



Environmental Public Health Division
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COVID-19 Response Guidance for Pools and Aquatic Facilities

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There is no evidence that COVID-19 can be spread through pool water within *properly maintained* aquatic venues, because the disinfectant (Chlorine or Bromine) kills the virus when water chemistry and circulation are adequate. However, there are *many* opportunities for COVID-19 to spread directly between patrons in the pool deck area, pool enclosure, and sanitary facilities. This is especially true within indoor aquatic facilities, where the direct spread of respiratory droplets through the air beyond six (6) feet is possible.

Pool decks have often been crowded social scenes before Covid-19 changed our daily lives. According to the Centers for Disease Control (CDC), the virus that causes Covid-19 spreads most commonly between people who are in “close contact,” meaning less than 6’ apart for 15 minutes or more. Adequately separating persons not from the same household by six (6) feet or more is critical, especially when face coverings are not being worn by everyone. Furnishings within the deck area and pool enclosure will need to be separated 6’ or more to encourage/promote social distancing. Frequently touched surfaces will also need to be disinfected often, because surfaces allow for the transfer of infected respiratory droplets.

Face coverings are the most effective means of preventing the spread of respiratory droplets from infected people. They can help to protect patrons and staff who fail to maintain 6’ of social distancing at all times. In addition, the virus that causes Covid-19 can spread further than 6’ indoors, when tight-fitting face coverings are not worn. The coronavirus travels within tiny, aerosolized respiratory droplets that can hang in the air for some time within an indoor pool enclosure. Of course, face coverings cannot be worn *in* the pool water because they are impossible to breathe through when wet. This could trigger a panic response in some swimmers, possibly leading to an injury or even a drowning. The Indiana Department of Health (IDOH) strongly recommends that face coverings still be worn on the deck within any indoor aquatic venues, as well as within any indoor portions (restrooms, staff break areas, etc.) of outdoor venues. Governor Holcomb has required that face coverings still be worn on state property such as state parks and state park inns, as well as within K-12 schools.

In accordance with Governor Holcomb’s most recent Covid-19 related Executive Orders (available at www.in.gov/gov/newsroom/executive-orders/), the *statewide* mask mandate and several other countermeasures have been changed from requirements to recommendations. Citizens are still expected to take responsibility for their own safety, *as well as for the safety of those around them*. Covid-19 has already killed well over 12,000 Hoosiers and half a million Americans. Even a fully vaccinated person may unknowingly spread Covid-19 to the unvaccinated and the vulnerable.

This guidance is intended to summarize best practices for the operation of public/semi-public aquatic venues, while highlighting those public health mandates that do remain in effect. Every business or entity is still expected to develop and maintain a Covid-19 Response Plan, per Governor Holcomb's most current Executive Order. This IDOH guidance should be considered when developing such a response plan for an entity operating a public or semi-public aquatic facility.

Local governments are also authorized to impose their own orders and restrictions to combat the spread of Covid-19. This could involve a variety of countermeasures, from limiting gathering sizes, to requiring that face coverings still be worn indoors. Aquatic facility operators must check with their local health department regarding local orders/restrictions.

Face coverings

Face coverings that fit tightly, covering both the mouth and nose, are the most effective means of preventing the spread of Covid-19. Maximizing the use of face coverings is especially important within *indoor* aquatic facilities, where respiratory droplets are most likely to persist and spread. Face coverings can also be important at outdoor aquatic venues because patrons and staff may not realistically maintain 6' of social distancing at all times.

Face coverings should **not** be worn in the water by any persons. Face coverings that unexpectedly become saturated with water could cause panic and lead to a drowning, especially in young children. It will not be possible to breathe thru a saturated piece of cloth.

Children two (2) years of age to seven (7) may be permitted to wear face coverings at their parent/guardian's discretion while **not** in the water. However, there is a concern that a young child could accidentally fall into the water, panic, and potentially drown after their face covering becomes saturated. Children under two (2) should never be expected to wear a face covering due to the general risk of suffocation.

Because face coverings should never be worn in the water for these safety reasons, it is especially important that people in the water maintain six (6) feet of social distancing from other patrons who do not live in the same household. If one cannot maintain six (6) feet of social distancing in the water, they should leave the water until the pool is less crowded. Pool owners/operators should take action to reduce the number of persons within the water if conditions become too crowded to provide for reasonable social distancing.

The Indiana Department of Health (IDOH) strongly recommends that aquatic facility staff, including lifeguards, be required to continue to wear face coverings as part of an entity's required Covid-19 Response Plan. Consideration must be given to the type of cloth face coverings worn by lifeguards; it must be possible to remove them very quickly before entering the water. A lifeguard could reasonably be permitted to remove their face covering after they have positioned themselves on the lifeguard platform as long as a 6' distance can be maintained from the platform chair, with the perimeter of the platform being marked in some way to exclude patrons.

Under no circumstances should lifeguards be taxed with additional duties related to enforcing face covering expectations. Lifeguards must be left to focus on their life-saving surveillance duty.

Per the most recent of Governor Holcomb's Executive Orders, face coverings must still be worn inside of all state-owned facilities, as well as outside on state property where six (6) feet of social distancing cannot be maintained between individuals who do not live in the same household. This affects state park aquatic venues, including those indoor venues at state park lodges.

In addition, the most recent of Governor Holcomb's Executive Order also mandates that face coverings still be worn within K-12 educational facilities. This affects school swimming pools.

Six (6) feet Social Distancing

Simply maintaining at least six (6) feet of space between people who do not live in the same household has been shown to significantly reduce the likelihood of Covid-19 transmission. The CDC still maintains that Covid-19 spreads most commonly between people that are within 6' of one another for fifteen minutes or longer ("close contact").

The facility owner/operator should implement all reasonable measures to promote, enable, and encourage 6' social distancing between patrons from different households. This will require adequately spacing deck furniture and likely removing some fraction of the facility's deck furniture to accommodate such spacing. Staff must be instructed to also socially distance.

The normally acceptable "bather load" as calculated from the table in 410 IAC 6-2.1-7.5 may not be adequate to promote a 6' minimum spacing between patrons on the pool deck. Common sense and good judgement must be exercised. It is not mandatory to post a reduced bather load, however reasonable measures should be implemented to encourage and allow for proper six (6) foot social distancing.

Provisions to encourage social distancing should be included in an entity's required Covid-19 Response Plan.

Under no circumstances should lifeguards actively performing patron surveillance duty be required to enforce social distancing expectations because this could distract them from their life-saving surveillance duties.

Increasing Airflow from Outside

The virus that causes Covid-19 can spread through tiny aerosolized respiratory droplets that move through the air of an indoor facility. Especially when athletic activity is occurring, these droplets have proven to spread further than six (6) feet in some cases. It is not safe to wear a face covering in the water, and young children cannot be expected to wear face coverings around the water as previously discussed.

For these reasons, the CDC recommends that facility owners/operators increase outdoor airflow into an indoor aquatic venue. Adjustments within HVAC systems can be made to

increase the amount of outdoor makeup air brought into the indoor facility. It may also be possible to simply open windows to bring in more outdoor air at some facilities. The Indiana Department of Health (IDOH) recommends consulting with the facility's HVAC specialist before making changes.

This countermeasure can be especially appealing because it does not require the cooperation of patrons to implement. Any indoor aquatic facility that is not effectively maximizing the use of face coverings is *strongly* encouraged to maximize outdoor airflow into the facility, although this countermeasure is still no replacement for face coverings.

Disinfecting Frequently Touched Surfaces

The virus that causes COVID-19 can survive on surfaces *outside* of the pool water for days or possibly even weeks without disinfection. The virus survives the longest on smooth, non-porous surfaces at moderate temperatures with no UV light. While it is possible to contract the virus from surfaces, this is not one of the most common means of transmission.

However, this is one of the most *preventable* pathways of exposure. Patrons could become infected by touching a contaminated surface and then touching their mouth, nose, or eyes.

Frequently touched objects such as those listed below are of particular concern and should be disinfected the most frequently.

- Door knobs/handles (in the venue as well as in any building entryway doors)
- Stair railings and pool ladders
- Tables, deck chairs, and benches
- Light switches, keyless entry readers, lock boxes
- Baby changing stations
- Drinking fountains
- Vending machines
- Telephones
- Any emergency shut off controls (typically found on spas)
- Restroom faucets, sinks, soap and paper towel dispensers, toilet flush controls, and doors
- Touch to activate controls on interactive fountains and spa therapy jets
- Pool decks and the splash decks of interactive fountains
- Goggles, kickboards, tubes, and similar items used within the water

An EPA registered disinfectant should be applied to such surfaces *after* removing any soil/dirt/grease/buildup in accordance with product label directions. It is important that soil/dirt be removed first for the disinfectant to kill viruses effectively.

The Centers for Disease Control (CDC) has provided information and instructions on how to disinfect similar surfaces at the following: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html>.

A complete list of EPA registered disinfectants suitable for coronavirus surface disinfection can be found at the following: <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>.

Household bleach (approximately 6% active Sodium Hypochlorite) can also be diluted by mixing 1/3 cup with 1 gallon of water. Liquid pool Chlorine is more concentrated (usually 10-12% Sodium Hypochlorite) and can be diluted by mixing 1/3 cup with 2 gallons of water. Bleach solutions should be mixed daily for use and discarded at the end of the workday. It is unnecessary and unsafe to use a dilution that is more concentrated. Chlorinated pool water is NOT adequate to serve as a surface disinfectant solution.

Appropriate personal protective equipment, such as chemical impermeable gloves, goggles, and/or a face shield should be utilized when working with all disinfectants in strict accordance with label directions and OSHA workplace standards.

Dependent on the type of disinfectant used (see label requirements), it may be necessary to disinfect some surfaces, such as the pool deck, when patrons are not present.

Consider implementing a system to gather and disinfect all deck chairs, kickboards, floats, etc. These items could then be signed out to incoming patrons for individual use. If it is not feasible to disinfect some items such as deck chairs between patrons (either due to time/staff constraints, or because the items physically cannot be disinfected given materials and construction), it would be advisable to take such items out of use. Patrons could potentially be permitted to bring items such as lawn chairs from home.

Balls and any toys/games normally used for communal play (volleyball, water basketball, etc.) should be taken out of use.

Water Chemistry

It is critically important that minimum disinfectant levels (Chlorine or Bromine), a proper pH, and Cyanuric acid (Chlorine stabilizer) levels that do not exceed Indiana regulatory limits be maintained. This will allow for the rapid inactivation of viruses such as the one that causes COVID-19.

With adequate water circulation, proper water chemistry, regular water chemistry testing, and the continuous feed of an EPA registered disinfectant (Chlorine or Bromine product), the pool/spa water itself can avoid becoming a mode of transmission for the coronavirus. Specific chemical parameters that are the most important for preventing the spread of viruses follows:

- Disinfectant level that meets the minimum level in 410 IAC 6-2.1-30(b). Depending on the type of pool and its relative risk, this level will be either 1, 2, or 3ppm.
- A pH level within 7.2-7.8 is required. pH levels above 7.8 reduce Chlorine's effectiveness.
- No Cyanuric acid, CYA, Chlorine Stabilizer, 'Trichlor', 'Dichlor', chlorinated isocyanurates, trichloro-s-triazinetriene, or dichloro-s-triazinetriene should be utilized in any pool, spa, or other aquatic venue that is indoors. IF such compounds are used in an *outdoor* venue, the Cyanuric acid level must be tested weekly and maintained not to exceed 60ppm. Excess Cyanuric acid greatly reduces the disinfectant's effectiveness.

A more complete list of water chemistry regulations and testing requirements can be found within section 30 of the Indiana Department of Health's "Public and Semi-Public Swimming Pools Rule" 410 IAC 6-2.1 at: www.in.gov/isdh/files/410_iac_6_2_1.pdf .

As required by the above Indiana Department of Health regulation, any aquatic venue with a disinfectant level outside of the acceptable range, a Cyanuric acid level that is too high, a pH level above 8.0, or a chemical feeder or circulation pump that is not working should be immediately closed by the facility owner/operator until the problem is corrected.

Signage, handouts, and/or waivers

Specific COVID-19 relevant warnings could be presented to patrons in the form of signs, handouts, verbal instructions, or possibly even as a component of a waiver. Recommended statements that may be included in such a sign, handout, or waiver include, but are not limited to, the following:

- DO NOT enter this facility if you have a cough, fever, or other symptoms of illness.
- Maintain at least six (6) feet between you and any other people who are not part of your immediate household.
- Wear a face covering when you are not actively swimming or in the pool/spa water.
- NEVER wear a face covering while actively swimming or allow children to do so.
- NEVER dive or enter a water slide with a face covering in place.
- The danger of contracting COVID-19 exists if you choose to enter this aquatic facility.
- You are responsible for washing your hands as well as any object/s you bring into this facility.

Additional Resources and Information

For more information on preventing the spread of COVID-19 at public/semi-public aquatic facilities, please visit:

- The Center for Disease Control's Coronavirus Webpage:
<https://www.cdc.gov/coronavirus/2019-ncov/index.html>
- CDC Guidance for Pools and Interactive Water Fountains During COVID-19:
<https://www.cdc.gov/coronavirus/2019-ncov/community/parks-rec/aquatic-venues.html>
- Indiana Department of Health's Public Swimming Pool and Spa Program:
www.pools.isdh.in.gov
- Governor Holcomb's Executive Orders website:
<https://www.in.gov/gov/newsroom/executive-orders/>
- Governor Holcomb's "Back on Track Indiana" website:
<https://www.backontrack.in.gov/>