

Healthcare-associated Legionellosis Prevention and Response

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- Wake AHEC requires all speakers to disclose any relevant financial conflicts of interest.
- Sarah Rhea has no relevant financial conflicts of interest to disclose.

Legionella Bacteria

- Gram-negative organisms found in fresh water environments
- Amplification in man-made water systems
 - ▣ Water temperatures of 77-108 degrees Fahrenheit (⁰F)
 - ▣ Stagnation
 - ▣ Presence of scale, sediment, and biofilm
- Exposure via inhalation of aerosolized water



Epidemiology of Legionellosis

- Estimated 8,000–18,000 hospitalized cases per year in U.S.
- Case fatality rate of 5–30%
- Approximately 80% of reported cases caused by *L. pneumophila* serogroup 1 (Lp1)

Healthcare-associated (HCA) Legionellosis

- Definite HCA: Laboratory-confirmed legionellosis in a person who has spent ≥ 10 days continuously in a healthcare facility before illness onset
- Possible HCA: Laboratory-confirmed legionellosis in a person who has spent 2-9 days in a healthcare facility before illness onset

Public Health Response to Sentinel HCA Legionellosis

- Environmental assessment at the facility
- Surveillance for additional legionellosis cases
- Review respiratory equipment cleaning policies
- Provide prevention recommendations
- Discuss next steps with facility administration

Control Measures for Outbreak of HCA Legionellosis

- Initiate temporary tap water restrictions
- Install 0.2 micron point-of-use filters
- Collect environmental samples for *Legionella* culture
- Hire environmental engineer with expertise in control of *Legionella* bacteria
- Perform water system superheating and hyperchlorination

Guidance Documents

Legionellosis Prevention and Response Toolkit

- Sentinel Case Investigation documents
- Outbreak Investigation documents

References

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