

LA County Public Health Approach to *Legionella* Surveillance and Outbreak Response in Skilled Nursing Facilities

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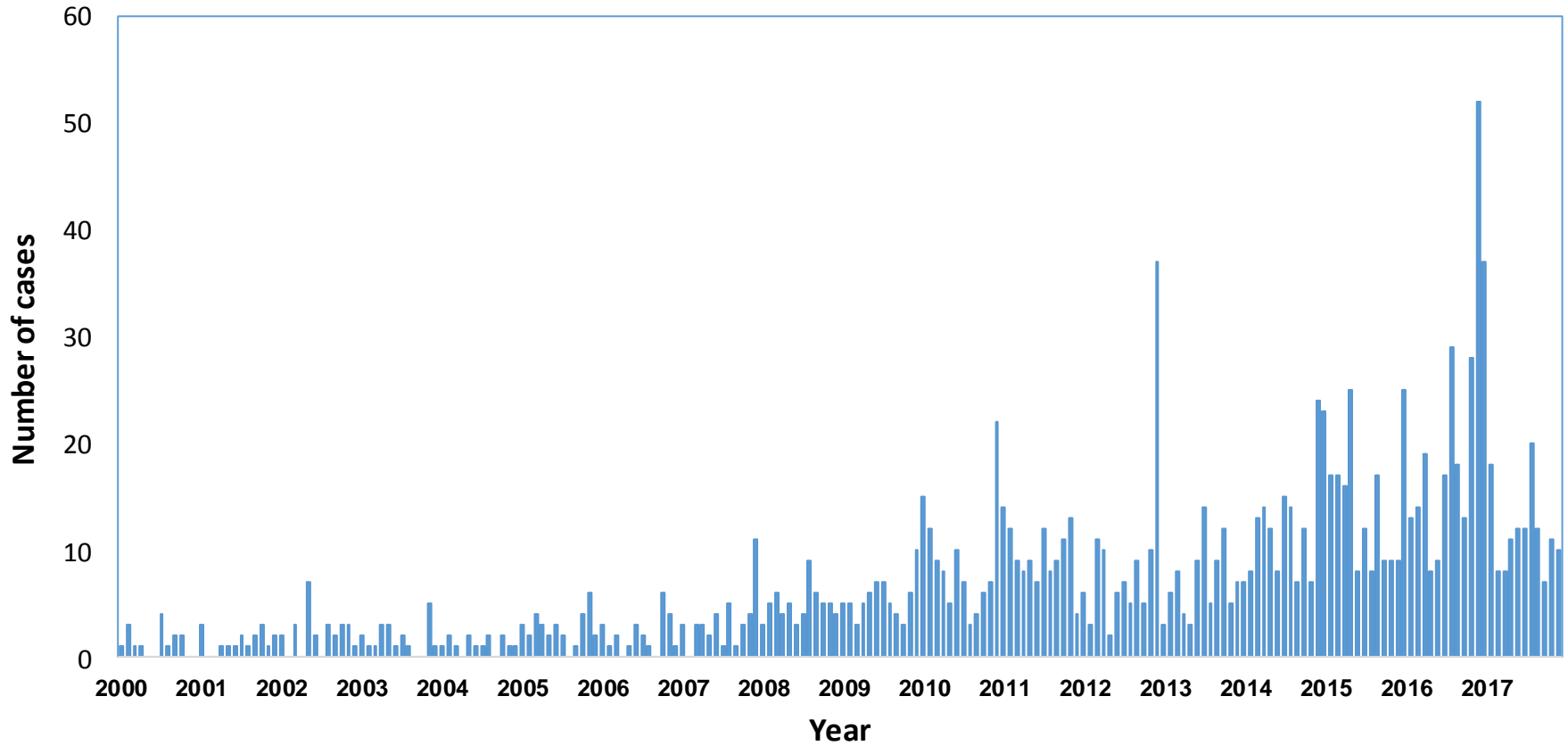


What do we mean by surveillance?

- Systematic collection, analysis, and dissemination of data on a health-related event to improve health outcomes
- Uses of surveillance data:
 - Determine disease burden and trends
 - Detect outbreaks
 - Evaluate the effectiveness of prevention measures
- *Legionella* infection reportable in LA County <7 days
 - Provider reportable
 - Laboratory reportable



Legionnaires' disease on the rise in LA County



Possible reasons for the increasing number of reported cases

- Increased susceptibility of the population
 - Aging U.S. population
 - More people on immunosuppressing medications
- More *Legionella* in the environment
 - Warmer temperatures
 - Aging infrastructure
- Improved diagnostic capability
 - Urine antigen test availability
- Increased awareness and reporting



Investigating *Legionella* Reports

- Objectives:
 - Understand risk factors
 - Identify source of infection
- Investigation approach
 - Obtain medical records
 - Interview patient
 - Conduct site visit and environmental sampling
(if needed)



INVESTIGATING HEALTH CARE ASSOCIATED CASES AND OUTBREAKS



When does public health investigate healthcare-associated Legionnaires' disease?

- ≥ 1 case of *definite* healthcare-associated Legionnaires' disease is identified
- ≥ 2 cases of *possible* healthcare-associated Legionnaires' disease is identified within 12 months of each other at same facility



Definition of healthcare-associated Legionnaires' disease

- Definite case if patient was hospitalized at one or more facilities during the entire 2 to 10 day incubation period (time between exposure and symptom onset)
- Possible case if patient was hospitalized at one or more facilities for a portion of the 2 to 10 day incubation period



Key elements of a public health investigation for Legionnaires' disease

- **Perform a retrospective review** of cases
- **Prospective review** of case to identify additional (new) cases
- Consider **immediate control measures**
- Facilitate **environmental assessment**
- Facilitate **environmental sampling**, as indicated by the environmental assessment
- Work with healthcare facility leaders to **review and revise the water management program**
- Follow up to **assess the effectiveness** of implemented measures



Examples of immediate control measures to reduce risk of ongoing *Legionella* transmission

- Restrict showers
- Avoid therapy pools and spas
- Use bottled water for vulnerable patients
- Do not use water from faucets in patient rooms
- Do not use non-sterile ice from facility ice machines
- Consider installing 0.2 micron biological point-of-use filters
- Consider halting new admissions or temporarily closing the building, affected area, or device



PREVENTING CASES AND OUTBREAKS



Most outbreaks can be prevented with effective water management



ANSI/ASHRAE Standard 188-2018
(Supersedes ANSI/ASHRAE Standard 188-2013)
Includes ANSI/ASHRAE addenda listed in Annex D

Legionellosis: Risk Management for Building Water Systems

See Information Annex D for approval dates.

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Standard 188-2018

- Establishes minimum legionellosis risk management requirements for building water systems.



CMS water management program requirement

- Issued in 2017 and updated in 2018
- Requires facilities to “develop and adhere to policies and procedures...that reduce the risk of growth and spread of Legionella and other opportunistic pathogens in water.”
- Applies to
 - Hospitals
 - Skilled nursing facilities
 - Critical access hospitals
- Surveyors will review policies, procedures, and reports documenting water management program implementation



QUESTIONS?

