

Legionella

CIRCUMSTANCES

• Suspected Case Investigation

Optimal sensitivity is desirable in the context of a case investigation; therefore, two samples, water and swab, should be collected from the same water outlet(s) in the immediate environment of a suspected case.

Routine Monitoring

For routine environmental surveillance, one sample, either swab or water (or a combination of the two), of an outlet is acceptable.

Post-disinfection Monitoring

Ongoing surveillance for monitoring the efficacy of disinfection efforts should include previously positive locations for follow up testing.

SAMPLE COLLECTION

Potable Water

- 1. Fill out SPL Chain of Custody.
- 2. Use waterproof pen to label bottle and swab with sample location, description, and date.
- 3. Swab collection: a) Remove aerator if present.
 - b) Moisten the outlet by briefly turning on the hot water.
 - c) Insert swab into faucet opening rotating four times against the inner surface as it moves up into the opening (for shower head, rotate swab over entire surface of showerhead four times).
 - d) Replace swab in transport tube.
- 4. Water collection: a) Turn on hot water and immediately fill the bottle.
 - b) Close bottle and invert to mix the sodium thiosulfate neutralizer.

Hot Water Tanks

- 1. Open the drain valve at the base of the heater or tank and immediately fill bottle.
- 2. Let the water continue to drain for 15–30 seconds to flush out residual water within the drain pipe.
- 3. Fill a second sample bottle.
- 4. Submit both samples, labeled **Immediate** and **Post Flush**.



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SAMPLE COLLECTION

Cooling Towers

Submerge open bottle just under the surface of water to obtain approximately 120 ml of sample.

Note: Swabs are not considered an appropriate sample for routine testing of cooling towers.

Ice Machines

The ice is processed in the lab after allowing it to melt and is concentrated by filtration. Two or three sample bottles of ice are needed for adequate melted volume. If a water dispenser is part of the machine, collect the water as you would from any faucet: turn on the faucet and immediately fill the sample bottle.

Note: A swab of the faucet opening can also be collected and is recommended if assessing the outlet as a source of infection during a case investigation.

SHIPPING

- Ship the same day samples are collected for receipt in laboratory for delivery within one to two days.
 Note: Maximum time from sample collection to culture in the laboratory should not exceed five days.
 Samples from the State of New York should not exceed two days.
- 2. Sample(s) may be refrigerated (2–8° C) overnight if necessary.
- 3. Place bottles in box with insulated liner.
- 4. Place completed Chain of Custody in plastic document holder and pack in box.
- 5. Ship overnight Monday–Thursday only to: Special Pathogens Laboratory

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Questions? Contact SPL at 412-281-5335