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THE PRACTICAL GUIDE TO KEEPING HEALTH CARE WORKERS HEALTHY

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INSIDE

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The sick treating the sick: HCWs pressured to work ill

Clarify sick policies to fight entrenched presenteeism

By Gary Evans, Senior Staff Writer

Employee health professionals must work with clinical colleagues to develop clear, supportive policies that clarify when ill healthcare workers should take a sick day rather than expose vulnerable patients and co-workers, researchers recommend.

Recent studies suggest that working while ill is surprisingly common, as healthcare workers with symptoms such as high fever, diarrhea, and even confirmed flu infection report for duty.

"There is no national data — no system that reports this to the CDC, but this clearly occurs everywhere,' says **Jeffrey R. Starke**, MD, infection control officer at Texas Children's Hospital in Houston.

For the most part, ill healthcare workers know they could be putting their patients and co-workers at risk of infection. Ironically, concerns for co-workers and patients are often cited as the prime reasons to work sick, with the perception being that patient care will suffer and colleagues will be overly burdened by the absence of the ill. A recently published survey captured this paradox, with 95% of physicians and nurses conceding that working sick puts patients at risk — yet 83% admitted doing so at least once in the prior year.[1] Indeed, 9.3% reported working ill at least five times in the previous year. The study, conducted at Children's Hospital of Philadelphia

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(CHOP), found that 57% were uncertain what constitutes "too sick to work."

Starke and co-author **Mary Anne Jackson**, MD, infectious disease director at Children's Mercy Hospital in Kansas City, MO, emphasized in an editorial accompanying the study that it is essential for occupational health and infection control departments to identify what constitutes being too sick to work at their facilities.[2]

"There are not well-defined protocols that [state] when healthcare workers must stay home while ill," Jackson says. "Many hospitals identify febrile respiratory illness as one criterion but allow for return to work when fever abates. The absence of fever does not [necessarily] equate to absence of risk for viral transmission. In the editorial, we suggested other potential symptoms or signs — jaundice, bloody diarrhea. Clearly, more research is needed to help define such criteria and evaluate how effective these criteria would be."

As work cultures and peer pressure push sick workers to the bedside, the worst case scenario is completely predictable: Frail patients will be infected by their caregivers. "The medical literature includes numerous reports of outbreaks for which symptomatic [healthcare workers] have been found to be the ultimate source of disease within healthcare facilities. Such infections include influenza, whooping cough, norovirus, and the drug-resistant superbug MRSA," the CHOP authors concluded.

Starke has seen such cases firsthand.

"I have done infection control at Texas Children's for 20 years and we have clearly had incidences where we had a transmission of viruses to children from ill healthcare workers," he says. "There's no question about it. It's not a question of if it happens — it does. The bigger question is, how often does it happen?"

It can be hard to quantify the overall protective effect of healthcare immunization to patients and coworkers, particularly as the seasonal flu vaccine varies in efficacy depending on the match with circulating strains. However, there is clear evidence of the devastating consequences of hospital-acquired influenza in high-risk populations. In a NICU outbreak, six babies were infected and one died. Some among the poorly immunized group of caregivers admitted working while ill, with only 14% reporting they stayed home with an influenza-like illness.[3] In an outbreak in a bone marrow transplant unit, six patients developed pneumonia and two died.[4] Five staff members developed influenza-like illness during the outbreak, and overall there were seven cases of occupationally acquired influenza in a staff with paltry immunization rates.

More than 1/3 work with flu

Given such outbreaks, it was concerning to see how more than one-third of physicians recently surveyed said they would work with test-confirmed influenza. The unpublished study, presented recently in San Diego at the 2015 IDWeek conference, found that 36% of responding physicians said they would work even if they had lab-confirmed influenza.[5] The findings were skewed by level of training, with 51% of fellows saying they would work with confirmed flu as opposed to only 16% of attending physicians.

Overall, the 474 physicians responding to a survey included 88 medical students, 193 residents, 40 fellows, and 153 attending doctors. Surgeons and emergency room physicians were the most likely to show up regardless of condition.

While the interdepartmental findings may vary by institution, the overall finding of physicians willing to work while sick is probably similar in other facilities, says **Shruti K. Gohil**, MD, one of the authors of the study and associate medical director of Epidemiology & Infection Prevention at the University of California, Irvine School of Medicine. "We got a pretty good slice of the pie with a 61% response rate," she says. "Intuitively, [the results] were not surprising to me." *(See interview with researcher, page 4.)*

The findings make a strong case for mandating flu vaccination for healthcare workers, a position that the American Academy of Pediatrics vigorously endorsed in a recently issued position paper. *(See related story, page 6.)* The IDWeek study led to a policy at UC Irvine that calls for physicians and other healthcare workers to stay home if they have any of the following symptoms:

- fever greater than 101,
- active diarrhea/vomiting, and
- confirmed contagious illness (e.g. flu).

In addition to having a clear definition of what constitutes too ill to work, 70% of the physicians in the UC Irvine survey said the following factors would improve their willingness to stay home if ill:

- department chair/chief sets protocol for what to do if ill,
- seeing colleagues sent home if working ill, and
- a lack of negative repercussions when physicians stay home if ill.

In the absence of such symptomatic definitions and supportive policies, employee health professionals should be aware that healthcare workers might be caring for patients alongside co-workers despite having fever, diarrhea, vomiting, or flulike illness. Nurses will certainly work sick, but the culture among physicians appears to be more engrained.

"The logistical problems of finding coverage are often problematic for physicians," Jackson says. "There's also a culture among residents and physicians that suggest that those who do not show up because of illness are not pulling their weight. Many often have a personal mindset that they are indispensable. While most understand the potential risk of working while ill, the full extent of the risk to [patients] with various conditions is not explicitly defined."

Death's doorstep

"[The physician work] culture is not gender-based — it's just as strong in women as in men," Starke says. "Unless you are on death's doorstep, you are supposed to be there doing your job."

How powerful is the temptation for physicians to work while sick?

Even distinguished epidemiologist **William Schaffner**, MD, admits he once showed up with flu to begin working his shift as a young resident. Now a leading national vaccine advocate and professor of preventive medicine at Vanderbilt University in Nashville, Schaffner recalls being infected with influenza and a temperature of 103.

"I was a macho young guy and sure enough, I showed up ready to go to work and do my shift," he says. "My chief resident took one look at me and wisely sent me home. Having done that, I know that others do that. Healthcare workers do come to work sick. It happens so frequently that they have a name for it — presenteeism."

The aforementioned CHOP study included responses from 280 attending physicians and more than 250 advanced practice clinicians (APCs), including certified registered nurse practitioners, physician assistants, clinical nurse specialists, and other highly trained healthcare providers. This APC group was consistently less willing to work ill than their physician colleagues, with 20% vs. 39% saying they would work with diarrhea; 10% vs 22% for fever; and 51% vs 60% with acute respiratory symptoms.

Though some hospitals are stepping up to address the problem, other hospitals have policies that include disincentives to stay home if ill. The survey found that 56% of doctors and nurses felt supervisors in their departments were "not supportive" of staying out sick.

"There are actually hospitals that have punitive policies and make people take their own time off before they can take sick days or if they are out more than a day or two you have to get a doctor's note," Starke says. "There are some punitive elements to this."

For the most part, however, healthcare workers honor the engrained expectations of their work culture, with the survey study reporting 61% of all respondents cited a strong cultural norm to come to work unless remarkably ill. More insidious, 64% of the physicians and nurses feared they would be ostracized by colleagues if they missed work.

"Respondents recounted critical comments made by colleagues about those who take sick leave, stories of working (or seeing others work) while

so ill that they needed intravenous hydration, and the general impression of an unspoken understanding that attending physicians and APCs should 'buck up' and work," the authors of the CHOP study concluded.

Staffing concerns were cited by 94% overall, suggesting both physicians and nursing specialties have thin reserves of supplemental staff.

"A lot of hospitals have cut back on staff so much to save money, the margin if you will, has been drastically cut," Starke says. "I personally feel that hospitals have a duty to make sure that their work force is healthy."

In that regard, hospitals could plan ahead for replacing ill staff during the winter months marked by colds and flu, he says.

"This is predictable because you know the majority of these illnesses are going to occur between November and March," Starke notes. "Unfortunately, hospitals tend to be full at that time as well, as people in the community are getting sick — especially with influenza. The point is you can look at your staffing patterns and do some planning and account for the fact that a certain percentage of your employees are going to be out at any given time [during this period]."

If the presenteeism culture is so entrenched that healthcare workers are going to continue to show up sick even with clear and supportive sick policies, the best single practice to advocate is hand hygiene. At Texas Children's, a major institutional effort pushed compliance with hand washing toward 100%, drastically reducing hospital-acquired respiratory infections in patients, Starke says.

"The vast majority of respiratory viruses are transmitted through direct contact," he says. "In fact, they are not particularly airborne — though influenza is a little different in that it can be spread through droplets through the air that can go several feet. So if every healthcare worker got immunized for flu and then if we really do a superb job with hand hygiene, we would block the vast majority of transmission of viruses from healthcare workers to patients."

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Some ill doctors would still care for immune-compromised patients

A Q&A with presenteeism researcher

In an unpublished study[1] of physicians presented recently in San Diego at the 2015 IDWeek conference, researchers found that doctors are willing to work with symptoms and maladies that would debilitate most people.

In addition to the 36% willing to work with test-confirmed flu, 96% physicians said they would work with cold symptoms; 78% with diarrhea; and 55% despite vomiting. Among those with fever, 84% would work despite fever up to 100.9°F; 49% despite fever of 101-102.9°F; and 24% despite fever ≥103°F.

In another disturbing finding, the physicians' willingness to enter immunocompromised neutropenic patient rooms was 47% for cold symptoms; 29% for diarrhea; and 13% for fever ≥101°F. Reasons cited for working while ill included guilt for having colleagues cover for them (82%) and believing the transmission risk was low (75%). **Shruti K. Gohil**, MD, one of the authors of the study and associate medical director of Epidemiology & Infection Prevention at the University of California, Irvine School of Medicine, recently sat down with *Hospital Employee Health* to discuss the findings.

HEH: Why did you focus on physicians rather than healthcare workers in general?

Gohil: We knew that physicians have a strong work ethic and the culture of medicine is somewhat different than that of other professions. The consequences of absenteeism in our work can really have significant impact. If you think historically about the profession, [including times when] both hospitals and physicians were few and far between, you can see that the culture is to work long hours regardless of our own personal needs. Sometimes our work necessitates absolute concentration on our patients and their needs, and this can be at the expense of us paying attention to our own needs.

HEH: The most surprising finding to me was that more than a third (36%) of physicians would work with test-confirmed influenza. That would appear to support the argument that mandatory flu immunization is necessary.

Gohil: Absolutely — getting the flu vaccine is important, as is keeping all of healthcare workers highly compliant for vaccines for preventable illness such as measles. Measles is the most contagious virus that we know of. Keeping your titers up and complying with all occupational health policies are critically important for this reason. This is not just related to willingness to work, but as a healthcare worker keeping yourself healthy is critical."

HEH: Those that would enter the room of a neutropenic patient included 29% with diarrhea and 13% with fever ≥101°F. Given that those symptoms could reflect transmissible infections, should hospitals have policies specifying that symptomatic healthcare workers should not enter neutropenic rooms?

Gohil: "In our hospital, [our policy is] you don't go into the room of a neutropenic patient if you are actively symptomatic. We found there were a few too many that would still go in and see their patients. This means we have to do a better job of educating our doctors and letting them know under what circumstances is it allowable to go into patients' rooms.

What patient-related factors and what sickness-related factors are involved in making that determination? Suppose you happen to be the only physician who can take care of a patient. Maybe you are in a rural part of the country, you happen to be sick, but you are the one that can help someone. There are things you can do by taking precautions. We need to identify what precautions you need to safely manage care, assuming you are not so ill that you have heavy secretions and you are highly infectious to others. If you are just getting over a cold, could you wear a mask and wash your hands a lot? We don't talk about this much, but as a profession we can begin a dialogue. We need to educate our doctors and give them more guidance.

HEH: The willingness to work with flu seemed to decrease with more training. Was that trend reflected in the other symptoms?

Gohil: The same groups, such as fellows, residents and students, reported more of a willingness to work while they were sick versus the attendings — the attendings being the ones highest in rank. Those three groups tended to be more concerned about their superiors thinking less of them if they called in sick. They reported a sense of duty and of guilt if they didn't come in. They thought that their patients might suffer if they didn't come in, and importantly, they thought that they would burden their coworkers if they didn't come in. They thought there wouldn't be enough coverage if they were out and all of the work would go their colleagues.

HEH: Emergency medicine and surgical departments reported the highest willingness to work if ill. Is there a mindset or work culture in these two settings that could explain this?

Gohil: We wanted to know if there were interdepartmental variations and we found this. We didn't explore further as to why — that needs to be the next step in our work, to examine what departments' culture is contributing to working while they are sick. Each facility may have their own [variations] by department.

HEH: Can you provide an example of the supportive culture needed to influence physician willingness to stay home if ill?

Gohil: We have policies not to come into work in a general way, but we asked our physicians what would help them change their willingness to come into work even though they are actively ill. They believe that any supportive means is helpful. [This could] range from a simple email from leadership reminding staff that the hospital supports them staying home if they are sick, to a set protocol about what they are supposed to do when ill. There are a whole range of illnesses out there that are problematic. For example, when you get a cold, the first few days you are highly communicable, but if you develop a cough that lingers for couple weeks [it doesn't necessarily] mean you are infectious to another person. It gets really blurry as to when is it ok to come in, when is it not? While many, if not all, [hospitals] have policies that support healthcare workers staying home if they are ill with communicable diseases, as physicians we want to know exactly what symptoms should I be looking for and not working. Clearly our trainees, our students, and our residents don't want to do anything wrong by showing up to work while they are sick. They just

want to know, what is the line? What is the threshold?

HEH: So for the younger doctors, is it a matter of education or fear of the consequences of missing work?

Gohil: That is a really important question. I think it is matter of education and I think it is a matter of them understanding that their leadership supports them. They want to look like they are working hard and are willing to do whatever they can for patients. Just letting them know that there are certain circumstances in which you are doing more harm than good by coming in. This kind of messaging is really simple and helpful. Something we have done at California Irvine is show our interns and medical students the results of this study. And the leadership of the housewide residency programs and their program directors publicly stated during those presentations that they support the residents and interns staying home if they are sick. If they have a question about this, if they have a concern that they can be infectious to other people, we tell them to call your attending before you show up at work and review your symptoms. Or go to occupational health or your primary care doctor before you come to work. We will support you doing that, and that simple statement said so much. We have also had housewide communications that let all of our staff know that we support them if they are sick. Before the flu season starts, we wanted them to be [aware] of this. I think it will have an impact."

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Pediatric group on HCW flu shots: 'Keep it mandatory'

The American Academy of Pediatrics has vigorously reiterated its call for mandatory influenza vaccination of healthcare workers, saying religious or philosophical objections to immunizations do not override the ethical imperative to protect patients and coworkers.

"Unless you have a medical problem, there is in my opinion no excuse — zero, none — for healthcare workers not be vaccinated," says co-author of the AAP statement **Jeffrey R. Starke**, MD, chief of infection control at Texas Children's Hospital in Houston.

The AAP takes something of a "no healthcare worker is an island" stance, arguing that individuals embedded in societies and groups cannot consider their illness in isolation.

"Employees of healthcare institutions are obligated to honor the requirement of causing no harm and to act in the best interests of the health of their patients," the AAP stated.[1] "Medical exemptions to required influenza immunization (i.e. severe allergy to a vaccine component) should be kept at a minimum to ensure high coverage rates and granted only on an individual basis. Granting specific medical exemptions is constitutionally required, but states do not have to grant philosophical or religious opt-outs."

The AAP calls for the development of "consistent policies" for exempted healthcare workers. For example, although scientific evidence for requiring unvaccinated employees to wear a mask is scant, some institutions require non-immunized workers to do so during flu season.

With an increasing number of facilities requiring flu vaccination, coverage among healthcare personnel rose to 75% in the 2013-2014 season. The public health Healthy People 2020 objective is 90%. During that same flu season, 58% of healthcare workers reported that their hospitals had some version of a mandate or work requirement tied to vaccination.

"Mandating influenza vaccine for all HCWs is ethical, just, and necessary," the AAP argued. "Hospital-acquired influenza has been shown to have a particularly high mortality rate, with a median of 16% among all patients and a range of 33% to 60% in high-risk groups such as transplant recipients and patients in the ICU."[2]

Influenza vaccination of HCWs has the potential to reduce both morbidity and mortality among patients, the AAP noted. While there have been influenza outbreaks[3,4] and even patient deaths linked to linked to non-immunized flu infected workers, the quality of the evidence supporting a protective effect in overall populations has been moderate at best.[5] A 2013 Cochrane review concluded that there were "no accurate data" supporting the vaccination of healthcare workers to prevent laboratory-confirmed influenza in long-term care residents age 60 years and older.[6]

"Specifically, the authors did not find a significant decrease in respiratory illness or in deaths related to respiratory illness," the AAP noted.

Voluntary programs have proved ineffective, in part because healthcare

workers have persistent misconceptions about the risks and benefits of the influenza vaccine. The most commonly reported barriers to vaccination were concerns about vaccine safety and effectiveness and low perceived susceptibility to influenza. Some continue to believe the long-dismissed concern that the vaccine actually causes flu.

While influenza vaccine efficacy will vary year to year depending on the match with circulating strains, it seems clear enough that healthcare workers acquire flu and infect patients and coworkers. A prospective surveillance study of laboratory-confirmed influenza among hospitalized adults in a network of Canadian hospitals from 2006 to 2012 found that 17.3% of influenza cases were healthcare-associated.[7]

Healthcare workers fail to lead by example if they recommend universal immunization, including influenza vaccine, to their patients but do not require it of themselves. Furthermore, unvaccinated healthcare workers feed the growing public distrust and fear of vaccines, which has resulted in the resounding return of measles, the AAP concluded.

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OSHA issues new violence prevention strategies for healthcare

Website features real-world examples

The Occupational Safety and Health Administration (OSHA) recently unveiled a new Web page (http://1.usa.gov/1NlEvig) with tools and real-world examples to prevent and defuse violent incidents in the healthcare workplace. The website was launched Dec. 1 as this issue was going to press, but look for more news and analysis on OSHA's increasing emphasis on violence prevention and any implications for compliance in the next issue of *Hospital Employee Health*.

It appears there are no specific new regulatory requirements in this latest emphasis on violence prevention, but OSHA inspectors have some leeway under their General Duty clause requirement that employers provide a workplace that is "free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees."

In any case, it looks like OSHA is more interested in integrating violence prevention into existing patient and worker safety efforts rather than breaking it out as a separate regulatory area.

"Doing so makes sense, because many of the risk factors that affect patient safety also affect workers," OSHA says on the website. "For instance, a violent confrontation or intervention can result in injuries to both workers and patients, and caregiver fatigue, injury, and stress are tied to a higher risk of medication errors and patient infections."

A dangerous job

The scale of the problem is striking. Registered nurses have more than a threefold higher risk of violent injury resulting in days lost (14 per 10,000 nurses) than U.S. private industry as a whole, which suffers 4.2 lost-day violent injuries per 10k full-time employees, OSHA reports. That's a terrible toll on a force on a highly trained professionals, but consider this: Workers classified as "nursing

assistants" have injury levels off the charts, more than tripling the rate in RNs with 55 injuries per 10k full-time employees.

The most common causes of violent injuries resulting in days away from work across several healthcare occupations were hitting, kicking, beating, and/or shoving. As expected, patients are the cause of most violent injuries (80%), with 3% caused by co-workers and the rest committed by unnamed "others" that include visitors. The numbers are underestimates in any case, as OSHA cites a Minnesota survey of 4,738 Minnesota nurses found that only 69% of physical assaults were reported. Employee health professionals should look at their programs in terms of these common reasons given by nurses who did not report an act of violence: lack of a reporting policy, little faith in the reporting system, and fear of retaliation.

The new OSHA strategies and tools focus on workplace violence prevention programs that include elements such as management commitment and worker participation, worksite analysis and hazard identification, safety and health training, recordkeeping and ongoing program evaluation.

In an example cited by OSHA, St. Vincent's Medical Center in Bridgeport, CT, begins every day with a "safety huddle" led by a senior executive. Representatives from all departments, including both clinical and non-clinical services, are required to attend. Together, they review any patient or associate safety events or concerns, recognize "good catches" (aka "near-misses"), and share updates on the status of safety-related projects or initiatives.

"These daily exchanges, fostered in an open, no-blame environment, help create an atmosphere of trust and cooperation," OSHA reports.

There are OSHA recommended strategies for specific patient encounters as well, such as "tapping out" when a patient is becoming increasingly irritated with a healthcare worker trying to provide care. At Providence Behavioral Health Hospital in Holyoke, MA, co-workers are encouraged to recognize this type of situation and "tap in" by telling the first worker something like, "You have a phone call — and it's your supervisor." Sometimes all it takes is a new face to get a patient to calm down, and an emphasis on "caring language" allows the first worker to exit the situation gracefully, OSHA notes.

"This type of focus on collaboration and respectful language is a hallmark of a "culture of safety," the agency says.

In addition, the tools used to monitor, manage, and improve patient safety have proven equally effective when applied to worker safety.

"For example, if your facility is Joint Commission accredited, you may be able to adapt existing compliance monitoring tools and infrastructure to address occupational safety," OSHA explains. "Several hospitals use their 'environment of care' rounds to monitor for conditions that could affect either patient or worker safety."

Strategies to improve patient safety and worker safety can go hand-in-hand — particularly those that involve nonviolent de-escalation and alternatives such as sensory therapy. The nationwide movement toward reducing the use of restraints (physical and medication) and seclusion in behavioral health — which is mandated in some states — along with the movement toward "trauma-informed care," means that workers are relying more on approaches that result in less physical contact with patients, intervening with de-escalation strategies before an incident turns into a physical assault, preventing self-harm by patients, and ultimately equipping patients with coping strategies that can help them for life.

Employee health professionals should look at their work culture as the product of individual and group beliefs, values, attitudes, perceptions, competencies, and patterns of behavior. All of these determine the organization's commitment to objectives such as quality and safety. Many leading healthcare organizations are reducing injuries to both patients and workers by fostering a "culture of safety" characterized by an atmosphere of mutual trust, shared perceptions of the importance of safety, confidence in the efficacy of preventive measures, and a no-blame environment. According to OSHA, typical attributes of a culture of safety include the following:

- staff and leaders who value transparency, accountability, and mutual respect,
- safety as everyone's first priority,
- not accepting behaviors that undermine the culture of safety,
- a focus on finding hazardous conditions or "close calls" before injuries occur,
- an emphasis on reporting errors and learning from mistakes, and
- careful language to facilitate conversation and communicate concerns.

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The do's and don'ts of using masks and N95s

Common sense tips provided free by APIC

With all the post-Ebola emphasis on personal protective equipment, there's no time like the present to review the proper use and wear of masks and respirators.

Fortunately, the Association for Professionals in Infection Control and Epidemiology (APIC) has created two new fact sheets that outline key points on use of N95 respirators and procedure masks in non-surgical settings, which can be found at http://bit.ly/1MWaRTP.

More technical, arcane guidance? In a word, no. In a blessed appeal to common sense, the new APIC fliers breakdown the "Do's and Don'ts" of procedure masks and N95 respirators in plain language approved by other key stakeholders.

"It's an area we felt needed some clarification as well as being a good review," says **Laura Buford**, RN, BSN, CIC, chair of the APIC Communications Committee and an infection preventionist at Lakeway Regional Medical Center in Austin, TX.

"It's easy to get complacent about things that are so routine. Sometimes we forget the basics. We felt making this 'Do's and Don'ts' would be beneficial for all levels of healthcare facilities."

As employee health professionals are well aware, there has been confusion about this issue since the SARS epidemic in 2003, and probably before that. Data from the Respiratory Evaluation for Acute Care Hospitals (REACH) studies conducted during the 2009 H1N1 pandemic confirmed the need for continued education and training about respiratory PPE among healthcare professionals.[1] In that regard, some of the commonly identified problems continue.

"Some things that have been reported are staff wearing the wrong type of mask, not wearing the mask correctly, masks hanging around the neck after use — ill-fitting N-95 respirators," Buford says. "These are pretty common in conversations with different healthcare facilities when creating this guide."

While N95 respirators are for the prevention of transmission of airborne pathogens like tuberculosis, Buford reminds that standard procedure masks are actually a part of standard precautions if the patient is symptomatic.

"Staff should wear a mask when a patient is coughing but they may not need to be on Droplet or Airborne Precautions," she says. "Staff need to protect themselves all the time, especially when it's not something specific that lands the patient into a transmission-based precaution."

OSHA approval

The "Do's and Don'ts for wearing procedure masks in non-surgical healthcare settings" and the "Do's and Don'ts for wearing N95 respirators in non-surgical healthcare settings" are free, downloadable fact sheets that feature quick tips for wearing and safely removing the PPE.

The fliers were developed by APIC's Communications Committee with input from the American Nurses Association (ANA), the Association of Occupational Health Professionals in Healthcare (AOHP), and the Association of periOperative Registered Nurses (AORN). The recommendations also pass muster with the Occupational Safety and Health Organization.

"We always want to make sure any guidance we provide is consistent with recommendations from regulatory bodies," Buford says. "Our goal is to help healthcare workers be safe as well as compliant."

The new fact sheets are essentially just-in-time teaching tools as the flu and respiratory infection season continues. For example, the handout on N95 respirators includes the following Do's:

- Check to make sure the N95 respirator has no defects such as holes or torn straps.
- Wear for protection against very small particles that float in the air (e.g., TB, measles, or chickenpox).
- Follow manufacturer's instructions for donning and doffing of N95 respirator.

And the following Don'ts:

- Wear an N95 respirator without proper fit-testing.
- Touch the front of an N95 respirator as it is contaminated after use.
- Leave an N95 respirator hanging around your neck.

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Is your staff immune to measles?

Some 9 million U.S. youth now unvaccinated

Employee health professionals should ensure the all staff have immunity to measles, as some 9 million U.S. children — 1 in 8 of those age 17 and younger — are susceptible to a virus that can cause chaotic outbreaks in healthcare facilities, researchers recently reported in San Diego at IDWeek 2015.

If the trend continues to increase, millions of susceptible youth — and eventually young adults — could reach a tipping point in population herd immunity, meaning more frequent and sustained measles outbreaks could occur.

"We can't be complacent — we don't have a very wide buffer before these population-level immunity estimates start dipping below critical levels," said lead researcher **Robert Bednarczyk**, PhD, a professor in the Rollins School of Public Health at Emory University in Atlanta. "If our measles immunization starts to falter we could see immunity below what we need to [prevent] transmission. We could start seeing larger outbreaks or outbreaks that sustain over longer periods of time."

An undiagnosed case of measles in a hospital can set off a frantic investigation to determine exposures and ensure immune status of staff and patients. As we recently reported, a single case of pediatric measles set off a staggering and expensive series of events at a hospital that included hundreds of blood tests, furloughed workers, and patient notifications. *(See the October 2015 issue of* Hospital Employee Health.*)*

Based on an analysis of national immunization survey data, the IDWeek study estimates that of 60 million U.S. children from infants to 17-year-olds, 8.7 million (12.5%) are susceptible to measles.[1] This is primarily because they haven't received the MMR vaccine, or they have received only one of the two recommended doses. (The first dose of MMR vaccine is recommended at 12 to 15 months of age and the second at 4 to 6 years old.) Of the total susceptible population, 6.7 million children are of an age recommended to be immunized for measles but have not been vaccinated. The remaining 2 million are under 1 year of age and thus not yet recommended for MMR, but it is important to include them because they are at greater risk of serious complications if they acquire measles, Bednarczyk said at an IDWeek press conference.

The data show a vaccination "bubble" or spike at around 5 years of age, suggesting school requirements have an impact, he said. However, many states allow exemptions for religious or personal reasons in addition to medical contraindications to the vaccine. Overall, the immunization rate trends upward with age, approaching the mid-90s in older teens who are more likely to have contact with more people. While that is generally good news, that still leaves one in four children three years and younger at risk of measles and even 5% of the 17-year-olds have not received any doses of the vaccine. A contributing factor is the anti-vaccine movement in the U.S. that has cast suspicion on all immunizations and linked the MMR shot erroneously with autism. Even if current immunization rates don't further decline, there are pockets and clusters of vulnerable populations who can set off rapidly expanding measles outbreaks.

"As a pediatrician and a public health officer, it is frustrating to admit children to hospitals for a disease that is very preventable and generally we felt was gone," said **Matthew Zahn**, MD, of the Orange County (CA) Health Care Agency.

Participating in the IDWeek measles discussion, Zahn said his county had 35 cases of measles at the beginning of 2015 as part of a large national outbreak that began at Disneyland.

"It was sobering to recognize that one exposure can cause so many cases around the country," he said. "We have a significant number of kids in this country who are [non- or] under-immunized and it is terribly important that providers emphasize immunization."

Currently, outbreaks typically burn out when they reach adult populations more likely to be immunized or have a history of natural infection. However, that firewall of sorts is subject to change as the demographic of non-vaccinators ages.

"There is a creeping nature to the problem in the sense that vaccine hesitancy is really coming of age to some degree," Zahn said. "We now see kids of 15 or 18 years of age whose parents have not vaccinated them because they have concerns about the safety of the vaccines."

REFERENCE

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Boston hospital pays record amount for drug diversion allegations

In the largest settlement of its kind involving allegations of drug diversion at a hospital, Massachusetts General Hospital (MGH) in Boston has agreed to pay the United States $2.3 million to resolve allegations that lax controls enabled MGH employees to divert controlled substances for personal use. MGH voluntarily disclosed the diversion.

MGH also has agreed to implement a comprehensive corrective action plan to address future diversions, U.S. Attorney **Carmen M. Ortiz**, JD, announced. "Under the law, hospitals like MGH have a special responsibility to ensure that controlled substances are used for patient care and are not diverted for non-medical uses," Ortiz said.

In 2013, an investigation was launched after MGH disclosed to the Drug Enforcement Administration (DEA) that two of its nurses had stolen large volumes of controlled substances. The two nurses stole nearly 16,000 pills, mostly oxycodone. Both nurses stole from automated dispensing machines.

DEA's ensuing audit of MGH's controlled substances revealed count discrepancies totaling more than 20,000 pills, missing or incomplete medication inventories, and hundreds of missing drug records.

MGH cooperated with the DEA's investigation and subsequently disclosed additional violations of the Controlled Substances Act (CSA). Specifically, MGH disclosed the following:

- a pediatric nurse with a 12-year substance abuse problem had injected himself with Dilaudid at work;
- a physician had prescribed controlled substances for patients without seeing them and without maintaining medical records;
- several nurses were able to divert prescription drugs for many years without being detected;
- medical staff had failed to properly secure controlled substances and even had brought them to lunch on occasion.

The corrective action plan that MGH accepted includes the establishment of an internal drug diversion prevention team; the creation of a full-time drug diversion compliance officer position; mandatory training of all staff with access to controlled substances, including on how to identify the signs and symptoms of substance abuse; enhanced diversion monitoring by supervisors and management; annual external audits to ensure compliance with the CSA; and increased physical controls of controlled substances, including limiting and monitoring access to automated dispensing machines through fingerprint identification.

Over the past decade, outbreak investigations have documented more than 100 infections and nearly 30,000 potentially exposed patients stemming from drug diversion in U.S. healthcare facilities, a CDC study reveals.[1] *(See* HEH*, June 2015.)*

As disturbing as those numbers are, it should be noted that while protecting patients is paramount, there is an employee health issue: the addicted healthcare worker. For example, nurses emphasize the ethical obligation to try to get their addicted colleagues into treatment: "Drug diversion is a symptom of the disease of addiction …a treatable disease."[2]

Encouraging healthcare workers with an addiction problem to seek treatment may be one of the best ways to save a caregiver's career before the disaster of an outbreak — the event that typically reveals the diverter.

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2. Tanga HY. Nurse Drug Diversion and Nursing Leader's Responsibilities: Legal, Regulatory, Ethical, Humanistic, and Practical Considerations. *JONA's Healthcare Law, Ethics, and Regulation* 2011;13:13-16. ■

COMING IN FUTURE MONTHS

- Case studies of effective violence prevention
- Speak truth to power about patient handling injuries
- Using transparency to stop bully culture among nurses
- Joint Commission citations for employee health

HOSPITAL EMPLOYEE HEALTH

CNE INSTRUCTIONS

To earn credit for this activity, please follow these instructions:

1. Read and study the activity, using the provided references for further research.
2. Scan the QR code to the right or log on to AHCMedia.com, then select "MyAHC" to take a post-test.
3. Pass the online tests with a score of 100%; you will be allowed to answer the questions as many times as needed to achieve a score of 100%.
4. After successfully completing the test, your browser will be automatically directed to the activity evaluation form.
5. Once the completed evaluation is received, a credit letter will be e-mailed to you instantly.

CNE QUESTIONS

1. A recently published survey revealed that 95% of responding physicians and nurses agreed that working sick puts patients at risk. Nevertheless, how many respondents admitted to working sick at least once in the prior year?

A. 58%
B. 83%
C. 31%
D. 9%

2. An unpublished study presented at the 2015 IDWeek conference found that 36% of responding physicians said they would work even if they had lab-confirmed:

A. MRSA skin infection
B. rhinovirus
C. asymptomatic tuberculosis
D. influenza

3. According to OSHA, which of the following was a reason cited by healthcare workers for not reporting violent incidents?

A. Lack of a reporting policy
B. Little faith in the reporting system
C. Fear of retaliation
D. All of the above

4. What ratio of U.S. children age 17 and younger are estimated to be susceptible to measles?

A. 1 in 8
B. 1 in 10
C. 1 in 6
D. 1 in 12

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.

2015 SALARY SURVEY RESULTS

HOSPITAL EMPLOYEE HEALTH

Employee health stays on track, but is there a bridge out ahead?

HEH survey shows field could face a seismic demographic shift

By Gary Evans, Senior Staff Writer

The old guard of employee health professionals are working deep into their careers, providing a critical safety net for healthcare workers as a possible demographic chasm looms.

Results of the annual *Hospital Employee Health* Salary Survey and Career Report show that 80% of respondents have worked in healthcare for 25 years or longer, though most of them not strictly in employee health.

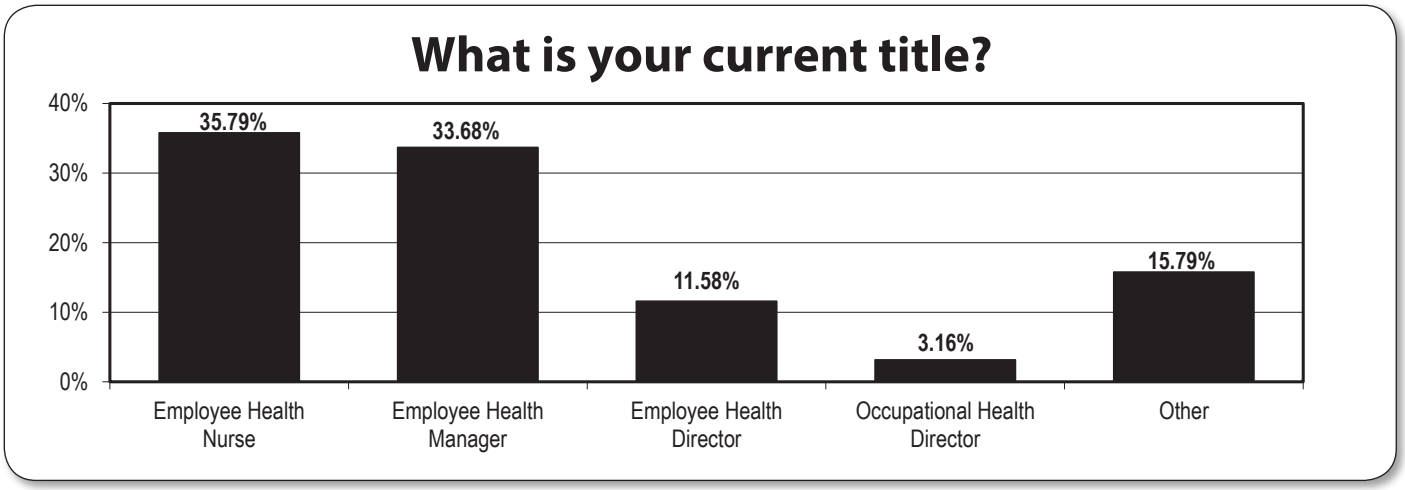
Employee health professionals responding to the survey were primarily female nurses with a median age in the 55-60 range and a median income of $70,000-$79,999. Overall, 70% reported receiving a 1%-3% raise in the last year, but 15% reported their compensation unchanged.

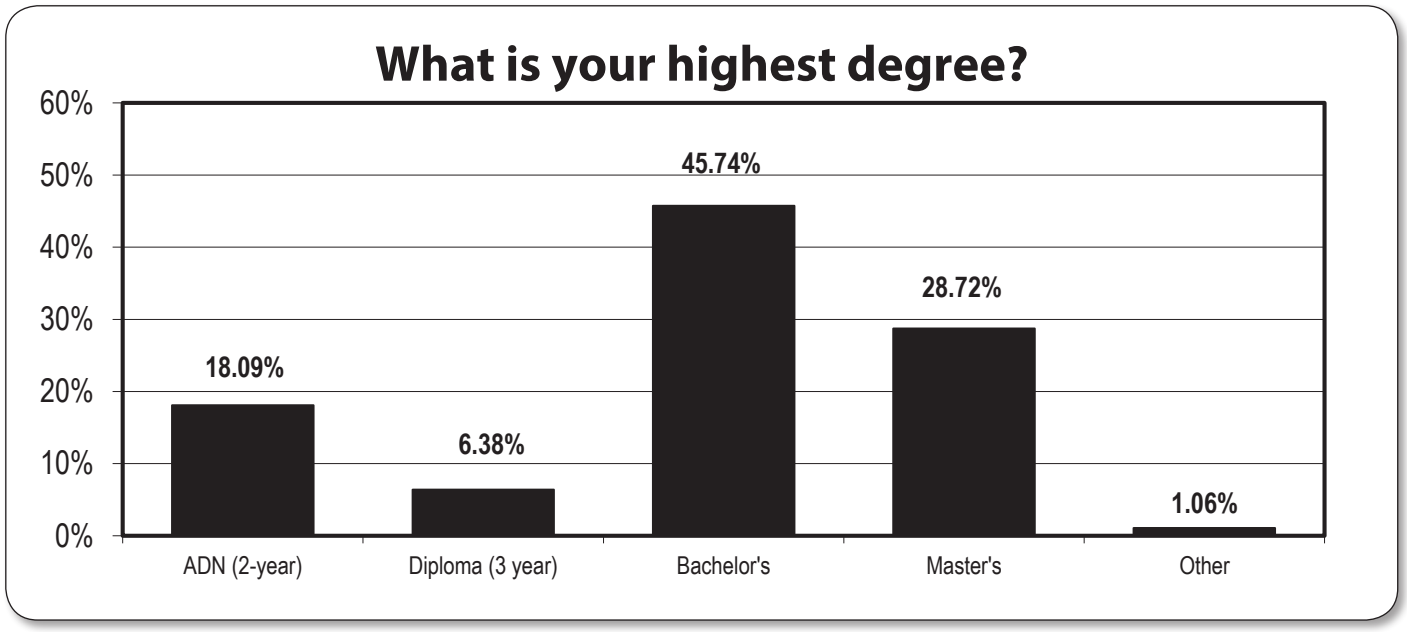
With only 20% of respondents age 50 or younger, the *HEH* survey raises the question of whether there will be sufficient numbers to replace retiring employee health professionals in the twilight of their careers. Considering this question, **Amber Mitchell**, DrPh, MPH, CPH, president and executive director of the EPINet International Safety Center, gave a blunt, unvarnished answer: "No."

"We have done a terrible job making employee and occupational health a 'sexy' field to enter," she says. "We have to do better with our own sales and marketing. We have to show our younger colleagues, that well and fit employees make well and fit hospitals, businesses, communities."

In danger of losing relevance in the shifting demographics of workers and patients in a healthcare system that is literally "re-forming," employee health professionals need to know their value and make sure others know it.

"They are an army of practitioners that make working Americans their patients," Mitchell says.





"Without them, the machine — the economy — just doesn't run. Without rallying behind our own paradigm shift — making ourselves relevant in discussions about our contribution to the economic viability of our nation — we are dooming our own profession."

As reflected in past surveys, many employee health professionals come to their positions with years of healthcare experience. About half of survey respondents have worked in employee health 10 years or longer, with 38% in the field less than a decade.

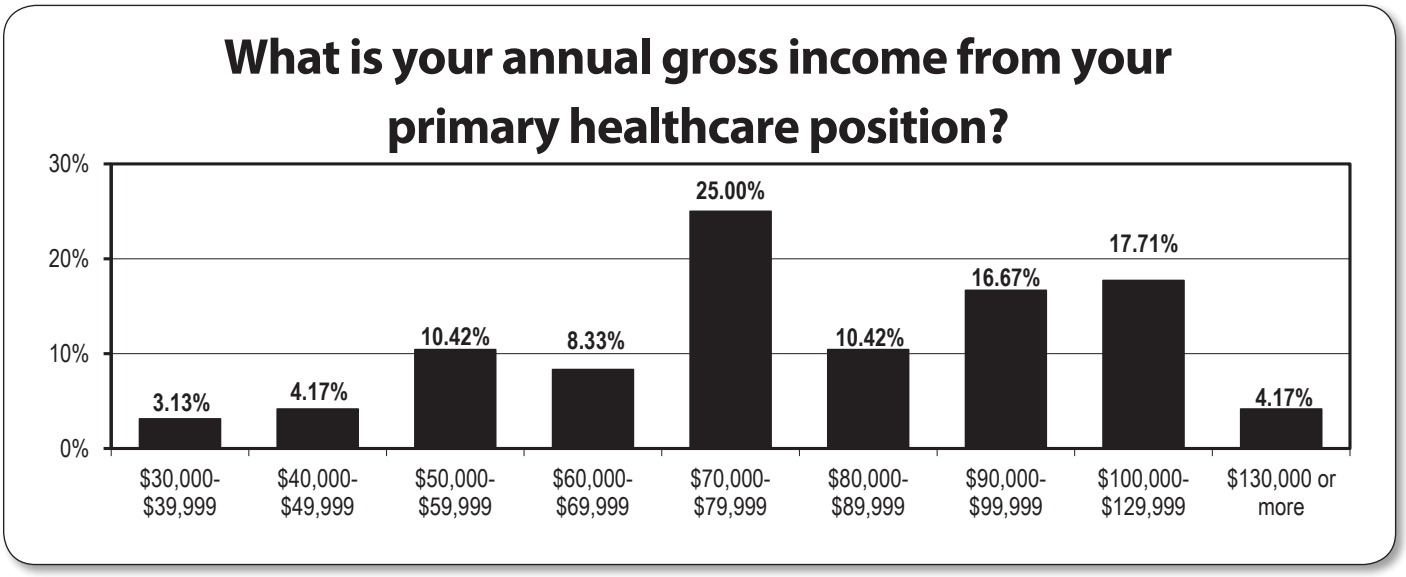
Indeed, the demographic shift may be more ongoing than impending, as open jobs for employee health professionals are getting harder to fill.

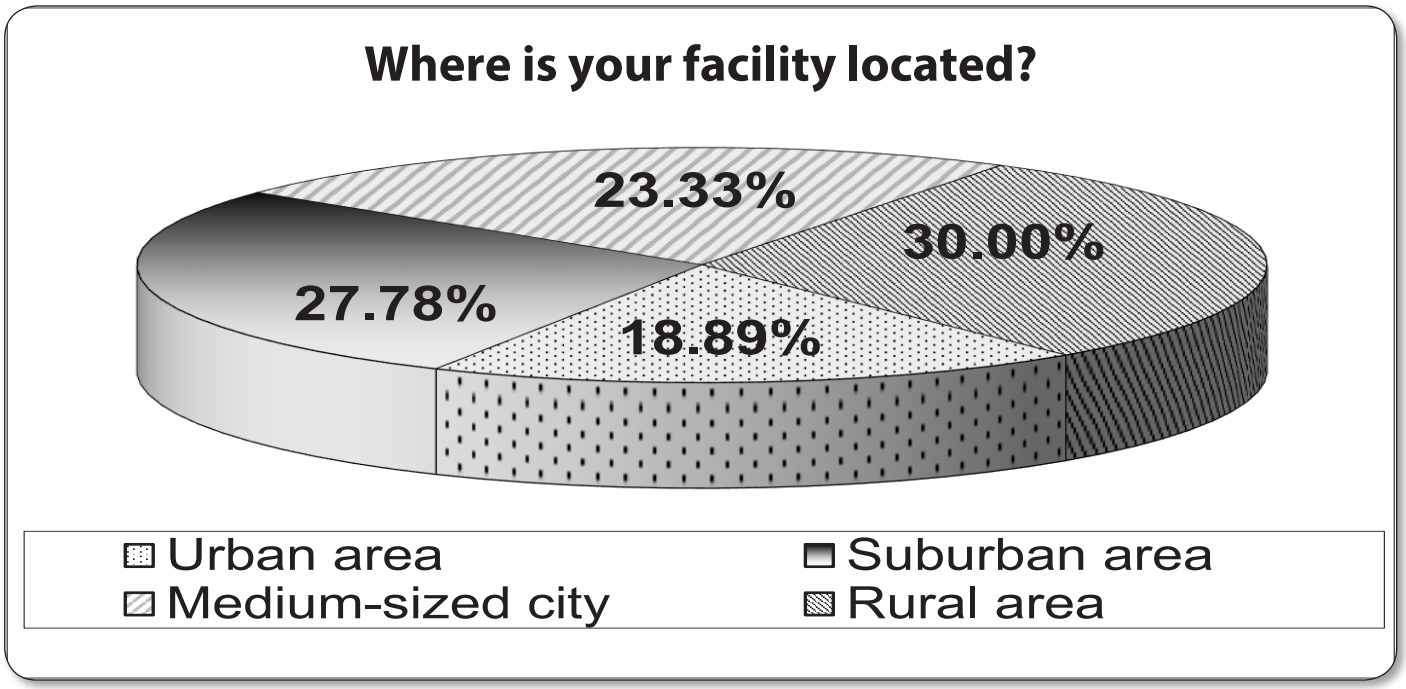
"Occupational medicine recruiters are incredibly busy lately with open positions and not enough docs or nurses to fill them, and that has been the case for at least two years," says **William G. Buchta**, MD, MPH, medical director of the Employee Occupational Health Service at the Mayo Clinic in Rochester, MN. "The lack of training opportunities for occupational medicine providers is crucial with no quick answer on the horizon, and the same is true for nurses in general. Look at the demographics of your survey. Half of the respondents will be gone from the field in 5 to 10 years. There is a void, and it is only widening."

The Ebola factor

The Ebola outbreak — particularly since two Dallas nurses were occupationally infected with the deadly virus — raised the profile and perceived importance of hospital employee health programs.

"Clearly, the populace became aware of the hazards involved in healthcare but also how effective appropriate PPE and procedures can be to protect them," Buchta says. "Employee health certainly played an important





role, such as in symptom monitoring for potentially exposed employees, immunization updates, and medical clearance to wear the PPE."

While Ebola certainly put a spotlight on healthcare worker health, it also revealed problems with personal protective equipment that continue to be a challenge.

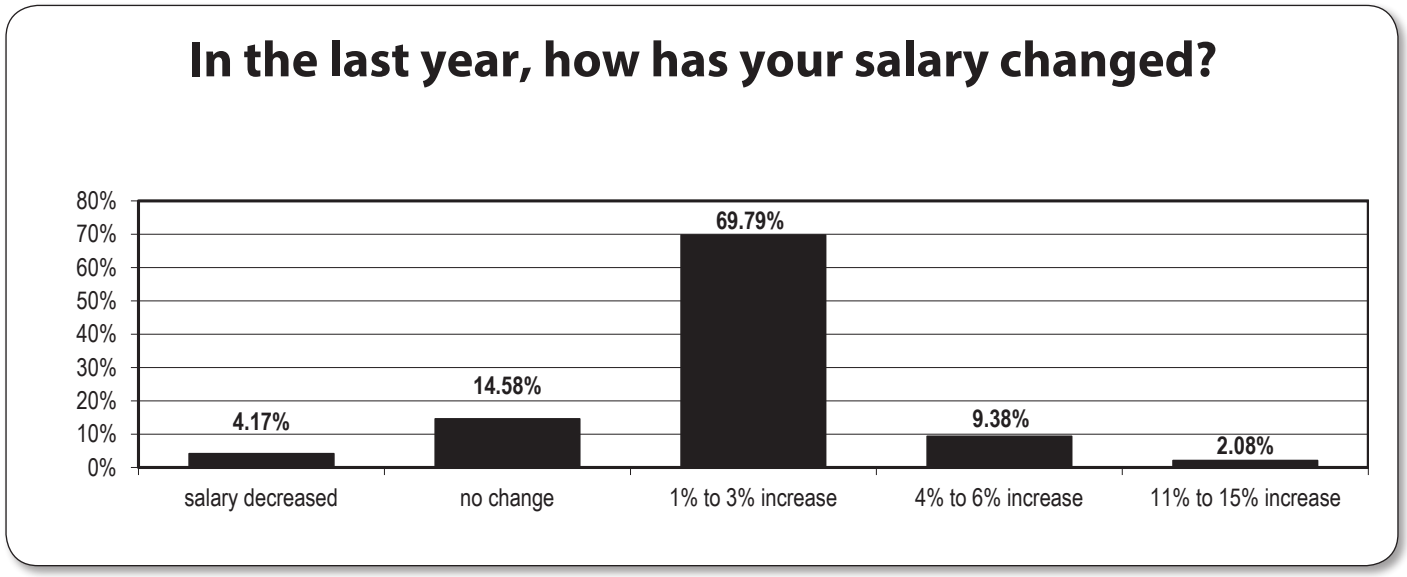
"Our memories are short," Mitchell says. "While the Ebola crisis increased awareness broadly at the time and the months following, according to International Safety Center EPINet data, compliance with PPE use is lower than ever."

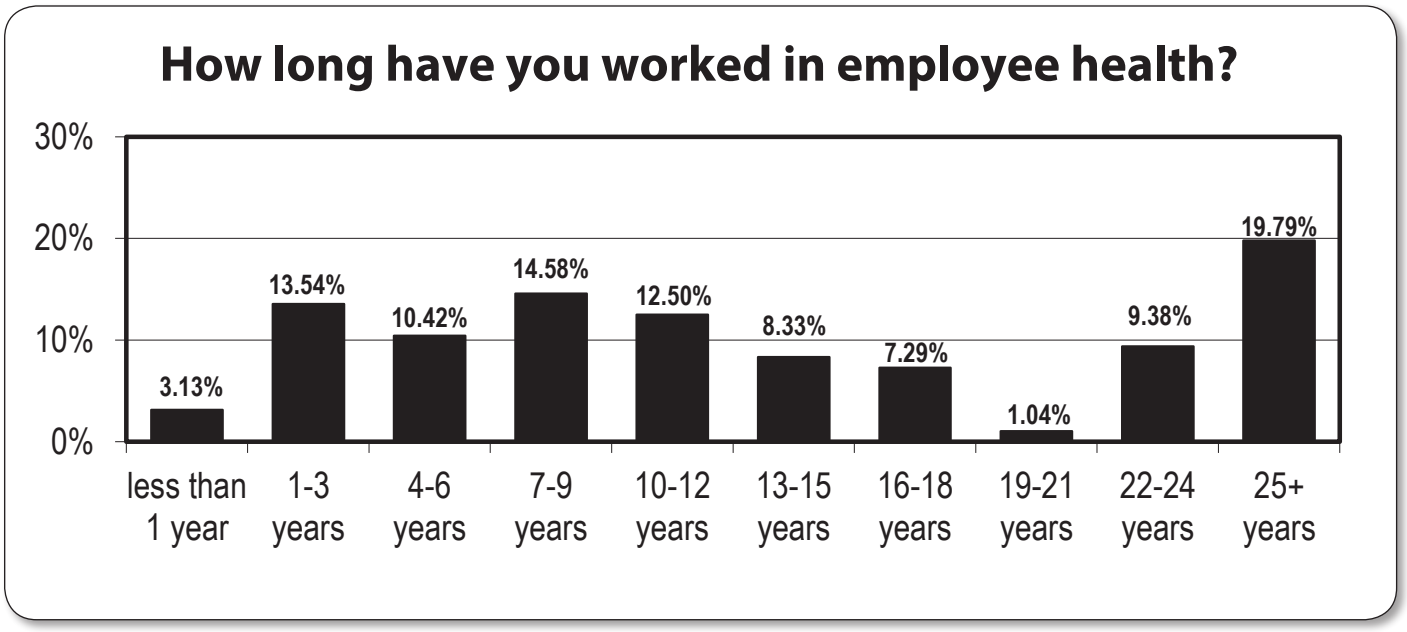
Mitchell recently reported that in the last three years the percentage of blood and body fluid (BBF) splashes and splatters — mucocutaneous — exposures incidents among nurses compared to all other healthcare workers has increased from 47.7% in 2012 to 54% in 2014.[1]

In particular, high-risk eye exposures have increased from 60% in 2012 to 68% in 2014. A troubling corresponding trend is that use of goggles and face shields is falling. According to Mitchell, healthcare workers reporting BBF exposures to their eyes were wearing either goggles or face shields only 8.5% of the time in 2013 — and only 2.8% of the time in 2015.

The wildcard

The wildcard that could change this landscape dramatically is a possible landmark regulation to protect healthcare workers from infectious diseases by the Occupational Safety and Health Administration. OSHA has been considering regulating worker protection against infectious diseases in healthcare settings for several years and now has some potent political currency in the aftermath of Ebola. As outlined thus far a





proposed OSHA rule would add new requirements for hazard identification, exposure control, and documentation. *(See the December 2015 issue of* Hospital Employee Health.*)* Such a regulatory requirement could empower employee health departments, improving wages and job security in an environment of heightened compliance demands.

Beyond infectious disease threats, there are a litany of other challenges that must be addressed if employee health is to remain a vital and attractive field for new professionals.

"I think we have gotten a handle on most of the infectious risks, and chemical risks are present but controllable," Buchta says. "With a diminishing supply of workers, we need to retain the ones we have and to keep them healthy. We need to minimize burnout from overwork and the devastating effects of patient violence -- mostly unintentional but just as psychologically and physically impairing as when it is intentional. I would also focus on the unmeasurable but prodigious negative effect of presenteeism from employees struggling with their own health issues, putting patients at risk for medical errors."

Still, there's no question — from the perspective of sheer volume — the biggest ongoing threat to healthcare workers is exertion injuries due to patient handling and lifting, he says.

"We need to change the expectations of both healthcare workers and patients so that neither one is put in a compromised position when there are ample preventive measures for exertion injuries," Buchta says. "The healthcare industry is loath to portray patients as hazards, but how can we claim that a semi-conscious, thrashing, asymmetrical, 300-pound bundle of flesh and bone is comparable to an inanimate 50-pound box? If our expectations of what is acceptable patient handling are more realistic, then we will retain healthcare workers and be able to attract more into the field."

No HCWs, no healthcare

In the meantime, employee health professionals must continue to make the business case for the critical role they play in keeping a hospital or other setting up and running. If healthcare workers are not protected there will be a cumulative snowball effect on their facilities, Buchta warns.

"Injuries lead to absences, restrictions, and eventually job changes, putting more pressure on the remaining coworkers in an environment that is already understaffed," he says.

Simply put, without healthcare workers, there is no healthcare, Mitchell says.

"Employee health professionals need to draw business parallels to administration in their facilities," she says. "They need to beef up their ability to market and sell themselves. Draw direct lines to their impact and importance. Imagine a hospital running without a CEO. Maybe they could go a day or two or a week or two. Now, imagine a hospital running without its nurses and doctors and technicians because they are all out with occupational illness or infection or injury. Maybe the hospital could go a minute or two."

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