

Legionellosis Risk Mitigation for Temporary Event Vendors

Certain activities at outdoor temporary events may pose a risk for Legionnaire's disease, a potentially serious respiratory illness caused by inhaling tiny water droplets contaminated with *Legionella* bacteria. As a vendor, there are precautions that can be taken to help reduce the risk of exposure to *Legionella* bacteria. Please contact the local health department for questions regarding Legionnaire's disease and *Legionella* exposure risk.

Hot Tub and Whirlpool Vendors

To minimize the risk of exposure to *Legionella*, please follow these recommendations when setting up whirlpool or hot tub displays containing water at temporary events, **even if the hot tub or whirlpool is for display only**. Full cleaning protocol is included in the CDC reference below.

- 1. Fill and hyperchlorinate using 20 ppm free chlorine. Keep the hydrotherapy jets off and let the hyperchlorinated water circulate for one hour in all components of the hot tub including the compensation/surge tank, filter housing, and piping. Turn on the hydrotherapy jets to circulate the hyperchlorinated water for nine additional hours. Maintain 20 ppm of free chlorine in the system for the entire 10 hours.
- 2. Flush the system before refilling with water and maintain at least two ppm free chlorine during display. Maintain records of free chlorine and pH of water as well as disinfection and cleaning records.
- 3. Between vendor events, drain the hot tub or whirlpool, removing as much stagnant water in the system as possible. Filters should be removed and left to dry and cleaned before reuse. The hot tub or whirlpool should be kept as dry as possible between events.

Outdoor Misters and other Spray Cooling Equipment

Cooling equipment such as misters or other spray devices are used at events when outdoor temperatures are high. Follow these recommendations to keep this equipment clean and minimize the risk of exposure to *Legionella*.

- 1. Water sprayed in a mister should be drinking water quality.
- 2. Never allow the water in the sprayer system to be stagnant for more than six hours.
- 3. Water reservoirs should be drained at least once every 24 hours.
- 4. Cleaning of misting systems should include soaking all aerators and sprayers in a chlorinated solution for 10 minutes. Chlorine disinfectant can be made by mixing 1/3 cup of household bleach with one gallon of water (1,000 ppm chlorine). Hoses should also be flushed, dismantled and kept clean.
- 5. Misters and cooling equipment should be stored dry and cleaned as described above before reuse.

Display Fountains, Small Water Features or Other Display Products with Water Spray

- 1. It is recommended that display fountains, small water features or other spray reservoirs be drained and cleaned weekly and disinfected with 3-5 ppm free chlorine (or equivalent) for one hour each day. Free chlorine concentration should be verified with pool and spa water test strips.
- 2. Between displays, or when water features have been inactive for more than three days, thoroughly scrub and disinfect water features or display fountains with 3-5 ppm free chlorine. Ensure fountains are stored completely dry.
- 3. If water becomes cloudy, the display fountain or water feature should be drained, scrubbed and disinfected.
- 4. Maintain cleaning and disinfection records for any display fountain or small water feature.

Sources:

https://www.cdc.gov/legionella/downloads/hot-tub-disinfection.pdf

https://www.specialpathogenslab.com/perch/resources/2014finallegionellaguidelinesforwesternpa.pdf

https://www.condair.com/m/0/water-misting-system-for-adiabatic-outdoor-cooling-in-hot-and-dry-areas-general.pdf

