

IPs Respond to CMS <i>Legionella</i> Directive

Almost a year has passed since the Centers for Medicare & Medicaid Services (CMS) issued a compliance memorandum telling healthcare systems to perform risk assessments and implement water safety programs to prevent patients from acquiring Legionnaires' disease (LD).

It's making a difference in terms of infection preventionists putting *Legionella* on their radar and hospitals seeking testing and risk assessment advice, says **Janet Stout**, PhD, president of the Special Pathogens Laboratory in Pittsburgh.

She predicted as much last year after the CMS memo was issued right before the annual APIC conference, turning Stout's relatively pedestrian *Legionella* presentation into "must-see" IC.

Facing a packed crowd seeking compliance guidance, Stout finally was no longer a voice in the wilderness.

After investigating LD since that first, titular outbreak in 1976 at a Legionnaires' convention in Philadelphia, Stout was ready to share a wealth of accumulated information.

"When I speak at something like that — there are also other sessions going on — I expect something like 50 or 100 people," she says. "It was standing room only. There must have been 500 to 600 people there. That was a dramatic visual depiction of the impact of the CMS memorandum. When CMS speaks, every healthcare facility listens."

The CMS outlined the situation in no uncertain terms. The compliance directive was needed because a review of the increasing number of LD outbreaks in 2000-2014 showed that 15% were in hospitals and 19% in long-

term care.

“The CMS expects Medicare-certified healthcare facilities to have water management policies and procedures to reduce the risk of growth and spread of *Legionella* and other opportunistic pathogens in building water systems,” the agency emphasized.¹

Primarily caused by *Legionella pneumophila* serogroup 1, LD outbreaks in healthcare are typically traced to the waterborne bug becoming aerosolized and inhaled in shower mist. Faucets, spas and baths, cooling towers, decorative fountains, and medical equipment also have been implicated.

Hospital Infection Control & Prevention asked Stout to update the situation in the following interview.

HIC: While there often is resistance to regulation in clinical settings, you have made the case that this CMS action is a good thing.

Stout: When the memorandum came out last year, I emailed the contact person and said, “Congratulations on doing something that will dramatically move the prevention of healthcare-acquired LD forward — forward in a way that will be much more substantive than the ASHRAE standard that came out in 2015, or even the CDC water management toolkit.”

First of all, the CMS memo was short and to the point. You must have a risk assessment and water management plan to address the risk of *Legionella* in your facility, and you need to have measures that demonstrate control, including testing for pathogens like *Legionella*.

HIC: *Legionella* has come to national attention following outbreaks, but subsequently fades back again. Will this regulatory aspect finally set prevention as a priority?

Stout: The only caveat I will say is that it has the potential to dramatically reduce healthcare-acquired LD. In the Special Pathogens Lab, we do the

testing for *Legionella* and other organisms, and do consultations to help people comply with CMS and other standards.

We have seen a dramatic uptick in requests for testing, risk assessments, and water management plans. Usually with these things there are early adopters, people in the middle, and later adopters. With ASHRAE, even though it was an industry best practice, it was still a voluntary standard. CMS is not voluntary.

The memo was effective immediately. That's part of why I would attribute dramatic improvement and progress in *Legionella* prevention to CMS.

HIC: What kinds of things are CMS surveyors looking for to assess compliance with the memorandum?

Stout: They are looking for evidence that you are either in compliance with their requirements or you are moving toward it. They are asking, "Have you done risk assessments? What is the evidence that shows that? Do you have a report or something that demonstrates that?"

Just like any surveyor, they want documentation.

The other question is, "Do you have or are you working on completing a water safety and management plan? Again, where is documentation that supports that? What testing have you done to show you have evaluated *Legionella* and these other potential pathogens?"

If you have the documentation and evidence, CMS should not cite you.

HIC: You have warned IPs not to end up "chasing zero" when it comes to *Legionella* organisms in water systems. Why is that important?

Stout: "Do not chase zero" is an important concept for *Legionella*. The issue is that people have been reluctant to test for *Legionella* because they are afraid they will find it. They have told themselves — sort of as a way to

manage their fear — that *Legionella* is ubiquitous so there is no point in testing.

That is a myth. It is not everywhere. In our experience, and if you look at the literature, anywhere from as low as 12% of buildings tested to 70% are colonized, but they are not all colonized with the same kind of *Legionella*. You need to know what kind is present in your water.

When you find it, the beauty of having these water management plans is that you establish a path forward to deal with that through corrective actions.

There is no reason to be afraid to evaluate the presence of *Legionella*. What gets people stuck is that they believe for some reason that you can completely eliminate a naturally occurring bacteria from complex water systems in hospitals and long-term care facilities.

You can't. You can control it, which is sufficient to manage or prevent disease. That is the “zero” worth looking for. We are looking for zero cases of LD, not zero bacteria.

HIC: Increased attention to *Legionella* would likely lead to increased reporting and case identification. Are you seeing that trend?

Stout: That's a great observation. They are seeing something like that in New York state and New York City right now. This is an important principle for people to understand. Cases go up with an increase in surveillance. If people start looking for something, the doctors start ordering diagnostic tests for *Legionella*, and they find more cases.

The argument is being made by some organizations that the regulations that were put in place — after the outbreak in NYC that caused 138 cases and 16 deaths — have not resulted in a decrease in cases.

The state followed the city and additionally required hospitals and long-term care facilities to test for *Legionella* and have a water management plan.

So, the organizations that say these regulations are having no impact on reducing cases are misinterpreting what is happening. This always happens after implementing new regulations — cases go up because they are looking for it. Eventually it will go down.

I caution people not to overinterpret a spike in case detection following a new regulation or guidelines. We have seen this before, and it is to be expected.

REFERENCE

1. CMS. Center for Clinical Standards and Quality/Survey & Certification Group. Requirement to Reduce Legionella Risk in Healthcare Facility Water Systems to Prevent Cases and Outbreaks of Legionnaires' Disease (LD). Ref: S&C 17-30-ALL. June 02, 2017: <http://go.cms.gov/2r3ue6B>.