

In this second installment of our “Healthy Communities” blog, we feature important and potentially lifesaving water safety information. In our first installment, we looked at drowning as a catastrophic event. We looked at the drowning process, the populations most at risk and the need for clarity and correct information about the behaviors and characteristics of a drowning victim. We highlighted common misconceptions about what happens in a water emergency and just how quickly someone, especially children, can lose their life in water.

The good news is that drowning can be prevented. Aquatics professionals, healthcare professionals and leaders in public health like West Central District Health Department are a wealth of information about the ways families can mitigate risk and still enjoy summer’s favorite activity. Before heading to the pool, the lake, or the river, it is imperative that adult care givers prepare children of all ages for their time in the water and set clear expectations about the behaviors and actions needed to stay safe. Parents and caregivers should develop a plan that everyone must follow for a safe water visit and in a possible emergency situation. These water safety plans should be prepared even when a gathering is held near water, not just when the activity includes swimming. Remember, most people who drown did not enter the water intentionally.



Take a water safety course if one is available in your area. A blog about water safety can only touch the surface of the things families need to know to stay safe around the wide variety of places people can enjoy the water. This type of education is not the same as swimming lessons. Water safety training is an educational curriculum that helps families develop a water plan that can prevent a tragedy and allow everyone to enjoy the wonders of being in the water safely. Swimming lessons should be thought of as an essential part of a child's overall education. The philosopher Plato once remarked, "A man is not learned unless he can read, write and swim." The earlier a child is introduced to the water the better. There are physical, cognitive, and emotional benefits beyond safety to young swimmers. Infants and toddlers demonstrate higher cognitive scores and better problem-solving skills than non-swimming youngsters.¹ Children who swim year-round are found to be more socially well-adapted. Water play also acts as resistance, building stronger muscles and better coordination. Swimming kids breathe better and get more oxygen.² Besides health and safety benefits, swimming is fun!

One of the most concerning realities from a public health lens is the number of Americans who misjudge their ability or their child's ability to swim. The ability to kick and paddle a few feet with the mouth barely clear of the water is often understood as "knowing how to swim." The American Red Cross, the nation's leading authority on water safety for over 100 years, surveyed Americans in 2014. The responses centered around a simple question, "Can you swim well enough to save your life?" Of Americans surveyed, 80% said they can swim...but less than half of Americans can perform all of the 5 basic skills that could save their life in water. Only 46% of Americans can perform all 5 of the basic water safety skills. These skills are: 1) Step or jump into water over your head 2) Return to the surface and float or tread water for at least one minute 3) Turn around in a full circle and find an exit while treading or floating 4) Swim 25 yards to the exit without stopping 5) Exit from the water with no assistance. These are the minimum



skills required for anyone and they define what it means to be "safer" in the water.

Beyond water safety education and learning to swim, parents and other caregivers should be very clear about their role in

drowning prevention. Young children, non-swimmers and weak swimmers must be constantly supervised by a vigilant adult who remains within reaching distance of the child, even in the presence of lifeguards. Parents should not rely on floatation toys, “water wings” and other inflatables or even lifejackets to prevent drowning. While Coast Guard-approved lifejackets are important for non-swimmers and all boaters, parents cannot assume their child won’t remove a lifejacket when they are not looking and enter the water. Constant, vigilant supervision is necessary, with parents or caregivers in the water. Both parents and kids will also have more fun if everyone is in the pool!

Make sure that there are barriers around any water and that those barriers are adequate and well-functioning. Home pools are a particular risk without common sense safety steps. Self-latching fencing and gates, locks, and alarms are all important, but nothing substitutes for constant supervision of young children. Remember that dangerous water for an infant and toddler can be as seemingly harmless as a bucket of water or a toilet. We talked last time about disproportionality in toddlers. Their heads are large and can make it impossible for them to get their face out of the water. Empty backyard kiddie pools each day. Infants under 1 year are more likely to drown at home, kids 1-4 are more likely to drown in a pool and kids 5-17 are more likely to drown in natural water.³ The bottom line is there is no substitute for adult supervision.

When choosing where to swim, it is always better to swim in a lifeguarded facility. Lifeguards are trained to prevent and respond to emergencies and serve their communities as public safety personnel. Drowning rates are higher in un-lifeguarded areas. When enjoying a private pool, a lake front or riverbank, designate one person to be the “water watcher” and have rescue equipment available. Always keep a phone near the water and never let your phone become a distraction from the constant supervision of young children. Phones are your immediate connection to EMS in an emergency, but they can also interrupt that constant and

vigilant supervision that is most needed. Caregivers should learn and practice CPR and First Aid for Severe Trauma.



Teach your children to respect the authority of lifeguards and insist that they learn basic pool rules before being allowed to visit the pool without you. Rules are designed to protect everyone and one

of a lifeguard's primary duties is to enforce them. Remind swimmers to always walk. Have a targeted conversation about the dangers of headfirst entries into shallow water. Beyond drowning, spinal cord injuries are of real concern in any water setting. Those using open water where clarity is lacking should never use a head-first entry. Parents and caregivers can reinforce rules prohibiting pushing, shoving, dunking, and extended underwater breath-holding. Make sure your children visit the restroom before entering the water. In our final water safety blog, we will discuss recreational water-borne illnesses (RWI's) and how you can help you and your child avoid these public health dangers.

Keep an eye to the sky and avoid water environments during thunderstorms. Lightening is one of the most dangerous weather-related events and is of particular concern around any type of water. The American Lightning Foundation recommends leaving the water immediately upon seeing lightening or hearing thunder. Seek shelter and avoid tall structures, lone trees, and metal objects. Stay off landlines and out of showers. The recommended wait time to return to the water is 30 minutes following each lightening or thunder observation. If 30 minutes passes without lightening or thunder, you can return to the water, keeping a vigilant watch in case conditions change.

When on vacation, make sure kids don't head to the pool or hot tub until you are ready to go. If pool or spa water is murky or milky, rethink the decision to swim. Healthy pool water should be crystal clear. Check for broken and missing drain covers in both pools and spas. Congress passed the Virginia Graeme Baker Pool & Spa Safety Act to address the dangers of improper or broken pool drains after 7-year-old Virginia Graeme Baker drown after she was trapped under water by the powerful suction of a hot tub drain.

The most important component of any water safety plan, educational program or swim lesson is "respect." Just as we teach our children to respect others, we must teach them to respect water. Water can be one's best friend or worst enemy. The benefits to people of all ages of water are exceptional and swimming is truly one of life's greatest enjoyments. Water, however, demands to be understood and respected. When we do that, we can go a long way in creating wonderful, lasting summertime memories of family, friends and the many joys of the water.

¹<http://www.braincourse.com/ambia.html>

²<http://healthbenefitsofwater.com/negative-ions/>

³from Safe Kids Worldwide; Keeping Kids Safe In and Around Water