

New York State Department of Health
Operational Best Practice Guidance for Swimming Pools, Spas, and Spray Grounds to Reduce Risk of Waterborne Poliovirus Transmission
April 20, 2023

The risk of waterborne disease transmission, including poliovirus, in treated recreational aquatic venues is reduced with proper operation and maintenance, including adequate disinfection levels. In response to the potential risk of waterborne poliovirus transmission, the New York State Department of Health (NYSDOH) has developed this best practice guidance and recommendations for the operation and maintenance of treated recreational water venues such as swimming pools, spas, and spray grounds. In some instances, the recommendations exceed current State Sanitary Code (SSC) requirements.

Although not regulated under the SSC, NYSDOH also recommends special consideration be given to treating the water in communal religious or ceremonial baths such as mikvahs and baptismal fonts.

1. Maintain minimum concentration of disinfectant residual and pH within range as follows:

	pH	Free Chlorine*	Total Bromine*	Notes
Pools	7.2 to 7.8	1.0 ppm	3.0 ppm	Free chlorine increased from 0.6 to 1.0 ppm
	>7.8 to 8.2**	3.0 ppm	Not applicable (pH >7.8 prohibited)	Free chlorine increased from 1.5 to 3.0 ppm
Spas	7.2 to 7.8	3.0 ppm	4.0 ppm	Free chlorine increased from 1.5 to 3.0 ppm; total bromine increased from 3.0 to 4.0 ppm
Spray Grounds	7.2 to 7.8	2.0 ppm	4.4 ppm	No change

*Minimum concentrations of disinfectant residuals have been increased to be consistent with levels known to better inactivate poliovirus.

**It is recommended to maintain swimming pool pH between 7.2 and 7.8 since chlorine is more effective in that range. It will also reduce chlorine usage.

2. Monitor disinfectant residual (free and total chlorine or total bromine) and pH levels every two hours when the pool or spray ground is open, in addition to before opening and at closing time.
 - Consider checking levels even more frequently during times of heavy use and on hot days when heat and the sun’s ultraviolet light will increase disinfectant demand.
3. Close your bathing facility if concentrations of free chlorine or total bromine fall below the minimum residual level. Reopen only after disinfectant concentration and pH level are within the required range.
4. Promote healthy swimming behaviors at your facility, including showering before swimming and handwashing. For more information: <https://www.cdc.gov/healthywater/swimming/>
5. Maintain adequate quantities of disinfectant and pH adjustment chemicals on-site. Always follow best practices for chemical storage and handling.
6. As a reminder, use of stabilized chlorine (cyanuric acid, dichlor, trichlor) and cyanuric acid is prohibited and is known to slow the rate at which free chlorine inactivates or kills germs/viruses.

Resources:

- Contact your local health department for questions specific to your pool, spa, or spray ground: <https://www.health.ny.gov/environmental/contacts/>
- Additional information on safe pool and spray ground operation:
 - <https://www.health.ny.gov/environmental/outdoors/swimming/>
 - <https://www.cdc.gov/healthywater/swimming/aquatics-professionals/index.html>
 - <https://www.cdc.gov/healthywater/swimming/swimmers/splash-pad-operation-and-management.html>
- Additional information on polio:
 - <https://www.health.ny.gov/diseases/communicable/polio/>
 - <https://www.cdc.gov/polio/what-is-polio/index.htm>