



DROWNING PREVENTION

Community Education Outreach Training Handbook

Water Smart Broward

DROWING PREVENTION OUTREACH

Training Handbook

Purpose

The loss of a child is devastating to parents, siblings, extended family members and the surrounding community. And sadly, many parents learn firsthand about the risks and related prevention measures from the personal experience of losing a child to a drowning fatality.

For some families a child may experience a nonfatal drowning, but live the remainder of their life in a disabled existence, often requiring constant care tending to basic life functions.

Families are torn apart by guilt and grief because they now realize simple steps may have prevented the tragedy. If only they knew beforehand . . .

Traditionally, water safety is not learned naturally, but rather from news reports or personal testimonies. Far too often fatal and nonfatal drowning events of young children occur outside of a recreational aquatic activity, and occur because their parent(s) or care giver was not aware of the risk.

As a community, it is vital that every member accepts the responsibility that the *safety of all children is everyone's responsibility*. Child drowning prevention is an achievable project. Working together to establish a water smart culture is an effective action plan that requires individuals representing the diverseness of the community.

Also, local governments, health care providers, educators, community based organization and faith based institutions need to serve as gatekeepers to reach the most vulnerable populations and influence parents and care providers to become aware, responsible and adopt safer behaviors to protect their children from fatal and nonfatal drowning incidents.

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*.

Although the guide is educational, tools are provided to utilize as checklists when discussing water safety and drowning prevention. The checklists are located in the Prevention Section.

Learning Objectives

Participants will be able to:

- Understand and explain the hazards related to fatal and nonfatal drowning
 - Know who is most at risk to drown and why
 - Understand how to prevent fatal and nonfatal drowning
 - Know what skills are necessary to respond appropriately and effectively to a drowning incident
 - Help others to conduct regular safety checks to prevent a drowning incident
 - Provide checklists as resources for educators, parents/caregivers and the general public
 - Provide resources to learn more about pool safety devices, available CPR classes and swim instruction
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Introduction

“Water can be a good friend or a deadly enemy”

Commodore Longfellow



Water, a friend or foe?

Water is an essential part of our lives.

- All living organisms, plants, animals and humans need water to exist.
- Water is also needed for bathing, cleaning, washing, and cooking.
- Water affords countless recreational activities that are relaxing and physically beneficial to the health and well-being of individuals of all ages.

*As vital and pleasurable as water can be,
Water presents a risk for injury and death.*

Water is available almost everywhere,

In Broward County, there are:

- 124,580 residential pools
- 4,250 community pools
- 23 miles of Atlantic coastal beaches
- 165 miles of navigable canals
- 25 miles of intra-coastal waterways
- Countless ponds, lakes, spas, above-ground and portable pools
- An abundance of buckets, garden ponds, bathrooms, and containers in every neighborhood

Drowning Overview

Drowning, defined by the World Health Organization (WHO), is the process of experiencing respiratory distress as a result of becoming submerged or immersed in liquid.

Drowning outcomes are classified:

- Nonfatal:
 - No morbidity (full recovery, no injuries or disabilities)
 - Morbidity (an injury, disability or health related issue because of the incident).
- Fatal

The terms wet, dry, active, passive, silent, secondary drowning and near drowning should no longer be used as stated by the World Health Organization.

Fatal and Nonfatal drowning is either unintentional or intentional

- Unintentional drowning implies that the event occurred without intent of harm. Unintentional injuries and death are predictable and preventable when proper safety precautions are taken.
- Intentional drowning results from harm being inflicted deliberately, such as suicide, homicide or child maltreatment.

Drowning is NOT accidental – using the term accidental promotes the idea that drowning cannot be prevented. Drowning is unintentional and preventable in most cases.

Fatal and nonfatal drowning incidents are grouped as:

- Recreational drowning – incidents that happen while using water for recreational purposes.
- Non-recreational drowning – incidents that happen when a person never intended to be in the water at the time, or, incidents involving unsupervised children accessing water.
- Other - child maltreatment, homicide, suicide or flooding water

How big is the problem?

According to CDC:

- From 2005 – 2009, each year, an average of 3,533 people in the United States suffer an unintentional drowning fatality (non-boating related). *About 10 drowning fatalities per day.* (An additional 347 people died each year experienced a drowning fatality in boating-related incidents).
- About one in five people who suffer a fatal drowning are children 14 years and younger. *For every drowning fatality, another 5 receive emergency department care for nonfatal drowning injuries.*
- Drowning is the leading cause of death among children under the age of 5.
- More than 50% of nonfatal drowning deaths treated in the emergency room require hospitalization or transfer for further care.
- Nonfatal drowning injuries can cause severe brain damage that may result in long-term or life-long disabilities such as memory issues, learning disabilities and permanent loss of basic functions (vegetative state).

Who is at risk?

CDC reports:

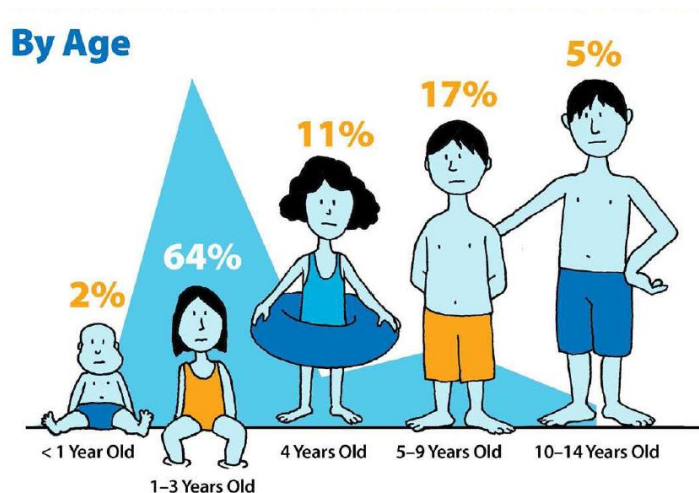
- Nearly 80% of drowning fatalities are **males**.
- **Children ages 1-4** have the highest fatal and nonfatal drowning rate. Most drowning incidents occur in home swimming pools.
- Between 2005 and 2009, fatal unintentional drowning deaths for **African Americans** were significantly higher than that of whites across all ages.

In Broward County:

Data collected from the Medical Examiner's Office from 2009 through 11/2014 reports:

- 41 drowning fatalities among children under the age of 5
- 21 Black, 15 White, 5 Hispanic
- 25 Male, 16 Female
- Incident count highest in Margate (6), Fort Lauderdale (5), Miramar (4)

According to the Consumer Product Safety Commission (Pool Safety), 78% of reported drowning injuries and fatalities involved children younger than 5 years of age.



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 in a drowning situation

Risk factors for individuals of all ages:

- Lack of swimming ability
- Overestimation of swimming competency and endurance by either parents or the swimmers
- Swimming alone or in an area not supervised by a certified lifeguard
- Medical issues, seizure disorders and wandering tendencies
- Fatigue or illness
- Improper or delay or response by bystander(s)
- Alcohol or substance use by the swimmer or the supervising adult
- Lack of knowledge, disregard or misjudgment of the hazard by the swimmer or adult supervisor
- 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

Section
3

Drowning Is Predictable

The most challenging and frustrating issue of a fatal or nonfatal drowning is that in almost every drowning incident the facts tell the same story.

The drowning incident:

- Involves a child between the ages of 1 and 4
- Occurs while in the care of one or both parents
- Occurs when the child was out of sight for less than 5 minutes
- Happens quickly and silently

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.***

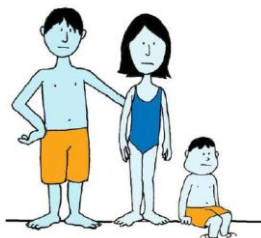
76% of deaths involved children **under age 5**.

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

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

Deaths by gender for children 0–14

Male **67%**
Female **33%**



LOCATION OF DEATHS

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

Above data provided by the U.S. Consumer Product Safety Commission (CPSC)

Drowning incidents tend to follow a predictable pattern by age:

- Infants – bathtubs, buckets and other containers of liquid
- Toddlers – swimming pools
- Grade school through high school – rivers, lakes, canals

Specific factors increase the risk of childhood drowning:

- Developmental stages/age groups; toddlers are at greater risk because:
 - Developmentally, they are very curious, have little or no fear of water, quick and on the run
 - They can awaken from sleep unexpectedly leaving the house quietly without being seen
 - Physically, the head of a toddler weighs more than the rest of their body which lends them to topple over easily, especially when leaning into a toilet, pool, garden pond, etc.
 - They require patience and constant supervision
 - They can drown in as little as 2 inches of water
 - They can climb, open doors and windows
- Policies and legislation – older pools are exempt or grandfathered from complying with current building and safety codes; portable pools do not have mandatory safety requirements
- Minority status - drowning rate for African American children is at least 3 times higher than those of whites (this disparity increases as the child grows older)
- Medical conditions such as autism, seizures and wandering tendencies

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 occurs in as little as 2 minutes.



Most children who drown are out of sight or missing for less than 5 minutes and usually in the presence of 1 or both parents.



Irreversible brain damage occurs in as little as 4 minutes.



Most children die who are submerged for as little as 6-10 minutes.

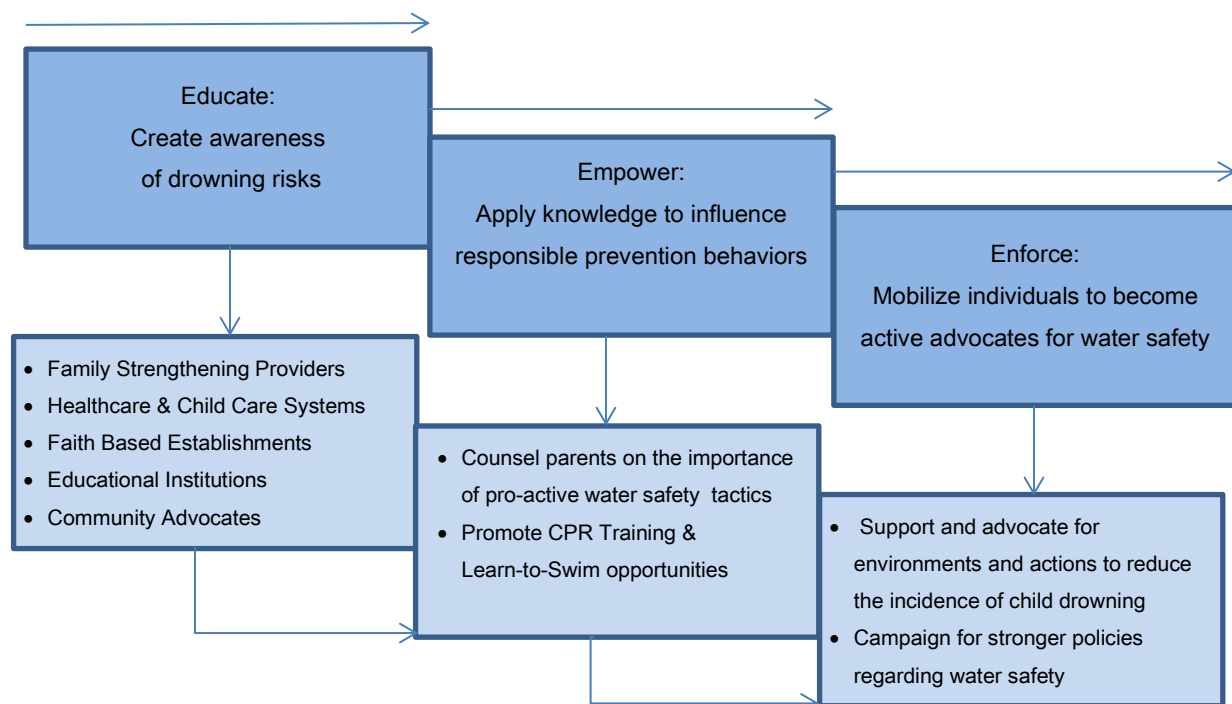
Drowning Is Preventable

Every drowning incident signals the failure of the most effective intervention – prevention.

Children deserve to grow, play and learn in a safe and secure environment.

Unfortunately the lack of knowledge and/or skills of a parent or other care provider can place a child at risk for a life-threatening situation, such as a drowning incident.

Educators, community advocates, healthcare workers and family strengthening providers are often the gatekeepers to access and provide parents with the knowledge to influence safer behaviors and learn skills necessary to protect children from drowning.



Simple Steps Saves Lives

Review with parents and caregivers the next four pages as a knowledge assessment and educational tool.

Risk	Prevention Strategy
Absence of adult supervision	Constant, close & capable adult supervision is the primary drowning prevention/protection strategy
	Children must be supervised always when in and around water. (bathtubs, pools of all types, lakes, canals, and everywhere there is water)
	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
	Supervision is required at all times for infants and toddlers even when water is not nearby, as toddlers can quickly leave a safe, supervised area and find water (developmentally they do not fear water or understand the risk)
	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
	Nothing substitutes for constant and responsible adult supervision, including infant bath safety seats, flotation devices and life jackets
	The ability of a young child to swim is NOT a substitute for adult supervision
	During family or group gatherings, designate a responsible adult to be the Water Watcher; the Water Watcher has a single duty: WATCH THE CHILDREN
	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



Risk	Prevention Strategy
<p>Lack of knowledge, disregard or misjudgment of the hazard</p>	<p>When a child is missing, check areas with water first and urgently; minutes can mean the difference between life and a disability or death</p>
	<p>Know the water hazards in your home, yard and community; when visiting or traveling, scope out any nearby water areas in advance</p>
	<p>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</p>
	<p>Think about drowning - almost every parent who lost a child to a drowning did not think it could happen to their child</p>
	<p>Fear of water by the parent or teaching a child to fear water is <i>not a protective measure</i></p>
	<p>Two inches of water is a drowning hazard for a young child</p>
	<p>If your child has taken swim lessons, do not overestimate their swimming ability, competency or endurance</p>
	<p>In public swimming areas, always swim in an area and during the time a lifeguard is on duty</p>
	<p>Talk regularly with children about water safety, have the following conversations with children:</p> <ol style="list-style-type: none"> 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. 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; <i>emphasize they are to run to get an adult.</i> 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 in water.

Risk	Prevention Strategy
Easy access to water	<p>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:</p> <ul style="list-style-type: none"> • They are consistently in use • Inspected & maintained regularly • All family members know proper use, as well as visitors, babysitters and other care providers • Adjusted when seasonal changes are made <p>Barriers are most often compromised during holiday celebrations when others may not be aware of precautions routinely practiced or during chaotic times such as moving or preparing for a vacation.</p>
	<p>Effective barriers include:</p> <ul style="list-style-type: none"> • Door and window alarms that are continuously in use to alert a child 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
	<p>Immediately after use:</p> <ul style="list-style-type: none"> • Remove toys in the pool and on the deck so children are not tempted to enter the pool area unsupervised; secure gates immediately after leaving the pool area • 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
	<p>Secure pet doors and other openings that a child could crawl through</p>
	<p>Ensure objects and shrubbery near the fence cannot assist a young child to climb into a pool area, or out of the yard</p>
	<p>If you live in a community with shared use of the pool, do not assume that safety features such as secure gates and well maintained fencing are in place. Be aware that others may leave behind toys or other items in and around the pool that would entice a toddler to retrieve, or that the gate is propped open by someone</p>

Risk	Prevention Strategy
<p>An inability to respond properly in a drowning situation</p>	<p>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.</p> <p>Once someone starts to drown, survival is <i>dependent almost exclusively</i> at the scene of the incident on:</p> <ol style="list-style-type: none"> 1. How quickly the person is removed from the water (bystander rescue) 2. How quickly proper CPR and rescue breaths are performed (bystander CPR)
	<p>Learn CPR with rescue breaths before an emergency! Anyone over the age of 10 can learn CPR – make this a family learning experience</p>
	<p>Know the signs of someone in trouble in the water; a drowning victim is:</p> <ul style="list-style-type: none"> • Struggling to breathe and cannot talk or yell for help • Using their arms to press down on the water to push their mouth up for a breath • Not able to wave their arms above the water, and splash to get attention
	<p>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.</p>
	<p>Proper steps to respond to an unconscious drowning person:</p> <ol style="list-style-type: none"> 1. Remove the victim from the water 2. Have someone call 9-1-1* 3. Begin rescue breaths & CPR, continue until advance medical help arrives <p>*If you are alone, yell for help, and immediately administer CPR with rescue breaths for 2 minutes, then call 9-1-1</p> <p><i>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</i></p>

Home Water Safety Checklist

Drowning is the leading cause of fatal and nonfatal injury among children under the age of 5, however, **drowning is almost always preventable with simple steps.** Use this checklist regularly to safeguard your child, and remember



Risk Area	Safety Measure	Present	Absent
Bathroom	Bathroom door kept closed to keep children out		
	Locked bathroom door can be opened from outside		
	Adult supervision is provided to children under the age 6 during bath time		
	Bathtubs are emptied immediately after use		
	Older siblings are not put in charge of a younger child during bath time		
	Toilet is closed when not in use		
	Toilet is equipped with lock		
	Infant bath safety seats are used only to support the adult bathing the child		
Body of water in close proximity to home	In-ground pool		
	Above ground pool		
	Portable pool		
	Spa or hot tub		
	Canal, lake, irrigation ditch		
	Bucket, ice chest or other containers in outside area		
	Ornamental or garden pond		
Use of barriers in place	4-sided fence separating the yard from the all types surrounding water		
	4-sided fence at least 4 foot tall surrounds the pool		
	Fence free of horizontal slats that might allow a child to climb		
	Fence free of gaps of no more than 4 inches		
	Self-closing/self-latching gate(s)		
	Doors leading from the house to outside equipped with alarms		
	Door alarms are at least 54 inches from the floor		
	Pet doors secured to prevent small child from crawling to outside area		
	Climbable items, including shrubs, chairs are away from fence		
Parent Caregiver Information	Close, constant and capable supervision is provided to child/children		
	Parent or caregiver knows CPR with rescue breaths		
	Parent has regular conversations with child about water safety		
	Parent knows how to swim using alternate arms and face in the water		
Swimming Pools	Pool and deck area clear of toys that entice an unsupervised child to seek		
	Steps/ladders to above ground pool, spa, hot tubs removed after each use		
	Lifesaving devices – life rings, rope, flotation devices are in pool area		
	Portable pool emptied immediately after use		
	Pool covers in place and able to support the weight of 485 pounds		
	Water is clear, clean and the bottom of the pool is clearly visible		

Responding to a drowning requires immediate bystander action, act quickly, minutes can save a life:

1. Remove the child from the water immediately
2. Place the child on his /her back
3. Get another adult to call for emergency help, if alone follow step 4 for 2 minutes, then call 911
4. Begin CPR with rescue breathing until the child is revived or emergency help arrives

Definitions & Talking Points

Standard terminology is purposeful to ensure clarity and consistency of drowning prevention education and reporting drowning incidents.

Drowning (WHO, adopted by the 2002 World Congress on Drowning)

Drowning is the process of experiencing respiratory impairment from submersion/immersion in liquid. Drowning outcomes are classified as death, morbidity and no morbidity.

Unintentional vs. accidental drowning;

- Unintentional drowning is the correct term to use in a submersion incident, as it implies that the event occurred without intent of harm.
- Accidental drowning is a term that *should not* be used, as it promotes the idea that injuries cannot be prevented, when in fact, relatively simple strategies can prevent drowning. However, in a drowning incident of possible neglect or abuse on the part of the parent, guardian, or care provider the incident may warrant criminal investigation.

The terms wet, dry, active, passive, silent, secondary drowning should no longer be used as stated by the World Health Organization.

Drowning Injuries and Fatalities can be split into two areas:

- Recreational drowning – incidents that happen while using water for recreational purposes.
- Non-recreational drowning – incidents that happen when a person never intended to be in the water at the time, or, incidents involving unsupervised children accessing water.

Near drowning is an outdated term and *should not* be used to describe a “nonfatal” drowning.

Drowning, as defined by the World Congress on Drowning, has three outcomes:

- No morbidity - no injury
- Morbidity - injury
- Mortality – death

Safe implies that a person is free from risk of harm or danger. When applied to water, no one is safe from a drowning incident. Depending on the person and the environment, the risk may vary in degree from very slight to very severe (Safer³ Water Safety Foundation).

Safer - the letter r in the word Safer sends a message that there are risks, however, proper protective practices may eliminate or minimize those risks. The combination of Safer Water, Safer Kids and Safer Response is a formula to prevent fatal and nonfatal drowning incidents (Safer³ Water Safety Foundation).

Supervision needs to be close, constant, and capable. The adult needs to be responsible, sober and able to perform a basic rescue, initiate CPR with rescue breaths and call for help.

- ***Inappropriate supervision*** is the correct term to use when referring to a lapse or absence of adult supervision of a child. In some situations the decisions or behaviors of the adult supervisor place a child that is in his or her care at significant risk for physical, emotional or psychological harm and the incident needs to be reported and investigated by child protective services.

Touch Supervision, an adult supervisor within arm's length of any child who is a weak or non-swimmer. The attention of the supervising adult is constantly focused on the child, and the adult is not engaging in other distracting activities (*on the phone, socializing, and reading*). *Touch supervision is also required with individuals with medical issues such as seizures or wandering tendencies.*

Water Competency, as defined by the American Red Cross Scientific Advisory Council, establishes a general definition of water competency that identifies specific skills and includes the concept that water competency depends on the aquatic environment and environmental conditions.

Water Competency must include:

1. Entry – with total submersion
2. Recovery to the surface and remain there for at least one minute (floating or treading)
3. Orientation – position to be able to turn 360 degrees and orient to the exit
4. Propulsion – level off and move on front and/or on back position for at least 25 yards
5. Exit from the water

Water competency is influenced by conditions of the aquatic environment (water temperature, movement, depth, clothing, distance, etc.) into which the person may be introduced.

Demonstration of skills in one aquatic environment may not transfer to another.

Water Watcher, a designated adult supervisor who maintains constant watch on children in and around water. A water watcher does not socialize or engage in distracting activities such as cell phone use, nor consumes adult beverages prior to or during water watcher duty. Ideally a water watcher is trained in CPR, First Aid and basic rescue techniques. During lengthy activities, multiple water watchers should be recruited and scheduled. Multiple

water watchers may be necessary for children who are poor or non-swimmers, or if a swimmer has a health condition such as epilepsy or a behavior tendency such as wandering.

T

alking points ensure consistent messaging on topics related to water safety and drowning prevention. Below are frequent questions with appropriate responses.

- **Drowning incidents are NOT accidental; drowning is an unintentional injury or death.**

Referring to a drowning as an accident implies that the incident could not have been prevented.

- **Drowning incidents are Preventable.**

- *Constant, vigilant adult supervision of young children is critical around any type of water in and outside of the home, and during water play.*
- *Use of barriers, alarms, locks and 4-sided fencing is essential to prevent unsupervised access to pools and other water outside of the home.*

- **Drowning is Predictable**

- *The highest rate of fatal and nonfatal drowning is among children ages 1 to 4.*
- *Most drowning incidents occur in a residential pool.*
- *At least one parent or family member is nearby when a child wanders away unnoticed.*

- **Immediate bystander CPR can make the difference between life and death.**

Delay of removing the child from the water and beginning bystander CPR can negatively impact the outcome of a drowning. Irreversible brain damage occurs in as little as 4 minutes.

Resources

Consumer Product Safety Commission

<http://www.cpsc.gov/en/Safety-Education/Safety-Guides/Sports-Fitness-and-Recreation/Pools-and-Spas/>

CPR Training

American Heart Association

www.heart.org

American Red Cross

<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

Broward County Drowning Prevention Task Force

954.467.4700 x 5807

Kimbery.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>

Florida Department of Children and Families

<http://www.myflfamilies.com/>

Florida Department of Health, Broward

Drowning Prevention Training for Family Strengthening Providers and Community-Based Organizations staff, civic organizations and groups, and Water Smart Broward Initiative

954.467.4700 x 5807

Kimberly.Burgess@flhealth.gov

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

<http://www.poolsafely.gov/>

Swim Lessons

Swim Central

954.357.SWIM (7946) Broward County Resource and Referral Service for available swim programs

<http://www.broward.org/Parks/ProgramsClasses/Pages/SwimCentral.aspx>