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THE PRACTICAL GUIDE TO KEEPING HEALTH CARE WORKERS HEALTHY

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Nursing leaders: Mandate all recommended shots for HCWs

Medical, religious exemptions must be documented

By Gary Evans, Senior Staff Writer

In what could be a turning point in the controversy over healthcare immunizations, the American Nurses Association (ANA) is calling on all nurses and their healthcare colleagues to be immunized against all recommended vaccine-preventable diseases unless they have verified medical or religious reasons for declining.

While other professional associations have made similar statements on healthcare vaccinations, the ANA speaks to the absolute critical group when it comes to vaccines and patient safety: nurses, says longtime vaccine advocate **William Schaffner**, MD, chairman of the department of preventive medicine at

Vanderbilt University Medical Center in Nashville.

“Nurses have more face time with patients than any other healthcare discipline. From a patient safety point of view, that’s the group that is the most important to be vaccinated. It’s so urgent,” he tells *Hospital Employee Health*. “This strong statement by the ANA not only informs their members, but now individual healthcare facilities — hospitals, clinics, doctors’ offices —

“FROM A PATIENT SAFETY POINT OF VIEW, THAT’S THE GROUP THAT IS THE MOST IMPORTANT TO BE VACCINATED. IT’S SO URGENT.”

can cite this speaking to their personnel. We hope this will persuade them to be vaccinated. It has been no secret that, speaking generally, nurses have been one of the healthcare disciplines that has not supported

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comprehensive immunization as strongly as we would have hoped. Having ANA now speak to their members is very important.”

The ANA position statement calls for immunization with all vaccines currently recommended for healthcare workers by the Centers for Disease Control and Prevention’s Advisory Committee on Immunization Practices (ACIP), which includes hepatitis B, influenza, measles, mumps, rubella, pertussis and varicella.¹

Vaccine issues and arguments in healthcare have primarily focused on seasonal flu shots, which hospitals are increasingly mandating to achieve high compliance. However, the ANA action was prompted by the shocking return of vaccine-preventable diseases like measles, which has resurged in several highly publicized outbreaks in recent years. During the first seven months of 2015, 183 people from more than 20 states were reported to have measles, with five outbreaks resulting in the majority of those cases, the CDC reports.² While these are primarily cases in public outbreaks, utter chaos can rapidly ensue if an undiagnosed case of measles is admitted to a hospital. (*See related story, page 113.*)

ANA: ‘We were not doing a good job’

“Measles was definitely a significant factor in that so many of the people who were infected were unimmunized,” says **Ruth Francis**, MPH, MCHES, program specialist in the ANA’s nursing practice and work environment department. “That really brought home to us the fact that we were just not doing a very good job to make sure the public is educated. A way to do

that is to ensure our nurses are fully immunized themselves and then we are leading by example and educating patients and parents to make sure that everyone is immunized. I think people take for granted that because others are immunized that they are protected through herd immunity. That actually is not the case if they themselves are not fully protected. The [measles] impact was just so huge and broad geographically it really made us realize we have some work to do in our communities.”

U.S. clinicians are becoming more suspicious of measles, but many providers have actually never seen an infection with a virus that was declared eliminated from the U.S. in 2000. How was that triumph undone? A key factor was publication of some erroneous, later-retracted “research” that attempted to link MMR (measles, mumps, rubella) vaccine administration to onset of autism in children.³ A misguided anti-vaccine movement complete with celebrities and the echo chamber of the Internet began to steer parents and children away from MMR immunization in the U.S. Travelers and foreign visitors from places where measles is still endemic also have also contributed to outbreaks, particularly when they are exposed to one of the groups who have refused vaccination.

In that regard, measles introductions are going to continue, so employee health departments should know the immune status of staff to avoid a mad scramble after a case is in the hospital.

“Though the WHO is promoting measles vaccination around the world, measles is going to be with us for some time,” Schaffner says. “It’s a small world so there will be importations into the US. [Measles] will come from aboard and also

by unimmunized members of our population who [travel] and bring it home. So introductions will occur.”

Facilities should be rigorous at screening on hire for measles immunity, which has generally been considered two doses of MMR or birth before 1957 (and assumption of naturally acquired disease). People born before 1957 may be presumed to be immune, according to CDC guidelines — although in the event of an outbreak, the CDC recommends that healthcare workers born before 1957 receive two doses of MMR.

“When you do have an introduction into a healthcare facility, there are some healthcare workers born before 1957 who may be susceptible,” Schaffner says. “They are few, but they’re out there and in the event of an introduction the facility really has to investigate all contacts. Now programmatically we don’t worry about them on a day-to-day basis, but if Vanderbilt suddenly had an introduction of measles we would have to find out all the contacts of that patient, and even among the people born before 1957 we would probably do serologic testing to make sure that they were immune.”

Another employee health issue with measles comes up in the hiring of healthcare workers from countries where measles is still endemic. One option is to test for existing immunity, but in some cases it may be simpler to immunize them with MMR.

“Different healthcare facilities approach it differently,” Schaffner says. “The easiest way if you are at all uncertain about their past experience, just immunize them and there are virtually no hazards associated with that.”

Under the new ANA policy, healthcare personnel who request exemption from vaccinations

for religious beliefs or medical contraindications should provide documentation from “the appropriate authority” supporting the request.

“For the exemptions the nurse needs to provide documentation from an authorized person — either a medical provider or a head of their church with a religious statement,” Francis says.

“THE NEED TO BE IMMUNIZED, I THINK, IS SEEN AS A GOOD THING FOR ALL HEALTH PROFESSIONALS, ESPECIALLY IF THEY ARE HAVING CONTACT WITH PATIENTS.”

Individuals who are granted exemption “may be required to adopt measures or practices in the workplace to reduce the chance of disease transmission” to patients and others, the new policy indicates. Typically, these measures include wearing surgical masks or being assigned to non-patient care duties.

ANA’s position on immunization for healthcare personnel aligns with the newly revised Code of Ethics for Nurses with Interpretive Statements, which says RNs have an ethical responsibility to “model the same health maintenance and health promotion measures that they teach and research,” including immunization.

“The need to be immunized, I

think, is seen as a good thing for all health professionals, especially if they are having contact with patients,” Francis says. “This is another way that professionals can be sure that their standard of practice is 100% and that’s where it should be. To be honest with you, we have not had any pushback on this so far. I know that other associations are equally in line with the CDC and ACIP recommendations. This is nothing new to the nurses and the ANA really feels strong about getting out there and making sure this happens.”

Indeed, the ANA action adds to a growing list of professional organizations calling for full immunization of healthcare workers with all recommended vaccines. In 2013, three major medical organizations — the Society for Healthcare Epidemiology of America (SHEA), the Infectious Diseases Society of America, and the Pediatric Infectious Diseases Society — recommended that hospitals that do not achieve a 90% rate of immunization on an ACIP recommended vaccine for healthcare workers should mandate that vaccine.

“More and more facilities are moving toward mandatory programs,” says **Hilary Babcock**, MD, MPH, SHEA board member and infectious diseases professor at Washington University School of Medicine in St. Louis. “Occupational health professionals are in favor of achieving high vaccination rates [and] many recognize that mandatory programs are the best way to achieve those high levels.”

Indeed, similar recommendations are in place in a position statement by the Association of Occupational

Health Professionals (AOHP). In a statement issued last year, the AOHP advocated mandating “that all healthcare personnel be offered ACIP-recommended immunizations at no charge. ... AOHP believes that immunization of healthcare personnel is essential to their health and the health of their patients, and the organization is committed to promoting ACIP-recommended immunizations for healthcare workers.”

However, the association left the door slightly ajar with the caveat: “AOHP respects the individual healthcare worker’s right to make an informed decision regarding vaccinations and supports healthcare institutions in developing their own policies and practices to immunize their workforce consistent with the ACIP recommendations.”

Most states do not have a law requiring vaccination of healthcare workers, leaving the onus on hospitals and healthcare facilities to develop their own policies, the ANA notes. While it’s well known that getting healthcare workers immunized for seasonal flu is a challenge, the ANA cites some partial data that suggests many workers are not taking the other vaccines, either. Although data were not broken out for individual vaccines, an ANA health risk appraisal found that only 55% to 75% of nurses have received the full schedule of all recommended vaccines.

“The percentage of workers who are not immunized is higher than we would like it to be, but certainly it is increasing and facilities are making it mandatory for workers to work in different areas,” Francis says. “But we still have some work to do and we know there are some

workers who are not protected.”

Many are certainly not protected against pertussis, another resurging disease that poses a risk to patients such as pregnant women and newborns. The level of immunization in healthcare workers has been estimated at below 40%, though the CDC has recommended the Tdap vaccine for a decade. Though admitting they had little data to support the move, the CDC recently reported that employee health professionals can consider revaccinating workers with Tdap if they are facing a pertussis outbreak. (*See related story, page 116.*)

“If there is a vaccine that healthcare facilities really need to pay attention to it’s Tdap because they are probably not up to snuff,” Schaffner says. “The recommendation is all healthcare workers should get a dose of Tdap, and lots of institutions have still not geared up to do that. Our occupational health service took a two-pronged approach. They focused first on everybody that worked in the children’s hospital and also added all emergency personnel and obstetrics. Those were our first [groups] and then the second prong was to provide it during everyone’s annual update.”

Given the threat of pertussis to infants and other high-risk patients, mandatory policies may pick up momentum on Tdap. At one health system, a mandated policy — even allowing for legitimate medical and religious declinations — resulted in a pertussis vaccination rate of 98%.⁴

With so many groups now on board, if healthcare worker vaccine rates don’t improve, the call for mandates may extend to federal regulations. CMS included many healthcare worker vaccines in its

final hospital infection control survey issued last year. However, they were listed for information only, as CMS does not have the current authority to cite for failure to vaccinate. That said, many think vaccinations and other items on the CMS survey could eventually be required as conditions of participation, meaning compliance could affect reimbursement rates.

“[SHEA] would support including vaccination rates as a quality metric, without necessarily requiring that a specific strategy be used to achieve it,” says Babcock.

The ANA hopes it does not come to that.

“There really are some challenges when you make it regulatory,” Francis says. “Who ends up being the police to make sure that it happens? Is there a financial impact or licensure impact if it is not adhered to? My hope is that people will come on board with a strong statement and see the value of [immunizations] rather than needing a regulation.”

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Take-home points in the ANA's vaccination mandate

Clear warning that employer 'disciplinary action' may be taken

The American Nurses Association issued a new position statement on healthcare vaccinations on July 21, 2015, that includes the following key points:

- In light of a recent and significant measles outbreak in the United States, ANA has reviewed current and past position statements for clarity and intent, and current best practices and recommendations from the broader healthcare community. Based on that review, it was determined that a revised position statement is needed to clarify ANA's position and incorporate current best practices.

- To protect the health of the public, all individuals should be immunized against vaccine-preventable diseases according to the best and most current evidence outlined by the CDC and the ACIP. All healthcare personnel

(HCP), including RNs, should be vaccinated according to current recommendations for immunization of HCP by the CDC and Association for Professionals in Infection Control and Epidemiology (APIC).

- ANA supports exemptions from immunization only for the following reasons: medical contraindications, religious beliefs.

- All requests for exemption from vaccination should be accompanied by documentation from the appropriate authority to support the request. Individuals who are exempted from vaccination may be required to adopt measures or practices in the workplace to reduce the chance of disease transmission. Employers should ensure that reasonable accommodations are made in all such circumstances.

- If an RN or other healthcare worker is exempted from vaccination,

the healthcare facility will have the discretion to determine what steps, if any, unvaccinated RNs or healthcare workers must take to reduce the risk of transmitting disease to patients. Refusal by RNs or other healthcare workers to participate in a mandatory vaccination program, or, if exempted from vaccination, to follow steps to reduce the risk of disease transmission, may result in disciplinary action by the employer.

- Successful immunization policies and programs require open communication and transparency between RNs and employers. RNs are responsible for providing patients with evidence-based information to support and promote optimal health and wellness, and for leading by example by participating in health-oriented activities such as immunizations to the greatest possible extent. ■

One case of measles leads to more than 1,000 exposures to HCWs and patients

'This would not be a very interesting story if that was the end of it.'

There are accidents and then there is the docking of the Hindenburg.

There are maddening, laborious measles exposure incidents in hospitals and then there is the epic disaster that unfolded in May 2014 at Inova Health System in Fairfax, VA. A cautionary tale on steroids, here is what can happen if you are not prepared to deal with a 3-year-old

child from India admitted with upper respiratory symptoms.

"It was a Sunday afternoon around 3:00 and our on-call infection preventionist got a call that we had a confirmed case of measles in our children's hospital," said **Dana Cole**, MPH, CIC, an infection preventionist at Inova who described the incident recently in Nashville at the annual conference of

the Association for Professionals in Infection Control and Epidemiology (APIC).¹ "He was admitted [directly] to our pediatric surgical unit, so we were relieved he didn't come through the ED."

However, the first red light was already blinking about the timing of the call.

"He had been admitted to pediatric urgent care the Thursday

prior to this phone call — so he had been in the hospital four days,” she said.

A pediatric infectious disease consult had been done, but the patient was put in droplet precautions, a step down from the airborne precautions warranted for measles. One confounder might have been that the child’s immunizations appeared up to date, but a rubeola IgM test was ordered as part of the differential diagnosis and the patient developed the classic rash on day three of admission. Again, infection prevention was not notified and the call that came in four days after the admission was a notification of confirmed measles by the health department.

“Another [factor] is that the Inova healthcare system does not currently require any proof of immunity or vaccination for vaccine preventable diseases with the exception of influenza,” Cole said, drawing a few gasps out of the APIC audience. “We didn’t hear about this patient until that Sunday afternoon phone call. So we had no clue what was going on.”

Damage control

Now completely in damage-control mode, Cole and colleagues assessed their options.

“We knew the patient had not been in an airborne isolation room because the physician ordered droplet, thinking that was sufficient,” she said. “It was already hospital day four. We looked at [CDC recommendations] and knew our exposed staff had to have proof of immunity or be restricted from work by the fifth day after exposure. So again it is a Sunday night and they had to be restricted starting Monday morning.”

The IPs immediately notified

hospital administration, which formed a multidisciplinary response team that included employee health, nursing and physician leadership, infection prevention, lab, emergency management, and security.

“We also needed to look at our exposed patients because they would have to be placed on airborne precautions on day five after exposure if they did not have proof of immunity,” she said. “The healthcare department recommended that we find out if they had an oral history

“WE DIDN’T HEAR ABOUT THIS PATIENT UNTIL THAT SUNDAY AFTERNOON PHONE CALL. SO WE HAD NO CLUE WHAT WAS GOING ON.”

of measles, were born before 1957 or they had a history of [at least] one MMR vaccine.”

“Just as a side note, one of the things we learned were that different standards for proof of immunity were really confusing for our leaders that were trying to figure out if their staff and patients were exposed to measles,” she added. “They asked a lot of questions and it became really challenging for them, but we are also not sure if there is anything that we could have done to change that in a safe and practical way.”

Employee health and infection prevention personnel went to the hospital that Sunday afternoon after the call and began investigating possible staff and patient exposures in

the pediatric unit.

“By the end of the evening we had evaluated all of these people and identified that we only had one nurse who needed to be restricted from duty until she could provide proof of immunity,” Cole said. “Four patients who were all immune suppressed required further follow-up and were placed on isolation. So at that point we were feeling pretty good about ourselves because we had gotten a lot done. But this would not be a very interesting story if that was the end of it.”

It gets worse

The measles patient was admitted to the pediatric surgical unit in Inova’s literal “original building,” which was constructed in the early 20th century as Fairfax Hospital.

“Later that [Sunday] evening our engineering department reviewing our HVAC system found that the [heating and air ventilation] for that unit circulated throughout the entire original building,” Cole said. “It’s called the original building for a reason and I’m pretty sure it’s held together with chewing gum and paper clips at this point. The [measles] patient room itself was actually slightly [air-flow] positive to the hallway and the air returns.”

That means measles virus, a notorious airborne spreader, could now have been moving through the various building departments with impunity for several days. It was time to call the state health department and the CDC. The decision made in consultation was to err on the side of caution and “consider everyone in the building who did more than just pass through as exposed to measles,” Cole said. “So our exposure just got a lot larger.”

Patients potentially exposed to measles included an inpatient psychiatric unit and a postpartum unit. “Diagnostics radiology was our big killer because they serve inpatients from all over the hospital as well as a huge outpatient population,” she said.

As their office was also in the original building, the infection prevention staff almost got caught up in the outbreak they were investigating. “Three of us almost got excluded from work because they couldn’t find our [immunization] records,” Cole said. “The cafeteria and engineering are also in this building so it became a huge exposure at this point.”

The emergency response team began divvying up tasks, with action items including evaluation of patients and staff for exposure and immune status, establishment of an emergency testing center for drawing titers, development of communication tools for patients and staff, and management of exposed staff and patients. On day seven the hospital implemented its Incident Command System to assist with the response.

A disaster by another name

“We didn’t call it an internal disaster, but we did use that structure to keep our tasks organized,” Cole said. “Infection prevention was managing all of our exposed inpatients with the assistance of nursing. The health department was wonderful and managed all of our exposed outpatients and discharged patients. Employee health managed all of our Inova employees while IPs managed all our licensed independent practitioners [LIPs] and contract employees.”

The hospital communication

department developed all needed messaging for staff, visitors, and patients and set up a hotline to help LIPs determine if they were exposed and what they needed to do in order to come back to work. Lab and engineering teamed up to set up some emergency testing centers in large tents for employees, LIPs and contractors, and others that needed titers drawn, increasing testing at one point from three times a week to three times a day.

“Ultimately 362 patients were exposed — 71 inpatients and 291 outpatients,” Cole said. “Of those, 20 required further follow-up and had titers done and placed in isolation. We were fortunate to have enough airborne isolation rooms to accommodate them. Hundreds upon hundreds of staff, LIPs, and contractors were exposed. Overall, 754 people had to have rubeola titers drawn, and given the timing they all had to be restricted from work until we could get the results back — which made people very unhappy. Fortunately, 93% of them demonstrated immunity to measles.”

However, 6% (47 people) had to be completely restricted from duty until day 21 after exposure, while 10 people had to wait and get tests redone because their results were unclear. And, thankfully, neither patients nor staff developed measles. Not one single case.

“We kind of think there was an element of pure dumb luck involved in that,” Cole said.

Among the “hard lessons learned” were poor communications exact a severe toll.

“If we had gotten that one phone call [sooner] we still would have had exposures but it would have been a lot fewer, and we would have had a lot more preparation time to put our response plan together,” Cole says.

“The volume of exposures was just crazy. Ultimately, well over 1,000 people were exposed. If we had requirements in place for staff and physician vaccinations and proof of immunity it would have saved a lot — 750 [of them] were kept out of work.”

Though much of the response was positive teamwork, the test results came back only as a name with no job identifiers, so there was more labor needed to connect the dots of possible exposures.

“Recordkeeping was an absolute disaster,” she said. “We got stacks of paper on a daily basis and tried to figure out what to do with them. Our employee health department was in the process of trying to upgrade their system, but what they had right then was not set up to be able to do reporting or easy searches.”

Contact your staff — today

“Communication is key,” Cole said. “So please make sure that your staff know how and when to get in touch with you. Don’t assume that they know. Refresh their memories periodically. Standardize recordkeeping and dissemination — having it come from one place. Implement policies for proof of immunity. That is something that we are actually doing now. We got a little waylaid by Ebola, but our new policies are moving through our med-exec committees as we speak. Hopefully they will be passed by the end of the year, but it would have made a huge difference in the work that we had to do.”

Things that went well in the massive response included the strong support of hospital leadership. “If we needed to have it happen, it

happened,” she said. Assistance came through in the form of hotline staffing by employees from sister facilities, and the health department took a very active role that was both supportive and helped coordinate the overall response.

“We were also fortunate enough to use this as an exercise for emergency management, so that met our Joint Commission requirements for the year and made our emergency manager very happy,” she concluded. “As a quick epilogue, about six weeks ago we had another [measles] patient come through our ED and everything went so much better. The patient was isolated quickly. There was a lot of communication between the ED, the [admitting] unit, and

our ourselves.”

As Cole concluded her presentation at APIC, *Hospital Employee Health* did manage to get in one quick but critical question: How much did it cost? Cole said she didn’t know, but it had to be in the “tens of thousands of dollars.”

We respectfully submit that it may have actually been quite a bit more, which makes it all the more frustrating when hospitals lag on preventive measures because they don’t generate revenue. Previous investigations of measles introductions and follow-ups have tallied staggering sums, and the scale of the Inova situation would likely put it in that category. For example, a single imported case of

measles ultimately cost two Arizona hospitals some \$800,000, with much of the expense related to ensuring the immunity of employees and furloughing workers.²

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Efficacy questioned, but consider pertussis revaccination of HCWs during outbreak

Revaccinated HCWs still receive PEP when applicable

If there is an increased risk of pertussis in a healthcare setting evidenced by documented or suspected healthcare-associated transmission of pertussis, employee health professionals can consider revaccination of healthcare personnel with Tdap (Tetanus-diphtheria-acellular pertussis) vaccine, the CDC recommends.

“Although an additional dose of Tdap may benefit individual healthcare personnel, the ability of Tdap vaccination to interrupt pertussis transmission or curtail a pertussis outbreak in a healthcare setting may be limited,” the CDC warns.¹ “Healthcare facilities considering repeat Tdap doses for healthcare personnel are encouraged to consult with their state and local public health

departments regarding the use of additional doses of Tdap.”

Despite high Tdap coverage and recent receipt of the vaccine, adolescents are experiencing high rates of pertussis in the United States. Vaccine effectiveness studies suggest the duration of protection against pertussis afforded by Tdap vaccination in adolescents is less than 4 years, but is not well defined in adults. Therefore, the optimal interval between Tdap doses is not known. In an update effective as of June 3, 2015, the CDC said the following factors should be considered when evaluating whether to revaccinate healthcare personnel:

- Vaccinating healthcare personnel with Tdap is not a substitute for infection prevention

and control measures, including post-exposure antimicrobial prophylaxis.

- Revaccinated healthcare personnel should still receive post-exposure antimicrobial prophylaxis when applicable.
- There is no supportive evidence that additional Tdap doses would prevent pertussis disease and transmission in a healthcare setting.
- Because infants are at greatest risk for severe or fatal pertussis, healthcare personnel who work with infants or pregnant women should be prioritized for revaccination, if implemented.

Since 2005, the CDC’s Advisory Committee on Immunization Practices (ACIP) has recommended that healthcare personnel receive a single dose of Tdap; after receipt

of Tdap, a dose of Td (Tetanus-diphtheria) is recommended every 10 years. Currently, both Tdap products are FDA approved for single use. In October 2014, ACIP considered Tdap revaccination of healthcare personnel. After review

of available data, ACIP maintains the current recommendation for healthcare personnel to receive a single dose of Tdap and at this time does not recommend routine administration of additional doses, the CDC reported.

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Following last year's misfire, EH programs may get more pushback, questions about flu shots

2014-15 vaccine had overall efficacy of only 23%

Employee health professionals with voluntary seasonal influenza vaccination can expect a tougher sell this year to skeptical healthcare workers, many of whom will recall last year's mismatched batch that whiffed on a widely circulating H3N2 strain that had antigenically drifted.

"It may be the most frequent question we get this year because many people will remember that last year it was not a very effective vaccine," said longtime vaccine advocate **William Schaffner**, MD, chairman of the department of preventive medicine at Vanderbilt University Medical Center in Nashville. "The message is to keep getting it out there. It's not a perfect vaccine. Its effectiveness varies, but still each and every year it is the best thing we can do to prevent influenza in ourselves and those around us, including our patients. We need to get vaccinated because it is the single best thing we can do on our patient's behalf."

The CDC estimates that the 2014-2015 vaccine had an efficacy of 18% against H3N2 influenza A and 45% against influenza B viruses. Overall, the efficacy estimate was 23%. In the decade preceding, flu vaccine efficacy varied from 10% (2004-2005) to 60% in (2010-2011).¹

The generally accepted efficacy estimate for seasonal flu vaccine over time is 59% among people age 18-64. Protectiveness falls off in the younger, older and those with underlying illness that weakens the immune response. Vaccine advocates emphasize, however, that even a low level of flu protection can make a difference in the morbidity and mortality of those infected.

"You are trying to keep people out of the hospital and out of the morgue. That's the goal," says **Paul Offit**, MD, chief of Infectious Diseases at the Children's Hospital of Philadelphia.

Selecting the seasonal flu vaccine strains is a bit dicey to begin with, as selections are gleaned from ongoing flu surveillance centers in more than 100 countries worldwide. The viruses targeted by the seasonal flu vaccines are updated each year based on which strains are circulating, how rapidly they are spreading, severity of disease, and other factors. Flu viruses that appear well matched to a vaccine may subsequently antigenically drift, making the vaccine designed to stop them less effective. A pandemic can arise when a complete antigenic "shift" occurs, meaning there can be little assumed immunity or vaccine protection until another vaccine is developed.

The 2015-2016 influenza vaccine was made to protect against the following three viruses:

- A/California/7/2009 (H1N1)
- A/Switzerland/9715293/2013 (H3N2)-like virus
- B/Phuket/3073/2013-like virus. (B/Yamagata lineage virus)

In addition to these trivalent vaccine, there is a quadrivalent 2015-2016 flu vaccine that protects against the aforementioned trio and an additional B virus (B/Brisbane/60/2008-like virus). For healthcare workers with an aversion to needles, a new needleless jet injector has been approved for use this year. The FDA approved use of the PharmaJet Stratis 0.5ml Needle-free Jet Injector for delivery of one particular flu vaccine (AFLURIA® by bioCSL Inc.) in people 18 through 64 years of age. The injector penetrates the skin with a narrow, high-pressure stream of fluid rather than a hypodermic needle.

Healthcare workers need to get vaccinated to protect high-risk patients even if staff are full of vigor and say invariably every year, "I never get the flu," Schaffner says. "Influenza infection causes minimal or no symptoms in up to 25% [of people infected]," he adds. "But these healthcare workers can still shed and

spread the flu virus.”

Likewise, employee health professionals have no doubt heard that the reason for flu declination is, “I’ll stay home if I get sick.” Yet it has been observed time and again that healthcare workers will report to work sick, hence the term “presenteeism.”

Flu shot mandates could cut off all this annual point-counterpoint, as hospitals that have gone this route typically achieve a greater than 90% immunization level in very short order. However, even proactive employee programs may find it difficult to get out of the 70% area through voluntary efforts. In any case, the overall trend — no doubt boosted by the increasing mandatory programs — is going upward. Citing unpublished CDC data recently in Nashville at the annual conference of

the Association for Professionals in Infection Control and Epidemiology (APIC), Schaffner noted rates of healthcare worker flu immunization climbing from 67% (2011-2012) to 72% (2012-2013), and to 75% (2013-2014).

The trends should keep moving north as more hospitals go to mandatory policies, and the Centers for Medicare & Medicaid Services (CMS) keeps the pressure on by requiring public reporting of healthcare flu immunization rates. These publically available rates on the CMS Hospital Compare website have a way of landing in the local paper one morning, showing how a community’s hospitals are faring and comparing their immunization rates.

“It clearly brought it more to our administration’s attention,” Schaffner says. “Mind you they had

been discussing how vigorously to do this for a number of years and they wanted to go up. The occupational health service did absolutely everything it could, but we got up into the 70s and that’s apparently where we got stuck. Our administration said that is not sufficient and instituted a mandatory program. [Our program] does not include firing people, but we follow up absolutely every individual who did not have a flu vaccination recorded. Once we did that — and that took a lot of work — last year we got over 90%.”

REFERENCE

1. Centers for Disease Control and Prevention. Seasonal Influenza Vaccine Effectiveness, 2005-2015 June 24, 2015: <http://1.usa.gov/1NNgxln>. ■

AOHP issues new respiratory position statement stressing competence, training

Wealth of training resources now available

The Association of Occupational Health Professionals in Healthcare (AOHP) recently adopted a new position statement emphasizing that respiratory protection is a “critical area of competence” for OHPs in healthcare.

“The position statement calls for building the competence of occupational health professionals in respiratory protection [RP],” says **MaryAnn Gruden**, MSN, CRNP, NP-C, COHN-S/CM, AOHP Association Community Liaison and manager of Employee Health Services at Allegheny Health Network in Pittsburgh. “Education and training is a

fundamental building block to develop competence. AOHP has participated in the development of RP competencies and educational tools by working with an interprofessional group.”

In addition, emerging infectious diseases such as Ebola have demonstrated the importance of healthcare workers being skilled in the use of PPE including respiratory protection, AOHP emphasized. While Ebola revealed a lack of preparedness with PPE in general, the momentum began building on respiratory protection issues when a different virus hit in 2009.

“Inadequacies of PPE

knowledge, training, and use were noted during the H1N1 flu pandemic,” Gruden notes. “That event lead to the 2011 Institute of Medicine Letter Report on Occupational Health Nurses and Respiratory Protection and the subsequent work that has been done to develop respiratory competencies for occupational health nurses that have included educational resources.”

Indeed, with the AOHP’s input and support, there have been a wealth of resources released on respiratory protection, including the Occupational Safety and Health Administration (OSHA) and the National Institute for Occupational

Safety and Health (NIOSH) co-creation this year of the Hospital Respiratory Protection Program Toolkit. The toolkit can be found at www.osha.gov/Publications/OSHA3767.pdf. (See HEH, Aug.

2015, page 90.)

“The webkit includes an educational program that is designed for the OHN who is the respiratory protection [RP] program administrator,” Gruden

says. “The program covers the essential components of RP necessary to meet the requirements of Federal OSHA Respiratory Protection Standard CFR 1910.134.” ■

Active shooter drills increasing, should hospital security be armed?

Violent incidents raise questions as hospitals prepare

A wave of violence continues to threaten healthcare employees and patients, increasing preparations but opening new questions about arming staff and security.

The increase in shooting incidents is prompting more hospitals to conduct active shooter drills, says **Ben Scaglione**, director of security in healthcare for G4S Secure Solutions, a security company based in Jupiter, FL.

Hospitals also are seeing more violence from behavioral health patients and are developing better response plans, Scaglione says. Similarly, hospitals should reassess how they handle inmate prisoners, he adds. Handcuffs and other restraints can be a thorny issue, with clinicians sometimes insisting that a patient be released at least temporarily during treatment.

“It’s a lack of understanding. Clinical staff want the best for their patient, but the bottom line is they are prisoners and they need to be shackled,” Scaglione says. “Clinical staff need to understand that a shackled prisoner needs to stay that way. I saw a case years ago where a prisoner should have been shackled and wasn’t, and he was able to leave his room and sexually assault a female patient down the hall.”

There has been a small increase in hospitals arming their in-house security officers, he says, but that issue is contentious. Some healthcare and security experts say armed security brings with it too much potential liability and responsibility for adequately training and certifying employees. Others say armed guards are necessary because a large amount of violence can take place before local police arrive.

Arming security guards will get the attention of hospital insurers also, notes **Sean Ahrens**, CPP, BSCP, CSC, security consulting services practice leader for Aon Risk Solutions in Atlanta. An insurer that might be responsible for paying claims related to an employee using a firearm will demand extensive documentation of the screening, training, and certification of those employees, he says. “It takes a significant effort to

maintain those records, which you absolutely must have if an incident ever occurs,” Ahrens says.

The decision might come down to what sort of neighborhood the hospital is located in and what treatment is provided, says **Allan Ridings**, senior risk management and patient safety specialist with the Cooperative of American Physicians (CAP), a doctor-owned medical malpractice insurance organization in Los Angeles. An acute care hospital in a high-crime area, with a busy emergency department, is more likely to need armed guards than a specialty facility in a low crime area, he says.

“When I worked for a large medical corporation, we had armed guards on campus, patrolling the parking lots, even in the facilities that were not in high-crime areas,” Ridings says. “An important benefit is that it lets employees know you care enough to protect them.” ■

COMING IN FUTURE MONTHS

- An MRSA carrier on the OR team
- A familiar face takes new form in needlestick fight
- Nursing schools breaking out the patient lift equipment
- Preventing burnout in the nursing force



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CNE QUESTIONS

- 1. The Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), recommends routine immunization of healthcare workers for which of the following?**
 - A. Variola virus
 - B. Hepatitis A
 - C. Varicella virus
 - D. All of the above
- 2. What year was measles declared eliminated from the United States?**
 - A. 1995
 - B. 2000
 - C. 2005
 - D. 2010
- 3. The American Nurses Association new vaccine policy states that all requests for exemption from vaccination should be accompanied by which of the following?**
 - A. A sworn statement by the healthcare worker
 - B. Medical evidence of a past vaccine reaction
 - C. The worker's most recent job evaluation
 - D. Documentation from the appropriate authority
- 4. According to Dana Cole, MPH, CIC, a measles introduction in her hospital exposed how many total patients?**
 - A. 362
 - B. 71
 - C. 291
 - D. Zero

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.