## Health Affairs, 2/4/15

It has taken an epidemic in West Africa to expose a troubling issue for U.S. hospitals and health policy: the short shrift given infection prevention.

In a thoughtful December Health Affairs Blog post, Dr. Leonard Mermel, an epidemiologist and infection control specialist, noted that over a three-month period his hospital's work on Ebola preparedness "significantly strained our ability to manage other infection control challenges."

That is a red flag for health care policymakers. As hospitals focus on Ebola preparations, we can't lose sight of the fact that more than 700,000 Americans contract health care associated infections (HAIs) each year. About 75,000 people die from HAIs, such as Clostridium difficile (C. diff), Methicillin-resistant Staphylococcus aureus (MRSA) and vancomycin-resistant enterococcus (VRE).

This is more than 10 times the number of patients who have died from Ebola across the globe. Read the entire article

## Modern Healthcare, 2/3/15

"Infection preventionists and those working in infection prevention and control departments spend a significant amount of time on Ebola-related activities, and that has taken them away from the other critical daily infection control activities," said Mary Lou Manning, president of APIC.

"There doesn't seem to be a groundswell for committing additional resources," Manning said. "If you pick up a newspaper, the national reality and the conversation has really shifted from not just Ebola preparedness but to this broader issue of emergency preparedness in general, and as it's related to infectious diseases."

In light of such monetary concerns, Manning said it was up to infection disease preventionists to do a better job of maintaining data to support the impact of their efforts toward reducing disease threats, most of which are related to stopping hospital-acquired infections.

"As soon as there is an event that happens, whether it's something emergency-related such as Ebola or measles, there will be increased visibility for the infection preventionist," Manning said. "But it's the day-to-day work that is vitally important."

#### HICprevent, 12/12/14

"We conducted a poll, Oct. 10-15, about Ebola readiness, and 51% of respondents indicated they only have zero to one infection preventionist [on staff]," says Katrina Crist, MBA, chief executive officer of the Association for Professionals in Infection Control and Epidemiology in Washington, DC.

"More importantly, there was a direct correlation between having more than one IP on staff and being more prepared," Crist adds. "We are looking at how we can develop a strategy and prioritize to bring the message forward that personnel is a serious issue and needs to be better understood and addressed."

Personnel issues are one of three top priorities identified by APIC: "We're sounding the alarm," Crist says.

Another personnel trend noted in the HIC salary survey was the rising age of IPs. Nearly 90% of the 56 respondents said they were over 45 years of age. More than 20% reported being 61-65 years of age, and close to 9% were already 66 years old or older.

"We need more young people; we need people in their 30s, so when people my age retire there are infection preventionists to take their place," says Connie Steed, MSN, RN, CIC, director of infection prevention at the Greenville Health System in Greenville, SC.

APIC's second top priority involves training when surge capacity is necessary, Crist says.

"What Ebola showed us is how time intensive training is," she says.

## Healio Infectious Disease News, December issue

"The mantra for every hospital in the United States is to identify, isolate and communicate," Linda R. Greene, RN, MPS, CIC, infection prevention manager, University of Rochester Medical Center, Highland Hospital in Rochester, N.Y., and spokeswoman for the Association for Professionals in Infection Control and Epidemiology (APIC), told Infectious Disease News. "All hospitals and emergency departments must be prepared to identify and isolate potential patients with Ebola. Health care workers need to recognize the signs and symptoms, including travel histories. Many hospitals have integrated this into routine screening questions."

For the nurses from Dallas, the early recognition of their symptoms and immediate isolation is likely what led to their fairly quick recoveries, Greene said.

#### Outpatient Surgery, November issue

The Association for Professionals in Infection Control and Epidemiology (APIC) notes that because of the intense training staff undergoes to prepare for Ebola, as well as the personal protective equipment facilities need to purchase, resources are being diverted from other, more common infections, like the flu, *C. diff.*, MRSA and even enterovirus-68.

"We have to drop so many other things to take this on," says APIC President Jennie Mayfield, BSN, MPH, CIC. "No one wants a flu epidemic in their facility."

While APIC says that preparing for Ebola is a must, the group reminds healthcare workers to also be on the lookout for other infections. APIC is calling on hospitals to increase their funding of infection prevention and control programs in their facilities to help take on Ebola, as well as other harmful infections.

"Infection control is under resourced and the Ebola situation is exasperating that," says Kristina Crist, MBA, CEO of APIC. "We need more resources to be prepared overall."

Outpatient Surgery, November issue (continued) Who's your infection preventionist?

The Ebola scare and its demand for intense, in-person training and drilling have drawn attention to the dearth of full-time infection preventionists.

"We know that many hospitals do not have enough staff dedicated to infection prevention and control," says Jennie Mayfield, BSN, MPH, CIC, president of the Association for Professionals in Infection Control and Epidemiology. "Facilities that are inadequately staffed to begin with are stretched beyond capacity at a time like this. The current crisis demonstrates our lack of surge capacity and should concern everyone. Because our infection preventionist members are having to focus so much attention on Ebola, they are very worried about what other infectious diseases we might be missing. The infection preventionist's skills have never been in more demand."

## An unlikely visitor

While Ebola isn't likely to make an appearance at your surgical facility, experts still recommend that you be prepared to treat and transport a patient.

"It's highly unlikely someone would come in for ambulatory surgery," says Linda Greene, RN, MPS, CIC, a member of APIC's regulatory review panel, noting that it's still important to "be able to quickly screen and isolate the patient" if it happens.

Staff should have a "high level of awareness," says Ms. Greene. If they come across a patient who has traveled recently and is exhibiting signs and symptoms, they should immediately change into an Ebola spacesuit, isolate the patient, contact the proper organizations, like the CDC, and arrange for transport to the nearest hospital accepting infected patients.

#### LA Times, 11/17/14

Only about 6% of hospitals said they were "well-prepared" for an Ebola patient, according to an October survey by the Assn. for Professionals in Infection Control and Epidemiology. And 51% of the respondents said their hospitals had one or no full-time infection control professional on staff.

The state's plan has been held up as a model for future outbreaks, according to Linda Greene, a spokeswoman for the infection control professionals' association and an infection prevention manager at the University of Rochester Medical Center, one of New York's designated treatment hospitals.

Under such a system, hospitals throughout a state would be expected to identify initial cases and then transfer them to one of the designated centers for treatment.

"Any hospital, no matter how small, must be able to identify a case," Greene said. "This is really a model that's been in healthcare for a long time — not every hospital can have a burn unit; not every hospital can have a trauma unit. We're seeing that move into the infectious disease world."

## Bloomberg Businessweek, 11/12/14

Nine people have been treated for Ebola in the U.S., beginning with Kent Brantly, who was infected while doing relief work and flown to the U.S. in August for care. Since then, the CDC has had to adjust while learning more about how to manage the virus, said Linda Greene, an

infection prevention specialist at Highland Hospital in Rochester, New York, and a former board member at the Association for Professionals in Infection Control and Epidemiology. The agency has had to "look at the knowledge they have and use that knowledge based on U.S. experience."

One thing infection-control experts knew was that Ebola isn't that easy to transmit until its late stages. Hundreds of people in Texas and Ohio who may have had contact with Ebola victims have completed three weeks of monitoring without getting sick. "What we're seeing is exactly what CDC predicted," Greene said.

## Associations Now, 11/3/14

One association hopes it has the answer to that question. Working in tandem with the Johns Hopkins Armstrong Institute for Patient Safety and Quality, the Association for Professionals in Infection Control and Epidemiology (APIC) has created an online program designed to teach medical professionals how to properly use personal protective equipment when attending Ebola patients.

APIC and Johns Hopkins worked together on the course at the request of the Centers for Disease Control and Prevention (CDC). A team of nearly 40 people created the educational program, which follows the guidance CDC has previously offered to medical officials. APIC representative Pamela Falk noted that the educational offering could take some of the burden off of those in the medical field who are responsible for such training.

"Infection preventionists have been working around the clock to prepare clinicians for Ebola by training and disseminating information," Falk said in a news release. "This innovative program will assist [infection preventionists] in training health care personnel on proper [personal protective equipment] use through visual demonstrations put in the context of CDC's new [personal protective equipment] guidance."

#### Nurse.com, 10/31/14

"The idea of a trained observer highlights some practices we should be doing every day," said Linda Greene, MPS, RN, CIC, an infection prevention manager at Highland Hospital in Rochester, N.Y., and a member of the regulatory review panel for the Association for Professionals in Infection Control and Epidemiology. "There are many more things that could be on the horizon when it comes to infection, and the CDC's new guidelines are a reminder that we have the ability to watch out for each other. Small decisions like pointing out an error or reminding someone about something can mean the difference in infection and prevention."

## Infection Control Today, 10/31/14

"Infection preventionists have been working around the clock to prepare clinicians for Ebola by training and disseminating information," says Pamela Falk, MPH, FSHEA, CIC. "This innovative program will assist IPs in training healthcare personnel on proper PPE use through visual demonstrations put in the context of CDC's new PPE guidance. We hope this new interactive training helps lighten the burden of our infection preventionists so they can focus not only on Ebola, but on the surveillance of other dangerous healthcare-associated infections such as carbapenem-resistant Enterobacteriaceae (CRE), MRSA, and *C. difficile*."

## Associated Press, 10/31/14

Linda Greene, who sits on the Association for Professionals in Infection Control and Epidemiology Regulatory Review Panel, said the new DOT permits provide a measure of security for hospitals wondering whether their existing contractors would handle Ebola waste. But protocols are still evolving.

"You start putting plans in place for something you haven't dealt with before and begin asking all these questions," Green said. "There's a lot of discussion and problem solving that still has to occur."

## Medpage Today, 10/29/14

Earlier, the Association for Professionals in Infection Control and Epidemiology had said it opposed mandatory quarantine of healthcare providers with no symptoms of Ebola, even if they have treated patients.

The "evidence is clear," the association said in a statement, that contagion is not possible if someone with Ebola is asymptomatic and that infection requires close contact with the body fluids of a patient who has symptoms.

## Washington Post, 10/28/14

These quarantines would "lead to increased difficulty in assembling care teams in West Africa and the U.S.," the Association for Professionals in Infection Control and Epidemiology said.

#### Vox Media, 10/28/14

"Nurses and doctors everyday risk their lives for patients," says Linda Greene, an infectious disease specialist and board member of the Association for Professionals in Infection Control and Epidemiology, which opposes Ebola quarantines. "Our approach to them, when they return, is punishment. Three weeks is a long time."

Greene says she could see herself supporting a ban if the evidence was different. If we knew that doctors or nurses could easily spread Ebola by going to the grocery store or bowling alley, there might be reason to bar such activities. But that evidence just doesn't exist — and active monitoring is a smarter tool.

"We definitely support the twice-a-day monitoring and temperature taking," Green says. "But the idea of voluntary quarantine is probably overkill. Everything we know about this disease shows it doesn't spread unless someone is symptomatic."

#### Washington Post, 10/27/14

So far there have been just a few bumps in the road in implementing these new quarantine procedures. Those bumps include:

1. The Association for Professionals in Infection Control and Epidemiology opposing the mandatory quarantine — but what do they know?

#### Newsweek, 10/27/14

The Association for Professionals in Infection Control and Epidemiology (APIC) remains "deeply concerned about the Ebola virus disease (EVD) outbreak and the difficulty in protecting health care professionals providing care to EVD patients," they oppose the mandatory quarantine.

"While we understand public concerns, APIC does not support mandatory quarantine of health care providers with no symptoms of Ebola who have treated patients with EVD," APIC in an emailed statement on Sunday.

## TIME, 10/27/14

While we understand public concerns, APIC does not support mandatory quarantine of healthcare providers with no symptoms of Ebola who have treated patients with EVD.

APIC believes that quarantining healthcare professionals returning from caring for Ebola patients in West Africa will deter potential healthcare volunteers and lead to increased difficulty in assembling care teams in West Africa and the U.S. Forced quarantines of healthcare workers with no symptoms of Ebola who have risked their lives to protect others, are unnecessarily harsh and are not aligned with scientific evidence. Quarantines may affect the healthcare worker's ability to make a living and may also have negative emotional and social consequences as a result of being stigmatized for their service."

## Medscape, 10/27/14

"Facilities that are inadequately staffed to begin with are stretched beyond capacity at a time like this," said APIC President Jennie Mayfield, BSN, MPH, in a news release. "The current [Ebola] crisis demonstrates our lack of surge capacity and should concern everyone."

## Center for Infectious Disease Research and Policy, 10/27

Several professional medical organizations have also weighed in. For example, the Association for Professionals in Infection Control and Epidemiology (APIC) said in a statement yesterday that it understands public concerns, but it does not support mandatory quarantine of asymptomatic healthcare providers who treated patients with Ebola.

"It is important to be guided by the scientific evidence, and apply the lessons learned so far from other experiences, including the fact that even family members who were in close contact with Mr. Duncan in Dallas have not gotten sick," APIC said. It added that the policies could deter health professionals from volunteering, hamper their ability to work when they return, and stigmatize them for their service in West Africa.

## MedPage Today, 10/27/14

Home monitoring is a step in the right direction, but it's still an over-reach, according to Linda Greene, RN, past board member of the Association for Professionals in Infection Control and Epidemiology, in Washington.

"We really do not support quarantine," Greene, who is also the infection prevention manager for the University of Rochester (N.Y.) Medical Center, said in a phone interview at which a public relations person was also present. "Part of the challenge here is 21 days is a long time ... If you

don't have symptoms, is this putting undue restrictions on people who are heroes? They're caring for the sickest of the sick ... and yet we're putting restrictions on them."

"We definitely support twice daily monitoring for fever, and we support checking for symptoms," Greene continued. "We support letting health officials know if you become ill. That is really the way we need to treat our care providers."

Quarantining asymptomatic healthcare workers who treat Ebola patients could have negative repercussions, she said. "You're not going to have people willing to volunteer to care for these patients ... [and] the most important way to stop [the epidemic] is at the source. So if we diminish the number of people who will go there because of having a quarantine or restriction when they return, we may indeed face an even larger epidemic."

## Yahoo! Health, 10/27/14

It's hard to say exactly how many infection preventionists the average U.S. hospital should employ, since more than the number of inpatient beds needs to be considered, said Linda Greene, R.N., an infection preventionist at Highland Hospital in Rochester, N.Y., and a former board member of APIC. The administration should also evaluate things like critical-care capacity and the number of clinics — for example, dialysis facilities — that are associated with the hospital. "You really have to do a thorough assessment of where the needs are," she said. "And for many hospitals, that evaluation has not necessarily been done."

In an ideal situation, "they are the feet-on-the-ground individuals, doing in-the-moment teaching, answering questions about disease transmission or different types of organisms," she said. "They're doing a continual scan of what's coming in — what types of patients, microbiology reports, infections." Unfortunately, mandatory reporting of infectious-disease data means preventionists are often "tied to their desks," instead of educating the hospital's staff about infection control and implementing disease-prevention strategies, said Greene. In a small hospital, a single infection preventionist may be adequate, said Greene, but "the majority of respondents [to the survey] really feel that they don't have the resources necessary." This is due not only to inadequate funding, but also a lack of appreciation for infection preventionists' role in the hospital. "When there is not an immediate threat, like the Ebola outbreak, and your infection rates are very good, [people don't realize] that those rates are good because someone is working to prevent infections," Greene told Yahoo Health. "The infection preventionist is under-appreciated until something goes wrong."

In other words, when things are running smoothly, hospitals may not understand the necessity of infection experts, so they staff only one or two. But when a crisis strikes, they suddenly find themselves grossly underprepared. "The most important thing we've learned from the Dallas experience is how important planning is, and how important surge capacity is," Greene said. Translation: Hospitals should consider the worst-case scenarios — say, a sudden Ebola outbreak — when deciding how many infection prevention experts to bring on board, not the number they'd need when infectious diseases are well under control.

A shortage of preventionists not only leaves a hospital ill equipped to handle the crisis at hand — it may also mean more run-of-the-mill infections are neglected. "We're really worried about that — about superbugs, like CRE and clostridium difficile," said Greene. "These can have devastating consequences. People die from these diseases." As Ebola readiness takes precedence, these infections may take the backburner, permitting an uptick in their rates. "It's kind of like taking your eye off the ball," she said.

"When you're planning for something, the question is, 'How do we care for patients?'" said Greene. "Then it becomes, 'Oh my gosh, we can't just throw the waste in the regular trash. How do you get that waste outside the room? Where are we going to house our patients? What's the traffic flow so that we're not going back between a clean and dirty area?' These are all logistical issues."

"It's not just putting it on — it's this idea of a buddy system, where a trained observer watches you put it on," Greene told Yahoo Health. "Are there any gaps? Is all the skin covered? Can you move your arms?" During interactions with the patient, the observer also makes sure there are no "breaks in technique" or accidental encounters with bodily fluids, she said.

Although this new Ebola-prevention protocol may be daunting to hospitals, Greene thinks the current crisis has been positive in one respect: reminding health-care workers of the importance of safety, regardless of the presence of Ebola, and watching out for each other, which may be as simple as prompting a colleague to wash his hands. "Some hospitals have done that very well," she said. "But I think we have a long way to go. This is a lesson learned, in terms of taking what we learned and applying it to our everyday practices. This is the time to really step up infection prevention. We must not only educate our health-care workers, but also educate the public."

#### Bloomberg Businessweek, 10/26/14

The Association for Professionals in Infection Control and Epidemiology and the Society for Healthcare Epidemiology of America issued statements in opposition to the quarantine orders.

## Modern Healthcare, 10/26/14

Among the groups voicing concerns have been Doctors Without Borders itself, the New Jersey chapter of the American Civil Liberties Union and the <u>Association for Professionals in Infection Control and Epidemiology</u>.

The Association for Professionals in Infection Control and Epidemiology echoed Fauci's concern in a statement it put out later Sunday.

"APIC believes that quarantining healthcare professionals returning from caring for Ebola patients in West Africa will deter potential healthcare volunteers and lead to increased difficulty in assembling care teams in West Africa and the U.S.," its statement said.

"Forced quarantines of healthcare workers with no symptoms of Ebola who have risked their lives to protect others are unnecessarily harsh and are not aligned with scientific evidence. Quarantines may affect the healthcare worker's ability to make a living and may also have negative emotional and social consequences as a result of being stigmatized for their service," its statement went on to argue.

#### Modern Healthcare, 10/26/2014

"The results paint a disturbing picture" and point to an urgent need to bolster infection prevention resources, said Katrina Crist, APIC's CEO. Facilities, already inadequately staffed, are now being stretched beyond capacity. APIC called on hospitals to hire infection

preventionists to provide the appropriate in-house training and ensure guidelines are followed proficiently. They also recommended investments in infection-monitoring technology and equipment, to be able to provide real-time data.

The costs associated with Ebola preparedness remain unclear, but they also may be unavoidable as hospitals prepare for eventualities, said Jennie Mayfield, APIC president. But in the end, the goal is to ensure safety, both for staff and the patient, she said.

APIC encourages every hospital in to be prepared to identify, isolate and take initial care of an Ebola patient and to take advantage of regional resource centers to mitigate some of the costs.

## National Public Radio, 10/24/2014

"We have to drop so many other things to take this on," says Jennie Mayfield, president of APIC.

Infection prevention and control at hospitals can range from ensuring that nurses and doctors are washing their hands and wearing face masks to coordinating whether or not a certain patient really needs an antibiotic, in order to reduce the prevalence of drug-resistant bugs.

For infection preventionists, a normal routine includes "Looking at the lab results, we're looking at what new patients maybe came onto a unit, we're taking calls from the unit, 'What do you think I should do about this particular thing?'" says Linda Greene, an infection prevention manager and member of APIC's regulatory review panel.

But now, Green says, if the infection preventionist is working on training with personal protective equipment for Ebola, their other tasks aren't getting done as promptly or efficiently as they could be.

As a result, Greene tell Shots the fear is that they'll "miss red flags" for patients with the flu or antibiotic-resistant bacteria. And while patients needn't necessarily be worried about making a visit to their local clinic, she says hospitals could be doing a better job. Greene says hospitals need to think about their worst-case scenario, whether that be an Ebola patient or a larger flu pandemic, and equip themselves with the people and technology to handle it.

"We learned this from the SARS outbreak," Greene says. "People burn out."

The Ebola outbreak has helped highlight the gaps in hospitals' response to highly infectious agents, Greene says, but if hospitals take the time to address those gaps, it won't be so hard when the next big health problem comes our way.

## FierceHealthcare, 10/24/2014

"We know that many hospitals do not have enough staff dedicated to infection prevention and control," Jennie Mayfield, president of APIC, said in an announcement about the findings. "Facilities that are inadequately staffed to begin with are stretched beyond capacity at a time like this. The current crisis demonstrates our lack of surge capacity and should concern everyone. Because our infection preventionist members are having to focus so much attention on Ebola, they are very worried about what other infectious diseases we might be missing. The infection preventionist's skills have never been in more demand."

APIC Chief Executive Officer Katrina Crist said the survey highlights the short shrift many hospitals give to infection prevention. "The Ebola outbreak illustrates why facility-wide infection prevention programs are critical and require adequately trained, staffed and resourced infection control departments. The unique skill set of the infection preventionist is needed to get out in front of this outbreak and prevent the next public health issue from escalating to a crisis."

APIC urges organizations to focus on the following three aspects of infection prevention in order to effectively protect healthcare workers, patients and the public:

- Personnel: Because Ebola readiness demands intense, in-person training and drilling led by infection prevention experts, APIC says it is critical to provide adequate infection prevention staffing.
- Training: To ensure that hospital staff follow guidelines precisely 100 percent of the time, healthcare workers must have the proper training and participate in drills on safety protocols so that they can demonstrate proficiency in essential infection control practices.
- Technology and equipment: To maximize efficiencies and provide real-time data to help infection preventionists detect and control infectious diseases, APIC leaders say healthcare facilities must invest in infection tracking and monitoring technology.

During a press conference Friday to discuss the survey findings, Linda Green, R.N., who sits on APIC's Regulatory Review panel, said the results are a "wake-up call" to U.S. hospitals to strengthen their processes.

All U.S. hospitals must have the capability to identify and isolate a potential Ebola patient, even if they end up transferring the patient to a regional or specialized center. However, Crist worries that with so much attention on Ebola, infection control staff will miss other outbreaks, such as a flu epidemic or a problem with methicillin-resistant Staphylococcus aureus (MRSA).

"This really underscores point in general that infection control is under resourced and what's happening with Ebola situation is exacerbating it," Crist said.

#### Hospitals and Health Network, 10/24/14

In other news today, the Association for Professionals in Infection Control and Epidemiology released a survey assessing hospital readiness to receive a patient infected with Ebola. The study, conducted Oct. 10–15, suggests that only 6 percent of U.S. hospitals are well-prepared to handle such cases. The association suggests that hospital leaders focus on three aspects of infection prevention:

- adequate infection prevention staffing;
- training health care workers on safety protocols so they are prepared to the utmost;
- investing in infection tracking and monitoring technology.

APIC officials say that a broader goal of the survey is to draw attention to how infection prevention departments are funded and staffed.

"We have to drop so many other things to take this on," Jennie Mayfield, APIC president said during a press briefing this morning. "Nobody wants a flu epidemic in their facility."

HealthDay, 10/24/14

"The results of the poll paint a disturbing picture, and point to an urgent need to bolster infection prevention resources in health care facilities," Katrina Crist, CEO of APIC, said during a noon press conference.

"The recent Ebola outbreak and the specter of other serious infectious diseases and antibioticresistant superbugs are another example of why infection prevention programs are critical to our nation's health care facilities," she said.

Crist said that not enough is being done to protect patients and health care workers.

According to the survey, the majority of hospitals (40 percent) said they were "somewhat prepared."

Speaking at the press briefing, APIC President Jennie Mayfield said, "This survey confirms our belief that many hospitals do not have enough staff dedicated to infection prevention and control."

APIC wants hospitals to beef up their procedures to handle Ebola patients. This includes staffing to ensure that properly trained infection control experts are present. In addition, the group is calling for rigorous training to ensure guidelines are followed at all times and that proper equipment is available.

Linda Greene, a member of APIC's regulatory review panel, said, "The current crisis really sheds light on how critically important properly resourced infection prevention programs are."

"From there, it might be more judicious to send those patients to regional centers," she said.
"But don't forget that an Ebola patient can walk into any emergency department, and therefore we must be prepared to do an initial assessment and treatment until transfer arrangements can be made."

## FierceHealthcare, 10/24/2014

Meanwhile, a new survey conducted by the Association for Professionals in Infection Control and Epidemiology (APIC) reveals only six percent of U.S. hospitals are well-prepared to receive a patient with the Ebola virus. The survey asked 1,039 infection preventionists working in acute care hospitals, "How prepared is your facility to receive a patient with the Ebola virus?"

During a press conference today revealing the findings, APIC urged all healthcare organizations to beef up personnel, training and equipment to better prepare their staff to identify potential Ebola patients. Look for additional coverage about the APIC findings and recommendations later today from FierceHealthcare.

#### Fox News, 10/24/14

There was a direct correlation between the number of infection prevention specialists on staff and hospitals' feelings of preparedness, APIC officials said during a press conference Friday.

Infection prevention specialists are professionally trained in identifying sources of infections and limiting their transmission in health care settings. They can act as an extra line of defense at the bedside and in the facility by educating nurses and physicians, and observing units to ensure

proper policies and procedures are followed, Linda Greene, a member of the APIC regulatory review panel, said during the press conference Friday.

"This survey confirms our belief that many hospitals do not have enough staff dedicated to infection prevention and control," APIC president Jennie Mayfield said during the press conference.

During the press conference, APIC officials pointed out that infection in health care settings has been an issue long before the recent Ebola outbreak. Greene expressed concern over screening and treatment procedures for other infectious viruses— such as enterovirus D68 and the flu— being overlooked while health care workers are busy preparing for potential Ebola cases.

"I think it's the time now that we need to be really mindful that this is one thing, but tomorrow it can be something else," Greene said.

### Bloomberg Businessweek, 10/24/14

Those calling for tighter restrictions on health-care workers should keep in mind that Ebola is spread through contact with the body fluids of a symptomatic person, said Linda Greene, an infection prevention specialist at the University of Rochester in New York and a former board member at the Association for Professionals in Infection Control and Epidemiology.

Not even the family members of Thomas Eric Duncan, the Liberian man who died Oct. 8 of the disease in Dallas, were infected after spending a few days in close quarters with him, said Greene, who was not at the hearing.

"This is not an airborne disease," she said in a telephone interview. "It's important for people to ask questions, but we have to look at the evidence and our understanding of transmission and what we've learned so far from other experiences. Even family members and those individuals who were in close contact with Duncan have passed the 21-day period. I understand the concern but we need to keep the evidence first and foremost."

## New York Daily News, 10/24/14

Infectious preventionist Linda Greene, a registered nurse at University of Rochester Health System and a spokesperson for the Association for Professionals in Infection Control and Epidemiology, agreed, saying that self-quarantines have downsides, like unnecessarily scaring caretakers.

"At this point it seems the procedures that have been put in place were followed" to make sure Spencer did not pose a threat to others, she told The News.

## FierceHealthcare, 10/22/2014

"I think sometimes healthcare workers may become a bit complacent, and so what [Ebola preparation] does is it helps us remove some of that complacency," Linda Greene, R.N., infection prevention manager at Highland Hospital in Rochester, New York, told FierceHealthcare in an exclusive interview.

"Every day, in every hospital, someone could prevent, maybe not Ebola, [but] there are a number of infectious diseases that we're worried about," such as the flu, said Greene, who is also a former board member of the Association for Professionals in Infection Control and Epidemiology (APIC) and currently sits on APIC's Regulatory Review panel. "I don't think we can underemphasize those basic infection practices that are so very vital to prevent the spread of infection," such as hand hygiene, mask use and early identification, she said.

Even after the Ebola threat is contained, concerns about the virus could potentially change the game for infection prevention in hospitals, Green told FierceHealthcare.

"I think that, if nothing else, there's increased attention to the fact that in infection prevention efforts, we are connecting the dots," she said. "We see how extremely important that is, and we see the outcomes of that ... and I think that high level of awareness certainly will stay with us."

## AMN Healthcare, 10/17/14

Best practices to avoid Ebola and other infectious diseases include good hand washing techniques, paying attention to droplet and contact precautions and the proper use of PPE designed to keep both nurses and patients safe, according to Laura Buford, RN, BSN, an infection prevention coordinator at St. David's South Austin, Texas Medical Center and a member of the Association for Professionals in Infection Control and Epidemiology (APIC) communication committee.

When caring for patients who've had possible contact with infectious diseases like Ebola, the CDC advises healthcare professionals to wear PPE including single-use impermeable gowns or coveralls, double nitrile gloves, masks, face shields, surgical hoods, and impermeable boot coverings that extend at least to the mid-calf regions. Gowns go on first, then masks, goggles, face shields, head coverings, and boot covers. "Gloves go on last," said Buford.

Gowns need to cover more surface area of clothing and extra covering may be needed for legs and shoes. Make sure gowns are tied around the neck and waist, and that no skin is exposed. Put gloves on over the cuffs to ensure you have an extra seal around gowns. "It's very important there's no leakage around cuffs on arms."

If caring for a patient undergoing procedures that may introduce secretions into the air, respiratory protection from an N95 mask or PAPR hood should be used. "Because they're respirator masks and, as they filter the air we breathe, they provide a higher level of coverage than ordinary surgical masks," Bufford explained. Buford reminds clinicians to ensure respirator masks have been fit tested appropriately.

She reminded nurses about the importance of following procedures correctly when putting personal protective equipment on and off. "Make sure you don't contaminate yourself by performing these tasks in the right order and as cautiously as possible," she said. The CDC recommends the use of a "buddy system" to monitor the donning and doffing of PPE.

Orientation at hospitals should include general infection control processes and issues,

Buford explained. "Once nurses arrive on their assigned units they're given more specific information.

Now that will include Ebola information. Nurses should make sure they're comfortable working on their assigned units and know where to locate supplies and equipment to care for patients and to protect themselves," she said. "We do our best to keep nurses well informed about infection control issues."

## Hospitals and Health Network, 10/17/14

Linda Greene, manager of infection prevention at the University of Rochester (N.Y.) Highland Hospital, and a member of the Association for Professionals in Infection Control and Epidemiology's regulatory review panel, says that one cannot overcommunicate during these times. She suggests holding town hall meetings, sending emails and otherwise setting the tone of being open to feedback.

"If you're a C-suite leader, you need to make sure that your managers are definitely ambassadors of evidence of what's going on, of allaying fears, but also presenting facts to staff," she says.

Lastly, leaders should recognize and make it clear that protocols and policies might change daily because of new evidence. "It's such a challenging time with so many unanswered questions right now, oftentimes things change on a daily basis," Greene says. "We need to let people know our knowledge is evolving."

### Modern Healthcare, 10/17/14

Linda Greene, an infection prevention manager at Highland Hospital in Rochester, N.Y., said events such as the one Tuesday can be crucial in ensuring that healthcare providers don't take proper donning and doffing for granted.

"Right now, it's really difficult," Greene said. "We don't have room for error, particularly when you have a patient that is acutely ill with Ebola."

Greene, who sits on the regulatory review panel of the Association for Professionals in Infection Control, said education is important not only for physicians and nurses, but anyone who could come into contact with a patient or his bodily fluids, including housekeeping staff, technicians and security officers.

## Medscape Medical News: US hospitals unequipped to deal with Ebola, experts warn, 10/17/14

## **More Resources Needed**

"Hospitals all over the country are not going to have these units like they have at Emory, but I think what we've learned from our experience is that we need a two-fold approach." Linda R. Green, RN, MPS, manager of infection prevention at Highland Hospital, Rochester, New York, told Medscape Medical News.

"The first one is that every hospital in the United States needs to be able to identify [Ebola] patients and immediately isolate them. And then call in expertise," she said, speaking on behalf of the Association for Professionals in Infection Control and Epidemiology.

What could also help would be to organize a network of regional hospitals with appropriately trained personnel, as has been done in New York State, she added. That approach already exists for specialties such as burn and trauma units and specialty rehabilitation units.

Gaining more resources would help also, she said. "From an infection prevention perspective, we are under-resourced in many hospitals." Hospitals need more infection control specialists. "I think we have to recognize that infection preventionists in particular have this unique skill set that is really being called upon in these times."

# McClatchy Newspapers: Obama's Ebola czar is a government insider with no medical background, 10/17/14

Katrina Crist, CEO at the Association for Professionals in Infection Control and Epidemiology, said the position "will free up medical and research experts to provide clinical guidance, protocols and training to ensure that America's hospitals and health facilities are best prepared to identify, isolate and treat potential patients."

## USA Today, 10/16/14

More than a third of all U.S. hospitals do not have a certified infection prevention specialist on staff, according to a study this year in the *American Journal of Infection Control*. The Association for Professionals in Infection Control recommends that every hospital have at least one certified infection specialist.

## US News & World Report, 10/16/14

Linda Greene, an infection prevention manager at Highland Hospital in Rochester, New York, says it's difficult to speculate what occurred in Dallas because the investigation into how the virus was transmitted and how certain protocols were overlooked is still ongoing.

"Despite the best efforts we do know in many hospitals that infection prevention control measures are under-resourced," said Greene, who is also a member of the Professionals in Infection Control and Epidemiology Regulatory Review Panel.

"As you get something new, that you haven't had experience with, there are all kinds of fine lines," Greene says. "There are all kinds of minute details and protocols that escape you."

## Washington Post, 10/14/14

Jill Holdsworth, president of the D.C. chapter of the Association for Professionals in Infection Control and Epidemiology (APIC), said that among the lessons she's heard hospitals here and across the country are understanding: the importance of creating an Ebola cart, with all the necessary supplies should they need to treat a patient who might be infected.

"That was one thing no one really had, because we had never had to deal with something like this," she said. "Now people don't have to ask for certain types of gowns and gloves, because they are in a central place."

Modern Healthcare, 10/14/14

Linda Greene, a nurse who is an infectious disease control expert and member of the regulatory review panel for the Association for Professionals in Infection Control and Epidemiology, said the high likelihood that a person will not got to a designated site to care initially made it more feasible for all hospitals to each train a few care professionals who could act as a special unit and be deployed when a patient is suspected of having Ebola.

"It's not feasible that every single healthcare worker in every single hospital is going to be ready," Greene said.

## Nurse.com, 10/13/14

Though APIC has not done a survey of its members, anecdotally, infection control specialists say they are doing much more teaching and training about the disease since the Dallas case, said Liz Garman, a spokeswoman for the organization. "It's occupying 100% of their time," she said.

## Nurse.com, 10/13/14

"The more questions we get and the more people look at the protocols and policies and ask for training, I think the more prepared we can be," said Linda Greene, RN, MPS, CIC, an infection prevention manager at Highland Hospital in Rochester, N.Y., and a former board member of the Association for Professionals in Infection Control and Epidemiology.

Don't feel prepared? Here's what you do.

Nurses who do not feel prepared to treat patients with Ebola should be expressing their concerns to supervisors and infection preventionists, along with asking questions.

That's the suggestion of Linda Greene, RN, MPS, CIC, an infection prevention manager at Highland Hospital in Rochester, N.Y., and a former board member of the Association for Professionals in Infection Control and Epidemiology.

According to Greene, these questions from nurses might include:

- I'm feeling uncomfortable about my ability to care for someone with Ebola. Can you guide me?
- I haven't seen an Ebola policy. What's our organization's practice?
- I've read the policy, but I don't see instructions on what to do if a patient needs, say, a CT scan. How do I transport the patient?
- What if the family, who has been exposed to a patient with Ebola, comes in with the patient? Do we isolate them, too?
- Hospitals also have a responsibility to solicit information from front-line providers, Greene said, on how to improve their policies and procedures.

## The American Nurse, 10/9/14

Infection control experts agree. "Employers and nursing staff should familiarize themselves with triage cues for Ebola," said Barbara Smith, MPA, BSN, RN, CIC, a nurse epidemiologist for Mount Sinai St. Luke's and Mount Sinai Roosevelt hospitals in New York City, a national leader with the Association for Professionals in Infection Control and Epidemiology (APIC), and an

ANA member. "And staff in EDs and other parts of the hospital should get involved in drills so they can handle any type of outbreak appropriately."

Said Smith, "They need to ask, 'What do we do if this type of patient comes in" [and know how to respond.]"

It's equally important that nurses understand the level of protection needed when working with certain patients, such as standard droplet versus contact precautions, and follow CDC recommendations, Smith said. Further, they can advocate for proper cleaning of high-touch areas in their work setting, such as refrigerator doors and doorknobs, and practice those same precautions in their own homes.

Another key strategy that can help nurses stay safe is knowing not only how to don personal protective equipment but also how to remove it in the correct order, Smith added. "People tend to get casual about it, but it's really important [to prevent contamination]," she said.

### National Geographic, 10/8/14

Beyond airports, hospitals are an important second line of defense against Ebola, said Jill Holdsworth, an infection control practitioner at Inova Mount Vernon Hospital in Alexandria, Virginia.

"As soon as a patient walks in, if they present with a fever, you should ask them about recent travel history," said Holdsworth, who is also a spokesperson for the 15,000-member Association for Professionals in Infection Control and Epidemiology. "If they say yes, they immediately get taken to a room until we can figure out what's going on. That's what every hospital has to be doing."

#### NBCNews.com, 10/3/14

Any potentially infected material should be removed carefully but there is no risk to the community, said Jill Holdsworth, a Virginia infection control expert and member of the Association for Professionals in Infection Control's emergency preparedness committee.

"People need to be educated so they are not out there thinking they could get Ebola," Holdsworth told NBC News.

But Ebola virus is actually not difficult to kill — soap and water will wash it safely away, and bleach definitely kills it. Unless bodily fluids were splashed all over — an unlikely scenario — the apartment would not be a hot zone, she said.

"If there is a couch or something fabric, it'll probably just get trashed," she said. "If he wasn't vomiting, then the risk in his apartment is probably small."

## NBCNews.com, 10/3/14

Linda Greene, a member of the Association for Professionals in Infection Control and Epidemiology and an infection prevention manager at Highland Hospital in Rochester, New York, said she expects to see an increase in Ebola training at hospitals now that it's "on our soil."

"Hospitals are certainly in the process of doing the training. To some extent, perhaps, it wasn't close enough to home," Greene said. If they haven't already, hospitals are now likely thinking of "the next level" of intensive training.