Swimming Pool and Spa Laws and Safety
4 CE Hours

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Learning objectives

- Explain the factors that put children age 1 to 5 at the greatest risk for submersion-related injuries and drowning in swimming pools.
- Name the federal and state laws that apply most directly to swimming pools in Florida.
- List a community association’s legal obligations under the Virginia Graeme Baker Pool and Spa Safety Act (P&SS).
- Explain why some pool and spa drain covers were recalled in 2011 and the procedures for replacing them.
- Differentiate between community association types and areas that are subject to the 2010 Americans with Disabilities Act (ADA) and those that are not covered.
- Determine whether a specific community association pool is a public or private facility according to each of the following: ADA, P&SS Act, FHA, and Chapter 64E-9.
- Discuss the responsibilities of the Florida Department of Health, county health departments, and local building departments, respectively, as delegated by amendments to Chapter 514 FS in 2011 and 2012.
- Explain the application procedure for obtaining a valid swimming pool or spa operating permit, how often renewal is required, and the penalties for operating without one.
- List the fence and barrier requirements for community association pool and spa facilities required by Chapter 64E-9.
- Explain the function of a monthly swimming pool report and requirements for submitting it to the local county health department.
- Explain the purpose of the Florida Energy Law and how it relates to community association pools and spas.
- Explain the need for a “multi-layered” protection system at any facility with a swimming pool or spa, and provide examples of five commonly used devices or strategies that can be used together.

Introduction

Community association swimming pools and spas are wonderful places to exercise, play, and relax, but they can also be terribly dangerous, particularly for non-swimmers, unsupervised children, or frail adults. In Florida, the need for increased safety is particularly acute, because Florida typically leads the nation in drowning deaths among young children, with the majority of deaths under the age of 5 occurring in swimming pools and spas.1

This course contains the following subject matter:

- Why increased safety measures are needed for pools and spas.
- Federal and state requirements for community association swimming pools and spas.
- Determining which pool and spa safety regulations apply to your community association.
- Behaviors and strategies for preventing drowning and submersion injuries.
- Links to further resources or assistance.

Scope of the problem2

Each year, hundreds of children drown, and thousands come close to death from submersion in residential swimming pools and spas. In Florida, where drowning is the leading cause of death among children ages 1 to 5, more children die from drowning than in any other state. According to the Florida Department of Health (DOH, or department), which researched...
While older children are also at risk, it is not of the same magnitude and typically declines as the child grows older; a recent report analyzing death and injury statistics concluded that children under the age of 5 are two times more likely than children between the ages of 5 and 9 to be swimming pool drowning victims, and three times more likely than children age 10 and older.4

While the majority of swimming pool drowning accidents are associated with children, individuals in certain at-risk populations, including those who are medicated, frail, elderly, unwell, in recuperation, and some people with disabilities, are also at increased risk of drowning or near-drowning injuries. Drowning is a significant cause of death among senior citizens in Florida. Those with visual disabilities or conditions that have the potential to affect balance or coordination, such as a heart condition, diabetes, or dementia, are especially vulnerable to the risk of injury or drowning without appropriate supervision.5

A study of Florida drowning deaths for the five-year period 1992-1997, provided the following data:6

- A total of 448 individuals age 65 and older were victims of drowning in the state.
- An estimated 195 of these individuals had medical problems, such as Alzheimer’s disease, confusion, balance or vision impairment, a heart problem, or diabetes.

Of special concern to swimming pool operators:

- A total of 145 drowned in swimming pools.
- In cases where it was documented, more than half (52 percent) of these older Floridians who drowned fell into the swimming pool when others did not expect them to be in or near the water.

The chart below shows the relationship between age, sex, and fatality rates from drowning for Florida residents. The age range of 1-4 shows the highest drowning rates for both sexes. After that, the rate drops sharply, showing the lowest fatality rate among children ages 5-14. At every age range, males (indicated by the top line of the graph) are consistently more likely than females (bottom line of the graph) to die from drowning.

The Consumer Product Safety Commission, which collects and studies data on fatal drowning and near-fatal submersions, conducted an in-depth examination of incidents in the states of California, Arizona and Florida. These states were chosen because of their larger numbers of swimming pools and the fact they are used throughout the year.

Here are some of the most significant and disturbing findings from that study:7

- Most of the victims were under the supervision of one or both parents when the swimming pool accident occurred.
- Nearly half of the child victims were in the home shortly before the pool accident occurred, while an additional 23 percent of the accident victims found drowned or submerged were last seen outdoors but outside the vicinity of the pool, meaning more than two-thirds of the children were not expected to be at or in the pool at that time.
- Seventy-seven percent of the swimming pool accident victims had been missing for five minutes or less when discovered drowned or submerged in the pool. A tragic characteristic of drowning deaths is how quickly and quietly they occur. By the time a child’s absence is noted, the child may already have drowned. Pools are particularly hazardous to toddlers because they are curious and impulsive, with little ability to sense danger. They also can move very quickly.
- Children drown silently. Splashing and screaming are rare, so caregivers are unaware the child is in trouble.
- It is possible for a young child to drown in a very small amount of water. Some drownings involve less than two inches of liquid, which is unlikely to be perceived as a threat to children by adults.
- Sixty-five percent of the accidents occurred in a pool owned by the victim’s immediate family, and 33 percent of the accidents occurred in pools owned by relatives or friends. Fewer than 2 percent of the pool accidents were a result of children trespassing on property where they were not allowed or did not live.
- The overwhelming majority of non-fatal submersion injuries occur in pools.8 For every child who drowns, four suffer brain injury from near-drowning incidents, with an unknown number of hospitalizations from these injuries resulting in permanent disability. Advances in medical technology are allowing more near-drowning victims to survive, but many are surviving with serious, permanent neurological damage.

In sum, the data demonstrate that children who become drowning victims often had adults present to supervise them, but the adults were not physically close to the child and did not have the child in their sights. Because pool submersions happen quickly and quietly, with most children who drown out of view for less than five minutes, even a short break from supervising children can be deadly.

Similarly, a large percentage of drowning accidents among the elderly occur when caregivers may be near the victim but do not notice when he or she falls in the water or slips under the water’s surface.

While these statistics are tragic, they suggested a strong possibility that deaths or injuries caused by submersion could be reduced by establishing stronger pool and spa safety requirements. Over the past decade, legislative changes to federal, state, and local laws and codes have established regulations addressing and minimizing pool and spa risks.
associated with faulty parts and equipment, lack of appropriate barriers, lack of public awareness of potential pool and spa risks, and educational programs to teach safety skills and strategies. These laws also have implemented significant changes in construction and sanitation standards, technician qualifications, and accessibility requirements.

**Regulations governing swimming pool and spa safety**

Regulations governing swimming pool and spa safety can be found in many areas of federal, state, and local laws, rules, and codes. The information most relevant to community associations is primarily contained in the following documents:

- **Federal law:**
  - Americans with Disabilities Act (ADA), enacted in 1990, and amended by the 2010 ADA.
  - Fair Housing Act (FHA), as amended in 1988.
  - U.S. Code Title 15: Chapter 106 – Pool And Spa Safety.
- **Florida state law:**
  - Chapter 514 Florida Statutes (FS): Public Swimming and Bathing Facilities.
  - Chapter 553 FS: Part IV, Florida Building Code.
  - Chapter 64E-21.001 FAC – Drowning Prevention Education/Public Information Publication.
  - Chapter 4 Florida Building Code (FBC), Section 424, Swimming Pools and Bathing Places, including the Florida Energy Law, enacted in 2008.

**Which rules apply?**

Not all laws on swimming pools and spas are consistently applied to all types of community associations, but recent legislative updates show a trend toward equal treatment of all entities under the community association umbrella. This chapter will review laws, rules, and codes that affect community associations, but it is not exhaustive, and laws are regularly revised. If there are any questions about whether your association pool or spa is compliant with current law, consult an appropriately trained expert.

**PART I: FEDERAL SWIMMING POOL AND SPA REGULATIONS**

The Virginia Graeme Baker Pool and Spa Safety Act⁹ (P&SS Act)

The Virginia Graeme Baker Pool and Spa Safety Act (P&SS Act) became effective in December 2008. It was created to:

- Enhance the safety of public and private pools and spas.
- Encourage the use of multiple layers of protection.
- Reduce the risk of children drowning in pools and spas.
- Reduce the number of suction entrapment incidents, injuries, and deaths.
- Educate the public about the importance of constant supervision of children in and around water.

The Virginia Graeme Baker Pool and Spa Safety Act (P&SS Act) takes its name from Virginia Graeme Baker (known as “Graeme”), a young girl who drowned in June 2002. Graeme became entrapped by a hot tub drain and was unable to pull herself free from it because of the powerful suction. Drain entrapments typically result when a swimmer’s body, hair, limbs, or clothing becomes entangled in a faulty or flat drain or grate. Even a capable swimmer can be trapped; 7-year-old Graeme was a member of her community swimming and diving team, and had been able to swim without assistance since she was 3 years old. Efforts by Graeme’s mother to pull her from the drain were unsuccessful. The two men who eventually freed Graeme from the spa drain had to break the drain cover to do so. Graeme died from drowning, but the real cause of her death was suction entrapment because of a faulty drain cover. After her tragic death, her mother, Nancy Baker, became a strong advocate for pool and spa safety, successfully lobbying Congress to require anti-entrapment drain covers and other safety devices.

According to the act, virtually any pool operated by a community association (including almost all Florida pools and spas in condominiums, homeowners’ associations, health clubs, and hotels) must be fitted with new safety-rated domed drain covers. While pools serving between two and five residences and those in condominium complexes with fewer than 32 units were previously exempt under state rules, the P&SS Act brought all such facilities under federal regulations, allowing few, if any, exemptions from the law.
Public pools and spas

The following types of pools and spas are defined as “public” by the act, and covered by the law’s public pool and spa regulations:

- All pools and spas generally open to the public.
- Pools open only to residents of single apartment buildings, condominium complexes, or multifamily residential areas.
- Pools and spas open to guests of a hotel or resort.
- Government pool facilities.

The P&SS Act requires public pool owners and operators to:

- Replace the main drain/grate cover with a code-compliant cover meeting the current standards established by the American Society of Mechanical Engineers and the American National Standards Institute (ASME/ANSI).
- Modify suction drainage systems to minimize the likelihood of becoming stuck or trapped in the drain. Some of the additional entrapment prevention options

In addition to having a drain cover or another anti-entrapment device that complies with ASME/ANSI standards, the P&SS Act requires pools and spas using a single main drain, other than an unblockable drain, to add one or more of the following options:

- **Safety vacuum release system (SVRS):** A safety vacuum release system stops operation of the pump, reverses the circulation flow, and provides a vacuum release at a suction outlet upon detecting a blockage.
- **Suction-limiting vent system:** A suction-limiting vent system with a tamper-resistant atmospheric opening, also called an atmospheric vent, which has a pipe on the suction side of the circulation system on one end and is open to the atmosphere on the opposite end. When a blockage occurs at the main drain, air introduced into the suction line causes the pump to relieve suction forces at the main drain.
- **Gravity drainage system:** A gravity drainage system uses a collector tank with a separate water storage vessel that feeds water to the pool circulation pump. Atmospheric pressure, gravity, and displacement of water by bathers move water from the pool to the collector, removing the need for direct suction at the pool. This system is also known as a reservoir, surge tank, or surge pit.
- **Automatic pump shut-off system:** An automatic pump shut-off system senses a drain blockage and automatically shuts down the pump system.
- **Drain disablement:** To qualify as drain disablement, the drain/outlet must be physically removed from the system by filling the sump with concrete, cutting and capping the piping in the equipment room, or re-plumbing the section line to create a return line and reverse flow. This is the only option that eliminates rather than mitigates this hazard.
- **Other systems:** Any other system determined by the commission to be equally effective as or better than the safety systems listed here.

Consumer Product Safety Commission (CPSC) enforcement authority

The P&SS Act also strengthened the Consumer Product Safety Commission’s (CPSC) civil and criminal authority, giving the agency the power to shut down pools or spas that are not compliant with the law. State health departments and attorney general offices will support the CPSC in enforcing the act by assisting with compliance checks or other participation. Health inspectors, who conduct public pool inspections twice each year, will examine drains and covers as part of their safety review.

Regulators will initially focus their attention on wading pools/ kiddie pools and spas. Pools designed specifically for young children, such as shallow wading/kiddie pools, that have easily accessible suction outlets; in-ground spas that have flat suction outlet grates; and single suction outlet systems pose the greatest danger of entrapment and evisceration to young children, who are at the greatest risk of entrapment accidents.

2011 Revocation of rule on unblockable drains

In 2011, the CPSC clarified the meaning of an “unblockable drain,” defining it as “a drain of any size and shape that a human body cannot sufficiently block to create a suction entrapment hazard,” consistent with wording
in the P&SS Act. This ruling revoked the previous year’s interpretation of the law, which permitted the use of a drain cover meeting certain specifications to be attached to a drain for the purpose of converting a blockable drain into an unblockable drain. The decision affirmed that a blockable drain cannot be made unblockable by use of a cover alone.

The 2011 decision concluded:
- An unblockable suction outlet cover can no longer be used to convert a blockable suction outlet to an unblockable suction outlet.
- A single suction outlet of a blockable size must be equipped with a secondary anti-entrapment device or system.\(^\text{10}\)

The following are not affected by this decision:
- Pools and spas that use a single, unblockable cover over an equally large suction outlet.
- Pools and spas with multiple suction outlets per pump, with covers or grates at least three feet apart, measured center to center.
- Smaller suction outlet covers or grates that are not labeled or sold as unblockable.

### Drain cover recall

In early summer 2011, many pool and spa owners were obligated to find replacement drain covers in a hurry before pools could be opened for the season because of a massive drain cover recall, initially involving eight major manufacturers of pool and in-ground spa drain covers. The U.S. Consumer Product Safety Commission in cooperation with those companies issued a voluntary recall of the products and issued a statement warning consumers to stop using the recalled products immediately because they posed a possible entrapment hazard to swimmers. The recalled items were associated with increased safety risks, because the labeled flow rate was incorrect and potentially unable to handle the flow of water through the cover.

By March 2012, the CPSC had recalled more than 1 million incorrectly rated pool and spa drain covers.\(^\text{11}\) All drain covers installed after December 2008 in kiddie pools, in-ground spas, and swimming pools with a single drain are subject to the recall. Swimming pools [as opposed to built-in wading (kiddie) pools or in-ground spas] that have more than one drain per pump or a gravity drainage system are not affected by this recall. Pool owners and operators who have one of the recalled pool or spa drain covers should have the main drain or grate cover replaced with one that is code compliant, meeting the standards established by the American Society of Mechanical Engineers (ASME).

If affected by the recall, contact the manufacturer to receive a replacement or retrofit, depending on the part make and model. A qualified professional must perform all replacements or retrofits of a drain cover. Drain covers should never be removed unless a replacement cover and qualified professional ready to install it are immediately available.

Covers were manufactured in the United States and China and distributed to many different independent professional pool and spa suppliers, builders, and installers, but were not sold directly to consumers.\(^\text{12}\) Because the faulty covers pose a potential entrapment risk to pool and spa users, resale and attempted resale of the covers is prohibited.

The Association of Pool and Spa Professionals (APSP) established a drain cover manufacturers’ recall webpage at http://www.apsp.org/safety/content.cfm?ItemNumber=1000, with answers to frequently asked questions and links to information and assistance specific to consumers, builders, installers, owners, operators, and service companies, to help them identify the defective covers, provide remedies, and present how-to information. A list of the defective cover manufacturers can be found at the website.

### 2010 ADA accessible pool requirements

The Americans with Disabilities Act (ADA) of 1990 was revised in 2010 (2010 ADA), creating new standards and minimum requirements for swimming pool, wading pool, and spa (pool) accessibility. All newly constructed and altered pools must meet these requirements. Public accommodations must bring existing pools into compliance with the 2010 standards to the extent that it is readily achievable to do so.

The 2010 standards establish two categories of pools: large pools with more than 300 linear feet of pool wall, and smaller pools with less than 300 linear feet of wall. Large pools must have two accessible means of entry, with at least one being a pool lift or sloped entry; smaller pools are only required to have one accessible means of entry, provided it is either a pool lift or a sloped entry.
There are a limited number of exceptions to the requirements. One applies to multiple spas provided in a cluster. A second applies to wave pools, lazy rivers, sand bottom pools, and other pools that have only one point of entry. All new construction of pool facilities built by state and local governments, public accommodations, and commercial facilities must be accessible to and usable by persons with disabilities.

Title III readily achievable barrier removal

Title III of the ADA requires that places of public accommodation (e.g., hotels, resorts, swim clubs, and sites of events open to the public) remove physical barriers in existing pools to the extent that it is readily achievable to do so (i.e., easily accomplishable and able to be carried out without much difficulty or expense). Removing barriers in existing pools may involve installation of a fixed pool lift with independent operation by the user or other accessible means of entry that comply with the 2010 ADA standards – again, to the extent it is “readily achievable.”

Determining what is readily achievable will depend on circumstances and timing, and will vary from business to business. In making a determination, public accommodations should consider the following factors:

- The nature and cost of the action.
- Overall resources of the site or sites involved.
- The geographic separateness and relationship of the site to any parent corporation or entity.
- The overall resources of any parent corporation or entity, if applicable.
- The type of operation or operations of any parent corporation or entity, if applicable.

Pool alterations must meet 2010 ADA standards to the maximum extent feasible. An alteration is a physical change to a swimming pool affecting or potentially affecting the usability of the pool. Changes to the mechanical and electrical systems, such as filtration and chlorination systems, are not alterations.

Entities must ensure that an alteration does not decrease accessibility below the requirements for new construction. For example, if a hotel installs a fixed pool lift powered by water pressure, it must ensure that the hose connecting to the lift does not create a barrier across the accessible route to the pool.

Application to community association pools

According to “Accessibility Requirements for Existing Swimming Pools at Hotels and Other Public Accommodation” as published by the U.S. Department of Justice and Section 553.503, Florida Statutes, community association swimming pools are not subject to the ADA accessibility requirements or the Accessibility Code if any of the following apply:

- They are part of common use areas of apartment buildings and developments intended solely for the use of residents and their guests (and not otherwise available to the general public).
- They are not the recipients of government assistance or sponsorship.
- They are not “public swimming pools” according to Section 424.1, which defines a public pool as “a conventional pool, spa-type pool, wading pool, special purpose pool, or water recreation attraction, to which admission may be gained with or without payment of a fee and includes, but is not limited to, pools operated by or serving camps, churches, cities, counties, day care centers, group home facilities for eight or more clients, health spas, institutions, parks, state agencies, schools, subdivisions, or the cooperative living-type projects of five or more living units, such as apartments, boardinghouses, hotels, mobile home parks, motels, recreational vehicle parks, and townhouses. The term does not include a swimming pool located on the grounds of a private residence.”

The new ADA pool accessibility requirements do not apply to most community associations because the pools and amenities at typical condominiums and homeowners associations are strictly for the use of the residents and their guests and are not open to the public. However, community associations that operate as a resort/hotel condominium and are therefore open to the public will be required to meet the new ADA pool accessibility requirements. Communities hosting swimming competitions, water aerobics, water exercise or physical therapy sessions may be required to comply. If there is any ambiguity, the association should consult an attorney to determine whether the association pool or spa is required to meet new ADA accessibility requirements.

In general:

- If a community association allows nonmembers of the association to use its pool in exchange for some form of compensation, the pool is likely to qualify as a public accommodation and should have been compliant with the ADA standards for accessible entry and exits by January 21, 2013. For technical assistance in ensuring compliance of common areas, see the ADA Title III Technical Assistance Manual at http://www.ada.gov/taman3.html.

Example 1: A private residential apartment complex includes a swimming pool for use by apartment.
tenants and their guests. The complex also sells pool “memberships” generally to the public. The pool qualifies as a place of public accommodation.

- **Example 2:** A residential condominium association maintains a long-standing policy of restricting use of its swimming pool to owners, residents, and their guests. Consistent with that policy, it refuses to rent the pool to local businesses and community organizations as a meeting place for educational seminars. The pool is not a place of public accommodation.

- **Example 3:** A swimming pool/club located in a residential community is made available to the public for rental or an event open to the public. The entire swimming pool/club area qualifies as a place of public accommodation. Any community associations that allow the use or rental of their pool for events and activities that are open to the public must provide accessible means of entry and exit from pools.

Private clubs may or may not be subject to ADA regulation: If a private club limits use of its facilities strictly to members and their guests, then the club would not be subject to ADA regulations. However, if that club hosts swimming competitions or any other type of activity that opens the pool to nonmembers, the club would be required to follow ADA regulations for the pool. The determination of what constitutes a private club is based on its control of operations, membership requirements, and associated fees and expenses. Operations that have limited or no membership requirements and minimal charges or dues are less likely to fall under the private club exclusion.

Accessible pool features must be maintained in operable, working condition so that persons with disabilities have access to the pool whenever the pool is open to others. For example, a portable pool lift may be stored when the pool is closed but it must be at poolside and fully operational during all open pool hours.

### 2013 clarification of 2010 ADA requirements

In April 2013, the Department of Justice (DOJ) issued another clarification of 2010 ADA requirements for compliance of portable pool lifts to meet barrier removal obligations. Generally, lifts purchased after March 15, 2012, must be of the fixed type if it is readily achievable to do so. However, if a facility purchased a non-fixed lift before March 15, 2012, that otherwise complies with the requirements in the 2010 standards for pool lifts (such as seat size, etc.), it may be used as long as it is kept in position for use at the pool and operational during all times that the pool is open to guests. If these conditions are not met, the DOJ can prosecute the violation.

Ongoing staff training is essential to ensure that accessible equipment (particularly pool lifts) and pool facilities are available whenever a pool is open. Staff training should include instruction on what accessible features are available, how to operate and maintain them, and any necessary safety considerations.

### FHA accessible pool requirements

Although residential facilities are not required to comply with ADA regulations for swimming pools, they must comply with the Fair Housing Act. Under this legislation, privately owned residential communities must provide a barrier-free pathway up to the edge of a pool. In addition, they cannot prevent residents from using their own apparatus to gain access to the pool, providing it does not provide a hazard for other residents. For example, if a resident has a portable pool lift and keeps it in storage when not in use, the facility cannot prevent that resident from using the lift to gain access to the pool.

For technical assistance on the guidelines for swimming pools, wading pools, and spas, download the Access Board Accessibility Guidelines at: [http://www.access-board.gov/recreation/guides/pools.htm](http://www.access-board.gov/recreation/guides/pools.htm).
U.S. Code provisions: Swimming pools

Title 15 of the United States Code, Chapter 106, Pool and Spa Safety, required states to establish minimum pool safety standards consistent with the P&SS Act and provide enforcing authority; states in compliance are eligible for a state grant specified by Section 8004 of Chapter 106.

PART II: FLORIDA STATE SWIMMING POOL AND SPA REGULATIONS

Chapter 514 Florida Statutes: Public Swimming and Bathing Facilities

Chapter 514 F.S, Public Swimming and Bathing Facilities, created in 1985, is the primary law regulating public pools and spas in Florida. It establishes enforcement authority for pool and spa regulations, sanitation and safety standards, and provides definitions and rationale for distinguishing public from residential facilities. In most cases, there is consistency in terminology and standards among state, federal, and local safety regulations; in each case, however, public and residential pools and spas are subject to different standards. The distinctions between public and residential facilities established in Chapter 514 FS determine which laws apply to a particular association’s pool or spa, and, more specifically, that association’s legal obligations.

Chapter 514 FS defines the majority of community association pools as “public pools,” providing the following definitions in Section 514.011 F.S.:

- A “public swimming pool” or “public pool” is:
  “A conventional pool, spa-type pool, wading pool, special purpose pool, or water recreation attraction, to which admission may be gained with or without payment of a fee and includes, but is not limited to, pools operated by or serving camps, churches, cities, counties, day care centers, group home facilities for eight or more clients, health spas, institutions, parks, state agencies, schools, subdivisions, or the cooperative living-type projects of five or more living units, such as apartments, boardinghouses, hotels, mobile home parks, motels, recreational vehicle parks, and townhouses.”

- A “private pool” is a facility used only by an individual, family, or members of a living unit and their guests, which “does not serve any type of cooperative housing or joint tenancy of five or more living units.”

In 2009, Chapter 514 FS was extensively revised, with significant changes to the “exemptions” section, which was separated from the “variance” section to stand alone, and provided new requirements for community association exemption from the law. Before that year, all community associations except homeowner associations were eligible to apply for exemptions from certain safety requirements listed in the chapter. Once approved, exemptions did not expire. Section 514.0115 narrowed exemption qualifications, and provides that exempt pools reapply to renew their status every two years.

Section 514.0115 exempts the following types of pools and spas:
- Private pools used for swimming instruction.
- Any pool serving certain qualifying residential childcare agencies.
- Water therapy facilities connected with hospitals, medical doctors’ offices, and licensed physical therapy establishments.

It also exempts:
- Pools serving 32 or fewer condominium or cooperative units that are not operated as a public lodging establishment.
- Pools serving condominium or cooperative associations of more than 32 units and whose governing documents completely prohibit rentals of fewer than 60 days (or a sublease, in the case of cooperatives). However:
  - The condominium or cooperative owner or association is still required to file applications with the department, obtain construction plan approval, and secure an initial operating permit through the Department of Health (DOH).
  - These facilities are still subject to inspection by the DOH annually or if requested by a unit owner to determine compliance with department rules on water quality and lifesaving equipment. The department does require compliance with rules on lifeguards.

No matter what their size (smaller or larger than 32 units), all condominium and cooperative associations must comply with water quality standards and maintain requisite lifesaving equipment.
Recent amendments

In 2011, Section 514.031 FS was created to address discrepancies between federal and state law, making Florida state standards consistent with the federal P&SS Act and calling for additional safety features, including anti-entrapment systems and regulations addressing single-drain pools. Federal law required the installation of an anti-entrapment device or system for all public pools by December 2008. Association spas were required to be retrofitted for gravity drainage according to Department of Health (DOH) regulation by July 1, 2011.

In 2012, Chapter 514 was substantially amended to meet or exceed federal requirements of the P&SS Act. Section 514.0315 required many of the safety features for public swimming pools and spas previously required by federal law, but also added a provision that the individual installing the compliant anti-entrapment system or device must be a licensed contractor. Revisions in 2012 also amended areas of the law on enforcement authority, and responsibility for sanitation, safety, permits, and construction plan approval, among other areas.

A number of revisions to pool service licensing will become effective in October 2014. The law revises a number of definitions, categorizes pool cleaning and maintenance subject to pool licensing, and removes the one-year work experience requirement needed to obtain the pool service license. The law is intended to eliminate a barrier to pool service licensing and ensure all individuals working with pools and spas have the necessary education and licensure. The amendment also exempts some direct employees of a facility, such as a hotel, from the pool service licensing requirement.

One of the most significant changes in the law, currently in effect, was a shift in responsibilities among agencies responsible for swimming pool and spa safety. Sections 514.021 FS and 514.025 FS, Department Authorization and Responsibilities, and Assignment of Authority to County Health Departments, respectively, established the following roles and responsibilities for the Department of Health (DOH, or department), county health departments (CHD), and local building departments (LBD):

- **DOH responsibilities:**
  - The Department of Health is authorized to set sanitation and safety standards for public swimming pools and public bathing places, and may take enforcement measures against public swimming pools that present a significant risk to public health by failing to meet sanitation and safety standards.
  - The DOH’s authority is restricted to sanitation and safety standards limited to the following areas: source of pool and spa water; its microbiological, chemical, and physical qualities; methods of water purification; treatment and disinfection; and lifesaving equipment and behaviors.
  - The DOH has no authority over the construction, erection, or demolition of public swimming pools. This is the function of the Florida Building Commission (FBC) through adoption and maintenance of the Florida Building Code.

- **CHD responsibilities:**
  - County health departments (CHDs) are responsible for routine surveillance of water quality in all public swimming pools and bathing places, including routine inspections, complaint investigations, and enforcement procedures.
  - CHDs staffed with qualified engineering personnel will review applications and plans for the construction, development, or modification of public swimming pools or bathing places.
  - CHDs are responsible for conducting inspections and issuing all permits.

- **LBD responsibilities:**
  - Rules governing swimming pool construction are now the domain of Florida’s county and city building departments (local building departments, or LBDs), who bear the responsibility of ensuring compliance with Chapter 4, Section 424 of the Florida Building Code (FBC), and have the sole authority to review public pool applications and engineering plans and issue approval if the planned construction is FBC-compliant. Once approved, the building department issues a construction permit and conducts necessary construction inspections, per Chapter 553, FS. Upon completion and successful final inspection, the LBD provides proof of approval to the CHD.

Checklist for pool plan reviews

The following checklist, current as of May 2012, is used by the Department of Health (DOH) and Building Association Officials of Florida (BOAF) to determine whether spa plans are compliant with FBC Section 424.14. To see the public pool and wading pool checklists, which are too lengthy to include here, see FBC checklists at www.myfloridaeh.com/water/swim/index.html.

Note that Chapter 64E-9 FAC requirements are included in this checklist because they are considered critical to public health, so these items are examined by the county health department at the first operating permit inspection after the building official’s approval of the construction.
### Florida Building Code or Florida Administrative Code

<table>
<thead>
<tr>
<th>Section</th>
<th>Requirement</th>
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<tbody>
<tr>
<td>424.1.8.2</td>
<td>Color, pattern or finish of the interior does not obscure existence of objects or surfaces.</td>
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<td>424.1.8.3</td>
<td>Minimum water depth is 2½ feet, and maximum water depth is 4 feet (except swim spas may have a maximum 5-foot depth).</td>
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<tr>
<td>424.1.8.3</td>
<td>Spas over 200 square feet of water surface area have depth markers.</td>
</tr>
<tr>
<td>424.1.8.4</td>
<td>Steps or ladders are provided (one set for each 75 feet, or major fraction thereof, of pool perimeter).</td>
</tr>
<tr>
<td>424.1.8.4</td>
<td>Steps for spas with more than 200 square feet of water surface area comply with Section 424.1.2.5 for pools: 1. Step treads have a minimum width of 10 inches for a minimum continuous tread length of 12 inches. 2. Step riser heights do not exceed 12 inches.</td>
</tr>
<tr>
<td>424.1.8.4</td>
<td>Intermediate treads and risers between the top and bottom treads and risers are uniform in height and width.</td>
</tr>
<tr>
<td>424.1.8.4</td>
<td>Steps have contrasting markings on the leading edges of the intersections of the treads and risers.</td>
</tr>
<tr>
<td>424.1.8.4</td>
<td>Submerged benches have contrasting markings on the leading edges.</td>
</tr>
<tr>
<td>424.1.8.4.1</td>
<td>Handrails are provided for all steps and are anchored in the bottom step and in the deck.</td>
</tr>
<tr>
<td>424.1.8.4.2</td>
<td>Where figure 4 handrails are used, they are anchored in the deck, and extend laterally to any point above the bottom step.</td>
</tr>
<tr>
<td>424.1.8.4.2</td>
<td>Figure 4 handrails are located to provide maximum access to the steps, and extend at least 28 inches above the deck.</td>
</tr>
<tr>
<td>424.1.8.5</td>
<td>Spa decks have a minimum 4 foot wide unobstructed width around the entire pool perimeter except: spa pools less than 120 square feet of water surface may have a min. 4-feet-wide unobstructed deck around a minimum of 50 percent of the pool perimeter. If 120 square feet or greater, only 10 percent may by obstructed.</td>
</tr>
<tr>
<td>424.1.8.5</td>
<td>Decks less than 4 feet wide have barriers to prevent their use.</td>
</tr>
<tr>
<td>424.1.8.5</td>
<td>Deck is not more than 10 inches below the top of the pool.</td>
</tr>
<tr>
<td>424.1.8.6.1</td>
<td>Return lines of spa therapy or jet systems are independent of recirculation filtration and heating systems.</td>
</tr>
<tr>
<td>424.1.8.6.2</td>
<td>Therapy or jet pumps take suction from a collector tank (collector tank size to take this flow gallonage into account).</td>
</tr>
<tr>
<td>424.1.8.7</td>
<td>Spa pools with less than 20 feet of perimeter have a minimum of two equally spaced adjustable inlets.</td>
</tr>
<tr>
<td>424.1.8.8</td>
<td>Spa pool has a minimum filtration turnover of one every 30 minutes.</td>
</tr>
<tr>
<td>424.1.8.8</td>
<td>Piping, fittings and hydraulic requirements comply with Section 424.1.6.5</td>
</tr>
<tr>
<td>424.1.8.8</td>
<td>All recirculation lines to and from the pool are individually valved with proportional type control valves.</td>
</tr>
<tr>
<td>424.1.8.9</td>
<td>Spa pool with more than 200 square feet of water surface area has provision for vacuuming.</td>
</tr>
<tr>
<td>64E-9.008(7)</td>
<td>General pool rules sign required to be posted.</td>
</tr>
<tr>
<td>64E-9.010(6)(c)</td>
<td>Cold plunge spa has chiller. (therapy/jet system not required)</td>
</tr>
<tr>
<td>64E-9.010(6)(d)</td>
<td>Heated system provides 15-minute patron-activated timer on therapy pump circuit.</td>
</tr>
<tr>
<td>64E-9.010(13)</td>
<td>Automated oxidation-reduction potential (ORP) and pH controllers are provided.</td>
</tr>
<tr>
<td>64E-9.010(14)(a)</td>
<td>Maximum water temperature 104 degrees F is posted on pool rules sign.</td>
</tr>
<tr>
<td>64E-9.010(14)(b,c)</td>
<td>Child supervision and health advisories are posted on pool rules sign.</td>
</tr>
<tr>
<td>64E-9.010(14)(d)</td>
<td>Maximum use 15 minutes is posted on pool rules sign.</td>
</tr>
<tr>
<td>64E-9.010(15)</td>
<td>A clock is visible from the spa.</td>
</tr>
<tr>
<td>64E-9.010(16)</td>
<td>If spa has emergency cut-off switch, 80-decibel alarm and signage is provided.</td>
</tr>
</tbody>
</table>

### Offset spa

<table>
<thead>
<tr>
<th>Section</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>424.1.8.10</td>
<td>If the spa pool is part of a conventional pool, it is offset from the main pool area, with the same water depth as the main pool area.</td>
</tr>
<tr>
<td>424.1.8.10</td>
<td>The offset spa pool meets all other requirements of this section.</td>
</tr>
<tr>
<td>424.1.8.10</td>
<td>The deck area at the offset spa is protected by 30-inch-high connected stanchions or other impediment.</td>
</tr>
<tr>
<td>424.1.8.10</td>
<td>The deck perimeter of the offset spa area does not exceed 15 percent of the total swimming pool perimeter.</td>
</tr>
<tr>
<td>424.1.8.10</td>
<td>All benches have contrasting markings on the leading edges of the intersection of the bench seats.</td>
</tr>
<tr>
<td>424.1.8.10</td>
<td>Tile used for intersecting edge markings is slip resistant.</td>
</tr>
</tbody>
</table>
Operating permits

A public swimming pool cannot operate without a valid permit from the CHD. Permits must be renewed annually, with the most recent posted in a highly visible place. The permit application requires the following information:
1. Description of the source or sources of water supply and the amount and quality of water available and intended for use.
2. Method and manner of water purification, treatment, disinfection, and heating.
3. Safety equipment and standards used.
4. Any other relevant information considered by the department.

If an applicant is denied approval, he or she can reapply for a permit once the situation is corrected. Operating permits may be transferred from one name or owner to another, but the new owner must submit his or her own application form within 30 days of the transfer. The department has the authority to deny an application, suspend or revoke a permit, impose an administrative fine, close a public pool, or bring legal action against a facility for lack of compliance with the provisions of this chapter and its related rules.

Chapter 515 Florida Statutes: Residential Swimming Pool Safety Act

In 2000, the state passed the Residential Swimming Pool Safety Act, Chapter 515 FS, (also known as the Florida pool fencing law, and formally titled the Preston de Ibern/McKenzie Merriam Residential Swimming Pool Safety Act). The law required all residential pools to adopt protective features focused on keeping children without supervision from the pool area. While it did not apply to most community associations, it is an important document because fencing laws applicable to Florida community associations were patterned on standards established in this act.

The law was informed by data from the CSPC drowning study and those like it. Unlike previous safety measures, the law acknowledged the inevitability that a child might be unsupervised at some point. It required the installation of fences or other barriers that would act as obstacles between an unsupervised child and access to a residential pool to increase the amount of time it would take an accident to happen or prevent it entirely by delaying the child and alerting caregivers.

The act requires outdoor swimming pools to have a four-foot fence or other barrier around the outer perimeter of the pool, with no gaps, and far enough away from the pool’s edge to create a buffer should a child be able to get through the fence. Entry through the barrier and to the pool must open outward, and include a self-closing and self-locking device that is out of a child’s reach. Indoor pools or those within a screened area are not required to have a fence or barrier if all windows and doors that provide access to the pool have a wired safety alarm or a self-closing, self-latching device that is 4½ feet or taller.

Chapter 64E-9 of the Florida Administrative Code (FAC)

Chapter 64E-9 FAC, Public Swimming Pools and Bathing Places, contains a great deal of detailed information necessary for building or operating a swimming pool compliant with the standards specified in Chapter 514 FS. Chapter 64E-9 FAC was comprehensively amended in 2009 to meet federal standards established by the P&SS Act. The new law made community associations subject to barrier laws, like those in Chapter 515 FS, and established even more rigorous standards for community association pool and spa compliance.

This chapter classifies all pools as public pools that do not meet the definition of a private pool, which is a facility used only by an individual, family, or members of a living unit and their guests that “does not serve any type of cooperative housing or joint tenancy of five or more living units.” This section presents a brief overview of Chapter 64E-9 FAC, which provides technical information on minimum design, construction, and operation requirements. Given its length and complexity, it is recommended you refer directly to the law for further information or clarification on any point.

Section 64E-9.001, General, explains the rationale behind the regulation of public swimming pools and bathing places, which the department considers of significant value in the prevention of disease, unsanitary conditions, and accidents that threaten the health or safety of pool patrons. This section also establishes the authority of the department to suspend or revoke operation of a pool or spa if it finds conditions unsanitary or dangerous to public health or safety, and asserts that the department will establish appropriate standards if they do not currently exist to protect the health and safety of pool and spa users.

Section 64E-9.0035 FAC, Exemptions, codifies exemptions established in Chapter 514 FS, and provides instructions and supporting documents for condominium associations and cooperatives desiring exempt status according to the qualifications stated in 514.0115 FS. As noted earlier, before 2009, exemptions available to qualifying condominiums and cooperatives, once issued, did not require renewal. Under the revised chapter, state permits for exemptions must be renewed every two years. Currently, homeowners associations must comply with regulations governing all public pools, without possibility of exemption. The Department of Health inspects all public pools, including those at homeowners associations, condominiums, cooperatives, and subdivisions, yearly to determine compliance.

Applying for an exemption requires the following steps:
- A person seeking an initial exemption or an existing facility claiming to be exempt from department regulation must apply to the department using forms provided for that purpose. Applications must be renewed every two years by July 1 of each even-numbered year. Applicants...
for swimming pool exemption must submit the following information along with the application form:

- For condominiums: The recorded declaration of condominium; the condominium’s articles of incorporation; bylaws; and all duly adopted and recorded amendments; supplements and recorded exhibits; a copy of a plot plan diagram for the proposed property; and form DH 4065 for 32 units or less, or DH 1704 for more than 32 units.
- For cooperatives: The articles of incorporation of the association; bylaws and the ground lease or other underlying lease, if any; the document evidencing a unit owner’s membership or share in the association; and the document recognizing a unit owner’s title or right of possession to his or her unit; a copy of a plot plan diagram for the proposed property; and a completed form DH 4065 for 32 units or less, or DH 1704 for more than 32 units.
- For exemption as a water therapy facility pool: Along with a completed form DH4144, a written statement signed by a medical professional that he or she has already or intends to prescribe medical water therapy for a patient in the pool. For subsequent biannual exemption renewals, in addition to the signed written statement, each water therapy facility must provide a list of the Florida licensed physical therapists, occupational therapists, and athletic trainers providing therapy in the pool.

A person granted an exemption must notify the DOH if the conditions upon which the exemption was based change. An exemption from DOH rules does not exempt the pool from Florida Building Code requirements, found in Sections 11 and 424.1. Section 64E-9.004, Operational Requirements, provides valuable information on water cleanliness, chemistry, testing, and recordkeeping essential to ensuring water quality. Because so many of the requirements specified in this section are included in a state of Florida Health Department inspection checklist for swimming pools, spas, and wading pools, it is outlined here:

- **Water quality** – The water supply for all pools shall be an approved potable (safe to drink) water system or shall meet the requirements for potable water systems by the submission from the operator of bacteriological and chemical laboratory reports to the county health department. Saltwater sources are exempt from the potable water chemical standards except for iron and color requirements.
  - **Cross-connection prevention** – An atmospheric break or approved backflow prevention device must be provided in each pool water supply line that is connected to a public water supply. Vacuum breakers must be installed on all hose bibs.
  - **Bacteriological quality** – The pool water shall be free of coliform bacteria contamination.
  - **Clarity** – The pool water shall be 0.5 or less NTU, and the main drain grate must be readily visible from the pool deck.

- **Chemical quality** – Chemicals used in controlling the quality of the pool water must be tested and approved using the National Sanitation Foundation (NSF-ANSI) Standard, Drinking Water Treatment Chemicals – Health Effects, which incorporates these rules and must be compatible with other accepted chemicals used in pools. The following regulations are required for pool water treatment:
  - **pH** – 7.2 to 7.8.
  - **Disinfection:**
    - The free chlorine residual must measure from 1 milligram per liter (mg/L) to 10 mg/L in conventional swimming pools, and from 2 mg/L to 10 mg/L, in all other types of pools, including spas and fountains.
    - The bromine residual must measure from 1.5 mg/L to 10 mg/L in conventional swimming pools, and from 3 mg/L to 10 mg/L in all other types of pools.
    - The following maximum disinfectant levels apply to indoor conventional swimming pools: 5 mg/L free chlorine or 6 mg/L bromine.
    - When oxidation-reduction potential controllers are required, the water potential must be maintained between 700 and 850 millivolts. Even if these units are used, manual daily testing, according to 64E-9.004(13), F.A.C, is still required.
    - **Cyanuric acid** – 100 mg/L maximum in pools, with 40 mg/L as the recommended maximum, and 40 mg/L maximum in spa pools.
    - **Quaternary ammonium** – 5 mg/L maximum.
    - **Copper** – 1 mg/L maximum.
    - **Silver** – 0.1 mg/L maximum.
  - **In 2009,** a provision was added requiring that any landscape irrigation water that wets the deck area of the pool, the pool itself, enters the collector tank, or wets an interactive water feature, must be potable (safe to drink) water from a public water system.
  - **Manual addition of chemicals** is allowed only under special conditions and requires that the pool be closed for a period prior to their addition and as long as necessary after to ensure sufficient and safe distribution. After treatment for breakpoint chlorination and algae prevention, pool use may resume when the free chlorine levels drop to 10 mg/L.

- **Cleanliness** – The pool and pool deck must be kept free from sediment, floating debris, visible dirt and algae. Pools must be refinished when the pool surfaces cannot be maintained in a safe and sanitary condition.
  - Food and beverages are prohibited in the pool and on the pool wet deck area; animals and glass containers are prohibited within the fenced pool area, or 50 feet from the pool edge when no fence exists.
  - The pool recirculation system must be operated at all times when the pool is open for use. The recirculation system may be shut off three hours after the pool closes, but must resume operation three hours before the pool opens. A time clock must be used to control shutdown time.
  - The pool water level must be maintained at an elevation suitable for continuous skimming without flooding during periods of non-use.
  - All equipment and other items located at or belonging to the facility must be kept in good repair.
  - When use of a public swimming pool requires an admission or a membership fee, the most recent pool inspection report must be posted in plain view of existing and potential members and patrons.
Sanitary facilities must be clean, with supplies such as toilet paper, paper towels or blow dryer, soap, and wastebaskets available and in a sanitary condition.

- Footbaths are prohibited.

**Test kits** – Test kits are required to be on the premises of all pools to determine free active chlorine and total chlorine using N,N-diethyl-p-phenylenediamine (DPD), or bromine level, total alkalinity, calcium hardness, and pH.

- The following test kits must be provided if the corresponding chemicals are used: cyanuric acid, sodium chloride, quaternary ammonium, ozone and copper.

- When silver is added as a supplemental disinfectant, a water analysis must be performed every six months and be submitted to the department upon request.

- A test kit may be used for multiple pools, provided the pools have common ownership and are located on contiguous property.

- The test kit must be capable of measuring the level of disinfectant in the normal operating range.

- Sports accessories such as volleyball and basketball nets may be used at designated times, provided a clear four-foot deck area exists behind the structures. When the pool is open for general use, they must be removed.

**Monthly report** – The pool owner or operator is responsible for keeping a daily record of information on pool operation, using the Monthly Swimming Pool Report (report) – DH 921 3/98, obtained from the local county health department. The report shows values for manually conducted pool water tests for pH and disinfectant levels performed at least once every 24 hours, and, new in 2009, weekly testing for cyanuric acid when chlorinated isocyanurates are used at spas and pools. The report must be kept in a secure location at the pool or submitted monthly, as required by the local health department.

**Human fecal accidents** – In 2009, a new section addressing human fecal accidents was added, requiring the pool operator or owner to comply with all procedures and recommendations found in the Centers for Disease Control and Prevention’s (CDC) “Fecal accident Response Recommendations for Aquatics Staff” dated February 15, 2008, and found on the department’s website at [http://www.floridashealth.org/Environment/water/swim/index.html](http://www.floridashealth.org/Environment/water/swim/index.html).

Alternative emergency disinfection methods developed by industry by the application of new disinfection technology or by the use of chemical disinfectants that are effective, safe and appropriate for public bathing facilities, and are approved by the CDC, may also be used.

**Lighting** – Additional lighting sources are specified for pools used at night or when adequate natural lighting is not available.

Sections 64E-9.005, Construction Plan or Modification Plan Approval, and 64E-9.006, Construction Plan Approval Standards, provide lengthy, detailed specifications for developing construction or modification plans that comply with revised standards and qualify for approval. It is illegal to begin construction or modification of any public pool without first receiving written approval from the department.

Section 64E-9.007, Recirculation and Treatment System Requirements, establishes that recirculation and treatment equipment such as filters, recessed automatic surface skimmers, ionizers, ozone generators, disinfection feeders and chlorine generators must be tested and approved using the National Science Foundation/American National Standards Institute (NSF/ANSI), Standards for Circulation System Components and Related Materials for Swimming Pools and Spas. This section incorporates those standards into the chapter, and establishes that a manufacturer must work with an NSF- or ANSI-approved agency to develop standards if none exist for a specific product. All water features using water from a pool must be designed to return the water to the pool.

In 2009, a new paragraph dedicated to collector tank retrofitting established requirements to eliminate direct suction through a main drain, setting dates for compliance in 2011 and 2012.

- All pools built without a main drain collector tank must be retrofitted with a properly sized and piped collector tank.
- Main drain covers/grates installed after the effective date of this rule must comply with current ASME/ANSI standards and the water velocity requirement of this rule.
- Disinfection and pH adjustment should be added to the pool recirculation flow using automatic feeders meeting current NSF/ANSI standards, with all chemicals fed into the return line after the pump, heater, and filters, unless the feeder was designed by the manufacturer and approved by the NSF to feed to the collector tank or into the suction side of the pump.
- Dual or multiuse feeders may be approved on an individual basis.
- Feeding chlorinated isocyanurates disinfectant is prohibited in spas, wading pools, and interactive water attractions. Feeders of this type are no longer allowed, and should have been replaced with non-isocyanurate chlorinators, or an equivalent, and a pH adjustment feeder, in 2011.

Another paragraph added in 2009 addressed the use of ultraviolet (UV) light disinfectant equipment. The section encourages its use for elimination or reduction of chlorine-resistant pathogens, especially the protozoan Cryptosporidium, and authorizes UV light disinfection equipment to be used as a supplemental water treatment for public pools, subject to manufacturer’s specifications and the following conditions:

1. UV equipment and electrical components and wiring must comply with the National Electrical Code (NEC), and the manufacturer must provide certification of this fact.
2. UV equipment must meet Underwriters Laboratory (UL) standards and be electrically interlocked with recirculation pump(s) on all pools to assure pump(s) are disabled and do not operate if the UV equipment fails to produce the requisite dosage, as measured by an automated sensor.
3. UV equipment functionality must be validated by an appropriately trained professional to ensure it delivers the required UV dose, in a predictable manner, at the specified flow, lamp power, and water UV transmittance conditions. It must be in compliance with all Environmental Protection Agency (EPA) professional practices summarized in the EPA Publication Number 815-R-06-007, available at [http://www.floridashealth.org/Environment/water/swim/index.html](http://www.floridashealth.org/Environment/water/swim/index.html) or [http://www.epa.gov/safewater/disinfect ion/lt2/pdfs/guide_lt2_uvguidance.pdf](http://www.epa.gov/safewater/disinfect ion/lt2/pdfs/guide_lt2_uvguidance.pdf).
4. UV equipment produces a constant proven dosage of at least 40 mJ/cm² (milliJoules per square centimeter) at the end of lamp life.

5. The UV equipment cannot be located in a sidestream flow, but must be placed in a location and manner that treats all water returning to the pool.

Section 64E-9.008 FAC, Supervision and Safety, places the burden of responsibility for the supervision and safety of the pool squarely on the shoulders of all owners, managers, lifeguards, and swimming instructors in charge of or working at a public swimming pool. While the section does not require lifeguards or swimming instructors, if they are provided by the facility, they must have the authority to enforce all safety regulations. The section also mandates:

- Lifeguards and swimming must be certified in lifeguarding or swimming instruction, respectively, by the American Red Cross, the YMCA, or an other agency meeting established training standards.
- Lifeguards and swimming instructors must be currently certified in first aid and in adult, child and infant cardiopulmonary resuscitation through the American Red Cross, American Heart Association, National Safety Council, or other approved agency.
- Swim coaches are exempt from the swimming instructor certification requirement only if they are training advanced level swimmers for competition.
- Swimming instructors of developmentally disabled students must be certified according to Section 514.072, FS.

Section 64E-9.009, Wading Pools, and 64E-9.010, Spa Pools, establish additional standards for wading pools and spas, as well as address procedural requirements in case of a fecal accident. Should one occur, the wading pool or spa must be drained, and the pool, filter system, and plumbing properly disinfected according to subsection 64E-9.004(14), F.A.C, which requires the pool operator or owner to follow recommendations published in the Center for Disease and Prevention’s (CDC) Fecal accident response recommendations for Aquatics Staff found at http://www.floridashealth.org/Environment/water/swim/index.html. Alternative emergency disinfection methods, if approved by the CDC, may also be used. Refer to http://www.doh.state.fl.us/environment/water/swim/fecal_accident_response_reco.pdf.

Section 64E-9.011, Water Recreation Attractions and Specialized Pools, requires that these structures are designed and constructed in a sound manner. Specific rules for compliance are largely dependent on a specific pool’s design and function. The section applies to the following water attractions:

- Water slide plunge pools.
- Plunge pools.
- Water activity pools.
- Wave pools.
- River rides.
- Zero depth entry pools.
- Interactive water features (IWFs).
- Water theme parks.

Section 64E-9.017, Enforcement, asserts that any public pool with the following Chapter 64E-9, F.A.C violations can be immediately closed by the department:

- If a main drain grate is missing, unsecured, improperly secured, damaged, or does not meet the requirements of subparagraph 64E-9.007(10)(f)2., FAC.
- If the pool is operating without a valid permit.
- If direct suction exists on the main drain or other outlets, except vacuum fittings, automatic surface skimmers, and their equalizer grates, provided the flow velocity through the grate does not exceed 1.5 feet per second, or corrective actions specified in paragraphs 64E-9.007(3)(b) and (10)(f), FAC, were not completed.
- If any other conditions that endanger the health, safety, or welfare of persons using the pool exist, including, but not limited to, a drowning hazard, broken glass, sharp-edged or broken tile or metal, fecal accidents, electrical code violation, or severe biological growth.

Section 64E-9.018, Public Pool Service Technician Certification, created in 2009, requires that individuals maintaining the cleanliness, water quality, and chemical balance of public pools must be certified, and establishes a course of training and testing for certification. Proof of certification must be posted and visible in the equipment room of each pool served by that individual, and available for inspection by the department.

This checklist of pool and spa requirements is used for inspection purposes by the Florida State Department of Health to assess compliance with Chapter 64E-9 FAC. You may find it valuable to examine the association pool and spa as you review each point to confirm that your facility could pass inspection.
### POOL AREA

1. **Pool appearance/algae control. 64E-9.004(3).** The pool shall be free from floating material, sediment, visible dirt, algae, and the main drain shall be visible.

2. **Deck/walkway. 64E-9.004(3).** Wet deck areas shall be a minimum of 4 feet wide, of concrete or other nonabsorbent material with a smooth, slip-resistant finish. Wood and carpet are prohibited, and the area must be unobstructed by furniture, planters, hoses, etc., and be free of dirt, grass, algae or standing water.

3. **Tile/pool finish. 64E-9.004(3) and 64E-9.008(12)(a).** Pool finish and tile shall be in good repair.

4. **Depth markers. 64E-9.008(12)(h).** Minimum 4-inch-high, permanent, contrasting depth markings must be located on both sides of the pool at the shallow end, slope break, deep point and deep end wall, and every 25 feet. The markers must be installed inside and outside the pool, and have feet and inches spelled out.

5. **Handrail/ladder. 64E-9.008(12)(n).** Handrails must be provided for all pool steps and must be securely anchored in the pool deck and the bottom step. “Figure four” handrails must be securely anchored in the pool deck and must extend to the bottom step. Ladders must be provided and must be securely anchored in the pool deck and must rest against the pool wall with a 3- to 6-inch clearance.

6. **Step markings. 64E-9.008(12)(n).** All step edges must have a 2-inch contrasting marking on the tread and riser (3/4-inch by 2-inch bullnose tile may be substituted) which shall extend the full length of each step.

7. **Main drain grate. 64E-9.008(2) and 64E-9.004(7).** The grating shall be secured and fully intact.

8. **Gutter grates/skimmer. 64E-9.004(7).** Gutter drains must be covered by a fully intact grate. Skimmers must have a weir in place, deck cover in place, and the basket must be in place and clean. Skimmers with a direct connection to the pump must have an equalizer valve.

9. **Lighting pool/area. 64E-9.008(8).** Underwater lighting and overhead lighting shall be provided for night swimming, or the pool must close at dark.

10. **No diving markings. 64E-9.008(12)(k).** All areas of the pool which are not part of an approved diving bowl shall have “NO DIVING” markings every 25 feet.

11. **Diving board. 64E-9.008(12)(o).** Diving boards must be secured and slip resistant. If diving boards are removed, the stanchions must be removed.

12. **Pool cover. 64E-9.008(4).** Pools utilizing floating blankets must be inaccessible when the blanket is in use. Blanket shall not obstruct deck when removed.

13. **Poolside shower. 64E-9.008(13).** All outdoor pools must have a rinse shower located within 20 feet of the pool on the pool deck.

### POOL SAFETY

14. **Life hook with pole. 64E-9.008(2).** A shepherd’s hook securely attached to a one-piece 16-foot pole must be provided. The life hook must be fully accessible and visible from the pool. Pools over 50 feet in length must have at least one pole along each of the longer sides of the pool.

15. **Life ring with rope. 64E-9.008(2).** An 18-inch lifesaving ring with sufficient rope attached to reach all parts of the pool must be provided. The rope must be in good condition, free of frays. The ring must be fully accessible, which means visible and not tied down or locked. Pools over 50 feet in length must have at least one ring along each of the longer sides of the pool.

16. **Safety line/2-inch marking. 64E-9.008(3) and 64E-9.008(12)(g).** Pool floors having a slope break must have a two-inch contrasting stripe at the slope break. The marking must extend across the bottom of the pool and up both sides to the tile line. A safety line must be mounted 2 feet before the slope break towards the shallow end using cup anchors. The safety line must have visible floats at least every seven feet.

17. **Rules posted. 64E-9.008(7).** The following rules must be posted in minimum one-inch letters and must be visible from the pool/spa deck:
   1. No food or beverages in pool or on pool wet deck.
   2. No glass or animals in the fenced pool area (or 50 feet from unfenced pool).
   4. Pool/spa hours: ___ a.m. to ___ p.m. 5. Shower before entering. Pools of 200 square feet in area or greater without an approved diving well configuration shall have “NO DIVING,” in four-inch letters included with the above listed pool rules.

   In addition to these requirements, spa pool signs shall include the following:
   1. Maximum water temperature 104 degrees F.
   2. Children under 12 must have adult supervision.
   3. Pregnant women, small children, people with health problems and people using alcohol, narcotics or other drugs that cause drowsiness should not use spa pools without first consulting a doctor.
   4. Maximum use 15 minutes. A clock shall be visible from the spa pool to assist the patron in meeting this requirement.

18. **Lifeguard/instructor/pool technician certification. 64E-9.008(1)&(a).** If lifeguards or instructors are provided, they must be certified by the American Red Cross, YMCA or other nationally recognized organization. Proof of proper certification is required at the pool site. Pool maintenance personnel shall be certified.

### SANITARY FACILITIES

19. **Supplies. 64E-9.004(9).** Sanitary facilities must have toilet paper, soap, paper towels and waste can.

20. **Clean. 64E-9.004(9).** Sanitary facilities shall be maintained in a clean condition.
WATER QUALITY

21. Approved test kit. 64E-9.004(11). All pools must have an approved test kit on site capable of testing free chlorine (DPD), combined chlorine, pH, calcium hardness and total alkalinity. Pools utilizing chlorine generators must have a sodium chloride test kit. Pools using quaternary ammonium compounds must have a quaternary ammonium test kit. Pools using chlorine stabilizer must have a cyanuric acid test kit.

22. Free chlorine/bromine. 64E-9.004(1)(d). Free chlorine level must be between 1-10mg/L (parts per million) in conventional swimming pools (1½-10 ppm bromine). Spas must maintain 2-10 mg/L chlorine (3-10mg/L bromine). The maximum disinfectant level for indoor conventional swimming pools is 5 ppm chlorine or 6 ppm bromine.

23. pH. 64E-9.004(1)(d). The pH in all pools shall be maintained between 7.2 and 7.8.

24. Chlorine stabilizer. 64E-9.004(1)(d). The concentration of chlorine stabilizer (cyanuric acid) shall not exceed 100 ppm in conventional pools or 40 ppm in spas.

25. Spa 104 degrees air vent/equalizer valve. 64E-9.008(9). Spa pools have a maximum temperature of 104 degrees F. All spa pools that have suction lines on the main drain must have a minimum two-inch air vent line attached to the suction line (older spas). Main drains will discharge to collector tanks on new pools. Spas whose skimmers are on direct suction to the pump must have an equalizer valve.

EQUIPMENT ROOM

26. Wading pool: Quick dump. 64E-9.008(15)(g). All wading pools must have emergency drainage capabilities.

27. Water level/control. 64E-9.008(14)(k)6.f. The pool water level shall be maintained for continuous skimming flow. A manual and automatic fill device shall be provided and shall discharge into the collector tank.

28. Disinfection feeder. 64E-9.008(14)(q). A properly sized disinfection feeder shall be provided. Electrical pumps must be electrically interlocked with the recirculation pump.

29. pH feeder. 64E-9.008(14)(q). PH adjustment feeders must be provided on all pools; pH feeders must be electrically interlocked with the recirculation pump.

30. Chemical container/labeled. 64E-9.008(14)(q)2. Solution reservoirs shall have at least 50 percent storage capacity of the solution pump and shall be labeled.

31. Filter pump. 64E-9.008(14)(d). The filter pump shall be properly sized and operable.

32. Vacuum cleaner. 64E-9.008(14)(m). All pools shall have a vacuum cleaning system. (Except for spa and wading pools of less than 200 square feet.)

33. Flowmeter. 64E-9.008(14)(n). All pools shall have a flowmeter capable of reading from ½ to 1½ the design flow rate.

34. Thermometer. 64E-9.008(9). Pools equipped with a heater must have an in-line thermometer mounted downstream of the heater outlet.

35. Pressure/vacuum gauges. 64E-9.008(14)(e). All vacuum filter systems shall have a vacuum gauge before the pump. All pressure filter systems shall have a pressure gauge mounted before and after the filter.

36. Equipment room drainage/vent/lighting/clean. 64E-9.008(13)(e). The equipment room shall have proper drainage, forced or cross ventilation, lighting and be relatively clean and clutter free.

37. Cross connection. 64E-9.004(1)(a). An air gap must be provided in the fill line and in the waste line. Vacuum breakers shall be provided on all hose bibs in the sanitary facilities, pool area and equipment room area.

38. Gas chlorine: Mask/scales/chains. 64E-9.008(14)(q). Pools that utilize gas chlorine must have a gas mask with valid cartridges, scales to weigh the cylinders, and all cylinders must be chained.

39. Wastewater disposal. 64E-9.008(14)(p). Wastewater must discharge through an air gap and be disposed of in accordance with local requirements.


41. Other equipment. 64E-9.008(18). Auxiliary equipment must not interfere with the attainment of the design flow, i.e. ionizers, ozone generators, etc.

42. Equipment change. 64E-9.008(18). All equipment changes must have prior approval from the department.

43. Approved chemicals. 64E-9.004(1)(d). All chemicals used in public pools must meet NSF Standard 60.

44. Maintenance log. 64E-9.004(13). Maintenance logs must be kept on all pools.

45. Inspection posted. 64E-9.004(8). Pools that require membership for use must post the latest pool inspection by the department in a conspicuous place.

46. 514.0315(2), Florida Statutes, Safety: 64E-9.008(13)(k)4. All anti-entrapment devices and systems must be in compliance with statute and in good working order.


Chapter 64E-21.001 FAC: Drowning Prevention Education/Public Information Publication

This section mandates educational requirements for rescue and lifesaving programs, using standards consistent with the American Red Cross Community Water Safety Course, and refers to information on drowning prevention and responsibilities of pool ownership contained in the 1994 U.S. Consumer Product Safety Commission publication No. 362, Safety Barrier Guidelines for Home Pools.
While these laws have increased safety significantly, without an awareness of the potential dangers associated with swimming pools and spas and knowledge of protective strategies such as behavioral modifications, the level of risk at a community pool may still be unacceptably high. The following section discusses how to minimize risk through a system of multiple layers and strategies working together.

**Florida Building Code (FBC) Chapter 424**

Chapter 424 of the Florida Building Code specifies design and construction standards for swimming pools and bathing places: Section 424.1 addresses public swimming pools and bathing places, and Section 424.2 provides requirements for private swimming pools.

**Florida Energy and Conservation Code (Florida Energy Law)**

The Florida Energy and Conservation Code (Florida Energy Law) requires compliance with national energy standards for residential pools and in-ground spas (ANSI/APSP 15) and portable spas (ANSI/APSP 14), all of which have been incorporated into Chapter 4 of the 2010 FBC, and in effect since March 15, 2012.

The law requires existing pools and spas to have pumps, motors, controls, heaters, and portable spas that meet the following 2010 Florida Energy & Conservation Code standards for pool and spa energy efficiency:18

- Residential filtration pool pump motors cannot be split-phased, shaded-pole or capacitor start-induction run types.
- If the total horsepower (HP) of a residential filtration pool pump or filtration pool pump motor is one HP or larger than the pump and pump motor, it must have at least two speeds.
- Residential pool filter pump controls, for use with a multi-speed pump, must be capable of operating at a minimum of two speeds.
- Default pool filtration speed must be a speed that results in a flow rate that will NOT turn over the pool in less than six hours, and any high-speed override must default back to the pool filtration speed in less than 24 hours. This allows solar pool heating systems to run at higher speeds during periods of usable heat gain.
- Thermal efficiency of gas and oil-fired heaters must not be less than 78 percent.
- Heat pump heaters shall have a coefficient of performance at low temperature of not less than 4.0 (COP). 
- Natural and LP gas-fired heaters shall not be equipped with constant burning pilots.
- All heaters shall have a readily accessible on-off switch that is mounted on the outside of the heater and that allows shutting off the heater without adjusting the thermostat setting.

All pool and spa heaters meet federal and state efficiency requirements, but not all meet the Florida requirement for readily accessible on/off switches, among other features, necessary for Florida but not federal compliance. The Florida law does not cover pumps and pump motors installed in addition to the pool filtration pump, provided the pump is used exclusively for other purposes, such as booster pumps for cleaners, water feature pumps, etc. This applies to auxiliary pumps that include a filter, provided the auxiliary pump filtered flow is not used and not needed to meet the swimming pool’s turnover requirements.

To ensure the pump or motor meets current requirements and learn what pumps or pump motors are available for a specific pool, the Association of Pool and Spa Professionals (APSP) has established a pump motor database at http://www.apsp.org/Public/StandardsTechnical/PumpPumpDatabase/index.cfm.

Because companies are likely to continue to manufacture single-speed pumps and pump motors for non-pool filtration purposes, it is the installers’ responsibility to choose and install a compliant model when replacing a pool filter pump or pool filter pump motor. Building departments will have the ability to enforce these requirements on both new and existing residential pools. If a particular building department does not require a permit for a replacement pump or motor on an existing pool, this does not discount that the law and code requires the replacement pump/motor to comply.

If repairing an existing pump or pump motor, an existing single speed pump or motor can still be used, but if it is replaced, it is subject to the new requirements. If existing pool filter pump controls are replaced, controls capable of operating at a minimum two-speed are required to be installed, even for single-speed pumps.

These following requirements apply only to new construction:

- Pool filter pumps must be sized based on a specified formula so that the resulting flow rate will turn over the pool water volume in more than six hours or 36 gpm, whichever is greater. The effect is to limit the performance of single-speed pool filter pumps so the residential pool will not exceed public pool turnover flow rates. Some common one-half and three-quarter HP pumps move too much water and cannot be used as pool filter pumps.
- A time switch must be installed to allow pool owners to run the pool filtration pump only during the off-peak period.
- Pool filtration piping must be sized so that the velocity of the water at maximum flow does not exceed 8 feet per second in the return line, and 6 feet per second in the suction line. Note: Do not confuse these requirements with ANSI-7 water velocity requirements for entrapment prevention purposes. Pools must comply with both.
- Filters (cartridge, sand, and DE) must have a minimum area based on the six-hour turnover flow rate (pool gallons/360 minutes).
- When used, filter backwash valves must be two inches or the diameter of the return pipe, whichever is greater.
- For pool filtration pumps, a length of straight pipe that is at least four pipe diameters shall be installed before the pump.
- Directional inlet fittings are required.
Eighteen-inches of pipe, valves, tees, or installed pipe from pool to pad are required to allow for future solar connections.

Sweep elbows are encouraged, but not required.

**Part III: Multi-layered preventive measures**

As the first part of this course has demonstrated, community pools and spas are required by law to implement a specific set of safety regulations, including the installation of safety devices, and observe proper water safety behaviors. The Consumer Product Safety Commission and other experts favor multiple safety steps for swimming pools and spas, from the installation of pool and spa barriers to teaching children to swim. When combined, these safety strategies provide adults and children better protection in and around the water.

Studies suggest best practices to prevent pool and spa submersion deaths and injuries include:

- A law requiring pool barriers.
- Four-sided (isolated) pool fencing.
- CPR training.
- Arms-length adult supervision of young children near water.
- Lifeguard supervision.
- Self-closing and self-latching pool gates.
- Learning to swim and teaching young children to swim.
- Enhanced staffing and training of personnel supervising pools.
- Development of appropriate guidelines for water-related emergencies.
- Public education on issues related to water safety and drowning prevention.

**A multi-layered safety system**

The greatest water safety assurance in swimming pools and spas comes from adopting and practicing as many water safety measures as possible. Because children can drown in a few moments – the time it takes to answer the telephone or check something on the stove – a child may face danger before an adult knows it. To minimize the risk to children, swimming pools and spas must provide a number of obstacles between the child and potential danger.

Protective measures must always be used in conjunction with adult supervision and appropriate safety systems and devices to delay unsupervised access or warn of a child’s entry into a specific area. Barriers, alarms and safety covers are critical water safety steps, yet none are sufficient as the sole safety system for a pool or spa. Practicing multiple water safety steps in public and residential pools and spas can significantly reduce the number of children who are injured in non-fatal submersions or who drown every year.

**Supervision**

Responsible adult supervision is key to pool and spa safety for children. There should always be an adult designated to maintain constant visual contact with children whenever they are near or could get near any body of water, even a shallow “baby” or wading pool. There is no replacement for constant adult supervision.

Adults should always be near, alert, and attentive to children in and around the pool.

- A child must never be unattended in a pool or spa and must always be supervised by an adult when he or she is in or near water.
- Children should be taught basic water safety tips and how to swim.
- Children should be kept away from pool drains, pipes, and other openings to avoid entrapments.
- Pools should have an easily accessible way to call for medical assistance.
- A pool or spa should be checked first if a child is missing.
- Safety instructions should be made public and posted near the pool so they are readily available to everyone.

The Keep Your Eyes on the Kids Project is a program that originated in Arizona and now exists in Florida. It designates one adult responsible for closely supervising children playing in and around the pool or spa (or any body of water) for a specific period. The individual is identified with some visual marker, such as a “water watcher tag,” which is simply a lanyard worn by the designated adult that makes clear that he or she is responsible for supervising children’s activities at the facility. The individual formally transfers the lanyard, along with the supervising responsibility, to another person at the end of the period to ensure constant watchfulness.

The power of the water watcher tag or another type of obvious marker is that:

- It officially designates an adult to watch the children. Many times, adults assume that someone else is supervising the children when, in fact, no one is watching them.
- It reminds the adult who is acting as the “water watcher” that he or she must officially turn over responsibility for watching children to another adult with the physical transfer of the lanyard.

Adding a whistle to the lanyard provides an extra measure of safety, because it quickly draws attention to the situation and alerts individuals some distance away. It is useful to hang one by the pool, with an explanation regarding its use, to remind adults that supervision is the best way to prevent children from drowning, and encourage them to use it whenever possible.
Learning water safety skills

An absolutely critical step in preventing drowning is making sure everyone in the pool knows how to swim, and as many as possible know water rescue and lifesaving skills, such as CPR, in case of a pool emergency. Teaching children and adults to swim cannot guarantee that they will not drown, but it provides an important survival skill that can only prove beneficial, if not lifesaving.

Preventing drain entrapment

A drain entrapment occurs when an article of clothing, jewelry, hair, or a limb is caught when a body is pulled toward a faulty drain by the pool or spa’s suction. Children’s public wading pools, other pools designed specifically for young children, and in-ground spas that have flat drain grates and single main drain systems pose the greatest risk of entrapment. The best defense against entrapment is to prevent it before it can happen by being watchful in and around a pool or spa.

The most common entanglements and entrapments involve:
- **Body**: A body part, often the torso or bottom, covers a drain and is held down by the intensity of the suction.
- **Hair**: Long hair is caught in a faulty drain cover.
- **Limbs**: Arms, legs, feet or fingers are lodged in a suction opening.
- **Mechanical**: Jewelry, bathing suits or other materials are entangled in a drain cover.
- **Evisceration/disembowelment**: When suction draws out the intestines and organs.

Implementing these water safety practices reduces the hazard of drain entrapments and entanglements:
- Keep children away from pool drains, pipes and other openings to avoid entrapments and entanglements. Warn people not to lean against a drain or put their hands or feet near a drain.
- Make sure that loose items, such as long hair, clothing or jewelry, are not dangling when swimming in a pool or sitting in a spa. Swimmers with long hair should wear a bathing cap or tie their hair so that loose strands cannot become entangled in the drain.
- Confirm the pool or spa has compliant drain covers; that drain covers are not loose, broken or missing; and that they can be seen clearly through the water.
- Install a safety vacuum release system (SVRS), a device that will automatically shut off a pump if a blockage is detected, or other automatic shut-off systems.
- Know the location of the pump’s main switches and how to quickly shut the pump down. Plainly mark the location of the electrical cutoff switch for the pool or spa pump.

If someone is trapped, do the following:
- Immediately switch off the pump.
- Rather than attempt to pull the person away from strong suction of the drain or grate, push a finger or small object between the drain and the person’s body to break the seal; then use a rolling motion to free them.

Hot tub safety

Individuals using hot tubs must be aware of how they might react to the high temperature of the water. It is important to understand that infants and toddlers should never be permitted in a hot tub because a baby’s thin skin increases his or her risk of overheating. Additionally, children not yet toilet trained can potentially contaminate the pool, and unsanitary conditions must be rectified, meaning it must be closed and cleaned.

All individuals who use a hot tub, but especially young children, should be encouraged to drink water while in the water. If the bather feels nauseated, dizzy, or sleepy, he or she should leave the spa with assistance. Entering and exiting the spa should be done very carefully, because there are risks associated with slipping on wet tile, lightheadedness from a change in blood pressure when standing up and climbing out of the spa, disorientation due to the heat, and so on.

A child should not be allowed in a hot tub until he or she is able to stand on the bottom with his or her head remaining completely above the water. Children who are big enough to be in a hot tub should not use it for more than five minutes at a time, especially at the maximum temperature of 104 degrees. Even at a temperature of 98 degrees, children should remain in a hot tub for no more than 15 minutes at a time. If available, children should sit on “jump seats” that permit waist-deep immersion, rather than full-body immersion.

Lifesaving and rescue equipment

Facilities should have reliable rescue and lifesaving equipment, as well as individuals on location able to use them effectively. All rescue equipment should be placed near the pool in a clearly marked and readily accessible spot, and periodically checked to make sure it is still in good working condition.

The following items should be readily available:
- **Landline telephone (as well as cell phones)**.
- **Life ring, shepherd’s crook (hook)**: These are devices used to pull someone from the pool to safety. Have lifesaving equipment such as life rings and reaching poles available for use.
- **First aid kit**: A first aid kit should be kept in a safe and convenient location and periodically checked to make sure it is well stocked with all essentials, including life rings and reaching poles.
● Personnel trained in lifesaving and rescue strategies who can immediately be available to assist in a pool emergency.
● Post CPR, emergency contact information (911 and other), and warning signs in clearly visible spots near the pool. An association may even perform routine safety drills to make residents and employees aware of what to do in case of emergency.

Protecting the elderly, frail, or disabled

Moving in water can restore agility and strength to people of all ages and abilities, improving circulation and providing benefits when other types of physical therapy are not feasible. Although young children are the most frequent victims of pool drownings, people in poor health, of advanced years, and those with disabilities are also at higher risk of drowning or near-drowning injuries than the adult population.

Alarms

Alarms can warn of potential danger with loud noises and bright lights, or even set off video cameras or automatically alert someone by phone. Community associations have a choice of many types of pool alarms, with different functions appropriate for a range of locations. Alarms should be installed on all doors, gates, and windows that surround a pool or spa to alert adults when unsupervised children enter the area.

Audible alarms are commonly mounted on:
● Pool and spa gates that activate when the gate is opened to alert as many people as possible that an unsupervised child may have entered the restricted area.
● Windows and doors on the perimeter of a pool or spa; in cases where a building serves as the fourth wall surrounding a pool or spa, all windows or doors on the side of the building bordering the pool or spa must sound an alarm when opened.
● The edge of the pool, to sense if someone enters the pool or spa water. Many types of audible alarms sound in response to motion when water is displaced. These alarms may float on the surface (surface wave alarm) or underwater as well.

Upon activation, alarms should:
● Sound for 30 seconds or more, and within seven seconds after activation.
● Meet the requirements of UL 2017 General-Purpose Signaling Devices and Systems, Section 77.
● Be loud, at least 85 decibels when measured 10 feet away from the alarm mechanism.
● Sound distinct from other sounds or alarms, such as the smoke alarm.
● Have an automatic reset feature and a switch that allows adults to temporarily deactivate the alarm for up to 15 seconds. (The deactivation switch may be a keypad code or a manual switch, located out of reach of children.)

Other items that affect the safety of individuals using a pool:
● Rope and float line: Placed across the pool, the rope and float line alerts swimmers to the separation between the deep and shallow ends of the pool.
● Toys, games, and floats: Ensure all recreational equipment is safe and age-appropriate to the individual. Loose objects should be secured in a safe place and never left in or around the pool.
● Maintenance supplies: All cleaners, chemicals, and maintenance supplies should be kept in a locked storage area, away from children and pets. Check labels for proper storage and expiration dates, and follow manufacturers’ guidelines.

Many times, the individual slips under the water’s surface silently, not noticed until too much time has passed. Those who suffer from ailments affecting their vision, judgment, balance, or coordination, such as epilepsy, Alzheimer’s disease, diabetes, or a heart condition, can be particularly vulnerable to risk near the water. The two most important strategies to protect adults at risk are better caregiver supervision and the use of pool alarms.

An “immersion” pool alarm is designed specifically to prevent at-risk adults from drowning. Immersion pool alarms have a water-activated sensor that the individual wears on a bathing suit, wristband, or bathing cap. If that person falls into a pool or spa or slips below the surface, the sensor generates a loud alarm. This device effectively counteracts the silence that makes accidental submersions so deadly.

An outdoor swimming pool barrier is a physical obstacle that surrounds an outdoor pool or spa so that access to the water is limited to adults. A successful pool barrier prevents a child from getting over, under or through it to gain access to the pool or spa. Barriers also provide parents additional time to locate a child before he or she can get into trouble. Barriers such as fences, walls, or gates can also be very attractive, adding aesthetic and monetary value to the association property. It is important, however, before proceeding, to confirm that plans and designs have been presented to all appropriate authorities and regulatory organizations (local building code office, community association residents or board, etc.,) and approval has been secured.

Barriers and alarms work more effectively together. Barriers prevent entry, and alarms alert others to the fact that an entry has been attempted or has occurred. The first part of this course discusses how federal and state regulations on barriers to pool and spa entry evolved. Those requirements are summarized here.

Pool operators and owners are required to:
● Install a fence around the perimeter of the pool and spa area that uses a self-closing and self-latching mechanism on any gates. The barrier should measure at least four feet in height. It should have no footholds or handholds that could be used by a child to climb over. Young children can be very good at climbing, and may be able to overcome a pool barrier that is too low or easy to climb.
● Ensure vertical fence slats are less than four inches apart to prevent a child from squeezing through.
● Ensure that no part of the diamond-shaped opening of a chain link fence is larger than 1 3/4 inches.
● Ensure the maximum clearance at the bottom of the barrier does not exceed four inches above grade.

If a gate is properly designed, even if it is not completely latched, a young child pushing on the gate to enter the pool area will effectively close the gate, with the possibility of engaging the latch.

Gates must:
● Open out from the pool.
● Be self-closing and self-latching.
● Be well maintained so it can close and latch easily.
● Have release mechanisms out of a child’s reach and at least three inches below the top of the gate on the side facing the pool.
● Have no opening greater than ½-inch within 18 inches of the latch release mechanism to prevent a child from reaching through the gate to release the latch.

### Safety covers

A pool or spa safety cover is a barrier that can be placed over the water’s surface, and is easily opened or closed. Safety covers for pools can be manual or motorized, while covers for spas are generally manual. A non-penetrating cover can completely cover the pool and block access to pool water. The Association of Pool and Spa Professionals (APSP) recommends that all hot tub owners use a safety cover that locks.

When a safety cover is properly in place over the pool or spa, it provides a high level of security for children less than 5 years of age by inhibiting their access to the water as well as visually demonstrating to them that the pool is not open for use. It is critical to remove all ladders and slides when using covers on pools, so no access is possible. Maintain pool and spa covers in good working order to ensure they function properly.

Choose those with the following characteristics:
● All safety cover types should conform to the specifications in American Society for Testing and Materials (ASTM) for labeling requirements and performance.
● Pool covers should be able to be removed easily and quickly in case of emergency.

### Sumps

Field-built sumps must have a depth, when measured from the bottom of the cover to the top of the outlet piping, of 1.5 times the diameter of the piping, consistent with the current ANSI/ APSP-16 2011 performance standard and specifications of the P&SS Act. Compliant drain covers that can be safely secured to a preexisting sump with a properly controlled flow rate are also compliant.

In some cases, sumps may need to be replaced to comply with the act. Although it does not generally require pool owners and operators to replace a sump, work should be carried out if:
● A professional engineer (PE) determines that additional engineering work needs to be done to the sump to bring it into compliance with the standard and ensure a secure connection with a new cover.
● A PE determines that a new drain cover cannot be safely placed on a pre-existing sump, and the sump should be removed and replaced with a new, compliant sump that is compatible with the compliant drain cover.

### Drain covers

To comply with the P&SS Act, public pools and spas in the United States must:
● Employ entrapment protections established by the ANSI/ APSP-16 2011 performance standards regulating swimming pools and spas.
● Use compliant drain covers. For pools and spas with a single main drain other than an unblockable drain, they must be equipped with secondary safety devices or systems designed to prevent entrapment by pool or spa drains and that meet the act’s requirements.

All drain covers must be compliant with the current ANSI/ ASME performance standard. The ASME standard requires covers to display:
● Use – single or multiple.
● Flow rate GPM.
● Life or the number of years.
● Wall or floor mount.
● Manufacturer’s name.
● Model number.
● Flow rates and single drains.

### Additional protection

In addition to having a drain cover or other anti-entrapment device that complies with the ANSI/ASME A112.19.8 performance standard or the successor standard ANSI/APSP-16 2011, public pools and spas with single, blockable main drains must have additional protections by using one of the following systems or devices:
● Safety vacuum release system.
● Suction-limiting vent system.
● Gravity pools.
● Automatic pump shut-off system.
● Drain disablement.
Professional maintenance and inspection

Pool inspection by a trained and qualified inspector is a vital step in assuring the safety of a public swimming pool or spa. Engineers and pool technicians, among other qualified professionals, ensure that a public swimming pool or spa is operating safely. By properly installing safety devices, accurately measuring the water flow rate through a spa or hot tub, evaluating water quality, and examining the safety equipment and physical condition of facility, trained pool and spa professionals maintain the security of residential and public pools or spas, reducing the risk of drowning, submersion injuries, and entrapment. Confirm that professionals are licensed or certified in Florida and carrying insurance or similar protection.

Conclusion

If your association provides a pool or spa, you have a role to play in alerting pool and spa users to strategies and behaviors that reduce the risk of drowning and entrapment. By adopting safety standards and implementing them effectively, you can help reduce the risk of submersion injuries and fatalities at your association.

Endnotes

3. For more information about barrier removal, see the Title III regulations at Section 36.304.
5. State Of Florida Department Of Health County Health Department Public Pool And Bathing Place Inspection Report, DH 920 - Checklist for 64E-9.

References and resources

• Chick PS, Section 515.23.
• Snell AD. Pool and Spa Safety Information For Sumps http://www.poolsafely.gov/industry-operators/
• State Of Florida Department Of Health County Health Department Public Pool And Bathing Place Inspection Report, DH 920 : Checklist for 64E-9
• The National Swimming Pool Foundation (NSPF) Poolsafety.gov
• Virginia Graeme Baker Pool and Spa Safety Act (P&SS Act) was enacted to provide legal enforcement authority to prosecute caregivers who are not supervising individuals under their care properly in and around water.
• Wintemute GJ. Swimming pool owners’ opinions and strategies for prevention
• World Health Organization. Healthy Recreational Waters. at www.who.int/health_topics/healthywater

1. Florida typically leads the nation in drowning deaths among young children, with the majority of deaths under the age of 5 occurring in swimming pools and spas.
   - True
   - False

2. The Virginia Graeme Baker Pool and Spa Safety Act (P&SS Act) was enacted to provide legal enforcement authority to prosecute caregivers who are not supervising individuals under their care properly in and around water.
   - True
   - False

3. According to the P&SS Act, community associations (including almost all Florida pools and spas in condominiums, homeowners’ associations, health clubs, and hotels) are exempt from the law.
   - True
   - False

4. A suction-limiting vent system is a safety vacuum release system that stops operation of the pump, reverses the circulation flow, and provides a vacuum release at a suction outlet upon detecting a blockage.
   - True
   - False

5. Pools designed specifically for young children, such as shallow wading/kiddie pools, that have easily accessible suction outlets; in-ground spas that have flat suction outlet grates; and single suction outlet systems pose the greatest danger of entrapment and evisceration to young children, who are at the greatest risk of entrapment accidents.
   - True
   - False

6. The best defense against entrapments is the installation of flat, instead of domed, drain covers, which are designed to prevent entrapment.
   - True
   - False

7. If a community association allows nonmembers of the association to use its pool in exchange for some form of compensation, the pool is likely to qualify as a public accommodation, and should have been compliant with the ADA standards for accessible entry and exits by January 21, 2013.
   - True
   - False

8. Under the Fair Housing Act (FHA), a privately owned residential community must provide a barrier-free pathway up to the edge of a pool.
   - True
   - False

9. County health departments (CHD) are responsible for conducting inspections and issuing all permits.
   - True
   - False

10. In 2009, a provision was added to Section 64E-9.004, Operational Requirements, requiring that any landscape irrigation water that wets the deck area of the pool, the pool itself, enters the collector tank, or wets an interactive water feature, must be potable (safe to drink) water from a public water system.
    - True
    - False

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