Waterborne Legionellosis aka Legionnaires Disease from Drinking Water Plumbing

US Conference of Mayors

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Waterborne Disease Outbreaks



* Legionellosis outbreaks were first reported to CDC's Waterborne Disease and Outbreak Surveillance System in 2001; Legionellosis outbreaks before 2001 were added retrospectively during the 2007–2008 reporting period. Source: Adapted from CDC, 2017a.

CDC Waterborne Disease Outbreaks-2015

Table 1. Number and percentage* of reported waterborne disease outbreaks (N = 82) and associated cases, hospitalizations, and deaths, by outbreak exposure — Waterborne Disease and Outbreak Surveillance System, United States, 2015

Total	82 (100%)	1,276 (100%)	185 (100%)	27 (100%)
Unknown water	6 (7%)	13 (1%)	11 (6%)	0 (0%)
Other water§	6 (7%)	47 (4%)	27 (15%)	1 (4%)
Drinking water	23 (28%)	429 (34%)	124 (67%)	25 (93%)
Recreational water	47 (57%)	787 (62%)	23 (12%)	1 (4%)
Outbreak Exposure	Outbreaks N (%)	Cases N (%)	Hospitalizations N (%)	Deaths N (%)

Drinking Water Legionellosis-CDC 2015 Inhalation of water aerosols—not drinking

- •Legionellosis cases 234/429
- •94% of Hospitalizations 185/194
- •All water related deaths 25 + 2

Water Exposure Source

- Plumbing Contamination and Rooftop AC Heat Exchangers
- Inhalation of water aerosols NOT ingestion of water
- Warm water---shower head/showering
- Stagnant water
- No residual disinfectant

Risk Reduction

- Water distribution system----chloramine (chlorine + ammonia)
- Buildings --- entry level treatment:

Chloramine or Copper/silver

- Tap treatment device
- Require disinfectant in AC heat exchangers

Prevention and Control

- No EPA regulation or Guidance
- Water testing in buildings-e.g. office buildings, hotels
- Purge plumbing system, esp hot water, if necessary
- Advise private sector hospitals, hotels and apartment buildings install entry level treatment
- Booklet: Legionella Management in Building Water Systems
- What can the water supplier and community administration do?
- Require disinfectant in rooftop heat exchangers
- Check on Disinfectant use: chlorine or chloramine
- Disinfectant residual throughout the water system
- Chloramine is the easiest and best cost effective method.
- Chloramine and Copper/silver in buildings
- Change Carefully.