Water Smart: Broward
Water, a friend or foe?
Water Is Essential To Live

Plants
Animals
Vegetation
All living organisms

Drink
Bathe
Clean
Wash
Cook
Water Recreation
Fun . . . Relaxing . . . Physically Beneficial
Water is Everywhere!

In Broward County:

- 124,580 residential pools
- 4,250 community pools
- 23 miles Atlantic coastal beaches
- 165 miles of intra-coastal waterways
- Countless ponds, lakes, spas, above ground and portable pools
- Buckets, garden ponds, bathtubs, toilets, ice chests, containers
As vital and pleasurable as water can be, water presents a risk for a fatal or nonfatal drowning.
A fatal or nonfatal drowning incident is devastating to parents, siblings, extended family members, and the community.

Often parents learn about drowning risks and prevention measures after the tragic loss of their child.

Families are torn apart by guilt and grief when they realize simple steps prevent fatal and nonfatal drowning incidents.

Water safety and drowning prevention are not naturally learned; rather from news reports or personal experiences or testimonies.

Most parents do not think about the risk of a drowning outside of a recreational water activity . . .

Yet most of children under the age of 5 that drown were not involved in a water activity . . . they wandered into the water unsupervised . . . and alone
Drowning Is
the process of experiencing respiratory distress as a result of
becoming submerged or immersed in liquid
- defined by the World Health Organization (WHO)

Drowning Outcomes
- Fatal
- Morbidity
- No Morbidity

The terms wet, dry, active, passive, silent, secondary and near
drowning are obsolete terms and should not be used when
describing a drowning event - as per the World Health
Organization (WHO)
Drowning Is  \textit{NOT} Accidental

Drowning Incidents Are:

\textbf{Unintentional}

The event occurred without the intent of harm; \textit{unintentional injuries are predictable and preventable} when safety precautions are taken.

\textbf{Or}

\textbf{Intentional}

The event occurred from harm being deliberately inflicted, such as child maltreatment, suicide or homicide.
Drowning Incidents

Recreational

incidents that happen while using water for recreational purposes

Non-Recreational

incidents that happen when a person never intended to be in the water at the time, or incidents involving unsupervised children accessing water on their own.

Other

child maltreatment, homicide or suicide, flood disasters
How Big is the Problem?

CDC reports:

• From 2005 – 2009, each year, an average of 3,533 people died in the United States from unintentional drowning (does not include drowning deaths resulting from boating)

  *About 10 deaths per day*

• Among children ages 1 – 4, drowning is the leading cause of death

• *For every drowning death, another 5 receive emergency department care for nonfatal drowning injuries*

• More than 50% of nonfatal drowning incidents treated in the emergency room require hospitalization or transfer for further care

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Non-fatal drowning injuries often cause severe brain damage resulting in long-term or life-long disabilities such as memory issues, learning disabilities and permanent loss of basic functions (vegetative state).
Who is Most At Risk?

By Age:
- < 1 Year Old: 2%
- 1–3 Years Old: 64%
- 4 Years Old: 11%
- 5–9 Years Old: 17%
- 10–14 Years Old: 5%

Deaths by gender for children 0–14:
- Male: 67%
- Female: 33%

DEATHS

390 — Annual average number of drowning deaths in pools and spas of children ages 0–14 from 2008–2010 as reported to CPSC.

African-American children between ages 5 and 19 are 6 times more likely to drown in a pool than white children of the same age.***

76% of deaths involved children under age 5.

67% of deaths involved children between ages 1 and 3.

Deaths typically occur either the same day or within a week of the incident.

Reported by Consumer Product Safety Commission
Broward County, 2009 – YTD

41 - Fatalities (2014, 10)
21 – Black (2014, 7)
15 – White (2014, 2)
5 – Hispanic (2014, 1)

25 Male (2014, 3)
16 Female (2014, 7)

Top 3 Municipalities by Count
(from 2009 – YTD)

Margate 6
Fort Lauderdale 5
Miramar 4

Municipalities by Count, 2014

Margate 3
Deerfield Beach 2
Ft. Lauderdale 2
Coral Springs, Miramar, Sunrise 1
What factors influence drowning risks for young children?

• Absence of adult supervision

• Lack of knowledge, disregard or misjudgment of the hazard

• Easy access to water

• An inability to respond properly to a drowning incident
Additional risk factors:

- Lack of swimming ability
- Overestimation of swimming competency & endurance by either parents or the swimmer
- Swimming alone or in an area not supervised by a certified lifeguard
- Medical issues, seizure disorders and wandering tendencies
- Fatigue or illness
- Alcohol or substance use by the swimmer or the supervising adult
- Perception that a drowning victim becomes noisy by screaming and splashing when in fact, drowning victims actually fall below the surface of the water quickly and silently
- Failure to wear U.S. Coast Guard approved life jackets while boating
- Policies & legislation
- Minority status
- Medical conditions such as wandering tendencies and seizure disorders
Drowning is Predictable

- Involves a child between the ages of 1 and 4
- Occurs while in the care of one or more parents
- Occurs when the child is out of sight for less than 5 minutes
- Happens quickly and silently
Drowning Incidents Tend to Follow a Predictable Pattern by Age

**LOCATION OF DEATHS**

- **Infants**
  - Bathtubs, buckets, other containers of liquid

- **Toddlers**
  - Swimming pools

- **5 years and older**
  - Rivers, lakes, canals

73% of deaths of children younger than 14 occurred at a residence—**88%** of those victims were under 5.

- 59% in-ground pools
- 15% above-ground pools
- 9% portable pools
Risk Factor: Age

Toddlers and Water
- A fatal attraction

Stage of development
- No fear
- Very curious
- Do not recognize hazards or risks
- Require patience & constant supervision
- Can awaken from sleep unexpectedly leaving an unsecured home quietly and unnoticed

Physically
- Head weighs more than the rest of their body - likely to topple over
- Can drown in as little as 2 inches of water
- Quick and on the run
- Able to climb, open doors
Characteristics of Drowning:

- Most young children are fully clothed at the time of a drowning incident. The extra weight of clothing and a fully saturated diaper makes moving in the water very difficult.

- Drowning is quiet. A child that cannot breathe cannot talk or yell. Drowning victims instinctively use their arms to press down on the water as they attempt to push their mouths up for a breath.

- Drowning victims do not signal for help. They cannot wave their arms high above the water, nor are they able to signal by splashing.

- Drowning is quick. In most situations, unconsciousness occurs in two minutes or less.
Drowning Is Preventable

Every fatal and non fatal drowning incident signals the failure of the most effective intervention – Prevention

Unfortunately, parents/care providers often place a child at risk because they just don’t know . . .
Education of Parents is Fundamental to Prevent Drowning

Knowledge about water safety is centered around four important concepts:
1. Adult supervision
2. Knowledge and regard of all drowning hazards
3. Obstruct access to water
4. Proper emergency procedures
# Absence of Adult Supervision

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<tr>
<th>Risk</th>
<th>Prevention Strategy</th>
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<td></td>
<td>Constant, close &amp; capable adult supervision is the primary preventative strategy to prevent child drowning</td>
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<td>Children must be supervised always when in and around water. (bathtubs, pools of all types, lakes, canals, everywhere there is water)</td>
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<td>Infants and toddlers must be within arm’s length of a responsible adult when in and around water, as well as older children who cannot swim, children with a history of epilepsy or wandering tendencies, or medical issues that might cause sudden submersion in the water</td>
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<td>Supervision is required at all times for infants and toddlers even when water is not nearby, as toddlers especially can quickly leave a safe, supervised area and find water (developmentally they do not fear or understand the risk)</td>
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<td>Inappropriate supervision is an older sibling or child, an adult under the influence of alcohol or other substances, and, an adult with little or no knowledge of drowning risks – KNOW WHO IS WATCHING YOUR CHILDREN; Parents often make the mistake and assume responsible behavior from others they allow to care for their children</td>
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<td>Nothing substitutes for constant and responsible adult supervision, including infant bath safety seats, flotation devices, life jackets</td>
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<td>The ability of a young child to swim is NOT a substitute for adult supervision</td>
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<td>During family or group gatherings, designate a responsible adult to be the Water Watcher; the Water Watcher has a single duty: WATCH THE CHILDREN</td>
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<td>Avoid engaging in distracting activities such as reading, texting, internet or phone use when supervising young children around the home and in and around water</td>
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<td>Lack of knowledge, disregard or misjudgment of the hazard</td>
<td>When a child is missing, check areas with water first and urgently; minutes can mean the difference between life and a disability or death</td>
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<td>Know the water hazards in your home, yard and community; when visiting or traveling, scope out any nearby water areas</td>
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<td>Think of water hazards that are not obvious: water gardens or ponds, containers in the yard that might accumulate water, inflatable pools, above-ground pools, spas, hot tubs, toilets, buckets of liquid and unattended bathtubs filled with water</td>
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<td>Think about drowning - almost every parent who lost a child to a drowning did not think it could happen to their child</td>
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<td>Fear of water by the parent or teaching a child to fear water is not a protective measure</td>
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<td>Two inches of water is a drowning hazard for a young child</td>
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<td>If your child has taken swim lessons, do not overestimate their swimming ability, competency or endurance</td>
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<td>In public swimming areas, always swim in an area and during the time of a lifeguard on duty</td>
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<td>Talk regularly with children about water safety, have the following conversations with children:</td>
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<td>1. “Don’t go near a pool without an adult.” This is the most important water safety conversation because it is so simple. Even a young child can understand certain areas are off limits and the dangers of being alone around a pool.</td>
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<td>2. “If you see someone struggling in the water, don’t jump in to help. Run and get an adult.’ A child trying to save another person in the water is likely to result in two victims, not one. Practice with your child to recognize someone who needs help in the water; emphasize they are to run to get an adult.</td>
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<td>3. “And if you fall into a pool, don’t panic, turn around, find the wall, and climb out or yell for help.” Practice this skill in the pool with your child. Have the child practice wearing clothing to experience the sensation of additional weight.</td>
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### Risk

Easy access to water

### Prevention Strategy

Barriers challenge or delay a young child to access water; barriers afford additional time if a break in supervision occurs; barriers are vulnerable and are only effective if:

- They are consistently in use
- Inspected & maintained regularly
- All family members know proper use, as well as visitors, babysitters and other care providers
- Adjusted if seasonal changes are made

Barriers are most often compromised during holiday celebrations when others may not be aware of precautions routinely practiced or chaotic times such as moving or preparing for a vacation.

Effective barriers include:

- Door and window alarms that are continuously in use to alert a child possibly leaving the house
- Self-closing and self-latching gates that open outward and latches that are out of reach for a child
- 4-sided fencing that separates the pool from the home, and from the play area

Immediately after use:

- Remove toys in the pool and on the deck so children are not tempted to enter the pool area unsupervised
- Empty portable pools, bathtubs, all liquid containers such as water tables, buckets and ice chests
- Secure ladders to above-ground pools; secure covers for spas and hot tubs
- Keep toilet lids down and use child-safety latches on bathroom doors

Secure pet doors and other openings that a child could crawl through

Ensure objects and shrubbery near the fence cannot assist a young child to climb into a pool area, or out of the yard
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<td>An inability to respond properly in a drowning situation</td>
<td>Know what to do before an emergency; children who drown are more likely to have positive outcomes because a bystander knows what to do and acts quickly.</td>
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<td>Once someone starts to drown, survival is dependent almost exclusively at the scene of the incident on:</td>
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<td>1. How quickly the person is removed from the water (bystander rescue)</td>
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<td>2. How quickly proper CPR and rescue breaths are performed (bystander CPR)</td>
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<td>Learn CPR with rescue breaths before an emergency! Anyone over the age of 10 can learn CPR – make this a family learning experience</td>
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<td>Know the signs of someone in trouble in the water; a drowning victim is:</td>
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<td>• Struggling to breathe and cannot talk or yell for help</td>
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<td>• Using their arms to press down on the water to push their mouth up for a breath</td>
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<td>• Not able to wave their arms above the water, and splash to get attention</td>
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<td>If a child is actively drowning, avoid entering the water; use a rod, pole, rope or garden hose as a life-line to pull the victim to the side.</td>
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<td>Proper steps to respond to an unconscious drowning person:</td>
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<td>1. Remove the victim from the water</td>
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<td>2. Have someone call 9-1-1*</td>
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<td>3. Begin rescue breaths &amp; CPR, continue until advance medical help arrives</td>
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<td></td>
<td>*If you are alone, yell for help, and immediately administer CPR with rescue breaths for 2 minutes, then call 9-1-1</td>
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<td>Immediate Bystander CPR with rescue breaths is crucial to saving a life and minimizing the extent of a life-long disability in a drowning incident</td>
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</tbody>
</table>
As a community, it is vital that every member accepts the responsibility that the safety of all children is everyone’s responsibility.

Preventing child fatal and non-fatal drowning is an achievable project.

Working together to establish a water smart community is an effective action plan, but requires individuals representing the diverseness of the community working together.

Local governments, health care providers, educators, community based organization and faith based institutions need to serve as gatekeepers to influence parents and care providers to reach the most vulnerable populations.

Envision the impact to be first to educate a parent about drowning prevention; your influence may be life-saving, and that is the purpose of this guide.
## Resources

### Pool Spa Safety and Product Information
**Consumer Product Safety Commission**  

### CPR Training
**American Heart Association**  
[www.heart.org](http://www.heart.org)

**American Red Cross**  
[https://www.redcross.org](https://www.redcross.org)

**Broward Health** – offers free CPR instruction, but does not provide training for certification  
954.759.7400

**Coral Springs Fire Academy**  
954.346.1774

### Educational Resources
**Water Smart Broward**  
[www.watersmartbroward.org](http://www.watersmartbroward.org)

**Broward County Drowning Prevention Task Force**  
954.467.4700 x 5807  
Kimberly.Burgess@flhealth.gov  
Linda.Olson@flhealth.gov

**Broward Health Pediatric Drowning Prevention Task Force**  
954.344.3344  
[http://www.browardhealth.org/?id=597&sid=5](http://www.browardhealth.org/?id=597&sid=5)

**Florida Department of Children and Families**  

**Florida Department of Health, Broward**  
Drowning Prevention Training and Water Smart Broward Initiative  
954.467.4700 x 5807  
Kimberly.Burgess@flhealth.gov  
Linda.Olson@flhealth.gov

**Pool Safely U.S. Consumer Product Safety Commission (CPSC)**  

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### Swim Instruction
**Swim Central – Swim Lessons**  
954.357.SWIM (7946) Broward County Resource and Referral Service for available swim programs  
[http://www.broward.org/Parks/ProgramsClasses/Pages/SwimCentral.aspx](http://www.broward.org/Parks/ProgramsClasses/Pages/SwimCentral.aspx)
Questions ? ? ?