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INSIDE

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California Violence Prevention Law Sets New Standard for Nation

Landmark protection measures for healthcare workers

By Gary Evans, Medical Writer

Hundreds of hospitals and other healthcare facilities in California are implementing a statewide workplace violence (WPV) law, with an April 1, 2018, deadline looming to have a written WPV prevention plan in place.

Implementing the requirements of the state law — California SB 1299 — are proving challenging at some facilities, according to various complaints and concerns received by one of the principle organizations behind the law, the California Nurses Association/National Nurses United.

"We experience this with all of our health and safety protections — there is an initial resistance and we have to overcome that," says **Bonnie Castillo**, RN, director of health and safety for the nursing union, which lobbied for the law and supports similar requirements nationally.

> "WE EXPERIENCE THIS WITH ALL OF OUR HEALTH AND SAFETY PROTECTIONS — THERE IS AN INITIAL RESISTANCE AND WE HAVE TO OVERCOME THAT."

Indeed, considering the historical struggles to convince hospitals to adopt needle safety devices or purchase safe patient handling equipment, it should come as little surprise that implementing violence prevention programs will require a similar diligence.

"Right now, we are actively engaged in all of the hospitals where we represent registered nurses," she says. "We have found that there are some misinterpretations [of the requirements] by the employers and we are providing

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clarifications. The nurses are exercising their collective voice — which is really a protective voice — in ensuring that the employers ultimately comply with the full extent of the regulations. In the non-union settings, we are hearing of some blatant disregard of the requirements."

As previously reported in *Hospital Employee Health*, California's Occupational Health and Safety Administration (Cal/OSHA) adopted the WPV regulations in 2016, with implementation beginning last year and proceeding in 2018.[1] *(For more information, see the February 2017 issue of* HEH.*)* Cal/OSHA is the first state OSHA plan — which must have requirements at least as stringent as the federal agency — to adopt a healthcare violence prevention regulation. For its part, federal OSHA announced in January 2017 that it will develop a national standard for violence prevention in healthcare, but the effort is in regulatory limbo in the current political climate.[2]

The California law requires healthcare employers to perform an environmental risk assessment of the facility, looking for things like poorly lit areas, isolated workstations, lack of escape routes, objects that can be used as weapons, and entryways vulnerable to unauthorized access. In addition, healthcare workers must be trained on violence prevention, including information gained from the risk assessment. The Cal/OSHA law states that training must include "workplace violence risks that employees are reasonably anticipated to encounter in their jobs. The employer shall have an effective procedure for obtaining the active involvement of employees and their representatives in developing training curricula and training materials, participating in training sessions, and reviewing and revising the training program."[1]

The law calls for initial training on hire, when an employee is assigned new duties, and an annual in-service review.

"We are very concerned about training," Castillo says. "We are ensuring that all of the training is given to all the employees and has to include all of the basic information specific to the workplace. Typically, [employers] may go to a cookie-cutter plan but the regulations require a plan specific to the facility and individual units."

Healthcare workers at some facilities are reporting they have insufficient input into the violence prevention plans being set up at their facilities, though the regulation clearly states worker input should be part of the process, she adds.

"There are also complaints that some of the employers do not have a clear way to report incidents of workplace violence," Castillo says. "That's obviously critical to get a grasp of the severity of the problem."

Whistleblower Protections

While such concerns may not be surprising as the law is phased in, healthcare worker advocates want to achieve voluntary compliance rather than seeking Cal/OSHA enforcement. The law requires employers to allow workers to express concerns about workplace violence without fear of reprisal.

"But if [employees] have questions about the regulations, they are concerned about being labeled as a whiner or complainer," Castillo says.

Hospital implementation of all

aspects of the law should improve as facilities come up to speed with the requirements, but the law has some nuances that will require culture change at some worksites. Part of this is the longstanding perception by many healthcare workers that violence comes with the territory, and if no injury results, the incident need not even be reported, explains **Pidge Gooch**, MSN, RN, CENP, executive director of regional patient care service operations at Kaiser Permanente in Oakland.

"Recently, I was made aware of an issue where a nurse was scratched by a patient with dementia while the nurse was attempting to reposition the patient," she says. "The patient got upset and scratched the nurse. Neither the nurse nor the unit leadership recognized this as an act of workplace violence because the patient had dementia; they didn't really know what they were doing. But the law makes no allowance for altered mental status as an acceptable reason why a patient may get violent, nor exempts that event from being reported. That is a really hard concept for staff and leaders alike to wrap their minds around, which is part of the culture change that is needed."

Moreover, even if no injury occurs, an act of violence should be reported. SB 1299 defines WPV as "any act of violence or threat of violence that occurs at the worksite," including incidents that cause physical or psychological harm or involve a firearm or other weapon.

"One of the most challenging aspects of the legislation will be educating our staff to view events where there is no physical contact or injury as an incident of workplace violence," Gooch says. "The legislation is focused on the threat of violence as well as the act of violence. Typically, occupational health nurses are involved following an actual injury, not the threat of one. Because of this, I believe it will be of paramount importance for the occupational health nurse to become one of the faces of workplace violence prevention."

According to Gooch, key roles for employee health professionals include:

- participation in worksite analyses to identify risks and mitigation strategies;
- lead staff education programs to raise awareness;

"ONE OF THE MOST CHALLENGING ASPECTS OF THE LEGISLATION WILL BE EDUCATING OUR STAFF TO VIEW EVENTS WHERE THERE IS NO PHYSICAL CONTACT OR INJURY AS AN INCIDENT OF WORKPLACE VIOLENCE."

- establish workflows for the post-event period to provide care and counseling to employees;
- assist hospital leaders to promote the reporting of WPV events, even when no contact or injury takes place.

"In educating our staff, we need them to see the occupational health nurse outside of their usual response role — and one of more proactivity in assisting the hospitals to build effective workplace violence prevention plans," Gooch says.

Hospitals must create a workplace violence log, gathering information on any incident even if the healthcare worker was not injured. Absent of personal identifiers, the log is designed to highlight risk settings and behaviors that can be addressed in the WPV prevention plan.

"The log also must include post-incident responses and the resulting investigation into causes," Gooch says. "Hospital leadership across the continuum, occupational health nurses, security personnel, behavioral health experts, and frontline staff are just some of the people on the multidisciplinary teams working on this."

A Daily Risk

The essential facts are not in dispute; healthcare is a hazardous job. For example, federal OSHA was prompted to pursue rulemaking by a government watchdog report[3] that cited a disturbing level of assaults in hospitals, with attacks resulting in lost work days five times higher than the private sector as a whole. Efforts to use the OSHA General Duty Clause to enforce existing protections have been minimal and ineffective, the Government Accountability Office found.

Healthcare workers are at daily risk of violence, primarily from patients and visitors. Gooch recently published an article[4] on the California law which cited some sobering statistics, with approximately 24,000 assaults reported in healthcare settings between 2010 and 2013. Hospitals in the U.S. have reported increasing violent crime, up from two events per 100 beds in 2012 to 2.8 events per 100 beds in 2015.

Contributing factors that have been cited in the rising tide of violence in healthcare include the loss of mental health facilities nationally, and the staggering scale of the opioid epidemic. This may finally be changing to some degree, but another contributing factor is that violence awareness and prevention strategies have traditionally not been strongly emphasized in medical and nursing schools. However, more nurses are being taught concepts like situational awareness and de-escalation techniques to prevent and defuse potentially violent incidents. *(For more information, see related article below.)*

While there are common requirements, themes and issues, it is expected that violence prevention plans in California will vary somewhat by facility and patient population, Gooch says.

"While a hospital system could have a standardized template, the very nature of a hazard risk assessment is that it is highly specific to the facility being evaluated," she says. "Factors such as hospital services, patient demographics, and population served are just some of the elements that can vary by facility. While the specific subject matter is focused on WPV, most hospitals have a hazard vulnerability assessment, so the concept is not entirely new. I believe hospitals are up for the challenge."

Besides creating and maintaining a log of all WPV instances, leaders must develop an effective response plan for potential events like an active shooter. As part of this preparation, evacuation and sheltering plans should be in place. Employee health professionals may be involved in providing care for victims, ensuring all involved are identified and providing trauma counseling in the aftermath, Gooch notes.

Such major events present a planning challenge, but the day-to-day struggle will be convincing healthcare workers to report individual acts of violence as defined by the new law.

"One of the greatest challenges occupational health nurses face is an awareness of incidents that are not reported," Gooch concludes. "Collaboration with hospital safety officers, security, and other key leaders is necessary to integrate the occupational health team into the WPV prevention plan and increase staff awareness of the issues." ■

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Teaching Situational Awareness, De-escalation Techniques

Healthcare workers must remain calm, centered in eye of hurricane

The anatomy of violence is being dissected by both hands-on safety officers and academic scholars, revealing that both common sense and research can point a path to prevention.

Violence at some level is intrinsically unpredictable, but there are practical methods and techniques workers can be trained in to prevent events — and minimize the effect of events that do occur.

The phrase that captures a lot of this approach is "situational awareness," says **Cory Worden**, MS, CSHM, CSP, CHSP, ARM, REM, CESCO, manager of system safety at Memorial Hermann Health System in Houston.

"With workplace violence in any industry, whether it's healthcare, firefighters, or EMTs, you have to have a zero-tolerance policy," he says. "That goes without saying. We are not going to tolerate people being injured, but then the question becomes 'How do you prevent these injuries?'"

One obvious answer is constant vigilance to prevent workplace violence, but that may do little good if resources are not provided and the worker response is not engrained by training and understanding of the policies and procedures.

"You want to first make sure

you are providing people with the proper resources so they know the procedures, the codes, where the panic buttons are," Worden says. "And you want to make sure all the equipment is operational. The last thing you want to find out is that the panic button does not work when you hit it."

Once those protections are in place, an important adjunct is honing an awareness of potential factors that could contribute to violence or make healthcare workers more vulnerable if it occurs.

"With our nurses — especially in the emergency department — one of the things we always discuss with them is, for example, if you are pushing a work cart in an examination room you don't want to place it between the patient and the door," Worden says. "If you have a patient that suddenly acts out, you don't want to find yourself barricaded in the room."

The same logic applies in building workstations into existing rooms, as access to an exit should be considered in the layout, he says.

"Also, when you go into work with a tray of needles and sharps, make sure you are not placing them right in front of the patient where they might be tempted to grab one," he says. "Everything has to be thought through. This is called situational awareness."

Healthcare workers who have a background in police work, military, or EMT personnel likely have picked up this skill, but it must be emphasized in training for most people.

"Many people have not been in these types of situations, and we don't want them to find out what happens in the real world with a violent, combative patient," Worden says. "We want to make sure people are conditioned and ready to execute these procedures."

Arguably the most important part of situational awareness is being able to recognize when it is a "go time," he adds.

"For example, a person is raising their voice and using a lot of profanity or they are here to see their dying mother and they are starting to get really upset," Worden says. "We want to make sure we're prepared to start the response as early in the game as possible. The first goal is to prevent it, and if we can't prevent we need to make sure our response is as good as possible."

"THE FIRST GOAL IS TO PREVENT IT, AND IF WE CAN'T PREVENT WE NEED TO MAKE SURE OUR RESPONSE IS AS GOOD AS POSSIBLE."

Healthcare workers can be taught — through a combination of didactic lecture and role-playing — how to recognize potentially violent patients and de-escalate situations and interactions, the author of a recently published study[1] reports.

"Many violence prevention and de-escalation programs will blend some lectures and content on the risk factors, triggers, and causes of violence," says **Margo Halm**, RN, PhD, NEA-BC, director of nursing research and professional practice at Salem Hospital in Portland, OR. "Then, they will break out and have some case scenarios. It's best if they are built on likely scenarios that a nurse might see in their unit. They have an opportunity to role-play, so one person would act as the aggressor — a patient, a family member, or another employee; you could have a variety of scenarios. Nurses then practice how they would defuse the situation."

In a review of research papers published in the last 10 years on violence prevention in healthcare, Halm found some similarities and recurring themes. For example, verbal abuse typically is reported three times more often that physical assaults, and ED nurses are at higher risk than nurses in other departments.

Risk factors in violent patients include a history of aggression, psychiatric disorders, substance abuse, feeling powerless, and the perception that violence is tolerated.

In terms of content, aggression management education may include an "interpersonal style using effective communication, including less reliance on avoidant, hostile, or critical behaviors that may provoke escalation," Halm notes in the paper.

According to Halm, the behavioral skills needed to achieve some of this desired tone include de-escalation techniques that include the following outwardly expressed traits and emotions by healthcare workers:

- open, honest, genuine;
- self-aware, confident but not arrogant;
- non-judgmental;
- non-threatening, non-authoritarian manner;
- calm appearance, despite inner anxiety, to convey control of situation;
- awareness of body language like eye contact, facial cues, posture, proximity, and touch to ensure it expresses concern;
- actively listen to understand what the aggressor is saying;

• use soft tone of voice that is calm and gentle;

• use short sentences and simple vocabulary; provide aggressor time to respond before sharing more information;

• repeat messages when making requests, setting limits, offering choices, or proposing alternatives.

"Many healthcare workers may already have some of these skills and behaviors, but aggression management education really brings them to the forefront," Halm says. "It really helps people by heightening their awareness of these characteristics."

Those not naturally inclined to these de-escalation strategies can learn to adopt some of them to dial down volatile situations.

"Some people may need to work on being non-threatening, non-authoritarian," she says. "Maybe that is not somebody's normal persona in the way that they work. It's a way to really think about the way you interact with patients. There could be some cues that you are sending out; for example, if you get defensive in response to needs the patient is bringing forward, that can feed into the cycle. These all are key attributes that nurses can be taught." ■

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What's Driving Physician Burnout? Constant Change

'If you are losing 400 physicians to suicide in a year, that's a 747 going down'

A recent survey of healthcare leaders cited "change fatigue" as one of the primary drivers of burnout among healthcare workers, particularly physicians who work with a traditional autonomy that carries some risk of becoming isolating and depressing. The survey respondents were 123 leaders at hospitals, clinics, and health systems across the United States and Canada, according to a report on the project.[1]

The survey was complemented by interviews with some 45 healthcare executives, academics, and thought leaders. These discussions focused on establishing a culture of resilience, well-being, and joy for all members of the healthcare team.

Some of the report's concluding recommendations include the following:

• **Build an intentional, human-centered culture.** Culture sets the stage for authentic human connection, a core element of resilience, well-being, and joy.

• **Approach burnout and well-being comprehensively.** Many organizations are trialing well-being projects, but one-off initiatives will not solve the core issues.

• **Cultivate a team mindset.** Healthcare today is a team-based endeavor, relying on nurses, staff, physicians, families, volunteers, and patients to provide high-quality, safe, compassionate care.

• **Integrate burnout and well-being strategies with all other organizational priorities.**

Overall, 57% of research participants said change fatigue is the leading cause of care team burnout. Of course, some change may be needed to correct that situation, creating a classic catch-22.

Change Fatigue

Hospital Employee Health interviewed one of the principals involved with the report, **Corey Martin**, MD, leader of Physician Resilience Training and Burnout Prevention in the Allina Health System in Minneapolis.

HEH: Can you elaborate on this concept of "change fatigue" as one of the main drivers of healthcare burnout?

Martin: One of the biggest causes of change fatigue is that typically in healthcare, we have a new program or something rolled out all of the time. Anytime this happens we have different ways to measure it, different boxes to click, different things to do — a different process. Change is happening so quickly in healthcare, but maybe we can measure things a little bit easier with the electronic health records and computers.

We are trying to measure a lot of things, but I think a lot of what we measure probably doesn't matter. There's a lot of things we measure that matter, but a lot of it doesn't matter. We are just measuring it because we can measure it. A

lot of times that gets in the way of providing face-to-face, good healthcare and allowing people to have joy, meaning, and purpose in the work that they do. Because anything that shifts them from the face-to-face patient interaction really has been shown to undermine joy and purpose.

HEH: How do you manage that change and prevent that fatigue from setting in? Is there a way to prioritize what is important in terms of change?

Martin: I think that is the biggest question that's facing healthcare right now, and I don't think anyone really has a great answer for it. Change comes from a lot of different places — from bigger organizations, government regulations, insurance companies, and pharmaceutical companies. It is going to take a whole organization to look at it and try to do something about it, and I would say that for the most part, organizations are in the infancy of looking into this. Most programs start with a lot of personal resilience, taking better care of yourself, and that kind of approach.

HEH: The report also emphasizes the concept of an "intentional" culture.

Martin: What underlies all of this work is, how do we work on the culture within the organization? If you show up at work and you love what you are doing, and you have joy, meaning, and purpose, you are going to be able to take care of patients. You are going to have better patient outcomes and experiences. One of the things that is talked about in the report is, how do you be intentional about the fact that everything we do has something to do with a person's burnout and resilience? How do we take that into account in every decision we make for change management?

Some of the organizations are doing that and trying to get their hands around this. Then, there is the whole idea of the personal resilience work that many organizations are doing, including us. How do you show up and be your best person at work? How do you be intentional in incorporating a mindful practice into what you do every day, incorporating gratitude into the things you see every day, being present in the situation that you are in, instead of thinking about the 42 other things that you have to do? It really is both an organizational intent and a personal intent that go into this.

> "THERE'S A LOT OF THINGS WE MEASURE THAT MATTER, BUT A LOT OF IT DOESN'T MATTER. WE ARE JUST MEASURING IT BECAUSE WE CAN MEASURE IT."

HEH: You note that taking into account the effect of change on healthcare workers has not always been part of the equation.

Martin: For years, what we have done is take into account what change will do to finances and the bottom line. That is built into what we do, but we haven't been very good as healthcare systems in taking into account what this is going to mean for the people who are doing this every day. How do we make sure that they still find joy in what they do every day?

HEH: The report makes the point that the healthcare system cannot afford to ignore this problem, particularly in terms of the cost of burnout physicians that translates to high staff turnover.

Martin: There are a lot of different things that play into it, and physician turnover is the big one. [There is a recently published] calculator[2] that you can use as an organization by putting in your known physician burnout rate. Many of us do surveys to find that out. You put in your physician turnover rate and they have built-in metrics for what it typically costs for physician burnout and turnover. You can find out what the bottom-line effect is on your organization.

It costs about $500,000 to recruit and replace a physician. And that includes all costs of moving expenses, signing bonus, and that kind of stuff. I believe that is about $88,000, and then the rest of it is getting a physician into a community and [establishing their practice]. Because the physicians that left were really busy and they were covering that cost. New physicians typically take one to two years before they are billing enough for their organizations to cover their costs.

They have also looked at nursing, and nursing is about $50,000 per nurse that we replace due to turnover. So those are important things to build the business case.

The other thing is that about 400 physicians per year commit suicide. That is a lot of patients who don't have their doctor the next day. In terms of taking care of your patients and your employees, that is pretty huge. If you are losing 400 physicians in a year, that's a 747 going down.

HEH: You note that physician

culture is more autonomous and less interconnected than nurses, which may lead to increased isolation.

Martin: We have created a physicians' burnout hotline. It is actually a physician-to-physician conversation. I am the person at the other end of that hotline and when I get calls from physicians — by the time they pick up the phone and call, they are really burned out. It's up to me to have a conversation with them about our resources and why they should use the employee assistance program, and a whole host of [programs] within the organization that we can get them into. Because of our training, physicians tend to be lone-wolf type people, and so when they do reach out they are pretty far along. We need to have somebody who is willing take us under their wing a little bit and kind of show us the way. ■

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CDC Recommends Antiviral Treatments Due to Flu Vaccine Mismatch

The predominant circulating influenza virus this season is a poor match with the vaccine, meaning that antiviral drug treatments may be critical for the protection of high-risk patients.

The CDC issued a public health notice that influenza A (H3N2) is the predominant circulating virus.[1] Researchers and public health officials have previously reported that the vaccine strain of H3N2 is a poor match, with some efficacy estimates as low as 10%.[2]

The CDC expects vaccine efficacy to be similar to last season's 32% for H3N2, but that still leaves many people vulnerable.

"In the past, A(H3N2) virus-predominant influenza seasons have been associated with more hospitalizations and deaths in persons aged 65 years and older and young children compared to other age groups," the CDC reported. "For this reason, in addition to influenza vaccination for prevention of influenza, the use of antiviral medications for treatment of influenza becomes even more important than usual. The neuraminidase inhibitor (NAI) antiviral medications are most effective in treating influenza and reducing complications when treatment is started early. Evidence from previous influenza seasons suggests that NAI antivirals are underutilized in outpatients and hospitalized patients with influenza who are recommended for treatment."

The CDC recommended that all hospitalized patients and high-risk outpatients with suspected influenza should be treated as soon as possible with an NAI antiviral.

"While antiviral drugs work best when treatment is started within two days of illness onset, clinical benefit has been observed even when treatment is initiated later," the CDC noted. "The CDC recommends antiviral medications for treatment of influenza as an important adjunct to annual influenza vaccination. Treatment with neuraminidase inhibitors has been shown to have clinical and public health benefit in reducing illness and severe outcomes of influenza."

In addition to recommending antiviral treatment for hospitalized patients with flu, the CDC said the following risk groups should be administered antivirals if they exhibit influenza-like illness:

- a patient who has severe, complicated, or progressive illness. This may include outpatients with severe or prolonged progressive symptoms, or who develop complications such as pneumonia but who are not hospitalized;
- children younger than two years and adults aged 65 years and older;
- people with chronic pulmonary problems, including asthma; cardiovascular, renal, hepatic, hematological, and metabolic disorders, or neurologic and neurodevelopment conditions such as stroke, intellectual disability, moderate to severe developmental delay, muscular dystrophy, or spinal cord injury;
- people with immunosuppression, including that caused by medications or by HIV infection;
- women who are pregnant or postpartum (within two weeks after delivery);

• people aged younger than 19 years who are receiving long-term aspirin therapy;

• American Indians/Alaska Natives;

• people with extreme obesity (i.e., body mass index is equal to or greater than 40);

• residents of nursing homes and other chronic care facilities.

A Shot for All Seasons

Against this backdrop, the National Institutes of Health (NIH) is accelerating development of a universal flu vaccine, both to prepare for the next pandemic and prevent the kind of mismatch that has occurred this season. *(For more information, see the story in the January 2018 issue of* HEH*.)*

The NIH recently held a workshop with flu experts to develop new platforms for vaccine production.[3] The idea is to replace the traditional flu vaccine method of incubating the virus in eggs with something like a recombinant DNA technology-based platform that could be used to make a universal vaccine effective against multiple flu strains.'

NIH researchers are trying to develop a vaccine that would confer immunity to all hemagglutinin (HA) subtypes, which could be protective against influenza A without necessarily having to create a new vaccine each year.

"For example, we regularly get H3N2 and H1N1 viruses," says **Anthony Fauci**, MD, director of the NIH National Institute for Allergy and Infectious Diseases. "Those are the two major ones that for the last couple of decades have been prevalent. Yet, we have to change the vaccine almost every year. The reason is there are slight shifts in this subtype. A universal flu vaccine will cover those changes."

The duration of immunity conferred by a universal flu vaccine is one of the unresolved issues at present, but the ultimate goal is to add flu shots to the childhood immunization schedule, Fauci explains.

"There are going to be several iterations of universal flu vaccine," he says. "It is going to be like universal vaccine 1.0, 2.0, 3.0. First, you want to get a vaccine that covers multiple strains. Then we want one that not only covers multiple strains, but has immunity that lasts for several years. The endgame isn't for one year — that's a start. We would like to have a universal flu vaccine that you could give to children when they get the measles vaccine. Like a couple shots — one when you are one year old, and another when you're four to six years old."

"WE HAVE TO CHANGE THE VACCINE ALMOST EVERY YEAR. THE REASON IS THERE ARE SLIGHT SHIFTS IN THIS SUBTYPE. A UNIVERSAL FLU VACCINE WILL COVER THOSE CHANGES."

NIH workshop participants outlined an initial goal of a universal influenza vaccine with 75% efficacy that would provide prolonged protection against influenza A strains, which caused pandemics in 1918, 1957, 1968, and 2009. While researchers hope to achieve a vaccine efficacy greater than 90% eventually, the initial goal of 75% would be beyond the 60% or less immunity conferred in annual flu vaccinations.

Under current methods, it may take up to six months to create a vaccine for an emerging pandemic virus. While the 2009 outbreak was not considered severe by pandemic standards, the fear is that a flu strain will eventually emerge that is both highly virulent and easily transmissible.

The 1918 H1N1 influenza pandemic killed at least 50 million people globally, and possibly twice that. The virus had a striking virulence and emerged before antibiotics were available to treat bacterial co-infections. It is probably most remembered in epidemiological annals for causing an inflammatory immune response, the infamous "cytokine storm" that killed so many young and healthy people. H5N1, aka "bird flu," has caused mortality in the 60% range when it gets into humans, but it has not yet developed the means to transmit effectively from person to person.

A universal vaccine also would be a major public health bulwark against pandemic flu, possibly eliminating the need to rapidly produce a vaccine once it becomes clear that an antigenic shift has occurred in the virus and there will be little existing human immunity.

Though the 2009 virus was not as lethal as some of its pandemic predecessors, it showed how a much more virulent strain of flu could spread rapidly across the globe.

"It was a pandemic by definition because it was a brand-new virus that most of the population — except the very elderly — had never experienced," Fauci says. "It was widespread and occurred throughout

the world, so by definition it was a pandemic. However, in terms of severity it was relatively mild. In terms of epidemiology it was a pandemic, but from a pathogenicity standpoint it was not severe."

A more virulent flu virus in the next pandemic "is entirely possible, which is why we are putting such an effort into developing a universal flu vaccine," he says.

The unintended consequences of developing seasonal flu vaccine in chicken eggs were underscored by the current mismatch with H3N2 A virus.

In essence, the H3N2 vaccine strain mutated while it was being incubated, antigenically drifting away from the necessary match with the wild strain of the virus.

"It mutated at a very critical point in the virus — the point that was needed for vaccine [efficacy]," Fauci says. "Even though you put a matched virus into the eggs, what ultimately came out of the eggs was an accidental mismatch due to the mutation."

There is a cell-based vaccine available that was created without using chicken eggs, and thus would presumably be less susceptible to the vagaries of the 70-year-old egg production method. The CDC does not recommend the cell vaccine over the egg-based vaccine, saying, "while the use of cell-grown reference viruses and cell-based technology may offer the potential for better protection over traditional, egg-based flu vaccines because they result in vaccine viruses that are more similar to flu viruses in circulation, there are no data yet to support this. There is no preferential recommendation for one injectable flu vaccine over another."[4]

While cell-based vaccine is promising technology, the bulk of flu vaccine supply will be produced using eggs for the near future. ■

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Citing Inadequate Staffing, Nurses Sue Detroit Hospital

No breaks over long work shifts alleged

Claiming staffing deficiencies that place healthcare workers and patients at risk, a nursing union has filed a lawsuit against Huron Valley-Sinai Hospital in Detroit.

The hospital refuted the charges in press reports, essentially characterizing the action as a negotiating ploy. A request for comment from the hospital had not been answered as this issue of *Hospital Employee Health* went to press.

The Professional Nurses Association of Huron Valley-Sinai Hospital filed a lawsuit and issued a report[1] outlining the alleged working conditions. *(Text of the lawsuit can be found at: http://bit.ly/2pT5NOi.)*

"As Huron Valley-Sinai Hospital (HVSH) has changed from a stand-alone nonprofit community hospital to just one unit of a giant for-profit healthcare chain, workers and patients have felt the impact of corporate cost-cutting policies," according to the nursing group's report. "With an increased focus on generating revenues, many nursing and support staff positions are not posted and go unfilled, creating tremendous pressure on HVSH workers to do more with less. Nurses at Huron Valley-Sinai Hospital are in active contract negotiations with management trying to address the working conditions and staffing concerns reflected in this report."

Among the nurses' complaints and allegations are the following:

- patient falls in medical/surgical and intensive care units;
- late medications;
- failure to deliver basic hygiene and human care;
- patients left unattended during critical situations;
- more than 150 instances of nurses going without breaks or lunches during shifts that last as long as 12 hours;

• nurses assigned without proper training;

• management condoning or ignoring unsafe practices;

• equipment failure.

"Nurses at HVSH voted to form their union in 2016 in order to improve their working conditions," the report states. "They are currently negotiating their first contract. Securing safe and effective nurse-to-patient staffing levels is their highest bargaining priority. The Professional Nurses Association of Huron Valley-Sinai Hospital welcomes community support to achieve their goals." ■

REFERENCE

1. Professional Nurses Association. Unable to Provide Safe Patient Care: The Consequences of Short Staffing at Tenet DMC Huron Valley-Sinai Hospital. Nov. 2, 2017. Available at: http://www.insidedmc.org. Accessed Dec. 29, 2017.

Pediatricians Emphasize Employee Health in New Guidelines

Mandated flu shots, 'presenteeism,' needle safety, and TB testing

Employee health is heavily emphasized in new infection control guidelines for ambulatory settings by the American Academy of Pediatrics (AAP).[1]

In the first update of these guidelines in a decade, the AAP emphasizes the importance of mandatory flu shots, other vaccinations as indicated, staff training to prevent transmission, and heightened awareness of the risks of presenteeism.

"Not only the AAP, but many other associations are recommending mandatory, free flu immunization for healthcare employees," says lead author **Mobeen Rathore**, MD, of the University of Florida Center for AIDS/HIV Research, Education and Service in Jacksonville.

The conditions under which a mandatory flu vaccine would be enacted are left to the local facilities.

"I think that it is important to leave the details to each individual facility because conditions vary from practice to practice,/" Rathore says. "While we make a strong recommendation, we do not necessarily advise facilities how they should implement the policy. There are unique challenges and needs around the country."

Citing studies that show healthcare workers will report for duty when sick, the AAP discouraged presenteeism and said non-punitive but formal policies should make it clear to stay home when ill.

"We are realizing more and more that sick staff are coming to work," Rathore says. "They present the potential to transmit that infection, not only to patients but to other staff members. We are encouraging those who are sick to not come to work."

Other AAP employee health recommendations include the following:

• Screening for TB should be performed before employment to ensure that people with a tuberculous infection are detected early and, if necessary, treated. Screening may have to be repeated in certain situations in which the healthcare worker has been exposed to TB.

• In addition to annual influenza vaccination, healthcare workers should be immunized for pertussis, measles, mumps, rubella, varicella, and hepatitis B.

• All healthcare workers should perform hand hygiene using an alcohol-based hand rub or handwashing with soap and water before and after patient contact, or contact with the patient's immediate environment.

• Needles and sharps should be handled with great care. Safer needle disposal units that are impermeable and puncture-proof should be available next to the areas used for injection or venipuncture. The containers should be used only until filled to three-quarters of capacity and should be kept out of reach of young children. Procedures should be established for the removal and incineration or sterilization of contents.

• Needle devices with safety features should be evaluated periodically with input from staff members who use needles, and the use of devices that are likely to improve safety should be implemented. ■

REFERENCE

1. Rathore MH, Jackson MA. AAP Committee on Infectious Diseases. Infection Prevention and Control in Pediatric Ambulatory Settings. *Pediatrics* 2017;140(5):e20172857. Available at: http://bit.ly/2C7erOM. Accessed Dec. 29, 2017.

HOSPITAL EMPLOYEE HEALTH

CE INSTRUCTIONS

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

1. Read and study the activity, using the provided references for further research.
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CE QUESTIONS

1. **The California violence prevention law requires healthcare employers to perform an environmental risk assessment of the facility, looking for things such as:**

   a. poorly lit areas.
   b. isolated work stations.
   c. lack of escape routes.
   d. All of the above

2. **An exemption to the California violence prevention law reporting requirements is that incidents that do not result in injury need not be documented.**

   a. True
   b. False

3. **According to Margo Halm, RN, PhD, which of the following traits in healthcare workers can help de-escalate a potentially violent situation?**

   a. Make sure the visitor or patient knows there are consequences to acting out.
   b. Summon security immediately if you feel disrespected.
   c. Self-awareness; confident but not arrogant.
   d. Firm tone of voice to convey authority.

4. **Corey Martin, MD, said approximately how many physicians commit suicide each year?**

   a. 250
   b. 100
   c. 500
   d. 400

CE 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.