

# Public and Semi-Public Swimming Pools Rule

410 IAC 6-2.1



Indiana State Department of Health  
Environmental Public Health Division  
2 N. Meridian St., 5-E  
Indianapolis, IN 46204

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## Rule 2.1. Public and Semi-Public Pools

### 410 IAC 6-2.1-1 Applicability

Sec. 1. The definitions in this rule apply throughout this rule.

### 410 IAC 6-2.1-2 "Air gap" defined

Sec. 2. "Air gap":

- (1) means the unobstructed vertical distance through atmosphere between the water supply inlet and the flood level rim of the receiving unit; and
- (2) is at least two (2) times the diameter of the water supply outlet or pipe or six (6) inches, whichever is the smaller distance.

### 410 IAC 6-2.1-3 "Bather load" defined

Sec. 3. "Bather load" means the total number of bathers within the pool enclosure.

### 410 IAC 6-2.1-4 "Breakpoint chlorination" defined

Sec. 4. "Breakpoint chlorination" means the point in a rising chlorine residual at which the concentration of available chlorine becomes great enough to completely oxidize all organic matter and ammonia compounds (combined chlorine) in a pool.

### 410 IAC 6-2.1-5 "Competition pool" defined

Sec. 5. "Competition pool" means any pool intended for use for accredited competitive aquatic events. Competition pools may also be used for recreation and instruction.

### 410 IAC 6-2.1-5.3 "CT inactivation value" defined

Sec. 5.3. "CT inactivation value" means the concentration (C) of free chlorine in ppm (or mg/L) multiplied by time (T) in minutes at a specific pH and temperature.

### 410 IAC 6-2.1-5.6 "Deep areas" defined

Sec. 5.6. "Deep areas" means areas of the pool exceeding five (5) feet in depth.

### 410 IAC 6-2.1-6 "Department" defined

Sec. 6. "Department" means the Indiana state department of health.

### 410 IAC 6-2.1-7 "Diving pool" defined

Sec. 7. "Diving pool" means any pool that is designed and constructed primarily for diving and does not have a shallow end.

### 410 IAC 6-2.1-7.3 "Full stomach vomit" defined

Sec. 7.3. "Full stomach vomit" for the purpose of this rule shall mean the emptying of all of the stomach's contents as a result of an illness as opposed to vomit from swallowing too much water, overexertion, or play.

### 410 IAC 6-2.1-7.5 "Maximum bather load" defined

Sec. 7.5. "Maximum bather load" means the maximum usage of the pool calculated based on the following, whichever is applicable:

	Shallow or wading areas (A)	Deep areas, not including diving areas (B)	Diving areas (per board) (C)
If the deck is less than the surface area of the pool	15 sq. ft. of pool surface area per bather	20 sq. ft. of pool surface per bather	300 sq. ft. of pool surface area per bather
If the deck is equal to or larger than the surface area of the pool	12 sq. ft. of pool surface area per bather	15 sq. ft. of pool surface per bather	300 sq. ft. of pool surface per bather
If the deck is twice the surface area of the pool	8 sq. ft. of pool surface per bather	10 sq. ft. of pool surface per bather	300 sq. ft. of pool surface area per bather

A+B+C= Maximum bather load. If the diving board(s) is closed, an additional 10 bathers are permitted.

**410 IAC 6-2.1-8 "mg/l" defined (Repealed)**

Sec. 8. (Repealed by Indiana State Department of Health)

**410 IAC 6-2.1-9 "Person" defined**

Sec. 9. "Person" means:

- (1) any individual, firm, partnership, company, corporation, trustee, association, municipality, county, authority, estate, or public or private entity; and
- (2) its or their successors, assigns, or agents.

**410 IAC 6-2.1-10 "Plunge pool" defined**

Sec. 10. "Plunge pool" means a pool located at the exit end of a waterslide flume and is intended and designed to receive sliders emerging the flume.

**410 IAC 6-2.1-11 "Pool" defined**

Sec. 11. "Pool" means a structure, basin, chamber, or tank containing an artificial body of water for swimming, bathing, competition, relaxation, or recreational use.

**410 IAC 6-2.1-12 "Pools with wading areas" defined**

Sec. 12. "Pools with wading areas" means any pool that has a portion of the shallow end with a maximum depth of twenty-four (24) inches.

**410 IAC 6-2.1-12.5 "ppm" defined**

Sec. 12.5. "ppm" means parts per million and is equivalent to milligrams per liter when the medium is water.

**410 IAC 6-2.1-13 "Public pool" defined**

Sec. 13. "Public pool" means any pool, other than those pools defined as a semi-public pool, which is intended to be used for swimming or bathing and is operated by a concessionaire, owner, lessee, operator, or licensee, regardless of whether a fee is charged for use. Nothing in this article shall be construed as applying to any pool, constructed at a one (1) or two (2) family dwelling, and maintained by an individual for the sole use of the household and house guests.

**410 IAC 6-2.1-14 "Public sewer" defined**

Sec. 14. "Public sewer" means a sewage disposal facility provided by a utility, municipality, conservancy district, or regional sewer district.

**410 IAC 6-2.1-15 "Public water supply" defined**

Sec. 15. "Public water supply" means water supplied by a utility, municipality, conservancy district, regional water district, or water corporation.

**410 IAC 6-2.1-16 "Sanitary facilities" defined**

Sec. 16. "Sanitary facilities" means flush toilets, hand washing lavatories, and showers.

**410 IAC 6-2.1-17 "Semi-public pool" defined**

Sec. 17. "Semi-public pool" means any pool restricted for use by residents, members, or registered guests that is intended to be used for swimming or bathing and is operated solely for and in conjunction with:

- (1) hotels, motels, apartments, condominiums, bed and breakfasts, tourist homes, or similar facilities associated with lodgings;
- (2) camps or mobile home parks; or
- (3) membership clubs, churches, or associations.

Nothing in this article shall be construed as applying to any pool, constructed at a one (1) or two (2) family dwelling, and maintained by an individual for the sole use of the household and house guests.

**410 IAC 6-2.1-17.5 "Shallow areas" defined**

Sec. 17.5. "Shallow areas" means those portions of a pool ranging in water depth from two (2) to five (5) feet.

**410 IAC 6-2.1-18 "Spa" defined**

Sec. 18. "Spa" means a pool designed for recreational or therapeutic, or both, use, commonly known as a hot tub or therapy pool, that is not drained, cleaned, and refilled after each use. The term may include, but is not

limited to:

- (1) hydrojet circulation;
- (2) hot water;
- (3) cold water;
- (4) mineral baths;
- (5) air induction systems; or
- (6) any combination thereof.

**410 IAC 6-2.1-18.5 "Standard Methods" defined**

Sec. 18.5. "Standard Methods" means Standard Methods for the Examination of Water and Wastewater, twenty-first edition, published by the American Public Health Association, Inc., 2005, specifically Part 9000, Microbiological Examination of Water.

**410 IAC 6-2.1-19 "Swimming pool slide" defined**

Sec. 19. "Swimming pool slide" means any device used to enter a pool by sliding down an inclined plane or equipment similar to a playground slide.

**410 IAC 6-2.1-19.3 "Tourist" defined**

Sec. 19.3. "Tourist" means a person who has a home address somewhere else other than where he/she is spending the night.

**410 IAC 6-2.1-19.5 "Tourist home" defined**

Sec. 19.5. "Tourist home" means a structure constructed as a single-family dwelling that is rented or otherwise contracted for overnight lodging to a tourist for more than three (3) times per year or more than ten (10) days per year, total.

**410 IAC 6-2.1-20 "Turnover rate" defined**

Sec. 20. "Turnover rate" means the period of time, expressed in hours, required to circulate a volume of water equal to the maximum pool-water capacity through the pool-water treatment system.

**410 IAC 6-2.1-20.5 "Wading area" defined**

Sec. 20.5. "Wading area" means those portions of the pool with water depth ranging from zero (0) to two (2) feet.

**410 IAC 6-2.1-21 "Wading pool" defined**

Sec. 21. "Wading pool" means a pool used for bathing that has a maximum depth of two (2) feet.

**410 IAC 6-2.1-22 "Waterslide" defined**

Sec. 22. "Waterslide" means a recreational ride that is a sloped trough-like or tubular structure using water as a lubricant and method of regulating rider velocity and terminates in a plunge pool, swimming pool, or a specifically designed deceleration structure.

**410 IAC 6-2.1-23 "Wave pool" defined**

Sec. 23. "Wave pool" means any pool having a bottom sloped upward from the deep end to the surface at the shallow end with equipment installed at the deep end to create wave motions in the water.

**410 IAC 6-2.1-24 "Zero depth pool" defined**

Sec. 24. "Zero depth pool" means any pool with a bottom sloped upward from the deep end to the surface level at the shallow end.

**410 IAC 6-2.1-25 Administration of rule**

Sec. 25. (a) This rule may be administered by the department or by the local health officer through their authorized agent.

(b) Semi-public pools on the premises of a tourist home shall be operated and maintained in accordance with sections 26(b), 28(b), 42.1, and 44 of this rule.

(c) Semi-public spas on the premises of a tourist home shall be operated and maintained in accordance with sections 26(b), 28(b), 42.1, and 44 of this rule.

- (d) A copy of this rule shall be kept on site at the facility.

#### **410 IAC 6-2.1-26 New construction**

Sec. 26. (a) Public and semi-public pools, excepting those on the premises of a tourist home, shall be designed, constructed, maintained, and modified in accordance with 675 IAC 20-2.

- (b) Semi-public pools on the premises of a tourist home shall be designed, constructed, maintained, and modified in accordance with 675 IAC 20-4, excepting spas, which must be:
  - (1) commercially manufactured, residential style spas; or
  - (2) constructed in accordance with 675 IAC 20-3.

#### **410 IAC 6-2.1-27 Water supply**

Sec. 27. (a) An adequate and convenient supply of potable water that meets the provisions of 327 IAC 8-2 shall be provided at plumbing fixtures used for:

- (1) drinking;
  - (2) cooking;
  - (3) dishwashing;
  - (4) hand washing;
  - (5) showering; and
  - (6) pool water.
- (b) Wells shall be constructed, installed, and located in accordance with 327 IAC 8-2 and 312 IAC 13.
  - (c) A public water supply shall be exclusively used if available within a reasonable distance. A water supply, properly located and constructed, shall be provided if a public water supply is not available.
  - (d) The construction and location of wells with fewer than fifteen (15) service connections, or serving fewer than twenty-five (25) people, shall comply with Bulletin S.E. 13. All other wells shall comply with 327 IAC 8-2.
  - (e) The water supply and distribution system shall have the capacity to deliver a minimum water pressure of twenty (20) pounds per square inch to all water connections during periods of peak water usage. The water supply shall have a capacity to meet total water demands. If a well or pump cannot meet a peak or daily demand, a sufficient useable storage capacity shall be provided.
  - (f) The casing pipe of a well shall extend not less than twenty-four (24) inches above floor level, finish grade, or the highest flood level on record.
  - (g) Water supplies shall have no:
    - (1) wellhead;
    - (2) well casing;
    - (3) pump;
    - (4) pumping machinery;
    - (5) exposed pressure tanks; or
    - (6) suction piping; located in any pit, room, or enclosure that does not have free drainage by gravity to the ground surface at all times.
  - (h) Stop-and-waste valves (including unapproved frost-proof hydrants) or other devices that would allow aspiration or backflow of contaminated water into the potable system shall not be used.
  - (i) All portions of the water distribution system serving pools, and auxiliary facilities, shall be protected against backflow and backsiphonage. Water introduced into the pool, either directly or through the recirculation system, shall be supplied through an air gap or in accordance with 675 IAC 16.

#### **410 IAC 6-2.1-28 Sewage disposal**

Sec. 28. (a) The sewage disposal system shall be adequate to serve the facility, including the bathhouse, locker room, pool water treatment equipment, deck drains, and related accommodations.

- (b) Pool water and filter backwash water may not discharge to a ditch, stream, or lake, except in accordance with 327 IAC 2-1.
- (c) All pool gutters, recirculation systems, and overflows shall discharge through an air gap to preclude the possibility of a backup of sewage or waste into the pool or pool piping system.
- (d) All pool sumps, deck drainage systems, and other drainage fixtures that discharge to a sewer or storm drain shall be properly trapped and vented to prevent sewer gases and odors from reaching the pool area.
- (e) All sewage, including gray water, shall be disposed of via a connection to a public sewer, if available within a reasonable distance. If a public sewer is not available within a reasonable distance from the pool, sewage disposal must comply with 410 IAC 6-10, Bulletin S.E. 11, Bulletin S.E. 13, or applicable rules of

the Indiana department of environmental management.

**410 IAC 6-2.1-29 Sanitary facilities**

- Sec. 29. (a) The ratio and location of sanitary facilities for public and semi-public pools shall be in accordance with 675 IAC 20-2-27.
- (b) Sanitary facilities are not required poolside at semi-public pools if sanitary facilities are available to pool patrons within three hundred (300) feet of the pool enclosure.
  - (c) Toilet paper and covered waste receptacles shall be provided for toilet facilities.
  - (d) Soap, covered waste receptacles, and paper towels or electrical hand drying units shall be provided at the lavatories.
  - (e) Hot and cold water shall be provided through a mixing faucet. Hot water temperature shall:
    - (1) be at least ninety (90) degrees Fahrenheit; and
    - (2) not exceed one hundred twenty (120) degrees Fahrenheit.
  - (f) When showers are provided, the hot water temperature shall:
    - (1) be at least ninety (90) degrees Fahrenheit; and
    - (2) not exceed one hundred twenty (120) degrees Fahrenheit.An approved, properly operating hot water control valve shall be installed on the hot water heater to prevent the hot water temperature from exceeding one hundred twenty (120) degrees Fahrenheit at the point of use. Soap shall be provided at any shower. Bar soap shall not be permitted.
  - (g) All sanitary facilities shall be maintained in a safe and sanitary condition.

**410 IAC 6-2.1-30 Pool water chemistry**

- Sec. 30. (a) All pools, when open for use, shall be continuously and automatically disinfected with a chemical that imparts an easily measured, free residual.
- (b) A free residual of the disinfectant chemical shall be maintained throughout the pool at concentrations in accordance with the following:

POOL TYPE	CHLORINE		BROMINE	
	Minimum	Maximum	Minimum	Maximum
Wading pools	3.0 ppm	7.0 ppm	4.0 ppm	10.0 ppm
Spa pools	2.0 ppm	7.0 ppm	4.0 ppm	10.0 ppm
Waterslide plunge pools	2.0 ppm	7.0 ppm	3.0 ppm	10.0 ppm
Wave pools	2.0 ppm	7.0 ppm	3.0 ppm	10.0 ppm
All other pools	1.0 ppm	7.0 ppm	2.0 ppm	10.0 ppm

- (c) Whenever the residual disinfectant:
  - (1) falls below the minimum concentration required; or
  - (2) exceeds the maximum concentration allowed;the pool shall be cleared and kept free of bathers until disinfectant residuals are within the acceptable range.
- (d) The department may accept other disinfecting materials or methods when the materials or methods have been demonstrated:
  - (1) to provide a residual effect equivalent to halogens;
  - (2) to be easily measured under conditions of use;
  - (3) not to be dangerous to public health;
  - (4) not to create objectionable physiological effects; or
  - (5) not to impart toxic properties to the water.
- (e) The pool water shall be superchlorinated to breakpoint or superoxidized with a nonchlorine oxidizer when the pool test kit reveals a combined chlorine (chloramine) concentration of five-tenths (0.5) parts per million (ppm) or greater.
- (f) Chlorinated isocyanurates or stabilized chlorine shall not be used for breakpoint chlorination.
- (g) The pool shall be closed and remain closed during breakpoint chlorination until the chlorine concentration drops to the maximum level referenced in subsection (b).
- (h) If a nonchlorine oxidizer is used to superoxidize, the pool shall be closed and shall remain closed in accordance with the specifications on the product label.
- (i) A test kit shall be readily available for use by the pool operator, with reagents replaced according to

manufacturer's requirements, and meet the following:

- (1) For pools that use chlorine as a disinfectant, a test kit shall be used that covers a minimum range of zero (0.0) ppm to five (5.0) ppm or higher. The test kit must be:
  - (A) in increments of five-tenths (0.5) ppm; and
  - (B) capable of measuring total chlorine.
- (2) Orthotolidine may not be used as the disinfectant testing reagent.
- (3) For pools that use a disinfectant other than chlorine, the test kit shall have the range and accuracy proportionate to the range required for chlorine test kits.
- (4) A pH test kit:
  - (A) accurate to the nearest two-tenths (0.2) pH unit; and
  - (B) covering a minimum range of seven (7.0) to eight (8.0) pH units; shall be used.
- (5) When a cyanurate is used as a chlorine stabilizer, the test kit shall be capable of measuring cyanuric acid concentrations.
- (6) A test kit capable of measuring total alkalinity shall be used.
- (j) If chlorinated isocyanurate or cyanuric acid stabilizers are used in a pool, the concentration shall not exceed sixty (60) ppm. When the maximum allowable cyanuric acid concentration is exceeded, the pool must be closed until appropriate measures are taken to lower the concentrations to the required range.
- (k) Chlorinated isocyanurates and cyanuric acid stabilizers shall not be used in any indoor pool.
- (l) Only in pools where chlorine is used as the disinfectant can cyanuric acid be used as a stabilizer.
- (m) The water in a pool shall have a pH of not less than seven and two-tenths (7.2) and not more than seven and eight-tenths (7.8).
- (n) The alkalinity of the water in pools shall be at least eighty (80) ppm and no more than one hundred twenty (120) ppm as titrated to the methyl orange endpoint unless it can be shown that another level of total alkalinity produces chemically balanced water based on calculations approved by the department.
- (o) Pool water shall be tested for the following:
  - (1) pH and disinfectant residuals daily before the pool is open for use and at least one (1) other time during the hours of pool use.
  - (2) Combined chlorine at least twice a week when chlorine is used.
  - (3) Total alkalinity at least once a week.
  - (4) Cyanuric acid, when it is used, at least once a week.
- (p) Spa water shall be tested for pH and disinfectant residuals daily before the spa is open for use and at least two (2) other times during the hours of spa use for the following:
  - (1) Combined chlorine concentration, when chlorine is used, at least twice a week.
  - (2) Total alkalinity at least once a week.
- (q) All results shall be recorded.
- (r) If electronic monitoring devices are used, the accuracy of the device must be checked as required by the manufacturer or compared for accuracy at least once per week with a test kit. Use of oxidation reduction potential (ORP) controllers does not negate the manual daily testing requirement for disinfectant residuals.
- (s) The pool shall be closed for at least one (1) hour following the manual addition of a chemical directly to the pool water.
- (t) Any chemical used to treat the water in a pool must be used in accordance with the product label directions.

#### **410 IAC 6-2.1-31 Water quality standards**

- Sec. 31. (a) At all times, the water in a pool shall have sufficient clarity so that the main drain or a black disc, six (6) inches in diameter placed at the deepest part of the pool, is readily visible from the deck.
- (b) The water temperature in spas may not exceed one hundred four (104) degrees Fahrenheit.
  - (c) One (1) water sample must be collected weekly from each pool and submitted for bacteriological examination. Samples may not be collected from any portion of the recirculation system.
  - (d) Sampling shall start at least one (1) week prior to the opening of the pool.
  - (e) Bacteriological examinations performed on each sample shall include the heterotrophic thirty-five (35) degree Centigrade plate count, and a total coliform test using either the:
    - (1) multiple tube fermentation test;
    - (2) membrane filter test; or
    - (3) one hundred (100) milliliter presence/absence test.
  - (f) Tests shall be performed by a state-approved laboratory in accordance with the procedures outlined in

Standard Methods.

- (g) A copy of each water sample report must be submitted to the local health department by the pool owner or operator within four (4) days of receiving such a report from the laboratory. No two (2) consecutive samples or three (3) samples collected in a six (6) week period shall demonstrate the following:
  - (1) Contain more than two hundred (200) bacteria colonies per milliliter as determined by the heterotrophic thirty-five (35) degree Centigrade plate count.
  - (2) Test positive (confirmed test) for coliform organisms in any of the five (5) to ten (10) milliliter portions of a sample when the multiple tube fermentation tube test is used.
  - (3) Test positive for more than one (1) coliform organism per fifty (50) milliliters when the membrane filter test is used.
  - (4) Show the presence of any coliform when the one hundred (100) milliliter presence/absence test is used. Failure to collect and analyze weekly water samples during the period that a pool is open for use is considered an unsatisfactory report for the applicable week.
- (h) When the pool must be closed due to an unsatisfactory sample report, an additional water sample must be submitted to an approved laboratory. The pool may be reopened upon receipt of a satisfactory report.

**410 IAC 6-2.1-32 Recirculation**

Sec. 32. (a) The recirculation system shall be maintained in accordance with the following:

- (1) The turnover rate for spas shall be once every half hour.
- (2) For pools, except spas, built before September 13, 1989, the turnover rate shall be the lesser of the following times:
  - (A) Eight (8) hours.
  - (B) The maximum pool capacity in gallons, divided by the maximum bather load, divided again by one hundred eight (108) gallons per hour per bather.
- (b) In all other pools built on or after September 13, 1989, the turnover rate shall be as follows:

<b>POOL TYPE</b>	<b>TURNOVER RATE</b>
Wading pools	1 hour
Wave pools	2 hours
Zero depth pools	2 hours
Pools with wading areas	2 hours
Competition pools	6 hours
Diving pools	12 hours
All other pools	6 hours

- (c) A suitable means shall be provided to measure the flow of water through the pool water recirculation system.
- (d) Footbaths are prohibited.
- (e) All public and semi-public pools and spas must comply with the Virginia Graeme Baker Pool and Spa Safety Act, 15 U.S.C. 8001-8008.

**410 IAC 6-2.1-33 Gas chlorine and chemical storage**

Sec. 33. (a) The following shall be provided when chlorine gas is used:

- (1) Chlorine gas equipment shall be operated and maintained in accordance with standards and recommendations of The Chlorine Institute, Inc., Pamphlet 82, (1999). A copy of said standards must be kept on the premises.
- (2) A self-contained positive pressure demand breathing apparatus, with air supply tank, designed for use in a chlorine atmosphere.
- (3) The self-contained breathing apparatus shall be kept in a closed cabinet, accessible without a key and located outside of the room in which the chlorinator or chlorine cylinders are located.
- (4) Pool equipment operating staff shall be trained in the use of the self-contained breathing apparatus and shall maintain documentation of that training.
- (5) Each pool operator shall have a written emergency plan of action for chlorine gas leaks. The emergency plan shall be communicated to all employees, posted in a conspicuous place, and be practiced with annual drills.



- (b) All chemicals and items in the chemical storage room shall be stored at least six (6) inches above the floor to allow for flushing the area in the case of a spill.
- (c) All chemicals shall be stored in accordance with manufacturer recommendations.

**410 IAC 6-2.1-34 Lifesaving and safety equipment**

Sec. 34. (a) At least one (1) unit of lifesaving equipment shall be provided at each pool and shall consist of the following:

- (1) A life pole, or shepherd's crook type of pole, with blunted ends and a minimum length of twelve (12) feet.
- (2) A United States Coast Guard approved ring buoy, having a minimum outside diameter of twenty (20) inches, with one-fourth (1/4) inch diameter rope equal in length to the width of the pool and not to exceed forty-five (45) feet in length. A rescue tube is a permitted alternative to the ring buoy at locations where lifeguards are on duty during operational hours.
- (b) One (1) spine board, with straps and head immobilizer, shall be available for each pool enclosure, except for spas and wading pools.
- (c) For pools with a surface area of two thousand (2,000) square feet or more, a rescue tube or ring buoy shall be provided for each lifeguard on duty.
- (d) A twenty-four (24) unit first aid kit that meets American National Standards Institute (ANSI) standard Z308.1-2003 or 2009 and two (2) blankets shall be provided within each pool enclosure. The first aid kit shall be kept filled and ready for use whenever the pool is open for use.
- (e) A telephone shall be located within two hundred (200) feet of the pool enclosure and must be available for emergency use whenever the pool is open for use, with the facility location and the following emergency telephone numbers posted within view:
  - (1) 911.
  - (2) Ambulance or rescue unit.
  - (3) Hospital.
  - (4) Police station.
  - (5) Fire department.
- (f) Depth markings of pools shall conform to 675 IAC 20-2.
- (g) A removable buoyed transition line, anchored at each end, shall separate the shallow area defined as five (5) feet or less, from the deeper pool area, except when the pool is being used for organized activities or during operation as a wave pool.
- (h) One (1) unit of lifesaving equipment:
  - (1) in good repair;
  - (2) ready for use; and
  - (3) stored within twenty (20) feet of the pool;
 shall be provided for each two thousand (2,000) square feet of pool water surface, except spas and wading pools.

**410 IAC 6-2.1-35 Lifeguards**

Sec. 35. (a) A qualified lifeguard is required for all public pools. A qualified lifeguard is required for all semi-public pools with a surface area of two thousand (2,000) square feet or more. Lifeguards must be on duty at poolside at all times when the pools are open for use.

- (b) A qualified lifeguard or attendant must be stationed continuously at a waterslide and control its use.
- (c) When lifeguards are required, they shall be provided as follows:

BATHER LOAD*	MINIMUM NUMBER OF LIFEGUARDS
0-75	1
76-150	2
151-225	3
226-300	4
301-375	5

\*When the bather load exceeds three hundred seventy-five (375), one (1) lifeguard shall be provided for each additional seventy-five (75) bathers or fraction thereof.

- (d) Lifeguards shall possess a current nationally recognized certification in each of the following:

- (1) Lifeguard training.
  - (2) Adult/infant/child cardiopulmonary resuscitation.
  - (3) First aid.
- Copies of these certificates shall be kept on site and available for inspection.
- (e) The operators of all public pools shall provide annual lifeguard orientation and training that includes training in bloodborne pathogens. New guards shall also receive training when they are employed.
  - (f) When on patron surveillance duty, lifeguards shall not perform any other duties, including instruction of a class or coaching, and shall not be in the water except in the line of duty.
  - (g) Lifeguards on duty shall be identified with distinguishing equipment, apparel, or emblems.
  - (h) Lifeguard platforms or chairs shall be:
    - (1) elevated five (5) to six (6) feet above the deck at pool areas with a depth of five (5) feet or greater;
    - (2) placed in locations that minimize glare on the water; and
    - (3) in a position that will allow complete visual coverage of the pool and the pool bottom within a field of view not greater than forty-five (45) degrees on either side of a line extending straight out from the chair.

#### 410 IAC 6-2.1-36 Warning signs

- Sec. 36. (a) Warning signs shall be provided in legible letters at least four (4) inches high as follows:
- (1) A sign warning "DANGER-HAZARDOUS CHEMICALS" shall be posted on or adjacent to the entrance to the pool chemical feed and chemical storage rooms.
  - (2) Whenever the pool area is open for use and no lifeguard service is provided, warning signs shall be placed in plain view at the entrances and inside the pool area that state "Warning-No Lifeguard on Duty". In addition, the signs shall also state in clearly legible letters at least two (2) inches high, "No Swimming Alone. Children Under 14 Years of Age and Nonswimmers Shall Not Use the Pool Unless Accompanied by a Responsible Adult."
  - (3) When the pool is not open for use, a sign shall be posted stating "POOL CLOSED".
  - (4) A sign stating "No Diving" shall be posted at nondiving areas and at portions of the pool that are five (5) feet deep or less. "No Diving" signs are not required at spas or wading pools.
- (b) The following user sanitation and safety rules shall be posted on signs with letters at least one (1) inch high and within the pool enclosure:
- (1) Anyone who has or has had diarrhea in the past two (2) weeks shall not use the pool.
  - (2) Anyone who has an area of exposed subepidermal tissue, open blisters, cuts, etc., is advised not to use the pool.
  - (3) All persons shall take a cleansing shower before using the pool. A bather leaving the pool to use the toilet shall take another cleansing shower before returning to the pool enclosure.
  - (4) Spitting, spouting of water, blowing the nose, and similar behavior in the pool is prohibited.
  - (5) No running or rough play is permitted in the pool, on the runways, on diving boards, on floats, on platforms, in dressing rooms, or in showers.
  - (6) Street clothes are not allowed in the pool.
  - (7) All diaper aged children shall use plastic pants with tight fitting elastic at the legs and waist, or swim diapers.
  - (8) Do not change diapers at poolside.
- (c) In addition to the requirements of subsection (b), spa pools shall have the following posted:
- (1) Pregnant women, small children, or persons with heart disease, diabetes, high blood pressure, or low blood pressure should not enter the spa except under advice of a physician.
  - (2) Avoid use while under the influence of alcohol, tranquilizers, or other drugs that cause drowsiness or raise or lower blood pressure.
  - (3) Exposure greater than fifteen (15) minutes may result in drowsiness, nausea, or fainting.
- (d) The following shall be posted near the entrance of swimming pool slides:
- (1) One (1) rider at a time. Wait until the landing area is clear before entering the slide.
  - (2) Slide in a sitting position or on the back only.
  - (3) Do not attempt to stop on the slide.
  - (4) Leave the plunge area immediately.
  - (5) Warning: Water depth is \_\_\_\_ feet.
- (e) The following shall be posted near the entrance of the water slide:
- (1) Only one (1) rider at a time.

- (2) Follow the instructions of the attendant and/or lifeguard.
- (3) No running, standing, kneeling, rotating, tumbling, or stopping in the flumes.
- (4) No diving from a flume.
- (5) Leave the plunge pool promptly after entering.
- (f) Pools shall have a sign with letters at least one (1) inch high stating the maximum bather load posted within the pool enclosure.

**410 IAC 6-2.1-37 Cleaning**

Sec. 37. (a) Visible dirt on the bottom and walls of the pool shall be removed at least every twenty-four (24) hours or more frequently if required.

- (b) Scum, oils, or floating matter on the water surface of a pool shall be removed continuously by skimming, flushing, or other effective means when the pool is open for use.

**410 IAC 6-2.1-38 Records of operation**

Sec. 38. (a) Operating records shall be logged daily, kept for a minimum of one (1) year, and be available upon request by the department. The operating records must contain the following:

- (1) Disinfectant residuals and combined chlorine concentrations.
- (2) pH readings.
- (3) Volume of fresh water added.
- (4) Operating periods of pool water recirculation pumps and filters and the corresponding rate of flow meter readings.
- (5) Amounts of chemicals used.
- (6) Maintenance and malfunctioning of equipment.
- (7) The date and time of any fecal events occurring in the pool, whether it involved formed stool or diarrhea, and the free chlorine and pH levels at the time of observation of the event. Before reopening the pool, the:
  - (A) free chlorine and pH levels;
  - (B) procedures followed in response to the fecal accident, including the process used to increase chlorine levels (if necessary); and
  - (C) contact time;
 must be recorded.
- (b) An injury/incident report using a form prescribed by the department shall be made for each occurrence that:
  - (1) results in death;
  - (2) requires resuscitation;
  - (3) results in transportation to a hospital or other facility for medical treatment; or
  - (4) results in an illness connected to the water quality at the pool.
  - (5) The injury/illness report shall be forwarded to the department within ten (10) days.

**410 IAC 6-2.1-39 Visitor and spectator areas at public pools**

Sec. 39. There shall be a separation between the spaces used by visitors and spectators at a public pool and those spaces used by bathers. Visitors and spectators in street clothes may be allowed within the perimeter enclosure if a separate area is provided that is segregated from the space used by the bathers by a barrier or wall at least twenty-nine (29) inches high.

**410 IAC 6-2.1-40 Food area**

Sec. 40. (a) Food may be permitted only in the visitor or spectator area of a public pool, or in a similarly separated snack area for bathers.

- (b) Only drinks in unbreakable containers shall be permitted on the pool deck.

**410 IAC 6-2.1-41 Multi-use suits and towels**

Sec. 41. (a) After each use, all multi-use suits and towels, furnished to bathers by the operator of a pool, shall be washed thoroughly with detergent and hot water of at least one hundred seventy-five (175) degrees Fahrenheit or laundered in warm soapy water containing a chlorine concentration of at least fifty (50) parts per million. Suits and towels must be rinsed and thoroughly dried after laundering.

- (b) Clean suits and towels must be kept strictly separated from those that have been used and are unlaundered.

**410 IAC 6-2.1-42 Garbage and refuse disposal**

Sec. 42. Garbage and refuse shall be collected, stored, and disposed so that the pool area is kept clean and litter free.

**410 IAC 6-2.1-42.1 Tourist home pools and spas**

Sec. 42.1. (a) Water introduced into the pool or spa at a tourist home, either directly or through the recirculation system, shall be supplied through an air gap or in accordance with 675 IAC 16.

(b) Semi-public pools and spas at tourist homes shall meet the following:

- (1) A free residual of the disinfectant chemical shall be maintained throughout the pool or spa at concentrations in accordance with the following:

Pool Type	CHLORINE		BROMINE	
	Minimum	Maximum	Minimum	Maximum
Pools	1.0 ppm	7.0 ppm	2.0 ppm	10.0 ppm
Spas	2.0 ppm	7.0 ppm	4.0 ppm	10.0 ppm

- (2) Whenever the residual disinfectant:
  - (A) falls below the minimum concentration required; or
  - (B) exceeds the maximum concentration allowed;the pool or spa shall be cleared and kept free of bathers until disinfectant residuals are within the acceptable range.
- (3) The pool or spa water shall be superchlorinated to breakpoint or superoxidized with a nonchlorine oxidizer when the pool test kit reveals a combined chlorine (chloramine) concentration of five-tenths (0.5) ppm or greater.
- (4) Chlorinated isocyanurates or stabilized chlorine shall not be used for breakpoint chlorination.
- (5) The water temperature in a spa may not exceed one hundred four (104) degrees Fahrenheit.
- (6) The water in a pool or spa shall have a pH of not less than seven and two-tenths (7.2) and not more than seven and eight-tenths (7.8).
- (7) The alkalinity of the water in pools and spas shall be at least eighty (80) ppm as titrated to the methyl orange endpoint.
- (8) If chlorinated isocyanurate or cyanuric acid stabilizers are used in a pool, the concentration shall not exceed sixty (60) ppm. When the maximum allowable cyanuric acid concentration is exceeded, appropriate measures shall be taken to lower the concentrations to the required range.
- (9) Chlorinated isocyanurates and cyanuric acid stabilizers shall not be used in a spa or in an indoor pool.
- (10) Only in pools where chlorine is used as the disinfectant can cyanuric acid be used as a stabilizer.
- (11) Pool and spa water shall be tested and logged for the following:
  - (A) pH and disinfectant residuals before each change in occupancy.
  - (B) Combined chlorine at least once a week when chlorine is used.
  - (C) Total alkalinity at least once a week.
  - (D) Cyanuric acid, when it is used, at least once a week.
- (12) The pool or spa shall be closed for at least one (1) hour following the manual addition of a chemical directly to the water.
- (13) Any chemical used to treat the water in a pool or spa must be used in accordance with the product label directions.
- (14) (At all times, the water in a pool shall have sufficient clarity so that the main drain or a black disc, six (6) inches in diameter placed at the deepest part of the pool, is readily visible from the deck. Water in a spa shall have sufficient clarity so, when the hydrojets are turned off, the main drain or a black disc, six (6) inches in diameter placed at the deepest part of the spa, is readily visible from the deck.
- (15) One (1) water sample must be collected each month that the pool or spa is open for use and submitted for bacteriological examination. Samples may not be collected from any portion of the recirculation system. Bacteriological examinations performed on each sample shall include the heterotrophic thirty-five (35) degree Centigrade plate count and a total coliform test using either the:
  - (A) multiple tube fermentation test;
  - (B) membrane filter test; or
  - (C) one hundred (100) milliliter presence/absence test.Tests shall be performed by a state-approved laboratory in accordance with the procedures outlined in

Standard Methods.

- (16) A copy of each water sample report must be submitted to the local health department by the pool or spa owner or operator within four (4) days of receiving such a report from the laboratory. Should a bacteriological sample collected in accordance with subdivision (15):
- (A) contain more than two hundred (200) bacteria colonies per milliliter as determined by the heterotrophic thirty-five (35) degree Centigrade plate count;
  - (B) test positive (confirmed test) for coliform organisms in any of the five (5) to ten (10) milliliter portions of a sample when the multiple tube fermentation tube test is used;
  - (C) test positive for more than one (1) coliform organism per fifty (50) milliliters when the membrane filter test is used; or
  - (D) show the presence of any coliform when the one hundred (100) milliliter presence/absence test is used;
- another bacteriological sample shall be collected from the same pool within a week of receiving notice about the original monthly bacteriological sample test results, and analyzed in accordance with subdivision (15). No two (2) consecutive bacteriological samples shall demonstrate an exceedance of clause (A), (B), (C), or (D). Failure to collect and analyze water samples in accordance with subdivision (15) and this subdivision during the period that a pool is open for use is considered an unsatisfactory report for the applicable month.
- (17) When the pool or spa must be closed due to an unsatisfactory sample report, an additional water sample must be submitted to an approved laboratory. The pool or spa may be reopened upon receipt of a satisfactory report.
- (18) All items in the room used to store pool or spa water treatment chemicals shall be stored at least six (6) inches above the floor to allow for flushing the area in the case of a spill.
- (19) All pool or spa water treatment chemicals shall be stored in accordance with the manufacturer's recommendations.
- (20) A twenty-four (24) unit first aid kit that meets American National Standards Institute (ANSI) standard Z308.1-2003 or 2009, shall be provided at each tourist home having a pool or spa.
- (21) Prior to occupancy of a tourist home containing a spa, a legible printed warning shall be provided to the lodger stating the following:
- (A) Pregnant women, small children, or persons with heart disease, diabetes, high blood pressure, or low blood pressure should not enter the spa except under advice of a physician.
  - (B) Avoid use while under the influence of alcohol, tranquilizers, or other drugs that cause drowsiness or raise or lower blood pressure.
  - (C) Exposure greater than fifteen (15) minutes may result in drowsiness, nausea, or fainting.
- (c) The test kits used to determine quality of the water in a pool or spa at a tourist home shall have reagents replaced according to the manufacturer's requirements and shall meet the following:
- (1) For pools or spas that use chlorine as a disinfectant, the test kit shall cover a minimum range from zero (0) ppm to five (5.0) ppm or higher. The test kit must be:
    - (A) in increments of five-tenths (0.5) ppm; and
    - (B) capable of measuring total chlorine.
  - (2) For pools or spas that use a disinfectant other than chlorine, the test kit shall have the range and accuracy proportionate to the range required for chlorine test kits.
  - (3) When a cyanurate is used as a chlorine stabilizer, the test kit shall be capable of measuring cyanuric acid concentrations.
  - (4) A pH test kit:
    - (A) accurate to the nearest two-tenths (0.2) pH unit; and
    - (B) covering a minimum range of seven (7.0) to eight (8.0) pH units; shall be used.
  - (5) A test kit capable of measuring total alkalinity shall be used.

**410 IAC 6-2.1-43 Reasons for closure**

Sec. 43. A pool shall be closed when any of the following occurs:

- (1) Failure to meet:
  - (A) bacteriological requirements of section 31(f), 42.1(b)(15), or 42.1(b)(16) of this rule;
  - (B) disinfectant concentrations of section 30(b), 42.1(b)(1) of this rule; or
  - (C) the water clarity requirements of section 31(a) or 42.1(b)(13) of this rule.

- (2) The grate on the main drain is missing or broken, or failure to meet the requirements of section 32(e) [of this rule].
- (3) Failure to meet lifeguard requirements of section 35 of this rule, where applicable.
- (4) A pump, filter, or disinfectant chemical feeder is not operational.
- (5) A fecal accident.
- (6) The spa water temperature exceeds one hundred four (104) degrees Fahrenheit.
- (7) pH values less than 6.8 or equal to or greater than 8.0.
- (8) If the department determines a condition, situation, or installation is created, installed or maintained that may:
  - (A) cause or result in a health or safety hazard; or
  - (B) cause or transmit disease.

#### **410 IAC 6-2.1-44 Fecal accidents**

Sec. 44. (a) In the event that a solid stool or full stomach vomit is identified in the pool or spa water, the following steps are required:

- (1) The pool shall be cleared of all patrons and close all affected pools or spas operating a common filtration system and keep closed during the sanitation procedure.
  - (2) The solid fecal material or vomit shall be removed using a net or scoop. The pool vacuum shall not be used for this purpose. All equipment used to remove the fecal material or vomit shall be sanitized with a fresh solution of twenty (20) parts per million (ppm) chlorine or immersed in the pool during disinfection.
  - (3) The free chlorine/bromine level shall be tested.
  - (4) pH shall be maintained 7.5 or less.
  - (5) Ensure water temperature of seventy-seven (77) degrees Fahrenheit or higher.
  - (6) If chlorine stabilizers are not present in the pool water, the pool shall be closed until a minimum of two (2) ppm of free disinfectant has been present in the pool water for a minimum of twenty-five (25) minutes as measured at poolside or the length of time necessary to attain a CT inactivation value of forty-five (45). When chlorine stabilizers are present in pool water, the pool shall be closed until four (4) ppm of free disinfectant must be present in the pool water for a minimum of twenty-five (25) minutes as measured at poolside or the length of time necessary to attain a CT inactivation value of one hundred (100).
  - (7) When the required level of disinfectant concentration is met, the pool may reopen.
- (b) In the event that a nonsolid stool is identified in the pool or spa water, the following steps are required:
- (1) Immediately clear the pool of all patrons and close all affected pools or spas operating on a common filtration system and keep closed during the sanitization procedure.
  - (2) The fecal matter should be removed as much as possible using a net or scoop. The pool vacuum shall not be used for this purpose. All equipment used to remove the fecal material shall be sanitized with a fresh solution of twenty (20) ppm chlorine or immersed in the pool during disinfection.
  - (3) pH shall be maintained at 7.5 or less.
  - (4) Ensure that water temperature shall be seventy-seven (77) degrees Fahrenheit or higher.
  - (5) If chlorine stabilizers are not present in the pool water, raise the free chlorine residual in the pool water to twenty (20) ppm, chlorine minimum, and maintain it at that level for a minimum of seven hundred sixty-five (765) minutes (twelve (12) hours and forty-five (45) minutes), or the length of time necessary to attain a CT inactivation value of 15,300 or completely drain the pool to a public sewer. Spas only may be completely drained to an approved sewage disposal system other than a public sewer. Stabilized chlorine cannot be used to raise the free chlorine residual. When chlorine stabilizers are present in the pool water, the pool shall be closed, the pH lowered to 6.5, and a forty (40) ppm of free disinfectant must be present in the pool water for a minimum of thirty (30) hours as measured at poolside.
  - (6) When the pool is drained, sanitize all surfaces with a chlorine solution of at least twenty (20) ppm.
  - (7) When the pool is disinfected without draining, continuously operate the recirculation/filtration system during the sanitization/contact period time.
  - (8) Filters shall be backwashed to waste and filter material replenished as necessary.
  - (9) When the sanitizing contact period is completed, the pool may be reopened if the:
    - (A) excess free chlorine levels are reduced to the maximum allowed in section 30(b) of this rule;
    - (B) pH is balanced as needed;

- (C) filter is recharged as needed; and
- (D) circulation system is operating.

#### **410 IAC 6-2.1-45 Right of entry**

Sec. 45. The department or the local health officer may enter public or private property at reasonable times upon presentation of credentials to do any of the following:

- (1) Inspect facilities, equipment, or records.
- (2) Investigate complaints.
- (3) Conduct tests.
- (4) Collect samples to obtain information required under this rule.
- (5) Determine whether any person is subject to, or in violation of, this rule.

#### **410 IAC 6-2.1-46 Enforcement**

Sec. 46. The department may commence an action under IC 4-21.5-3-8 against a pool operator who:

- (1) fails to comply with this rule; or
- (2) interferes with or obstructs the department or its designated agent in the performance of duties pursuant to IC 16-20-1-23.

#### **410 IAC 6-2.1-47 Incorporation by reference**

Sec. 47. The following are hereby incorporated by reference as a part of this rule:

- (1) Indiana State Department of Health Bulletin S.E. 11. Copies may be obtained by a mailed request to Indiana State Department of Health, 2 North Meridian Street, Indianapolis, Indiana 46204.
- (2) Indiana State Department of Health Bulletin S.E. 13. Copies may be obtained by a mailed request to Indiana State Department of Health, 2 North Meridian Street, Indianapolis, Indiana 46204.
- (3) Standard Methods twenty-first edition, 2005, is incorporated by this rule. Copies may be obtained from the American Public Health Association, Inc., 800 "I" Street NW, Washington, D.C. 20001-3710.
- (4) The standards of the Chlorine Institute, Inc., Pamphlet 82, July, 1999. Two (2) copies of these standards are available for reference at the department. Copies may be obtained from the Chlorine Institute Bookstore, P.O. Box 1020, Sewickley, Pennsylvania 15143-1020.
- (5) Standard Z308.1-2003, "Minimum Requirements for Workplace First Aid Kits", published by the American National Standards Institute. Two (2) copies of these standards are available for reference at the department. Copies may be obtained from the International Safety Equipment Association, 1901 North Moore Street, Suite 808, Arlington, VA 22209.
- (6) Standard Z308.1-2009, "Minimum Requirements for Workplace First Aid Kits", published by the American National Standards Institute. Two (2) copies of these standards are available for reference at the department. Copies may be obtained from the International Safety Equipment Association, 1901 North Moore Street, Suite 808, Arlington, VA 22209.
- (7) The Virginia Graeme Baker Pool and Spa Safety Act of 2007, 15 U.S.C. 8001-8008 (2009). Two (2) copies of this law are available at the department. Copies may be obtained online from the Consumer Products Safety Commission website: <http://www.cpsc.gov/>