Legionella Prevention

For Facility Maintenance Staff
Prevention of healthcare-associated legionellosis centers on the quality of water, the principal reservoir for Legionella bacteria. Long-term care facility water systems, including heated potable water distribution systems and cooling towers, can provide environments for multiplication of Legionella bacteria. Factors that enhance colonization and amplification of Legionella include water temperatures of 20° and 50°C (68° and 122°F), stagnation, and sediment.

Through the following activities, facility maintenance staff can play an important role in prevention of legionellosis in long-term care facility residents:

- Maintain a current map of the facility.
- Inspect the facility and grounds for any obvious source of aerosolized water, including cooling towers, decorative fountains, drinking fountains, eye wash stations, showers, hot tubs, misters, laundry facilities, kitchen sinks/dishwashers (industrial variety), outdoor irrigation systems, ice machines, and power washers.
- Water entry into facility
  - Know the location(s) where city water enters the facility.
  - Ensure that incoming water main backflow prevention devices are properly installed and tested/serviced annually. Maintain a service log of these activities.
- Plumbing work
  - Report any plumbing work or plumbing problems to the administration.
  - Know the location(s) and type(s) of recent (within the previous 6 months) plumbing work at the facility.
- Water quality
  - Check all potable water outlet temperatures monthly. If possible, also check water outlet pH and chlorine levels monthly.
  - Ideally, maintain the hot water heater supply temperature at ≥140°F, while ensuring that residents and staff are safe from scalding. This may require placing or adjusting mixing valves throughout the water system and/or at the point of use.
  - Ensure all water accessible to residents meets the North Carolina Department of Environment and Natural Resources temperature requirements (T15A: 18A.1300).
  - Maintain cold water as cold as possible.
  - Maintain a log of water quality measures.
• Incorporate a weekly flushing protocol into the maintenance plan for outlets in areas of vacancy and/or identified areas of water system “dead legs”.
• Inspect drip pans of air conditioning units and water heaters to assess any pooling and/or dripping of condensate.
• Emergency planning: Portable hand washing stations and portable toilets
  o In collaboration with administration, determine the number of portable hand washing stations and portable toilets that would be needed in the event of an emergency situation.
  o Consider the locations where these portable units would be placed at the facility.