slightly decreased in the past 17 years<sup>1</sup>



\*Open water includes drowning that occurred when the child was already in natural water, fell into natural water, other specified body of water (e.g., reservoir) or was in a boat. It excludes drowning that occurred in a bathtub or pool. \*\*Other includes unspecified settings, but excludes deaths related to floods.

Although the risk for very young children is greatest in pools, the most recent 10 years of data show that as children age, they become more at risk of fatally drowning in open water (Figure 4).<sup>1</sup> This likely reflects greater exposure to open water settings and inadequate supervision; data from Child Death Review suggests that for cases where data on supervision were available, 62 percent of drownings in natural water occurred in the presence of an adult.<sup>11</sup>

#### Figure 4. As children age, their risk of open water drowning increases<sup>1</sup>



\*Open water includes drowning that occurred when the child was already in natural water, fell into natural water, other specified body of water (e.g., reservoir) or was in a boat. It excludes drowning that occurred in a bathtub or pool. \*\*Other includes unspecified settings, but excludes deaths related to floods.

## A Closer Look at Fatal Open Water Drowning Among Children

The remainder of this report focuses on fatal open water drownings for children ages 0-19 for the years 2007-2016 in the U.S., unless otherwise indicated.

## Age and Gender

When age is considered, most fatal open water drowning victims are teens ages 15-19 years (Figure 5).<sup>1</sup> However, younger children are also impacted, with nearly 1 in 4 open water drowning fatalities occurring in children under the age of 5 years.<sup>1</sup>

# Figure 5. More than half of fatal open water drownings in children occur to those under the age of 15 years<sup>1</sup>



Males are at a much greater risk of a fatal open water drowning than females, with 84 percent of open water drownings in children ages 0-19 occurring in males. This difference is greater than seen for fatal pool drownings, where 68 percent are male.<sup>1</sup>

For fatal open water drownings, the difference in risk between males and females increases as age increases, going from 2.7 times the risk for 0-4 year olds, 2.9 times the risk for 5-9 year olds, 3.2 times the risk for 10-14 year olds to 15.4 times the risk for 15-19 year olds (Figure 6).<sup>1</sup> These patterns are similar to those seen for pool drownings, although the magnitude of the differences is greater (Table 1).<sup>11</sup> Increased risk in males, particularly in the older age groups, is likely related to lower levels of supervision and increased risk taking, including swimming alone, swimming at night and swimming while using alcohol. Previous studies have documented increased involvement of drug and alcohol use in natural water drowning cases among older children and teens, particularly males.<sup>18-20</sup> Available data from Child Death Review indicate that 10 percent of 10-17 year olds who drowned had used drugs or alcohol right before their death.<sup>21</sup>











Table 1. Male-to-female ratios for fatal open water drownings compared to pool drownings have a similar pattern by age, although the magnitude of the difference is greater<sup>1</sup>

Age Group	Ratio Male to Female	
	Open Water Fatality Rates	Pool Fatality Rates
0-4 years	2.7 males:1 female	1.9 males:1 female
5-9 years	2.9 males:1 female	2.2 males:1 female
10-14 years	3.2 males:1 female	2.0 males:1 female
15-19 years	15.4 males:1 female	4.1 males:1 female
0-19 years	5.2 males:1 female	2.0 males:1 female

#### **Race and Ethnicity**

To examine race and ethnicity, we looked at five groups: Hispanic (of any race) and four non-Hispanic racial groups – White, Black/African American, American Indian/Alaskan Native (AI/AN), and Asian/Pacific Islander (A/PI). Overall, AI/AN children have the highest rates of fatal open water drowning, followed by Black/African American children.<sup>1</sup> These findings are consistent with previous research,<sup>11,19</sup> and highlight an important inequality. When setting is examined, the difference in fatal drowning rates between the open water and pool settings is lowest for White and Hispanic children and higher for other ethnic groups, with the greatest differences found for AI/AN and Black/African American children (Figure 7).<sup>1</sup>

Figure 7. American Indian/Alaskan Native and Black/African American children are at greatest risk of fatal open water drowning<sup>1</sup>



When age and gender are also considered, for males the greatest risk is for AI/AN children under age 5 and ages 15-19 and Black/African American children ages 5 and older, with the highest rate found for Black/African American males ages 15-19 (Figure 8).<sup>1</sup> For females, the greatest risk is for AI/AN children under age 5 and ages 10-14.<sup>1</sup>

Possible contributing factors for these racial disparities include differences in swimming ability, access to swim lessons, poor parental swimming skills, lower levels of education and income and cultural differences.<sup>19,22-26</sup> For Black/African American children, many of the differences are the result of a historical lack of access to pools and swimming lessons over generations.<sup>27</sup> As a result, there is an urgent need for greater investment in water safety training and swim lessons for these at-risk populations and their families. In addition, communities need to provide designated open water swim areas where hazards are minimized and safety measures, such as lifeguards and rescue equipment, are provided.

Figure 8. The highest rates of fatal open water drowning occur in AI/AN children under age 5 and AI/AN and Black/African American males ages 15-19 years<sup>1</sup>



### Activity at the Time of Drowning

The majority of fatal open water drownings (76 percent) occur when children are already playing or swimming in natural water, with the remainder resulting from unintentional falls into natural water, boating-related incidents and incidents involving other specified water sources (Figure 9).<sup>1</sup>





\* Boating related incidents include both powered and non-powered boats and modes of water transport

\*\* The activity at the time of drownings in "Other specified open water" is not recorded, but likely includes drownings resulting from falls, boating related and playing, swimming in those water sources

Children under age 5 are most likely to fatally drown in other specified open water, such as man-made ponds, and following a fall into natural water (Figure 10).<sup>1</sup> These incidents highlight the need for barriers around manmade ponds to reduce access, as well as the importance of supervision and use of personal floatation devices (PFDs) for weak- and non-swimmers around open water. The highest rates of fatal open water drowning occur in American Indian/ Alaskan Native children under age 5 and Black/African American males ages 15 - 19 years.<sup>1</sup> Children ages 15-19 are most likely to fatally drown while playing or swimming in natural water or as part of a boating incidents (e.g., overturned boat).<sup>1</sup> Again, this highlights the importance of PFDs, as well as teaching water-survival and swim lessons, swimming in designated areas, never swimming alone and knowing safe rescue techniques and cardiopulmonary resuscitation (CPR).

Figure 10. Falls into natural water and incidents involving other specified open water are most common for children under age 5<sup>1</sup>



\* Boating related incidents include both powered and non-powered boats and modes of water transport \*\* The activity at the time of drownings in "Other specified open water" is not recorded, but likely includes drownings resulting from falls, boating related and playing, swimming in those water sources

#### Location

The largest proportion of children who fatally drown in open water are from large urban settings of over one million people (based on postal code of residence) (Figure 11).<sup>1</sup> However, rural children make up 27 percent of fatal open water drownings, even though they make up only 15 percent of the population. Given natural bodies of water are part of the rural landscape for both agricultural and recreational purposes, the increased risk for drowning among children from rural areas likely reflects greater access. Drowning in irrigation canals, pits, ponds, etc. is a leading cause of childhood agricultural-related deaths.<sup>28</sup>

Figure 11. Nearly 4 in 10 children who fatally drown in open water live in large urban centers with populations larger than 1,000,000<sup>1</sup>



Data on the specific type of open water involved in fatal drowning incidents are limited: The current coding system used by the National Vital Statistics System does not specify beyond natural water. However, Child Death Review data do provide more detail. An investigation of the type of open water involved in fatal drownings in children 0-17 years old from 2005 to 2014 shows that for the 996 open water drowning deaths investigated (when specific location was indicated), the most common locations were lakes, rivers and ponds (Figure 12).<sup>21</sup> Surprisingly, oceans only made up about 4 percent of fatal open water drownings. This may reflect the increased likelihood of life guards at ocean beaches.

# Figure 12. The most common locations of open water drownings in children ages 0-19 are lakes, rivers and ponds<sup>21</sup>



When examined by age for the 989 cases (where age was indicated), lakes were the most common for all age groups except for children under age 5, where ponds are the most common location (Figure 13).<sup>21</sup> It is likely that a large proportion of these incidents are unintentional exposures, where a child has accessed a pond, and as mentioned previously, highlights the need for supervision and barriers around ponds. As children age, lakes and rivers become a greater risk, likely reflecting increased exposure to those types of water and decreased levels of supervision as children become more independent.

Figure 13. Children under age 5 are most likely to drown in ponds<sup>21</sup>







## **Open Water Swimming Poses Additional Risks**

Open water poses additional risks not found at a swimming pool and this, at least in part, explains why more children fatally drown in open water.

It is important for parents and caregivers to understand why open water poses an increased risk and what can be done to mitigate those risks. Parents should also teach children about the hidden hazards of open water and the risks in swimming in rivers, lakes, oceans, reservoirs and quarries, particularly as children get older and become more independent.

### Hidden Hazards of Open Water

Open water can be safe when it is officially designated as a water recreation or swimming area or when it is supervised by a lifeguard. Still, it is important for families to be aware of the following hidden hazards:

- Limited Visibility. Open water can be murky, reducing visibility if a child falls in the water, and potentially hiding hazards, such as rocks, logs, uneven surfaces and sudden drop-offs. Some open water also has debris and plants that may impede swimming or induce panic when a swimmer encounters them. If lifeguards are present, ask about the safest area to swim. When entering unfamiliar water, enter feet first and wade in slowly.
- **Depth, Distances and Drop-offs.** Unlike a pool, open water rarely has depth markings, which makes it harder for parents to know when a child is getting out of his or her depth. In addition, open water usually involves larger distances than a pool, and it can be hard to perceive how far away the shore is. This can increase risk of drowning, even for strong swimmers.

While a beach usually has a gradual entry (slope down into the water), this can change as the water level changes either with tides (for the ocean or tidal rivers) or as the seasons change (for rivers and lakes). For example, a beach may have a long gradual entry in the spring, but as water level drops, there can be a sudden drop off close to the beach. When looking for safe place to swim, choose a designated swimming area and check for signs indicating depth, distances and such things as high banks and sudden drop offs.

• **Currents and Tides.** Water in rivers, creeks and streams constantly flows downstream, creating currents that can be fast moving and unpredictable due to changes under the surface of the water. While currents in the form of rapids can be recognized by parents and children, currents can also be invisible on the surface, but strong below the water. Another danger on rivers are dams and weirs, which can create dangerous currents immediately downstream from their location.

## Tips for Talking to Teens About Open Water Safety

Given the high risk for teens, particularly teen males, parents and caregivers can reduce the risk of an open water drowning by ensuring their teens are water smart.

- Teach teens about the hidden hazards of open water so they understand the risks.
- Talk to teens about the importance of wearing a U.S. Coast Guard-approved PFD when boating or participating in other recreational activities on the water.
- Make sure teens learn basic water rescue skills and CPR.
- Discuss water safety expectations with your teen. Urge teens to follow open water safety tips (see page 20), and consider rules such as never swimming alone and always telling an adult where and with whom they are going to swim. As they get older, discuss the dangers of using alcohol when boating or swimming.



Ocean waves and rip currents are also of concern. Even at guarded beaches, wave activity can be dangerous, particularly breaking waves.<sup>29</sup> A rip current is a long, narrow band of water that can pull a swimmer away from shore and out into the ocean in just a few seconds. The United States Lifesaving Association estimates that rip currents account for more than 80 percent of rescues performed by surf beach lifeguards, and that each year more than 100 people die due to rip currents.<sup>29</sup> Due to these risks, avoid swimming at unsupervised beaches or in areas not designated for swimming. Make sure to learn about how to recognize, avoid and handle ocean rip currents.

• Weather and Seasonal Differences. Changes in the weather can add to the hazards of open water. Swimming, boating, personal watercraft or sail/surf boarding are dangerous activities when lightning is in the area. Heavy rains and flooding can create strong currents and rapidly change the depth and clarity of water. Families should also be aware of manmade storm channels and holding ponds, that can be empty one minute and full of water the next.

If you are planning an outing that involves open water, check the weather and water conditions before you leave home and again when you arrive. Stay alert for changes while you are at the site, and stay out of the water if you hear thunder or see lightning.

• Water Temperature. Water temperature has a strong impact on how a person reacts when entering the water. It can also affect swimming ability. Open water sources are usually colder than swimming pool water. Falling into cold water can cause cold shock, which in turn can lead to panic and drowning. When boating or engaging in other water recreational activities, families should remember to dress for the water temperature, rather than the air temperature and wear a PFD to reduce the risk of drowning.

## Smart Public Policy Can Keep Kids Safer In and Around Open Water

Because open water is so unpredictable, children should wear life jackets, also called personal flotation devices (PFD), on boats. But when it comes to laws governing PFD use, it is not so simple. On waters regulated by the U.S. Coast Guard, children under 13 years old are required to wear a U.S. Coast Guard-approved PFD on a moving boat.

However, other bodies of water are regulated at the state level, and the laws requiring PFDs for children range from ages 6 to 16, with many of them at age 12 or 13. Safe Kids Worldwide takes the position that, at a minimum, children 13 years and under should be required to be in an approved PFD. Virginia and Wisconsin<sup>30</sup> do not have a PFD usage requirement for children, and Safe Kids Wisconsin has joined others in supporting legislation to change this. The laws in other states require PFDs on a range of boats, whether they have motors or are kayaks. States with PFD laws applying to older kids have overall higher wear rates.

#### Find out what your state's law requires.

**Call to Action:** If your state's law sets the age too low, consider writing to your legislator and urging support for legislation to raise the age to at least 13. Other policies states and localities should consider:

- PFD loaner programs provide opportunities for families to borrow PFDs for free at boating ramps, swimming beaches and other locations. It is important to consider ways to provide PFD loaner programs at local open bodies of water. Around the nation, this is often assumed by volunteer organizations.
- Open water drowning prevention education is important. There is currently a bill in Hawaii to encourage the state's education department to include open water safety as part of its elementary school curriculum.<sup>31</sup>

## Open Water Drowning: A Winter Risk, Too

While summer is associated with swimming and water-related fun, cold weather also carries an open water drowning risk. Consider the case of 11-year-old Anthony Perez who was playing with a friend on frozen Strack Pond in Forest Park near his home in Queens, NY this past winter. He fell through, and his friend ran for help. Firefighters arrived at the scene within four minutes of the call, but it was too late. Anthony was pronounced dead at the hospital. New York City Fire Department Deputy Chief George Healy spoke about the drowning and hypothermia risk of frozen ponds, "We implore you — tell your children and make sure they are aware".<sup>32</sup>

Falling through ice may be infrequent in the New York City area, but is all too common in colder weather regions. For example, Minnesota has seen 248 people die falling through ice since 1976, 71 of whom were 19 and under, 29 percent.<sup>33</sup>



## **Open Water Safety Tips for Families**

Given the hidden hazards described above, along with the fact that drowning occurs quickly and silently, it is important that families understand the differences between swimming in open water and a pool. They should also know their skill level in open water, select safe locations to participate in water recreational activities and know what to do in a drowning emergency.

The following tips highlight important actions that can reduce the risk of open water drowning. Teaching safe and responsible behaviors to younger children may prepare them for the higher risk teen years.

- Watch kids when they are in or around water, without being distracted. Keep young children and inexperienced swimmers within arm's reach of an adult. Make sure older children swim with a partner every time.
- **Designate a Water Watcher.** When several responsible adults are present, choose one to watch children in or near the water for a certain period of time, such as 15 minutes. Adults can take turns with this assigned responsibility.
- Make sure children learn how to swim. Every child is different, so enroll children in swim lessons when they are ready. Consider their age, development and how often they are around water.
- Make sure kids learn these five water survival skills and are able to:
  - step or jump into water over their head and return to the surface;
  - turn around and orient to safety;
  - float or tread water;
  - combine breathing with forward movement in the water; and
  - exit the water.
- Teach children that swimming in open water is different from swimming in a pool. Be aware of situations that are unique to open water, such as visibility, depth, uneven surfaces, currents and undertow. These potential hazards can make swimming in open water more challenging than swimming in a pool.

It is important that families understand the differences between swimming in open water and a pool.

- Wear a U.S. Coast Guard-approved life jacket when boating or participating in other recreational activities on the water. Children should wear a U.S. Coast Guard-approved PFD appropriate for their weight and the water activity. For younger children, choose a PFD with both a collar for head support and a strap between the legs.
- Keep weak- and non-swimmers in PFDs when they are around water. Swimming aids and water toys, such as water wings and inflatable water rings do not prevent drowning.
- Use designated swimming areas and recreational areas whenever **possible**. Professionals have assessed these areas, and there are usually signs posted regarding hazards and the presence of lifeguards.
- Learn basic water rescue skills and CPR. It is important to know how to respond in an emergency without putting yourself at risk. Learning basic rescue skills and CPR may help you save a child's life.



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