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THE PRACTICAL GUIDE TO KEEPING HEALTH CARE WORKERS HEALTHY

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INSIDE

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Ebola outbreak underscores weakness in worker safety

OSHA moves forward on infectious disease standard

The recent Ebola infection of two Dallas nurses raises troubling questions about how prepared hospitals are to protect their employees from infectious diseases and whether the health care industry needs a higher level of worker safety.

Indeed, the Ebola outbreak provided a compelling backdrop to recent regulatory action by the Occupational Safety and Health Administration, which has posted a draft infectious disease standard that would make infection control measures mandatory. (*See related story, p. 137.*)

> 'I WAS SHOCKED AND SAD AND VERY ANGRY ABOUT THE INFECTION OF TWO HEALTH CARE WORKERS IN DALLAS.'

When the two nurses became ill in mid-October, national attention soon turned to their personal protective equipment. Media images showed workers cleaning the apartments of the Dallas patients wearing hazmat suits with elastomeric respirators. Health care workers in West Africa also wear hazmat suits.

Yet nurses caring for Thomas Eric Duncan wore surgical masks or N95s while Ebola was suspected but not confirmed. Their necks and foreheads were exposed, and they didn't wear booties or leg coverings. The hospital noted that it was following the Centers for Disease Control guidelines for contact and droplet precautions.

Nurses protested after CDC director **Thomas Frieden**, MD, MPH, said the transmission was likely caused by a "breach in protocol" in removing the protective equipment. He later apologized, saying he did not intend to blame the workers, expressing regret that the CDC did not send in an

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infection control team more swiftly to provide assistance.

A week later, CDC announced new infection control recommendations that called for N95 or powered air-purifying respirators (PAPRs), face shields and hoods that fully cover the neck, boot or shoe covering, and trained observers monitoring the donning and doffing of PPE. The "increased margin of safety" was necessary because American health care involves intensive nursing care and procedures, Frieden told reporters.

"Even a single health care worker infection is one too many," he said. "We may never know exactly how that happened, but the bottom line is that the guidelines didn't work for that hospital. Dallas showed that taking care of Ebola is hard."

But occupational health and safety experts also noted another lesson: Hospitals need to raise the bar on worker safety.

"This is a small microcosm of a larger issue of 'how do we protect our health care workers,' says **Andrew Vaughn,** MD, MPH, medical director of Occupational Health and Safety at Mayo Clinic Rochester (MN). "That is something that clearly needs additional attention."

The silver lining of the Ebola outbreak has been a new awareness about risks to health care workers – and the responsibility that their employers have to keep them safe, Vaughn says.

CA has law in place

Regardless of how strict they are, CDC guidelines are voluntary – except in California, where the Aerosol Transmissible Disease Standard requires employers to follow the infection control guidelines. But a national OSHA standard under development would make those guidelines enforceable at all hospitals and health care facilities.

OSHA is investigating the Dallas transmission, alongside the CDC, a spokesperson said. But beyond an information page on its website, OSHA has said little publicly about Ebola and nothing about the infection of the nurses. However, the Ebola outbreak began just as OSHA convened its small business review for a draft infectious disease standard.

On October 9, the day after Thomas Eric Duncan died of Ebola at Texas Health Presbyterian Hospital in Dallas -- and three days before the first nurse tested positive -- OSHA released background documents detailing its proposed approach to an infectious disease standard.

Written worker IC plan

The proposed standard would be patterned after the Bloodborne Pathogen Standard and California's Aerosol Transmissible Diseases Standard, requiring a written Worker Infection Control Plan, identification of at-risk job classifications, infectious agent hazard evaluations, worker protections, training and exposure investigation.

OSHA's draft infectious disease standard provides for "medical removal protection benefits," including full pay and protected job status.

"Hopefully, this Ebola outbreak and the issues around this will provide the push for OSHA to continue to move on [the standard]," says **Mark Catlin**, health and safety director for the Service Employees International Union (SEIU). "It certainly provides evidence that there's a need -- that the health care sector wasn't prepared to deal with this high level of dangerous disease."

Echoes of SARS

Ebola also has revived a concept that emerged after Severe Acute Respiratory Syndrome (SARS), which infected some 170 health care workers during the 2003 outbreak in Toronto. The precautionary principle holds that "reasonable steps to reduce risk should not await scientific certainty," the SARS commission concluded.

Even before CDC upgraded its recommendations, some hospitals were looking at special containment units in Atlanta and Nebraska as models. Emory University Hospital treated four Ebola patients with no transmission to health care workers. Those caring for the patients wore Tyvek full-body suits and powered air-purifying respirators.

Confidence over anxiety

"Although not strictly required, this approach was practical and allowed our HCWs to confidently focus on safely caring for and transporting these patients without needless anxiety and distraction," Emory physicians explained in the *Annals of Internal Medicine*.[1]

Conversely, Texas Health Presbyterian Hospital used hospital gowns and face masks – giving nurses an option of surgical masks or N95s. Nina Pham, the first infected nurse, "was using full protective measures under the CDC protocols, so we don't yet know precisely how or when she was infected," **Daniel Varga**, MD, chief clinical officer and senior executive vice president for Texas Health Resources, told a Congressional subcommittee in mid-October.

National Nurses United, which does not represent nurses in Texas, nonetheless became their public voice and complained that nurses had skin exposed in their protective garb and used medical tape to try to cover their necks.

"Were protocols breached? The nurses say there were no protocols. There were no mandates for nurses to attend training," union co-president **Deborah Burger** said in a press briefing.

More than 10 years after SARS, too many hospitals still don't have adequate isolation rooms in the emergency department or ready access to fit-tested N95s, says **Gabor Lantos**, MD, PEng, MBA, president of Occupational Health Management Services in Toronto and a consultant to hospitals. "Ask nurses if they feel they're adequately protected or not," he says. "They know the systems aren't in place."

The situation harkened to other outbreaks that have sickened and killed health care workers, including tuberculosis, MERS and flu pandemics. The lesson learned: Use available resources and technology to identify the illness quickly and to protect health care workers, says health care historian Deborah A. Sampson, PhD, APRN, who is also an occupational health nurse practitioner in New Hampshire.

"If you don't prepare and you don't intervene for a communicable disease, you can have significant issues," she says.

Droplet vs. airborne

The Ebola outbreak also has brought another controversy to light: The tension between infection control and industrial hygiene on the issue of disease transmission.

Even as the CDC upgraded the recommended Ebola protective gear, Frieden repeated that Ebola is not airborne. Yet experts in respiratory protection argue that the paradigm of droplet versus airborne transmission is outmoded.

Particles of various sizes are present near an infected patient and can be inhaled by caregivers, argued **Lisa Brosseau**, ScD, professor, and her colleague **Rachael Jones,** PhD, assistant professor, in the School of Public Health at the University of Illinois at Chicago, in a commentary written about a month before the U.S. nurses contracted Ebola.[2]

They urged the use of PAPRs in the treatment of Ebola patients. Coughing, vomiting, and diarrhea produce aerosols, creating a risk of inhalation, Brosseau notes. CDC's original guidance speaks only of extra protection during "aerosol-generating procedures," and even the updated guidance recommends PAPRs or N95s because of the potential for "an unexpected aerosol-generating procedure."

`Shock and anger'

"I have to say I was shocked and sad and very angry about the infection of two health care workers in Dallas," she says. It was a failure that "can be placed directly at the doorstep of CDC."

"We're watching the flaw in the infection control system that many of us have seen for years coming to the surface," agrees Catlin.

CDC needs to work more closely with occupation health experts at the National Institute for Occupational Safety and Health (a division of CDC) and OSHA, Brosseau and Catlin say.

Meanwhile, National Nurses United kept the heat on with a petition drive and press briefings calling for better protections.

"When the CDC is transporting

Ebola patients they all have hazmat suits on. Our nurses want the optimal protection, period," NNU executive director **RoseAnn DeMoro** said in a national conference call before CDC announced the new precautions. "And we're not going to stop until it's done." ■

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OSHA infectious disease rule moves forward

Long-anticipated draft standard comes out as nation's hospitals struggle with Ebola

While a Dallas hospital struggled to care for the nation's first Ebola case, the Occupational Safety and Health Administration quietly issued a draft of an infectious disease standard designed to protect health care workers. The proposed rule would make infection control measures mandatory and would add new requirements for hazard identification, exposure control, and documentation.

OSHA has been working on the rule for years, so the timing is coincidental. But Ebola events provided a compelling backdrop: the infection of two nurses and the subsequent decision by the Centers for Disease Control and Prevention to increase the "margin of safety" with enhanced infection control.

"Workers currently face a number of infectious diseases, and there are always new threats over the horizon – MERS, Avian Flu, and, of course, Ebola," an OSHA spokesperson told *HEH*. "The infectious disease standard would require employers to have a plan to protect their employees from any infectious disease, rather than going on a disease-by-disease basis."

Employee health professionals expressed concern about new regulations requiring time-consuming documentation. For example, the draft rule would require an "exposure determination" that involves listing all job classifications that include employees who could be exposed to infectious diseases.

Parts of the proposed regulation also could overlap with existing state and local health laws, requirements from accrediting bodies and even other OSHA standards, says **Dee Tyler**, RN, COHN-S, FAAOHN, executive president of the Association of Occupational Health Professionals in Healthcare (AOHP).

"We can make things so complex that healthcare providers and organizations find it impossible to comply with all the regulations and become distracted from their primary mission," she says.

Yet the Ebola outbreak illustrates why hospitals need consistent, mandatory rules to protect health care workers, counters **Mark Catlin**, health and safety director for the Service Employees International Union (SEIU).

"Currently, the majority of CDC guidance for infection control for protecting workers is optional. It's simply guidance," he says. Employers may ignore or downplay some of the measures, he says.

The proposed standard creates a useful roadmap for developing a site-specific infection control plan that focuses on worker protection, he says.

"This is what's been missing in the Ebola response," he says.

New job protection, vaccination rules

Currently, only California hospitals face enforcement action if they don't follow infection control guidelines. The OSHA draft standard is modeled after the California Aerosol Transmissible Disease standard, which covers diseases that are spread by the droplet and airborne routes, and the Bloodborne Pathogen Standard.

The draft standard would require hospitals and other health care employers to create a "worker infection control plan," which would include the exposure determination. The proposed rule requires written standard operating procedures to be included in the plan, including hazard evaluation, exposure investigation, personal protective equipment and engineering, administrative and work practice controls, and transmission precautions (droplet, airborne and contact).

As with the Bloodborne Pathogen Standard's exposure control plan, the worker infection control plan would require input from frontline staff and would be updated annually. Training would occur at least annually, and the

proposed rule stipulates minimally what must be covered in the training.

The proposed infectious diseases rule contains some provisions that would establish new responsibilities for employee health:

- EH professionals would need to maintain records "for each employee who has occupational exposure during provision of direct patient care and/or performance of other covered tasks."
- Hospitals would be required to provide vaccinations free of charge for influenza, measles/mumps/rubella, pertussis and varicella and any other vaccine in the worker infection control plan or that is considered medically appropriate for an employee.
- Hospitals would obtain signed declination statements from employees who decline a vaccine. (The proposed rule is silent on employer mandates for vaccination.)
- Workers would receive "medical removal protection," including pay and job protection for employees who are furloughed or ill because of an exposure (except for most cases of the common cold or seasonal influenza).
- Hospitals would be required to ensure that contractors, vendors, and licensed independent practitioners with privileges comply with the worker infection control plan. ■

[*Editor's note: A copy of the proposed infectious diseases rule is available at* www.regulations.gov with the document number OSHA-2010-0003-0245.]

Employee health professionals step up, lead hospital efforts to protect HCWs from Ebola

'We have more volunteers than we can use'

As news shows broadcast seemingly endless loops about Ebola, every community in America wanted to know: Is my local hospital ready to safely handle an Ebola patient?

Behind the scenes, that was a question that employee health professionals had already been addressing, through enhanced training, protocols and personal protective equipment.

"There is a huge response across the nation," says **Sharon Petersen**, MHA, BSN, RN, COHN/CM, who was a founder of the Rocky Mountain chapter of the Association of Occupational Health Professionals in Healthcare (AOHP). "As occupational health nurses, our primary focus has been ensuring that health care organizations across the country are responding so our employees can feel confident that the provisions provided for them are safe and effective."

Here are some areas of focus and strategies used:

Teamwork: Lakeland HealthCare in St. Joseph, MI, built an extensive interdisciplinary team that includes the three-hospital system's CEO, vice president for emergency management, chief nursing executive and directors of nursing, frontline emergency room managers and chiefs of the ER medical staff, electronic medical records representative, nurse educators, the facilities director, materials management, infection prevention and associate (employee) health — among others.

Not everyone attends every meeting, but they can tap in through a video conference call. At first, the group was much smaller, but the health system wanted to access all the necessary expertise and perspective, says **Rita Brandt**, MSN, RN, manager of Associate Health & Wellness. "We believe we can keep safer if we work as a team," she says.

The health system has a longstanding policy of holding 15-minute safety huddles every day. Led by the CEO, key leaders discuss any safety incidents or concerns of the past 24 hours and any issues that might occur in the next 24 hours.

Some hospitals also have designated specialized teams of health care workers who would care for any Ebola patients. These teams have a higher level of training, much as trauma teams do, says Petersen.

Mayo Clinic in Rochester, MN, asked for volunteers for an Ebola care team and got a strong response. "We have more volunteers than we can use," says **Andrew Vaughn**, MD, MPH, medical director of Occupational Health and Safety.

Communication: Lakeland HealthCare places policies, screening tools and updates on an intranet for employees and was planning to create a blog for employees to post questions. Transparency is the best policy, says Petersen. "We don't want our associates living in fear," she says.

Mayo has run simulation drills, making sure employees know how to don and doff the personal protective equipment. And Mayo has thought through the possible concerns of employees. For example, an employee who had a high-risk exposure might fear going home and possibly exposing family members. The health system is looking into alternate

living arrangements for the 21-day monitoring period, Vaughn says.

Most importantly, Mayo continually updates and clarifies its policies. "We've taken the approach of trying to communicate as clearly and frequently as we can," he says.

Personal protective equipment: When it comes to keeping employees safe, "The first rule is to do a hazard assessment," says **Lydia Baugh**, communications director of the International Safety Equipment Association (ISEA) in Arlington VA. Then look for equipment that provides the necessary protection and meets safety standards, she says.

As of late October, the ISEA was not reporting supply shortages. But hospitals had begun seeking equipment not normally on their purchase list, such as Tyvek suits and hoods that cover the neck. (Some hospitals had full-body suits as emergency gear for chemical spills or other industrial incidents.)

Problems with having the proper gear emerged at Texas Presbyterian. In a statement, the health system acknowledged that some Tyvek suits given to nurses caring for Ebola patient Thomas Eric Duncan were too big, and that the nurses may have taped them to make the fit better.

HR policies: Ebola care raises a number of human resource questions. The PPE is difficult to tolerate, so occupational health clinicians evaluate employees to determine if they have any medical limitations. Some hospitals have limited the work time in hazmat suits to two hours, others allow up to four hours.

Employees who are pregnant and those with certain conditions, such as seizure disorders, chronic skin conditions, or claustrophobia, or those taking immune-suppressing medication have been excluded from caring for Ebola patients. ■

CDC cites high-risk procedures like intubation in adding respirators to Ebola PPD for HCWs

Step-by-step instructions for donning, removing PPE

While emphasizing that Ebola does not spread by the airborne route, the Centers for Disease Control and Prevention is advising in new infection control guidelines that health care workers wear N95 respirators or powered air purifying respirators (PAPRs) for treating patients stricken with the deadly virus.

"We are recommending either of those options — but not a face mask." said CDC Director **Tom Frieden**, MD, MPH. "That's not because we think that Ebola is airborne, but rather because we think that [procedures] in American hospitals can be so risky, whether that is suctioning or intubation or other things that may not be done in other parts of the world such as Africa. We want to add the extra margin of safety."

Respiratory protection was one of the bigger points of discussion in the development of the new "consensus" guidelines for Ebola personal protective equipment (PPE), which included input from clinicians who are currently treating Ebola patients at Emory University Hospital, Nebraska Medical Center and the National Institutes of Health Clinical Center, he said.

"These guidelines represent a consensus and an increased margin of safety for health care workers," Frieden said at an Oct. 20 press conference.

Though it was starting to appear that many hospitals were going to err on the side of caution and use respirators regardless, the CDC argued in earlier Ebola guidelines that a surgical mask and face shield were sufficient to contain contact and droplet spread of the virus unless procedures were likely to generate aerosols that could be inhaled.

The agency was likely trying to head off public misperceptions — and the ensuing panic — that Ebola could transmit through the air like measles. That is still not the case, but health care workers could use as much reassurance as possible if they are going to be asked to walk into the isolation room of an Ebola patient. And as a practical matter, the old guidelines could lead to situations where clinicians may decide the patient could benefit from an aerosol-generating procedure, but they would have to leave the room and re-garb to don a respirator.

"We don't want the health care worker who is already suited up — and it takes a while to suit up — saying, '[I need] to suction this patient and that might [create] aerosol generation, so I'm going to leave — take all of this off — and put on an N95 or PAPR and come back,'" Frieden said. "So we've [decided] that we are not going to recommend that

CDC forms Ebola response teams, drops expectation that all hospitals can care for patients

All hospitals must still be able to identify, isolate an Ebola patient

Faced with fear and brewing rebellion in the health care community, the Centers for Disease Control and Prevention has dropped its stance that "any U.S. hospital can take care of an Ebola patient" in favor of rapid response teams.

The CDC Ebola Response Teams will be rapidly dispersed to any hospital in the country that reports a diagnosed case, **Tom Frieden**, MD, CDC director, said at an Oct. 14 press conference. "We will put a team on the ground within hours with some of the world's leading experts in how to take care of and protect health care workers from Ebola infection," he said.

Another likely factor in creating CDC rapid response teams and dropping the "all hospitals can treat" mantra is that nursing unions are charging that their members have not been sufficiently trained on Ebola at many hospitals.

"I've been hearing loud and clear from health care workers around the country that they are worried — they don't feel prepared to take care of a patient with Ebola," Frieden said. "We know how to stop Ebola, but we know it's hard. We know that a single breach, a single slip can cause an infection."

Thus the new emphasis on rapid response teams, though Frieden stressed that every hospital in the country still needs to be ready to diagnose a case of Ebola.

"That means that every doctor, nurse and staff person in an emergency department who cares for someone with fever or other signs of infection should ask where have they been in the last month?" he said. "The fact is that usually infection in health care settings spreads through someone who is not yet diagnosed. We have to shore up the diagnosis of those who have symptoms and have traveled."

Once the diagnosis is made, the hospital can call in a CDC response team, which will include experts in infection control, laboratory science, personal protective equipment, and management of Ebola units. CDC experts will also assist with experimental therapies, public education and environmental controls and waste removal, Frieden said.

face masks be used, but either N95s or PAPRs. For other countries [in Africa] that may be less relevant, but it's because of the kind of [aerosol generating] procedures that are done here."

Greatest risk during PPE removal

The new CDC guidance focuses on specific PPE that health care workers should use, providing detailed instructions on how to remove equipment safely. "The greatest risk in Ebola care is in the taking off of whatever equipment the health care worker has put on" Frieden said. "One of the critical aspects of these guidelines is a very structured way of doing that step-by-step which is supervised, and in a way ritualized, so that it is done the same way every time."

A CDC step-by-step video of donning and doffing PPE for Ebola is available at http://bit.ly/13HBkTb Overall, the PPE guidelines are based on three core principles:

- All healthcare workers undergo rigorous training and are practiced and competent with PPE, including taking it on and off in a systematic manner
- No skin exposure when PPE is worn
- All workers are supervised by a trained monitor who watches each worker taking PPE on and off. This is to ensure each worker follows the step by step processes, especially to disinfect visibly contaminated PPE. The trained monitor can spot any missteps in real-time and immediately address.

The CDC is essentially recommending the same PPE included in its August 1, 2014 guidance, with the addition of respirators, coveralls and single-use, disposable hoods and face shields. Goggles are no longer recommended, as they may not provide complete

skin coverage in comparison to a full face shield. Additionally, goggles are not disposable, may fog after extended use, and healthcare workers may be tempted to manipulate them with contaminated gloved hands, the CDC noted.

The new CDC recommendations for PPE use by health care workers caring for Ebola patients include:

- Double gloves
- Boot covers that are waterproof and go to at least mid-calf or leg covers
- Single use fluid resistant or impermeable gown that extends to at least mid-calf or coverall without integrated hood.
- Respirators, including either N95 respirators or powered air purifying respirator (PAPR)
- Single-use, full-face shield that is disposable
- Surgical hoods to ensure complete coverage of the head and neck
- Apron that is waterproof and covers the torso to the level of the mid-calf should be used if Ebola patients have vomiting or diarrhea. ■

Editor's note: The CDC Ebola guidelines are available at http://1.usa.gov/10ixUos

Ebola pushes nurses stress, anxiety levels higher as many doubt their hospital is prepared

'Psychological first aid is the mental health equivalent of CPR'

Nurses nationwide recently expressed fear and anxiety over the possibility of having to treat Ebola patients in hospitals they claim are poorly equipped. In a national teleconference call in October, thousands of nurses called in to hear and share information about how health systems are responding to the Ebola crisis.

The teleconference was sponsored by National Nurses United, a union that has criticized hospitals and government health officials for not preventing Ebola infections in two nurses who treated the index U.S. Ebola case at Texas Health Presbyterian Hospital in Dallas.

"Nurses from Dallas called us with horrendous stories — what happened in Dallas could happen anywhere," RoseAnn Demoro, executive director of National Nurses United told the teleconference audience.

Nurses on the call shared fears that their hospitals were ill-prepared to handle Ebola, despite having designated units for patients with the disease. They spoke of hospitals that lacked units with proper isolation and negative air pressure and hospitals that could not even provide goggles to nurses and other health care workers.

Ebola education was described as cursory or nearly nonexistent, with nurses saying they were largely excluded from the decision-making process. Some said their hospitals should put the resources in place to bring their infectious disease care up to the standards set by the Omaha-based Nebraska Medical Center's biocontainment unit, which has successfully treated Ebola patients without endangering workers.

While Ebola ultimately might impact little more than a handful of hospitals nationally, fear of the disease became widespread after the two Dallas nurses contracted the virus. Both survived and are out of treatment but the index case, Thomas Duncan, died on Oct. 8.

Fear is highly transmissible

"Thus far, the fear component has greatly outpaced the infectious disease's transmission," says **Daniel Barnett**, MD, MPH, an associate professor in the department of environmental health sciences at Johns Hopkins Bloomberg School of Public Health in Baltimore, MD.

It's important to provide psychological resources to health care workers who are on the front lines of this frightening scenario, he says.

"Psychological first aid is the mental health equivalent of CPR," Barnett says. "It allows a non-psychologist or psychiatrist to identify acute or long-term mental health distress in coworkers, patients, families, and others."

Psychological first aid is an evidence-based approach to helping children and adults in the immediate aftermath of disaster or trauma, according to the National Child Traumatic Stress Network, which provides a psychological first aid toolkit on its website. (http://www.nctsn.org/)

Employees trained in psychological first aid learn techniques of active listening and how to identify early signs of psychological trauma, he explains.

Using psychological first aid can mitigate some of the concerns of

health care workers on the front lines of a crisis, Barnett adds.

Once these changes are made, hospitals need to make sure workers know that specific help, training, and programs are available.

For example, hospitals will not be able to reassure employees and reduce fear and stress until they have adequate personal protective equipment (PPE) available and train staff on how to use it, he says.

"Hospital administrators need to let their employees know what protections are in place for their staff, and they need to emphasize that employee safety is the first priority for the hospital," Barnett says. "That may sound like an obvious statement, but what we've found in our research is employees need to know there is a plan in place, what the plan is, and how it relates to them specifically as workers."

Research shows that health care workers are more likely to respond to a dangerous medical situation if they have "self-efficacy," meaning they feel confident in their ability to handle the situation and play a major role in a successful public health response.[1]

In a study that looked specifically at health care workers' willingness to work during an influenza pandemic, investigators found that hospital workers with a perception of high efficacy were nearly six times more likely to respond than other workers.[2]

"A variety of factors influence willingness to respond, separate from the disease itself," Barnett says. "Some are related to psychological preparedness."

Two factors greatly influence how health care workers respond psychologically to Ebola or a similar infectious disease threat, he notes. First, hospital workers need training that focuses on giving them a sense of confidence that they can perform their jobs effectively in a given scenario, he says.

"That is an essential ingredient missing in preparedness training generally," Barnett says.

Hospital administrators often assume staff will work with Ebola or anthrax or any other frightening case if they're given basic training and told to do so.

"Historically, preparedness training has focused on knowledge and skills exclusively," Barnett explains. "But what this training has missed is the human dimension that pertains to employees' fears and concerns about the risk [of] doing their jobs in an infectious disease environment."

Secondly, staff need to get the message that they matter as individuals and are not just a part of an overall response to a crisis, he says. "They need to know that their presence in a given preparedness response helps with the overall response," Barnett says.

There's a phenomenon, called "diffusion of responsibility," in which a group of people might not respond to a crisis because each individual assumes it is someone else's responsibility. The New York City murder of Kitty Genovese in 1964 is a classic example of this, Barnett says.

Genovese was stabbed to death around 3 a.m. near her home in Queens. Although there were dozens of neighbors and others nearby as she screamed, no one intervened or brought her indoors until it was too late.

"People in the apartment building who were watching this attack assumed someone else would pitch in and help out or call the police," Barnett says.

"So giving hospital workers a sense that they matter will reduce likelihood of diffusion of the sense of responsibility," he adds.

These two pieces are often not addressed adequately in preparedness training, Barnett says.

"You cannot just train people for knowledge and skills and expect attitude to follow suit," he adds.

Hospitals should make ongoing training in the use of personal protective equipment a priority. One good example is the ongoing training provided to biocontainment unit staff at the Nebraska Medical Center, Barnett notes. First the Nebraska Medical Center sought highly-qualified volunteers to receive training for dealing with highly contagious and/or highly dangerous infectious diseases. Then they trained the volunteers on a regular basis, reinforcing training with a partner system in which one HCW would put on and take off PPE while another watched.

"The example of Nebraska is an example of having exercises, drills, repetition, and honing skills to develop expertise," Barnett says. "If they don't know [about] these programs they won't access them. Make it a priority to create the programs and then inform employees what mental health resources are available to them." ■

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Employee health professionals can use social media, Internet to boost staff health

How did many people learn about the tsunami in Japan? Twitter

Hospital employee health professionals should consider using social media and Internet communications and campaigns to electronically promote safety and health for health care workers.

For example, social media has become an integral tool for the American Association of Occupational Health Nurses (AAOHN).

"We formed a committee that managed our social media efforts on Twitter, LinkedIn, and Facebook, and now AAOHN has staff doing this," says **Kim Olszewski**, DNP, CRNP, COHN-S/CM, assistant professor of nursing at Bloomsburg (PA) University.

AAOHN can now disseminate information and news bulletins quickly through social media, including updates on Ebola or new regulatory changes, she says.

"We look for ways to keep our information fresh and innovative," Olszewski says.

Hospitals also can use social media to get out information about health initiatives and to launch health or vaccination campaigns, she suggests.

There are free healthy lifestyle apps that a hospital's campaign can promote among employees.

Also, with a little education from hospital employee health staff, hospital employees will be able to find better health information when they use online resources.

"About 70% of Americans go on the Internet to make decisions about health, but they typically go to websites without truly quality information," says **Debra Wolf**, PhD, MSN, BSN, associate professor and assistant director of nursing programs at Chatham University in Pittsburgh, PA. "You can give your employees tools to search the Internet in a more accurate, proficient manner."

A good starting point is to teach employees to how to find reliable health information on line, Wolf says. She recommends SPAT (http://www.spat.pitt.edu/) a website designed to evaluate the reliability of content on Internet sites. SPAT shows users how to check websites for their address, publisher, audience, and timeliness. If a website's audience is medical professionals, hospital employees might be reassured about the site's accuracy and quality. A next step for the occupational health nurse is to select a set of quality websites and give these links to staff.

"You can start with your hospital's own website and then select a general one about diabetes and one on healthy living," Wolf says.

Some examples of websites recommended for health information are MedlinePlus — a government site with health and medical information — and Healthfinder.gov, a web-based guide to finding health information.

Emergency response applications

Social media tools can be useful in the event of a disaster, which may result in loss of some phone service. "Twitter was used in the tsunami in Japan to let people know there was a disaster occurring," Olszewski says.

Hospital employee health leaders should make sure that any emergency communication system to get messages to staff should be designed with their input. They should have a point person involved in those meetings and decisions to make sure the information sent to staff about any situation is received and understood.

"The occupational health nurse needs to be at the table because they bring the health component to it," Olszewski says. "They are the boots on the ground."

For instance, when a hospital admits a patient with a dangerous infection, such as Ebola, information sent to staff via email could include current infection control and employee health information and recommendations.

Social media and the Internet also are useful tools for hospital health promotion campaigns.

Employee health can use podcasts, blogs, and virtual health communities to launch and promote a campaign, Wolf suggests.

"One university course I just developed [instructs] nurses how to use virtual tele-health to promote wellness," she says. "We teach them how to develop a blog that would support wellness for certain groups of people."

Another approach is creating a platform of health and wellness information on YouTube. For example, a video demonstration of donning and doffing protective barrier equipment as recommended

by the Centers for Disease Control and Prevention for Ebola was recently posted (http://bit.ly/1oul0Pd).

Employee health can also use mobile apps to guide workers toward healthier decisions, but first they should survey staff to determine how many are using mobile devices and apps, Olszewski suggests.

"We recommend doing needs assessment, finding out exactly how many people have smart phones and how many would be interested in doing a wellness activity," she says. "You can create a friendly competition in wellness or encourage people to download apps that let them follow how their friends are doing on a health challenge."

Before designing a new program that uses peer pressure through a mobile app, employee health should obtain employee input. "It's usually better received if you can get some employees involved in decision making," Olszewski says. "Find out what they have, what they need, and then get them engaged." ■

Massachusetts nurses union files suit against hospital, says flu shot mandate goes beyond law

Protecting 'rights of nurses to dictate what goes into their bodies'

In a legal challenge that could set a precedent for flu shot mandates, the Massachusetts Nurses Association has filed suit challenging a proposed mandatory flu vaccination policy at Brigham & Women's Hospital in Boston. Under the policy, workers can forego the flu shot for medical or religious reasons, but otherwise could be subjected to discipline that could include job termination, the union charges in the suit.

"The state regulations around this issue are crystal clear," the MNA said in statement. "A hospital cannot mandate that a nurse be vaccinated, only that they be provided with information and the opportunity to be vaccinated. It further clearly states that hospitals cannot take punitive action against a nurse who declines to be vaccinated. The Brigham's policy violates this regulation and the clearly expressed right of nurses to decline vaccination without fear of retribution, so we are asking the court to help us ensure the law is followed and the Brigham respects the rights of nurses."

Beyond the specifics of the lawsuit, the MNA opposes mandatory flu vaccination because:

•Many nurses have had severe reactions to the vaccine, and, nationally, there have been thousands of serious documented reactions to these vaccines in recent years.

•The flu vaccines are at best an educated guess (between 50% – 60% effective) with no guarantee of preventing a specific flu.

•Nurses take great pains to employ infection control practices to prevent flu transmission

•And even when we vaccinate workers, there are no policies to ensure that the thousands of visitors who come in and out of the hospital are vaccinated and take proper precautions to prevent spread of the virus.

"This lawsuit is about holding an employer accountable for following law and seeks to protect the individual rights of nurses to dictate what goes into their bodies," the MNA said. ■

CNE OBJECTIVES

After reading each issue of Hospital Employee Health, the nurse will be able to do the following:

1. Identify particular clinical, administrative, or regulatory issues related to the care of hospital employees;
2. Describe how the clinical, administrative and regulatory issues particular to the care of hospital employees affect health care workers, hospitals, or the healthcare industry at large;
3. Cite solutions to the problems faced in the care of hospital employees based on expert guidelines from relevant regulatory bodies, or the independent recommendations of other employee health professionals.

COMING IN FUTURE MONTHS

- TB spread reveals EH screening problems
- Has OSHA addressed state-plan weaknesses?
- Political changes, OSHA ID reg
- Employee health sessions presented at IDWeek
- Integrating employee health departments as hospitals merge
- Will Ebola spell EHP resources?

HOSPITAL EMPLOYEE HEALTH

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CNE QUESTIONS

1. **According to the Centers for Disease Control and Prevention, what type of protection is appropriate for health care workers caring for Ebola patients?**

   A. surgical mask
   B. elastomeric respirator
   C. triple gloving
   D. N95 or powered air-purifying respirator with full hood

2. **What vaccination requirement is included in the proposed infectious disease standard of the U.S. Occupational Safety and Health Administration?**

   A. influenza, measles/mumps/rubella, pertussis and varicella with declination
   B. mandatory influenza, measles/mumps/rubella, pertussis and varicella
   C. measles/mumps/rubella only
   D. There are no vaccination requirements

3. **Which of the following is no longer recommended by the CDC for Ebola personal protective equipment?**

   A. respirators
   B. disposable hoods
   C. face shields
   D. goggles

4. **What is psychological first aid?**

   A. an evidence-based approach to helping children and adults in the immediate aftermath of disaster or trauma
   B. CPR with the additional component of an anxiety evaluation
   C. a 30-minute administration of a short battery of mental health assessment tests
   D. None of the above

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