LEGIONELLA CONSIDERATIONS FOR SCHOOL REOPENING

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From Fresh Water to Clinical Disease

- **Legionella**
  - Lives in fresh water

- **Certain conditions in large, complex water systems can lead to Legionella amplification**
  - Temperature (77–108°F)
  - Stagnation
  - Scale and sediment
  - Biofilm
  - Prefluence
  - Absence of disinfectant

- **Certain devices can aerosolize water containing Legionella**
  - Showerheads and sink faucets
  - Cooling towers
  - Hot tubs
  - Decorative fountains

- **Legionella can be transmitted to susceptible hosts and cause disease**
  - Age > 50 years
  - Smoking
  - Weakened immune system
  - Chronic disease

Source: Centers for Disease Control and Prevention (CDC)
Simplified Reopening Guidance

• Actions
  • Drain and flush hot water tanks
  • Flush building water systems
  • Clean and disinfect drinking fountains
  • Change drinking fountain water filters

• Testing Objectives
  • Routine Legionella testing should be conducted to validate a comprehensive Water Management Program (WMP)
  • Establishing a baseline measurement for performance indicators
  • Evaluating potential growth and transmission sources
  • Investigating potential sources of environmental exposures for persons with disease

Summary

• Key points
  • Creation of a Water Management Program (WMP) is imperative
  • Testing should be driven by the components of a comprehensive WMP

• Questions
  • Contact your local Environmental Health Department for assistance
Reopening Guidance and Resources

- CDC: Guidance for Reopening
- EPA: Guidance for Reopening
- EGLE: Guidance for Reopening
- EGLE: Guidance for Flushing School Plumbing
- Building Reopening Checklist
- Reopening Aquatic Venues
- CDC: Considerations When Working with Legionella Consultants
- CDC Toolkit: Developing a Water Management Program to Reduce Legionella Growth & Spread in Buildings
- ASHRAE Guideline 12-2020: Managing the Risk of Legionellosis Associated with Building Water Systems