

Operating Public Hot Tubs

Low water volumes combined with high temperatures and heavy bather loads make public hot tub operation challenging. The result can be low disinfectant levels that allow the growth and spread of a variety of germs (e.g., *Pseudomonas* & *Legionella*) that can cause skin and respiratory Recreational Water Illnesses (RWIs). Operators that focus on hot tub maintenance and operation to ensure continuous, high water quality are the first line of defense in preventing the spread of RWIs.



- Obtain state or local authority-recommended operator and chemical handling training. National training courses are listed at <http://www.cdc.gov/healthywater/swimming/pools/certification-training-education.html>.
- Ensure availability of trained operation staff during weekends when hot tubs are used most.
- Maintain free chlorine or bromine levels continuously between 2–5 parts per million.
- Maintain the pH level of the water at 7.2–7.8.
- Test pH and disinfectant levels at least twice per day (hourly when in heavy use).
- Maintain accurate records of disinfectant/pH measurements and maintenance activities.
- Maintain filtration and recirculation systems according to manufacturer recommendations.
- Inspect accessible recirculation system components for a slime layer and clean as needed.
- Scrub hot tub surfaces to remove any slime layer
- Enforce bather load limits
- Drain and replace all or portions of the water on a weekly to monthly basis, depending on usage and water quality.
- Treat the hot tub with a biocidal shock treatment on a daily to weekly basis, depending on water quality and frequency of water replacement.
- Institute a preventive maintenance program to replace equipment or parts before they fail (e.g., feed pump tubing, sensor probes).
- Provide disinfection guidelines for fecal accidents and body fluid spills.
- Develop a clear communication chain for reporting operation problems.
- Cover hot tubs, if possible, to minimize loss of disinfectant and reduce the levels of environmental contamination (e.g., debris and dirt).
- Educate hot tub users about appropriate hot tub use.

Additional Hot tub Safety Measures

- Prevent the water temperature from exceeding 104°F (40°C).
- Exclude children less than five years old from using hot tubs.
- Maintain a locked safety cover for the hot tub when possible.
- Recommend that all pregnant women consult a physician before hot tub use, particularly in the first trimester.
- Prevent entrapment injuries with appropriate drain design and configuration.