

What is Legionella?

- *Legionella* are bacteria that can cause a serious form of pneumonia (lung infection) called Legionnaire's Disease.
- Most people become infected with *Legionella* when they inhale water droplets that contain the bacteria.
- *Legionella* is found naturally in warm water and can thrive in places like hot tubs, cooling towers, decorative fountains, and hot water tanks.
- Swimmers can become infected by breathing in mist or steam from a contaminated hot tub or pool. Hot tubs require extra attention, as the bacteria thrive in the warm water and high heat can affect disinfectant and pH levels.

Why is it important to prevent Legionella?

- Legionnaire's disease is a dangerous and sometimes fatal infection.
- High risk groups for *Legionella* infections include:
 - Individuals over the age of 50
 - Current and former smokers
 - Individuals with conditions that weaken their immune system
- *Legionella* is on the rise in Georgia, with 189 cases in 2018 compared to 69 in 2013 and 43 in 2008.
- In Georgia during 2018, 99% of reported individuals with *Legionella* infections were hospitalized, and 4% died.

What you can do to stop the spread of Legionella?

- Two or more *Legionella* cases associated with the same facility will trigger a public health investigation which will require an environmental assessment and water testing.
- Disinfectant and pH levels should be checked twice daily for pools and every four hours for hot tubs and spas and any issues should be addressed immediately. See below for recommended disinfectant levels.
- It is also important to maintain and clean equipment to remove slime or biofilm, scale buildup, organic debris and corrosion.
- Filter media for pools and hot tubs should be maintained according to manufacturer instructions and operating procedures. Regularly replace water in hot tubs.
- We highly recommend that all hot tub operators have a water management program for their hot tubs and spas. Pool operators may also create a water management program to limit *Legionella* and other germs from growing and spreading.
- The CDC has an online tool that can be found here: www.cdc.gov/legionella/WMPtoolkit.html

Disinfectant	Recommended levels for <i>Legionella</i> prevention	Georgia Rules, minimum required to maximum allowed range
Free Chlorine	2 - 4 ppm	Pool: 1 - 10 ppm* Spa/Hot tub: 3 -10 ppm**
Bromine	4 - 6 ppm	Pool: 3 - 8 ppm Spa/Hot tub: 4 - 8 ppm**
pH	7.2 - 7.8	7.2 - 7.8

*GA Rules: "Regular superchlorination is recommended." Some high use pool may need superchlorination three times a week or more as a preventative measure or when combined chlorine is over 0.4.

**GA Rules: "In a spa, during hours of operation, test the water every 4 hours and record results. Maintain this range continually and ideally shock treat at the end of daily use" for both free chlorine and bromine."