

# Environmental health checklist when responding to a single *Legionella* case with spa exposure

## *Records review & discussions for management*

1. Visit the establishment and review the pool and spa logs for the last month to see if they have been running appropriately. Provide copy of logs to Epi.
2. Have there been any complaints from patrons or staff?
3. Provide *Legionella* factsheet to management and ask that they share information on the signs and symptoms of *Legionella* with all staff. [Legionnaires' Disease \(state.mn.us\)](https://www.state.mn.us/health/legionnaires/)
4. Provide CDC best practices guide to management as a resource: [Disinfection of Hot Tubs that Contain Legionella \(cdc.gov\)](https://www.cdc.gov/eis/article/2015/s040415a01.html).
5. If the facility is a vacation home rental, here are some additional resources that may be useful:
  - a. [Considerations for Vacation Rental Owners and Managers \(cdc.gov\)](https://www.cdc.gov/eis/article/2015/s040415a01.html)
  - b. [Residential Swimming Pool and Spa Rentals \(PDF\)](#)
6. Have there been any maintenance issues (broken pump, spa closed, etc.)? If so, what issues and when?
7. Ask management how often they clean, scrub, and refill the spa.
8. Are there any water features onsite? (e.g., decorative fountains, kiddie pool spray features, etc.) Ask management how often are those cleaned and how?

## *Observations and spa check*

9. Check the chemicals in the spa and see if they are at appropriate levels.
10. Check the walls and skimmers of the spa for any biofilm or slime build-up.
11. How is the ventilation in the pool area?
12. If you notice slime/biofilm buildup in the skimmers/spa walls or spa logs or chemicals appear off the establishment should plan for a remediation step.
  - i. Drain the spa then scrub and clean walls, skimmers, etc.
  - ii. Backwash sand filters.
  - iii. Refill the spa and then hyperchlorinate.
    1. Maintain chlorine at 20ppm for a total of 10 hours.
    2. During the 10 hours, leave the jets off for the first hour and then run the jets for the remaining 9 hours.

3. Let the spa levels come down naturally (no dechlor) to acceptable levels before reopening.

### **Additional follow-up for establishments with more than one sporadic case within a year**

13. Close the spa immediately.
14. Collect samples using the Legionella Sampling Instructions provided by Epi.
15. Follow CDC guidance to disinfect the spa. [Disinfection of Hot Tubs that Contain Legionella \(cdc.gov\)](https://www.cdc.gov/legionella/media/releases/2015/s0515-hot-tubs.html).
16. Additional questions to ask management:
  - a. What type of filter(s) do they use? (sand, diatomaceous earth, cartridge)
  - b. When was the filter(s) last changed?
  - c. When were the filter(s) last backwashed?
  - d. Date spa was last drained and scrubbed?
    - i. What is their normal procedure for draining and cleaning the spa? Are they physical scrubbing spa to remove biofilm?
15. Once samples are taken and remediation is complete, EH and Epi can discuss next steps for reopening of the spa.