

Safely Managing Floatation Tanks: A Quick Guide for Health Departments and Operators



Background

This reference guide can be used by local, state, tribal, and territorial health departments and floatation tank/spa operators as a tool for understanding the Centers for Disease Control and Prevention's (CDC's) recommendations for operation and maintenance of floatation tanks. A similar quick guide has been created for splash pads at bit.ly/splash-pad-guide. The guides combine information from CDC's 2023 Model Aquatic Health Code (MAHC) and website to highlight key takeaways.

Go to [cdc.gov/mahc](https://www.cdc.gov/mahc) for more detailed information.

What is a Floatation Tank?



A tub that contains a saturated solution of magnesium sulfate with a specific gravity of 1.23 to 1.3, a light and sound-reduced environment, and a temperature of approximately 92–96°F / 33.3–35.6°C.

Floatation tanks can also be referred to as float tanks, float rooms, pods, spas, chambers, isolation tanks, or sensory deprivation tanks. They are used as a form of relaxation therapy, during which people can float in an environment with reduced external stimulation (e.g., sound, touch, and light).

What are the risks of floatation tanks if not maintained properly?



When the water solution used in floatation tanks is not properly treated, pathogens can survive, allowing for increased risk of disease transmission.

Since floatation tanks systems rarely use chemicals like chlorine to treat the water, other effective disinfection methods, like ozone or ultraviolet (UV), need to be incorporated to reduce the likelihood of pathogen survival.

What water supply should floatation tanks use?



Water used by the floatation tank facilities should be from a potable water source.

Discharged water from all plumbing fixtures in the floatation tank facility should be removed to a municipal sanitary sewer system.

- If a municipal sanitary sewer is not available, an onsite sewer system can be used if designed to accommodate the entire wastewater capacity.

How to disinfect and recirculate water in floatation tanks?



Disinfection systems should include either:

- An ozone treatment system; or
- A UV treatment system.

Ozone and UV disinfection systems, if used as the primary disinfection system in floatation tanks, should:

- meet **99.9%** reduction of influent bacteria;
- should not exceed **0.1 ppm** of ozone levels in the floatation tank solution (with ozone disinfection systems);
- have **calibrated UV sensors** installed (with UV disinfection systems). If the UV equipment fails to produce the appropriate amount of ozone as determined by the sensor, an alarm or other indication will alert staff.

No standing water, solution discharge water, or floatation tank solution should create a nuisance, offensive odor, stagnant wet areas, or an environment for the breeding of insects.

Turnover

Turnover at the opening and closing of the floatation tank filtration and disinfection systems should operate for **one volumetric turnover before first use** during the day and **four volumetric turnovers after the last use** at the end of the day.

There should be a minimum of three volumetric turnovers between users for systems disinfected with ozone or UV systems.

- If possible, the floatation tank system controller should be set at a default minimum length of three volumetric turnovers for filtration/disinfection time.
- For formed stool or blood contamination, filtration and disinfection systems should operate at the minimum volumetric turnovers as previously noted.
- For diarrheal-stool or vomit contamination, contaminated water should be completely drained, and tank surface should be disinfected prior to refilling.

Only USP grade magnesium sulfate should be used in the floatation tank solution.

Hygiene facility fixtures, cleansing showers, dressing areas, and furniture should be sanitized **daily** with an EPA-registered product or more often, if necessary.

To prevent buildup of biofilm layers:

- The interior surface at the waterline should be cleaned daily, and
- Tanks should be drained and scrubbed consistently.

Recirculation

- Cross-connection control water brought into the floatation tank, either directly or through the recirculation system, should be supplied through an air gap or another method to prevent backflow.
- Drains connected to the floatation tank facility, or the recirculation system should be discharged through an approved air gap.

How to maintain and inspect floatation tanks?



Daily preventive maintenance inspection of the following areas should be done before opening:

- All covers (e.g., drain covers) are in place, secure, and unbroken;
- Skimmer baskets and other water features are free of any blockage;
- Inlet and return covers and any other fittings are in place, secure, and unbroken;
- Safety warning signs and other signage are in place and in good repair;
- Entrapment prevention systems are operational;
- Recirculation, disinfection systems, controller(s), and probes are operating as required;
- Underwater lights and other lighting are intact with no exposed wires or water in lights;
- Biofilm has been removed from accessible surfaces of floatation tanks;
- Doors to nonpublic areas (chemical storage spaces, offices, etc.) are locked;
- Fecal/vomit/blood incident contamination response plans, materials, and equipment are available; and
- Assessing floatation tank solution clarity such that the bottom and objects in the floatation tank are clearly visible.

An authorized employee of the Authority Having Jurisdiction shall have the right to enter any floatation tank facility or area for the purposes of inspection.

These include:

- Inspect, investigate, or evaluate for code compliance;
- Verify compliance with previously written violation orders;
- Collect samples for testing;
- Examine and copy relevant documents and records;
- Obtain photographic or other evidence needed to enforce this code; or
- Question any person in the floatation tank facility.

Check out our other guide “Preventing the Spread of Germs in Splash Pads: A Quick Guide for Health Departments and Operators” at bit.ly/splash-pad-guide.

[QUICK GUIDE]

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Have Questions?

Contact NACCHO at mahcnet@naccho.org.

Additional Information

Refer to the following sections in the 2023 MAHC ([cdc.gov/mahc](https://www.cdc.gov/mahc)) for more information.

The 2023 MAHC added a new chapter on Special Venues that addresses floatation tanks:

- 7.1 Floatation Tank Design and Construction
- 7.2 Floatation Tank Operation for the Public



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1201 Eye Street, NW Fourth Floor Washington, DC 20005

P 202-783-5550 F 202-783-1583

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