



Hospital Employee Health[®]

THE PRACTICAL GUIDE TO KEEPING HEALTH CARE WORKERS HEALTHY



IN THIS ISSUE

- **Double shot:** Experts urge hospitals to start seasonal flu vaccines early and prepare for novel H1N1 vaccination . . . cover
- **Follow the leader:** Joint Commission monograph highlights importance of leadership support for flu shots 99
- **Do the ONE thing:** Catchy slogans help hospitals market their flu vaccines and boost rates 101
- **Lower precautions?** CDC advisory committee votes to lower H1N1 precautions . . 102
- **Reuse or dispose?** Respirator reuse complaint against CA hospital raises questions . . 103
- **Stress relief:** HHS provides guidance on easing the psychosocial trauma of a severe pandemic 105
- **Inserted in this issue:**
— *The Joint Commission Update for Infection Control*

Financial Disclosure:
Editor Michele Marill, Associate Publisher Coles McKagen, Consulting Editor MaryAnn Gruden, and Managing Editor Gary Evans report no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies having ties to this field of study.

SEPTEMBER 2009
VOL. 28, NO. 9 • (pages 97-108)

Employee health professionals brace for waves of flu, long vaccine campaigns

Novel H1N1 vaccine expected by mid-October

Be prepared for a double strike of influenza this year — and a prolonged season of vaccination to combat it. Flu experts are bracing for a new wave of the novel H1N1 influenza A strain that could strike early in the fall, as well as the usual pattern of seasonal influenza in the winter. That could mean a surge of patients while hospitals cope with greater absenteeism among health care staff. At a national H1N1 summit, U.S. Secretary of Health and Human Services **Kathleen Sebelius** called on states and health care providers to be ready to vaccinate as a key method to prevent transmission.

“We absolutely can’t afford to be unprepared. If we look at the public health history, vaccination programs are one of the great public health success stories,” she said.

Supplies of seasonal influenza vaccine will be abundant this year, with an estimated 199 million doses by the end of October. The first doses, about 51 million, are slated for delivery by the end of August. Hospitals should immediately begin vaccinating when they receive their first doses and continue vaccinating throughout the fall and winter, says **Anthony Fiore, MD, MPH**, medical epidemiologist and infectious disease specialist with the Centers for Disease Control and Prevention influenza division.

“For the past several years, we’ve advocated extending the time when people should get vaccinated [both earlier and later],” he reports.

Special issue: Bracing for H1N1 onslaught

This fall and winter, the novel strain H1N1 is expected to reemerge and spread widely in communities throughout America. With this issue, *Hospital Employee Health* provides up-to-date information on vaccination, respirator reuse or stockpiling, and the psychosocial needs of health care workers.

NOW AVAILABLE ON-LINE! www.ahcmedia.com
For more information, contact (800) 688-2421.

Testing of the H1N1 vaccine continued throughout the summer, and by mid-October, tens of millions of doses may be available, Fiore says. Vaccine experts still were unsure about whether adjuvants could be used to extend the vaccine supply or improve its effectiveness, and problems with vaccine yield could cause production delays.

Health care workers will be among the priority groups receiving the vaccine, which may require two doses. In fact, the World Health Organization

announced that health care workers should be the first to receive the vaccine because they are critical to maintaining functioning health systems.

Set priorities for vaccination

With an urgency to vaccinate health care workers against both seasonal and pandemic influenza, employee health professionals face unique logistical challenges. It's also unclear how health care workers will view flu vaccination this season. Will they want to be vaccinated against the novel strain because of the media coverage of the pandemic? Will they erroneously think that the seasonal vaccine is less important?

Hospitals were gearing up their flu vaccine marketing campaigns with extra education on H1N1. (See related article on p. 99.) The Joint Commission, the accrediting body based in Oakbrook Terrace, IL, issued a monograph to provide detailed strategies and a review of research for health care facilities in an effort to boost seasonal influenza vaccination rates. (See article on p. 101.)

"[Seasonal influenza] threatens to get lost with all the attention to H1N1," says **William Schaffner**, MD, an infectious disease expert and professor and chairman of the Department of Preventive Medicine at Vanderbilt University in Nashville, TN. Employee health professionals should shift their campaigns as early as possible, he says. "You want to clear the decks because you're going to have to do it over again with H1N1, in all likelihood."

CDC is not likely to issue detailed recommendations on which health care workers involved in direct patient care should receive the vaccine first — such as those in the emergency department or intensive care unit. In 2004, when there was a shortage of seasonal vaccine, "people were so concerned about the needs of others who might need to vaccine more to be at the front of the line that no one went to the front of the line," says Fiore, and vaccine was actually unused.

Yet individual hospitals need to plan for novel H1N1 vaccination with subpriorities, advises Schaffner. "If we only get 400 doses at Vanderbilt — and we have 5,000 employees — who are those 400 people going to be? You would do well to think in that kind of staged fashion," he says.

Another important consideration: Health care workers who are pregnant or have other underlying risk factors, such as asthma or diabetes.

Severe disease and fatalities have occurred among pregnant women with the novel H1N1, **Anne Schuchat**, MD, CDC's director of the

Hospital Employee Health® (ISSN 0744-6470), including **The Joint Commission Update for Infection Control**, is published monthly by AHC Media LLC, 3525 Piedmont Road, Building Six, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodicals Postage Paid at Atlanta, GA 30304 and at additional mailing offices.

POSTMASTER: Send address changes to **Hospital Employee Health**®, P.O. Box 740059, Atlanta, GA 30374.

Subscriber Information

Customer Service: (800) 688-2421 or fax (800) 284-3291. **Hours of operation:** 8:30 a.m.-6 p.m. Monday-Thursday, 8:30 a.m.-4:30 p.m. Friday EST. **E-mail:** customerservice@ahcmedia.com. **Web site:** www.ahcmedia.com.

Subscription rates: U.S.A., one year (12 issues), \$469. Add \$17.95 for shipping & handling. Outside U.S., add \$30 per year, total pre-paid in U.S. funds. Discounts are available for group subscriptions, multiple copies, site-licenses or electronic distribution. For pricing information, call Tria Kreutzer at 404-262-5482. Missing issues will be fulfilled by customer service free of charge when contacted within 1 month of the missing issue date. **Back issues**, when available, are \$78 each. (GST registration number R128870672.)

Photocopying: No part of this newsletter may be reproduced in any form or incorporated into any information retrieval system without the written permission of the copyright owner. For reprint permission, please contact AHC Media LLC. Address: P.O. Box 740056, Atlanta, GA 30374. Telephone: (800) 688-2421.

AHC Media LLC is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

This activity has been approved for 15 nursing contact hours using a 60-minute contact hour.

Provider approved by the California Board of Registered Nursing, Provider #14749, for 15 Contact Hours.

This activity is intended for employee health nurse managers. It is in effect for 36 months from the date of publication.

Opinions expressed are not necessarily those of this publication. Mention of products or services does not constitute endorsement. Clinical, legal, tax, and other comments are offered for general guidance only; professional counsel should be sought for specific situations.

Editor: **Michele Marill**, (404) 636-6021, (marill@mindspring.com).

Associate Publisher: **Coles McKagen**, (404) 262-5420, (coles.mckagen@ahcmedia.com).

Managing Editor: **Gary Evans**, (706) 310-1727, (gary.evans@ahcmedia.com).

Director of Marketing: **Schandale Kornegay**.

Senior Production Editor: **Nancy McCreary**.

Copyright © 2009 by AHC Media LLC. **Hospital Employee Health**® is a trademark of AHC Media LLC. The trademark **Hospital Employee Health**® is used herein under license. All rights reserved.

Editorial Questions

For questions or comments call **Michele Marill** at (404) 636-6021.



National Center for Immunization and Respiratory Diseases, told reporters at a press briefing. CDC will be urging pregnant women to get both seasonal and novel H1N1 vaccines. "We're urging women who are pregnant who develop fever or respiratory symptoms to seek care promptly. We think that early antiviral medicines for these women are really important," she said.

Employee health professionals may want to make sure that employees who are at greater risk of complications from influenza get the pneumococcal disease, a one-time dose for people younger than 65. Pneumococcal vaccine is recommended for smokers and anyone with asthma, heart or lung disease, or people with lowered immunity, such as those with cancer, organ transplants, kidney failure, or HIV/AIDS.

CDC decided against recommending the pneumococcal vaccine for all health care workers. "The epidemiology of the pandemic right now does not suggest that health care workers are at any increased risk of pneumococcal infection, and there's not any evidence that among those health care workers who have developed H1N1 that they have an increased risk of bacterial complications," says **Matthew Moore**, MD, MPH, medical epidemiologist with CDC's Division of Bacterial Diseases.

Flu is unpredictable

One thing is clear about the influenza virus: It is unpredictable. That means employee health professionals must remain flexible in their planning.

"There's a one-hundredfold difference in documented infections in different states. What one community experiences is not necessarily what another community, even nearby, is experiencing," CDC director **Thomas Frieden**, MD, MPH, told the H1N1 summit.

In the Southern Hemisphere, H1N1 has spread alongside seasonal influenza, and in the United States, transmission of H1N1 continued throughout the summer. As of late July, there was no evidence that the seasonal and novel strains had blended or that the novel H1N1 had mutated significantly. So far, it remains susceptible to Tamiflu and Relenza, the major antiviral medications.

"H1N1 is uncertain. It's going to remain uncertain until we have more information about the disease and vaccine," cautions **L.J. Tan**, MS, PhD, director of Medicine and Public Health for the American Medical Association in Chicago. "Don't be immobilized by the uncertainty around the

pandemic such that you don't execute the seasonal plan."

It's also still possible that the novel H1N1 could become a more virulent strain, flu experts cautioned. Researchers from the University of Wisconsin-Madison and Japan found that the novel H1N1 caused more lung damage and replicated more efficiently in the trachea and lower respiratory tract than does seasonal influenza in animal tests. The researchers tested H1N1 and seasonal strains in macaques, mice, miniature pigs, and ferrets. It's not clear how well animal models predict disease patterns in humans.¹

The researchers also found that the virus remains susceptible to the common antiviral medications, Tamiflu and Relenza.

Meanwhile, flu experts say the virus has spread more quickly than previous pandemics. "We have seen this virus reach nearly every country in a matter of weeks and months rather than years," Schuchat said.

"We don't know the extent of the challenges that we'll face in the weeks and months ahead," she said. "We do know that there's a lot we all can do to be as ready as possible to face those challenges."

(Editor's note: Up-to-date information on influenza vaccine availability can be found through the Influenza Vaccine Availability Tracking System at www.preventinfluenza.org/ivats/.)

Reference

1. Itoh Y, Shinya K, Kiso M, et al. In vitro and in vivo characterization of new swine-origin H1N1 influenza viruses. *Nature*. Online publication on July 13, 2009. Accessed on July 21, 2009; www.nature.com/nature/journal/vnfv/ncurrent/abs/nature08260. ■

Leadership support boosts flu vaccination

Joint Commission shares flu shot strategies

Fewer than half of health care workers receive their annual influenza immunization, according to federal surveys, despite a growing call for flu shots to protect patients as well as employees. Each year, hospitals gear up for annual flu campaigns but find they can spur little improvement in vaccination rates.

Employee health professionals now have a new

tool in their arsenal. The Joint Commission, an Oakbrook Terrace, IL-based accrediting body, has published a lengthy monograph detailing the most recent research about influenza transmission in health care facilities and flu vaccination. It also provides a comprehensive review of effective strategies to improve vaccination rates. The Joint Commission's Infection Control Standard requires hospitals to provide flu shots and influenza education to employees and licensed independent practitioners, and to track vaccination rates and establish an improvement program.

"There is truly no one strategy alone [that works]," says **Linda Kusek**, RN, BSN, MPH, CIC, associate project director in the Joint Commission's Division of Quality Measurement and Research and primary author of the report. "With the involvement and support of hospital leadership, organizations should look at their own culture, the educational needs of staff, and the resources available to determine which strategies to employ and how they should be implemented."

However, successful hospitals do appear to share one trait, she says. They all have strong, visible support from top leadership.

"No matter what strategies are involved, it's very important to have the buy-in and support from the organization's leadership," Kusek says. "Many organizations make this part of their patient safety culture, policies, and statements. Some organizations have board members involved, making it an organizational goal. When that happens, I think it sets the stage for the organization to be successful."

The monograph presents information from published articles that favor or oppose mandatory vaccination, but it does not take a position on it.

Here are some other issues discussed in the monograph:

- **Carefully consider how you define "health care personnel" in calculating vaccination rates.** Most hospitals include physicians; some include volunteers and medical students. "This is a particularly important concept to keep in mind when comparing influenza rates over time within a health care organization (that is, were groups of HCP added or removed from an organization's definition?) and between organizations (that is, are the same groups of HCP included in each organization's definition?)," the monograph states.

- **Health care workers need to understand that they can shed virus even if they don't have symptoms.** "I never get the flu" is one common

reason health care workers offer when asked why they didn't get the flu vaccine. But as many as half of influenza infections can be asymptomatic, according to research cited in the monograph. "It's a very serious infection that they can transmit to their patients even if they have no signs or symptoms," says Kusek.

- **Reasons for failing to get the vaccine vary by locale and demographics.** This is another reason why a one-size-fits-all strategy doesn't work. It is important for hospitals to determine the particular reasons their health care workers decline the vaccine, the monograph suggests. At one hospital, employees may be more likely to decline the vaccine due to concerns about adverse reactions, while at another, employees may question the effectiveness of the vaccine. Employee health professionals can then tailor their educational message, says Kusek. Also, different employee groups may respond differently to the vaccination campaign. For example, studies have found lower vaccination rates among health care workers younger than 50.

- **Multifaceted flu vaccination campaigns are most successful.** No single strategy is as effective as a combination of strategies. Those could include letters from hospital leadership or other visible signs of leadership support; convenient access to vaccines, such as using mobile carts or peer vaccinators and use of declination statements. A mandatory program such as the one at Virginia Mason Medical Center in Seattle, which requires the flu shots as a condition of employment for most employees, can attain vaccination rates as high as 99%. But even Virginia Mason launches its annual campaign with a marketing blitz, including a party and small giveaways.

- **Convenience is an important factor for health care workers.** Every year, a portion of health care workers fails to get the flu vaccine simply because they didn't get around to it. "Whatever approaches you use to make the vaccine more accessible, offer it as many times as possible and at varying times over all shifts, rather than once or a small number of times, to help reach the most staff," the monograph advises.

[Editor's note: The Joint Commission flu report is available at: http://www.jointcommission.org/PatientSafety/InfectionControl/flu_monograph.htm.

In addition, The Joint Commission has issued another Flu Vaccination Challenge, asking hospitals to register in the national initiative. Hospitals with high rates of vaccination will receive gold, silver, or bronze designations. More information is available at www.jcrinc.org.] ■

Put the right spin on flu vaccination

Snappy campaigns help raise rates for flu shots

Every year, the basic message is the same: Get your flu shot. But hospitals around the country have found innovative ways to market that message — and get the attention of health care workers. Here are a few campaigns highlighted by the Joint Commission in its recent monograph on influenza vaccination.

• **Have you done the ONE thing?** “Every year, to generate enthusiasm, we try to think of some catchy title to start the campaign,” says **Kelly Hefti**, MSN, RN, CNP, COHN-S, manager of health and safety for the Sanford Medical Center in Sioux Falls, SD. “‘The one thing’ kept popping out [as a theme]. If we could just get [health care workers] to do this one thing, we know we could prevent 36,000 illnesses [nationally from the flu].”

Educational material asked employees to do “the ONE thing” and explained why it would make a difference. Everyone who received a flu shot got a sticker that proclaimed, “I did the ONE thing.” Flu vaccinators wore T-shirts that said, “Have you done the ONE thing? Get your flu vaccination.”

“It definitely generated dialogue among co-workers,” says Hefti.

The medical center already had reached a relatively high level of immunization — 73%. The campaign helped rally employees to get their shots, but it didn’t affect those who typically declined to be vaccinated. The rate of immunization remained steady.

This year, Sanford Medical Center is reaching for the 80% mark — the level of vaccination coverage that is considered to provide “herd” immunity. The new slogan: “Join the herd.” Vaccinators will sport white T-shirts with black spots.

• **Red Dot Campaign:** At State University of New York (SUNY) Upstate Medical University in Syracuse, NY, it was very apparent who had received the flu vaccine and who had not. Vaccinated employees received a simple “red dot” sticker to wear on their identification badges.

That simple strategy caused quite a stir. Employees who received their vaccines before the Red Dot Campaign began asked to have one. Employees who chose not to have the vaccine fretted about the visible absence of the dot.

“It’s revealing they didn’t do something they

should have done, and they were not happy with that — which was exactly what we had intended,” says **K. Bruce Simmons**, MD, director of employee/student health.

Simmons credits the Red Dot Campaign with helping to boost the hospital from a 42% vaccination rate to 58% — close to the hospital’s goal of 60%.

This year, the hospital plans to use a similar campaign. Vaccination rates may also be boosted by concern over the novel H1N1, which continued to circulate in New York state during the summer.

• **Baby, Be Wise — Immunize:** *It starts with me and you, our fight against the flu. Don’t we gotta be there when others need us? . . . It’s time for each of us to step up and make a difference.*

With a doo-wop, lab technicians, food service workers, nurses, doctors, and other employees throughout the hospital were singing and dancing to the catchy tune. But the message was a serious one, meant to counter the common reasons that health care workers choose not to get the flu vaccine.

The Hospital of the University of Pennsylvania in Philadelphia created the five-minute video with the creative assistance of Ryan A. Leonard, a UPenn senior and hospital volunteer. PennYo, a Chinese a cappella group at the university, sang the song; various employees lip-synced to it in the video.

“It definitely rallied the troops,” says **Mel Kearney**, RN, BSN, a staff nurse in occupational medicine who coordinated the video project. “I think it helped to break down barriers. We’re sharing information in a fun way.”

UPenn played the video on the hospital’s internal web site and on a big screen at the flu “fair,” a carnival-like event that launched the flu vaccine campaign. The video is available on the video-sharing site, YouTube (www.youtube.com/watch?v=ruGgZbAVnko). A story on the video was featured on the front page of the *Philadelphia Inquirer*.

“I think it was really a heart-warming production and people were thrilled by it,” says **Amy Behrman**, MD, medical director of occupational medicine. Beyond entertainment, the video also provided some response to common concerns, such as the belief that the flu vaccine could make you sick. “It did explicitly answer questions that were raised on our declination forms the prior year.”

As the flu vaccine campaign launched, the hospital’s nursing leadership and physicians teamed up with a joint position paper strongly urging

employees to receive their flu vaccines. The efforts paid off; the vaccination rate of employees with direct patient contact rose by 16% to 57%.

"We had many people comment that this was the first time they had gotten vaccinated, that they loved the video and they felt reassured by it," she says.

• **Coughs and sneezes spread diseases:** At Community Health Care Inc., an ambulatory care provider in Davenport, IA, creating the flu vaccine campaign was truly a joint effort. Employees submitted suggestions for a slogan, and then voted on their favorites at the company picnic. The two finalists received \$25 gift certificates to a local grocery store and the winner received a \$50 check.

The contest immediately brought attention to the new slogan: Coughs and sneezes spread diseases.

Meanwhile, Community Health surveyed employees using the online tool Survey Monkey to find out why they got the annual vaccine — or

why they didn't. "What we found was surprising," says **Marie Wisely**, MBA, CPHQ, director of quality. "We always geared our education toward protecting the patient. That was No. 3 on the list. Folks said they took the vaccine because they wanted to protect themselves and their family members and they didn't want to use their precious time off if they were sick." They also didn't want to place greater pressure on their co-workers if they were out sick, she says.

Community Health used that information in a PowerPoint presentation to target the vaccine education. The educator also provided a question-and-answer period.

The outpatient system also created a friendly competition with cross-disciplinary teams. Any team that attained 90% vaccination could wear jeans for a two-week period in January.

The result: a 94% vaccination rate through a voluntary campaign. ■

HICPAC favors switch to surgical masks for H1N1

CDC director calls for IOM review before deciding

An advisory panel is recommending less stringent infection control precautions for novel H1N1, but the move is just one step in the Centers for Disease Control and Prevention examination of the issue.

The Healthcare Infection Control Practices Advisory Committee voted unanimously in July to recommend health care workers wear surgical masks when caring for patients with novel H1N1, rather than fit-tested N95 respirators, as the current guidelines state. CDC director **Thomas Frieden**, MD, MPH, also planned to meet with representatives of labor unions. He requested an Institute of Medicine expert panel review the scientific research and prepare a report by Sept. 1. Frieden plans to make a decision on the guidance by Oct. 1.

The HICPAC position states that "at a minimum," health care personnel should adhere to standard and droplet precautions for seven days after the onset of a patient's symptoms. An N95 respirator or higher level of respiratory protection should be used with procedures likely to produce aerosols, including bronchoscopy, cardiac pulmonary resuscitation, open airway suctioning, and sputum induction.

Yet decisions on the level of protection also should take into account factors at the hospital, such as the number of patients with novel H1N1 and any evidence of transmission of H1N1 at the facility, said **David Pegues**, MD, director of infectious diseases at the University of California at Los Angeles (UCLA) and head of the HICPAC working group that considered the issue. "A careful risk assessment is needed on an ongoing basis at all facilities to assess the needs of personal protection equipment," he said.

Labor reps resign in protest

Three labor union representatives resigned from the Novel Influenza A (H1N1) Infection Control Working Group, which drafted the HICPAC recommendations. The labor union representatives asserted that the working group did not want to hear from experts in respiratory protection.

"Fortunately, we have a new CDC leader who understands that their [HICPAC's] input is just one part of a much larger forum for discussion," says **Bill Borwegen**, MPH, health and safety director for the Service Employees International Union (SEIU).

Borwegen was pleased that an IOM panel would review the relevant research. "We think we have the science on our side [supporting the use of respirators]," he says. "Countless studies have been done that demonstrate the airborne nature of this H1N1 virus." ■

Reuse of masks sparks labor complaint

OSHA allows reuse in supply shortage

One evening, ICU nurse **Janet Braillard**, RN, returned to work at Sutter Solano Medical Center in Vallejo, CA, after being out with a respiratory illness and discovered a new memo. There was a shortage of N95 respirators, the hospital said, and nurses would need to place their respirators in a plastic bag, keep them in their lockers, and reuse them until they were visibly damaged or soiled.

"I was really shocked. I've been a nurse for 34 years and I've never encountered any kind of restriction like that," says Braillard.

That night, Braillard cared for a patient who was on a ventilator, in isolation, and being tested for the novel H1N1. (The patient eventually became a confirmed case.) She had another patient on a ventilator as well. "I was very sweaty that night being in an enclosed room with a reused mask," she says. Coincidentally, the hospital had shut off the water in the unit for six hours that night as a part of scheduled maintenance.

Eventually, Braillard became frustrated, disposed of her N95, and got a new one. When she returned to work a few days later, she found the same scenario, except additionally, a box of different respirators was available. Although the hospital was scheduling fit-tests, Braillard and some of her colleagues had not yet been fit-tested for the new brand and model of respirator. "It upset me so much," she says of the respirator situation. "I no longer trust that my employer has my best interests or my safety at the forefront."

Braillard and other nurses filed a complaint with the California Division of Occupational Safety and Health (Cal-OSHA), asserting that nurses should not be asked to reuse a product that is made for one-time use and that nurses were asked to wear a different respirator before they had been properly fit-tested.

The case highlights important questions about respirator supply and what to do when an N95 shortage occurs. The hospital contends that it acted properly to conserve respirators and followed federal and state guidelines. Nurses were asked to use one respirator per patient per shift, says **Sy Neilson**, spokesman for Sutter Solano.

The supply issue emerged in mid-June, as

H1N1 continued to spread in the community, he says. "We determined if masks were not reused by our staff, we would have a shortage. We are on allocation [from the distributor]. We have an order, but they only supply us with a certain amount [not the full order]. It doesn't come in on a regular basis."

However, a spokesperson for the National Nurses Organizing Committee/California Nurses Association in Oakland questioned why the hospital had a shortage when others did not. "As far as we're aware, this hasn't been an issue in other facilities," says **Liz Jacobs**, RN, who says the union is surveying nurses at other hospitals. "We're anticipating a virulent flu season with the reemergence of H1N1. We want our nurses to be as prepared as possible with the latest and best technology and policies in place to ensure their protection."

The California Division of Occupational Safety and Health (Cal-OSHA) is currently investigating the complaint and is seeking clarification from the U.S. Occupational Safety and Health Administration (OSHA) on respirator reuse.

Differing guidance on reuse

Can health care workers safely reuse N95 respirators in a supply shortage? Different federal agencies and panels have provided contradictory answers to this question.

OSHA currently says: "Once worn in the presence of an infectious patient, the respirator should be considered potentially contaminated with infectious material, and touching the outside of the device should be avoided. Upon leaving the patient's room, the disposable respirator should be removed and discarded, followed by proper hand hygiene.

"If a sufficient supply of respirators is not available during a pandemic, health care facilities may consider reuse as long as the device has not been obviously soiled or damaged (e.g., creased or torn), and it retains its ability to function properly.

"If disposable respirators need to be reused by an individual user after caring for infectious patients, employers should implement a procedure for safe reuse to prevent contamination through contact with infectious materials on the outside of the respirator" (www.osha.gov/SLTC/pandemic_influenza/pandemic_health).

The National Institute for Occupational Safety and Health (NIOSH), which certifies respirators, is continuing to research the issues surrounding

respirator reuse, such as the potential for re-aerosolization of viral or bacterial particles on the respirator.

“Our position would be that you could wear the respirator from patient to patient or room to room, so long as you kept it on,” says **Roland BerryAnn**, deputy director of NIOSH’s National Personal Protective Technology Laboratory. “If you take it off, you should dispose of it and wash your hands. The recommendation would be not to handle and rehandle the respirator that could have surface contamination.”

Recent research indicates that the likelihood of spreading infectious aerosols from a mask worn in different patient rooms is extremely small, even if the wearer coughs or sneezes, notes BerryAnn.

When an Institute of Medicine Panel considered the issue of reuse, it concluded that “disposable N95 respirators cannot be effectively cleaned or disinfected and should therefore be discarded after each use.” However, the panel went on to advise how an “individual user” should handle a respirator if it needs to be reused:

1. Protect the respirator from external surface contamination when there is a high risk of exposure to influenza (i.e., by placing a medical mask or cleanable face shield over the respirator so as to prevent surface contamination but not compromise the device’s fit).

2. Use and store the respirator in such a way that the physical integrity and efficacy of the respirator will not be altered.

3. Practice appropriate hand hygiene before and after removal of both the respirator and, if necessary and possible, appropriately disinfect the object used to shield it.¹

The Food and Drug Administration regulates surgical masks and N95 respirators as medical devices. The FDA asserts that “Disposable N95 respirators are not intended to be used more than once. They should also never be shared. Their protective capabilities cannot be assured when they are reused either by yourself or another person.”

If you must reuse an N95 respirator, is it advisable to protect the respirator from surface contamination by covering it with a surgical mask? That may have some drawbacks, noted **Deborah Gold**, MPH, CIH, senior safety engineer in the research and standards health unit at Cal-OSHA in Oakland.

“In placing the surgical mask over a respirator, are you going to alter the fit of the respirator? It may contribute to dislodging the respirator [or cause] increased breathing resistance,” she says.

“That will affect the respirator [fit] because the more resistance there is to breathing through the filter, the more likely air is to leak around the seal.

“Certainly one option is to use a face shield because a face shield won’t interfere with the operation of the respirator,” she says.

NIOSH is researching the utility of protecting the surface of a respirator by covering it with a surgical mask, says Berry Ann.

“There is an increase in the breathing resistance because of the extra layer and there is a slight increase in the buildup of CO₂ in the inhaled breath,” he says. “The findings we’ve gotten so far indicate that it’s not really a perceptible difference in performance.”

NIOSH also is testing different potential decontamination methods. One study found that ultraviolet germicidal irradiation, ethylene oxide, and vaporized hydrogen peroxide showed promise as decontamination agents. Microwave oven irradiation melted portions of the respirators, and bleach left a noticeable scent.²

To avoid a shortage, flu experts advise hospitals to stockpile respirators as a part of pandemic influenza planning or to purchase reusable respirators, such as elastomeric or powered air-purifying respirators (PAPRs). **(For more information on stockpiling, see related article, below.)**

References

1. Institute of Medicine. Reusability of facemasks during an influenza pandemic. Washington, DC: National Academies Press; 2006. Available at www.nap.edu/catalog.php?record_id=11637. Accessed on July 23, 2009.

2. Viscusi DJ, Bergman MS, Eimer BC, et al. Evaluation of five decontamination methods for filtering facepiece respirators. *Ann Occup Hyg* 2009; in press. ■

How many masks are needed in a pandemic?

Calculations estimate PPE, other needs

Stockpiling of personal protective equipment is an important component of pandemic planning. But how do you know just how many respirators to stockpile?

Start with some assumptions about your patient surge, the demographics of your patient population, and their likely length of stay, says **Lewis J. Radonovich**, MD, director, Center for Occupational

Safety and Infection Control at the Office of Public Health and Environmental Hazards of the Veterans Health Administration in Gainesville, FL.

FluSurge software from the Centers for Disease Control and Prevention can help hospitals estimate their patient population, based on the virulence and disease incidence of the pandemic. Radonovich and his colleagues in the Veterans Integrated Service Network (VISN) 8 then estimated how many encounters the health care worker would have with a patient per day, which varied based on the occupation of the health care worker. For example, a nurse caring for a patient on a ventilator in the ICU would have 24 encounters with the patient in a day, while a physician would have four encounters with the patient.¹ (The estimates are based on a severe, 1918-like pandemic.)

That model quickly produces a daunting number of respirators. "We basically abandoned the idea that we would buy enough disposable N95 respirators for the staff," says Radonovich, who published the methodology in *Emerging Infectious Diseases* in June. "If you look at any number of projections that were put out about the needs for the whole country or the world in a full-fledged pandemic, it becomes obvious that soon after the pandemic becomes severe, the world runs out of respirators."

The VISN 8 decided to purchase half-face elastomeric respirators, which are reusable, for staff with prolonged exposures, such as physicians, nurses and respiratory technicians. Although elastomeric respirators are more expensive than N95s, the reusable respirators could be cost-effective over time, he notes.

With limited funds, the VISN 8 set priorities for purchases to prepare for a severe pandemic. The top priority, Category A, included personal protective equipment as well as basic life-support items and antiviral medications.

Even completely funding the highest-priority purchases was too expensive, but the VISN 8 made a significant investment in the preparedness items. "We're trying to find a way to make sure every health care worker has enough personal protective equipment and enough supplies to treat anyone who comes to the hospital sick," says Radonovich. (*Editor's note: The CDC software is available at: <http://www.cdc.gov/flu/tools/flusurge/>.)*

Reference

1. Radonovich LJ, Magalian PD, Hollingsworth MK, et al. Stockpiling supplies for the next influenza pandemic [online

report]. *Emerg Infect Dis* [serial on the Internet]. 2009; Available at <http://www.cdc.gov/EID/content/15/6/e1.htm>. Accessed on July 23, 2009. ■

Be aware of HCW psych needs in pandemic

Employees may suffer from stress, trauma in events

The nuts and bolts of pandemic planning involve quantifiable items: Ventilators, respirators, antiviral medications, vaccine doses. But in the midst of drills and stockpiles and vaccine campaigns, don't forget about the psychosocial needs of your frontline employees.

That is the message of guidance from the U.S. Department of Health and Human Services, which encompasses everything from helping employees with child and elder care needs to providing support when employees must make decisions about rationing limited health care resources. (See **checklist, p. 106.**)

"The primary goal was to give a wake-up call for

(Continued on page 107)

Impact of Pandemic Influenza on Health Care Workers

According to guidance from the U.S. Department of Health and Human Services, health care workers may face the following issues:

- Increased risk of exposure to pandemic influenza.
- Constant need to take special precautions to avoid exposure to the pandemic virus.
- Illness and death among patients, as well as among colleagues and family members.
- Stigmatization and discrimination associated with being perceived as a source of contagion.
- Ethical dilemmas, such as conflicts between one's roles as healthcare provider and parent/spouse, or concern about receiving vaccines or antiviral drugs before other people.
- Increased difficulty in performing crucial tasks and functions as the number of severely ill patients increases, the healthcare staff decreases, and medical and infection control resources are depleted.
- Frustration regarding the need/expectation to maintain business as usual.
- Physical isolation associated with use of infection control measures that limit interpersonal contact.

Checklists for Pre-Pandemic and Pandemic Planning

The following items may be included in your psychosocial support for health care workers in a pandemic event:

Interpandemic and Pandemic Alert Periods

- Include psychosocial issues in planning
Incorporate psychosocial support services into emergency preparedness planning for an influenza pandemic.
- Coordinate with business, corporations, and other private sector interests in planning for behavioral health response and consequences.
- Develop plans to prepare and support emergency service responders (e.g., police, fire, hospital emergency department staff, mortuary workers) during and following deployment.
- Prepare for a significant surge of individuals who fear they may be infected, but aren't, who may present at emergency departments or other healthcare locations, or contact health information hotlines.
- Develop a demographic picture of the community (e.g., ethnic, racial, and religious groups; most vulnerable; special needs; language minorities) and plan for how they might be reached in a disaster.
- Identify rest and recuperation sites for responders. These sites can be stocked with healthy snacks and relaxation materials (e.g., music, relaxation tapes, movies), as well as pamphlets or notices about workforce support services.
- Develop confidential telephone support lines to be staffed by behavioral health professionals.
- Use behavioral health expertise to develop public health messages, train staff on the psychological impact of the use of personal protective equipment (PPE), and conduct other relevant activities.
- Identify and access existing resources.
Work with community-based organizations and nongovernmental organizations to determine the types of psychological and social support services and training courses available in their jurisdictions.
- Establish public sector links with private mental health resources such as Red Cross and other national voluntary organizations active in disasters.
- Develop a plan to manage offers of assistance and invited/uninvited volunteers.
Identify gaps, such as culturally competent and multilingual providers, that might affect disaster services.
- Train behavioral health and related professionals in disaster response strategies

- Train behavioral health staff in hospitals, clinics, and related agencies in techniques to help people cope with grief, stress, exhaustion, anger, and fear during an emergency.
- Train nonbehavioral health professionals (e.g., primary care clinicians, safety and security personnel, community leaders, and staff of cultural- and faith-based organizations) in basic psychological support services.
- Establish links to health and medical entities for purposes of assisting in screening potential victims for mental disorders and psychogenic symptomatology, functional impairment, substance abuse, etc.
- Develop resources and materials
- Prepare educational and training materials on psychosocial issues for distribution to workers during an influenza pandemic.

Checklist for Pandemic Period

During the first 4 weeks:

- Meet basic needs such as food, shelter, and clothing.
- Provide basic psychological support (psychological first aid).
- Provide needs assessments.
- Monitor the recovery environment (conducting surveillance).
- Provide outreach and information dissemination.
- Provide technical assistance, consultation, and training.
- Foster resilience, coping, and recovery.
- Provide triage.
- Provide treatment.
- Provide psychological and social support services for employees and their families.
- Address stigmatization issues that might be associated with participation in such services.
- Implement workforce resilience programs.
- Work with communications experts to shape messages that reduce the psychological impact of the pandemic.
- Provide medical, public health, and community partners with educational and training materials.

During subsequent weeks:

- Provide continued outreach, triage, and services.
- Monitor workforce for signs of chronic or severe psychological distress.
- Provide assistance in reintegration for workers who were deployed or isolated from work and family.

Source: HHS Pandemic Influenza Plan, Supplement 11. Workforce Support: Psychosocial Considerations and Information Needs, www.hhs.gov/pandemicflu/plan/sup11.html#apdx2.

the need for psychological and emotional preparedness in the same way you have N95s sitting on a shelf," says **Dori Reissman, MD**, medical and clinical science director for the World Trade Center Health Program at the National Institute for Occupational Safety and Health (NIOSH) in Washington, DC, and author of the guidance (www.hhs.gov/pandemicflu/plan/sup11.html#III.A).

For example, managers need training in the signs and symptoms of stress and how to provide a supportive work environment during a time of crisis, she says. Employee health and employee assistance programs may provide stress management and wellness and recuperation for employees.

Monitor mental health

Employee health services would need to monitor the psychosocial health of employees during a pandemic much as they do other measures of health, the guidance suggests. They may arrange for an area where employees can get some physical exercise and ensure that workers have shifts that allow for sufficient sleep, she says. **(For more information on the possible impact of a pandemic on health care workers, see box on p. 105.)**

The guidance on planning for psychosocial needs of health care workers benefited from lessons learned during the SARS epidemic and the aftermath of Hurricane Katrina, says Reissman. For

example, many hospitals provide some assistance with child care, elder care, or even pet care during an emergency.

"[Planning for psychosocial needs] goes way beyond workplace readiness and into the home environment," says. "We tried to highlight some of the anticipated problems that could come up depending on the severity of a pandemic."

CNE questions

9. Which of the following represents the public health recommendation for influenza vaccination in the 2009-2010 season?
 - A. Wait for the release of novel H1N1 vaccine and vaccinate together with seasonal influenza vaccine.
 - B. Vaccinate employees as early as possible with seasonal influenza vaccine, then again with novel H1N1 vaccine.
 - C. Vaccination against seasonal influenza is not necessary this year.
 - D. Novel H1N1 vaccine will be very restricted, so hospitals should not count on vaccine for HCWs.
10. According to the Joint Commission, what is a key influence in successful health care worker influenza vaccination programs?
 - A. Strong support from hospital leadership.
 - B. Peer pressure from co-workers.
 - C. Information from federal agencies.
 - D. Physician support for vaccination.
11. According to Roland Berry Ann, what would be an acceptable way to reuse N95 respirators?
 - A. Take off the respirator after caring for the patient and keep it in the patient's room.
 - B. Take off the respirator, make sure it is not soiled, and allow another health care worker to wear it.
 - C. Wear the respirator in more than one patient room, but dispose of it after removing it.
 - D. N95 Respirators cannot be reused in any circumstance.
12. According to guidance from the U.S. Department of Health and Human Services, hospitals should prepare to meet the psychosocial needs of employees in a pandemic by:
 - A. providing psychotherapy.
 - B. allowing them to stay home if they are stressed.
 - C. educating managers about the signs and symptoms of stress.
 - D. moving stressed employees to a different unit.

Answer Key: 9. B; 10. A; 11. C; 12. C.

CNE instructions

Nurses participate in this continuing education program by reading the issue, using the provided references for further research, and studying the questions at the end of the issue. Participants should select what they believe to be the correct answers, then refer to the list of correct answers to test their knowledge. To clarify confusion surrounding any questions answered incorrectly, please consult the source material. After completing this semester's activity with the **December** issue, you must complete the evaluation form provided in that issue and return it in the reply envelope provided to receive a credit letter. ■

COMING IN FUTURE MONTHS

■ Preventing falls among HCWs

■ Will CDC alter its H1N1 precautions?

■ Monitoring needle safety exemptions

■ Up-to-date information on novel H1N1

■ Establishing an on-site clinic for employees

Good communication also can allay fears and counter rumors, says Reissman. NIOSH recommends providing updated information about the pandemic locally, nationally, and internationally. Health care workers need human resources information, such as overtime pay, staff rotation, shift coverage, and sick pay. Employees need to be able to detect signs of stress and trauma in patients, and employees who care for large numbers of very sick or dying patients may need support and counseling.

“It’s a two-way communication [that involves] showing [employees] how you have prepared for the contingencies,” says Reissman.

When a pandemic subsides, the psychosocial issues may just begin for some employees. “It’s useful to do a psychosocial debriefing [so] people can have a chance to talk about what the experience was like and to deal with the emotional impact,” says **Eric M. Plakun**, MD, FACP_{psych}, director of admissions and professional relations for The Austen Riggs Center in Stockbridge, MA, and chair of the American Psychiatric Association’s Committee on Psychotherapy by Psychiatrists.

That impact is intensified if the disease causes widespread mortality, similar to the 1918 flu, or if medical resources are limited and staff must decide which patients receive ventilators or antiviral medications. Health care workers can be “vicariously traumatized” by traumatic events, says Plakun. “If we know that’s a risk, then we’ll have in place reasonable kinds of interventions that help people process it and put it in perspective,” he says. ■

CNE objectives

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

- **identify** particular clinical, administrative, or regulatory issues related to the care of hospital employees;
- **describe** how those issues affect health care workers, hospitals, or the health care industry in general;
- **cite** practical solutions to problems associated with the issue, based on overall expert guidelines from the Centers for Disease Control and Prevention, the National Institute for Occupational Safety and Health, the U.S. Occupational Safety and Health Administration, or other authorities, or based on independent recommendations from clinicians at individual institutions. ■

EDITORIAL ADVISORY BOARD

Consulting Editor
MaryAnn Gruden
 MSN, CRNP, NP-C, COHN-S/CM
 President Emeritus
 Association Community Liaison
 Association of Occupational
 Health
 Professionals in Healthcare
 Coordinator
 Employee Health Services
 West Penn Allegheny Health
 System
 Western Pennsylvania Hospital
 Pittsburgh

Kay Ball, RN, PhD, CNOR, FAAN
 Perioperative Consultant/
 Educator, K&D Medical
 Lewis Center, OH

William G. Buchta, MD, MPH
 Medical Director, Employee
 Occupational Health Service
 Mayo Clinic
 Rochester, MN

Cynthia Fine, RN, MSN, CIC
 Infection Control/
 Employee Health
 San Ramon (CA) Regional
 Medical Center

June Fisher, MD
 Director
 Training for Development of
 Innovative Control Technology
 The Trauma Foundation
 San Francisco General Hospital

Guy Fragala, PhD, PE, CSP
 Consultant/
 Health Care Safety
 Environmental Health
 and Engineering
 Newton, MA

Janine Jagger, PhD, MPH
 Director
 International Health Care Worker
 Safety Center
 Becton Dickinson Professor of
 Health Care Worker Safety
 University of Virginia
 Health Sciences Center
 Charlottesville

Gabor Lantos
 MD, PEng, MBA
 President
 Occupational Health
 Management Services
 Toronto

JoAnn Shea
 MSN, ARNP
 Director
 Employee Health & Wellness
 Tampa (FL) General Hospital

Sandra Domeracki Prickitt
 RN, FNP, COHN-S
 Employee Health Coordinator
 Marin General Hospital/Novato
 (CA) Community Hospital
 Executive President, Association
 of Occupational Health
 Professionals in Healthcare
 San Rafael, CA

To reproduce any part of this newsletter for promotional purposes, please contact:

Stephen Vance

Phone: (800) 688-2421, ext. 5511

Fax: (800) 284-3291

Email: stephen.vance@ahcmedia.com

To obtain information and pricing on group discounts, multiple copies, site-licenses, or electronic distribution please contact:

Tria Kreutzer

Phone: (800) 688-2421, ext. 5482

Fax: (800)-284-3291

Email: tria.kreutzer@ahcmedia.com

Address: AHC Media LLC
 3525 Piedmont Road, Bldg. 6, Ste. 400
 Atlanta, GA 30305 USA

To reproduce any part of AHC newsletters for educational purposes, please contact:

The Copyright Clearance Center for permission

Email: info@copyright.com

Website: www.copyright.com

Phone: (978) 750-8400

Fax: (978) 646-8600

Address: Copyright Clearance Center
 222 Rosewood Drive
 Danvers, MA 01923 USA



The Joint Commission Update for Infection Control

News you can use to stay in compliance

Joint Commission urges health care CEOs to lead the fight against drug-resistant infections

2010 deadline looms for patient safety goal on MDROs

The Joint Commission is calling on health care administrators to take the lead in preventing infections with multidrug-resistant organisms (MDROs), reminding them that current patient safety goals require CEOs to take responsibility for implementing programs to prevent these deadly and costly outcomes.

The initiative is outlined in a new report: "What Every Health Care Executive Should Know: The Cost of Antibiotic Resistance," a free, online multimedia toolkit developed by Joint Commission Resources (JCR) for hospital executives. (See editor's note, p. 3.)

MDROs such as methicillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant *Enterococcus*, *Clostridium difficile*, and resistant gram-negative bacteria such as *Pseudomonas aeruginosa* are increasingly common causes of health care-associated infections (HAIs). The threat posed by MDROs becomes more serious every day — not only because of the failure to control known pathogens but also because of the emergence of entirely new strains, which add to the burden of prevention, the report states.

"The problem of antimicrobial resistance and MDROs is increasing in spite of tremendous efforts to make reductions," said **Barbara Soule**, RN, MPA, CIC, practice leader for infection control services at JCR. "Although there have been some notable exceptions, we believe patients in hospitals are deeply imperiled. Leaders who effect the changing strategic direction for clinical care and patient safety are not always aware of the full magnitude of the problem."

Although some patients enter the hospital

already colonized with MDROs, the majority of patients who acquire MDROs likely acquire them through contact with the health care system. Acquisition of an MDRO generally occurs without the knowledge of the patient or clinicians, but a sizeable proportion of colonized patients go on to develop overt infection that can be associated with an array of poor outcomes that include death, the JCR report warns.

"We created this toolkit as a call to action to health care executives, [urging them] to lead the charge to improve patient safety and minimize the costs related to MDROs," Soule said at a recent conference call announcing the toolkit. "At every point in the toolkit, the leader's role is emphasized. The toolkit also is designed to provide leaders with tools that they can disseminate for use up and down the hierarchy of the organization."

CEOs carry presence of power

To give but one example from the report, the toolkit outlines strategies for CEOs to improve hand hygiene, a simple act that can prevent MDRO transmission on the transiently colonized hands of health care workers. "The involvement of the hospital chief executive is one of the most important factors in determining whether an organization pursues a path toward continuous quality improvement or slides toward mediocrity," the JCR notes. "Nowhere is this more apparent than in the institutional pursuit of maximizing hand hygiene compliance by health care workers."

As with quality interventions, the CEO carries the power of persuasion in every visit on the

wards. The CEO and other leaders can directly cultivate a culture of safety and quality during leadership rounds by washing their hands when coming onto the unit or before entering any patient room, the JCR notes. Even if they are not expecting direct patient contact, the staff observation of a CEO washing his or her hands as the first action in a clinical area sends a powerful message, the report states. In addition, the leadership team should discuss hand hygiene compliance data with the management and staff of a unit, asking about compliance rates and what obstacles exist for timely and appropriate hand hygiene. As staff express concerns or make suggestions, these should be considered and a response generated after the visit to indicate that leadership is serious about making hand hygiene a priority, the JCR emphasizes.

How many patients are dying?

In the research conducted to create the toolkit, the Joint Commission asked some compelling questions to CEOs. “Fundamentally, the question we asked of executives is how many patients at your institution died last year as a result of infection with an MDRO?” said **Stephen Weber, MD**, a JCR consultant and one of the principal authors of the toolkit. “It’s a question that, frankly, most senior executives should want to be able to answer if they are not already able to.”

While there is an ethical imperative to focus on patient safety, the massive financial impact of MDROs must be a critical part of CEO engagement, emphasized Weber, medical director of infection control and clinical quality at the University of Chicago Medical Center. “Ultimately, everyone needs to recognize that each organization has to embrace MDRO control not just because it’s a good clinical idea but because of the financial ramifications,” he said. Indeed, the report underscores that the cost of care can be more than double for patients infected with resistant bugs rather than drug-susceptible ones.

“We would like to sit back and say that just the clinical impact of these pathogens ought to be enough for us to want to seize control,” Weber said during the conference call. “But we live in a fiscal environment — seemingly more and more so every day. When it comes to the economy and health care, it would really be irrational and irresponsible not to address the financial impact of antibiotic resistance. The question that I suspect is on the minds of many CFOs, is: ‘How much

Take-home points for the CEO

A new report by the Joint Commission on multidrug-resistant organisms (MDROs), includes the following “take home” points for health care CEOs and administrators.

1. MDROs are causing a crisis in health care.
2. The problem of MDROs is increasing and shows no signs of improving.
3. MDROs can rapidly spread in hospitals.
4. New antibiotics cannot effectively fight many rapidly spreading MDROs.
5. MDRO is clearly associated with significantly increased hospital costs.
6. The average annual cost of hospital-acquired infections at most institutions is more than four times greater than the amount budgeted for infection control programs.
7. Investing in state-of-the-art, aggressive infection control and antibiotic stewardship programs will usually result in cost savings.
8. The only way to track costs of MDROs, trends in associated costs, and impact and success of interventions is to continuously perform standardized infection surveillance, routinely review the data, and use published costs of hospital-acquired pathogens to measure the financial impact of these pathogens. ■

did it cost our hospital last year to prevent and manage infections caused by MDROs?’ If you can’t answer that question or someone in the organization can’t provide you with that answer you ought to take a close look at [the toolkit].”

Indeed, institutional chief executives are “uniquely positioned” to contribute to the end of the era of antibiotic resistance the JCR report emphasizes. “As an advocate for patients, you are entrusted to protect their interests and safety while they are under your care,” the report concludes. “As a manager and leader, you can demand that those who work under you and in collaboration with you, including physicians, meet the standards of care. As a financial leader, you are uniquely positioned to ensure that those professionals who are committed to improving care at your hospital have the tools to do so, and as an officer of the organization, you have fiduciary responsibility to ensure that the operations of your hospital are as effective and efficient as they can be. In short, the job of controlling and

eradicating MDROs is the job of many, but the responsibility must ultimately be borne by organizational executives like you, rather than any other group or individual.”

“The intensity and sophistication of treatment in your hospital can save patients who previously would have no antibiotic options available to them and therefore little hope for cure,” the report states. “At the same time, these patients are the most vulnerable to the catastrophic effects of an MDRO infection. As the numbers of patients being saved increases, so too will the size of the population vulnerable to these infections. From a clinical perspective, the stakes have never been higher.”

As big as they are, health care costs and patient consequences are not the only forces driving the MDRO issue. The JCR report advises CEOs that patient advocacy groups and the media have become more outspoken and critical in their demand for improvement in the fight against “super bugs.” However until recently, clinical and policy leaders have allowed their calls to go unheeded, and the public increasingly believes that hospitals cannot or will not address this problem, the report notes. That has led to legislative action, with well-intentioned laws targeting MDRO reduction raising fears of unintended consequences.

“Many agencies, publications, guidelines and regulations are calling attention to the MDRO problem,” Soule said. “The Joint Commission has increased emphasis on MDROs in the 2009 patient safety goal for preventing MDROs. What mainly distinguishes this toolkit is that it has been designed primarily for health care leaders and addressing their role in advancing to improve care.” (See related story on Joint Commission MDRO patient safety goal, below right.)

(Editor’s note: To download the toolkit, go to: <http://www.jcrinc.com/MDRO-Toolkit-Overview/Default.aspx>.) ■

Joint Commission takes on decolonization issue

The Joint Commission takes on the controversial issue of decolonization of patients carrying multidrug-resistant organisms (MDROs) in a new report aimed at health care CEOs. With more hospitals adopting active surveillance cultures to detect MDROs, the question of attempting to

decolonize patients has become controversial due to issues of cost and long-term efficacy. There are also concerns that decolonization may increase resistance to mupirocin and other drugs used to eradicate carriage of MDROs.

The Joint Commission’s advice to CEOs on the topic is included in a new report: “What Every Health Care Executive Should Know: The Cost of Antibiotic Resistance,” a free, online multimedia toolkit developed by Joint Commission Resources (JCR) for hospital executives. Key points from the report include:

The decision to introduce an MDRO decolonization program into the hospital or select units must be considered carefully and with direct input from institutional experts in infection prevention and health care epidemiology.

The CEO can play an integral part in this process by establishing an environment that fosters interactions between individuals from different disciplines and by setting an agenda that seeks to maximize adherence to the core transmission prevention activities — hand hygiene, isolation precautions, and environmental hygiene. When these core transmission prevention activities have been maximized, it may be reasonable to consider whether quality can be improved further through an antibiotic or antiseptic decolonization program.

At that point, the increased costs of such a program can be discussed, and potential unintended consequences can be examined. In this situation, the CEO or his or her designated representative can provide critical leadership by doing the following:

- Insisting that the program go through a risk-assessment process
- Establishing a clearly defined set of procedures
- Implementing a system for monitoring appropriate use of decolonization agents and adverse events (e.g., the emergence of high-level mupirocin resistance)
- Ensuring that the program is meeting its stated objectives to reduce the numbers of infections caused by MDROs ■

Joint Commission deadline on MDRO goal is Jan. 1

The Joint Commission’s 2009 patient safety goal regarding multidrug-resistant organisms

(MDROs) includes the following key provisions and deadlines:

- Implement evidence-based practices to prevent health care-associated infections due to multidrug-resistant organisms in acute care hospitals. This requirement applies to, but is not limited to, epidemiologically important organisms such as methicillin-resistant *Staphylococcus aureus* (MRSA), *Clostridium difficile* (CDI), vancomycin-resistant *Enterococci* (VRE), and multiple drug-resistant gram-negative bacteria.

This requirement had a one-year, phase-in period that includes defined expectations for planning, development, and testing (milestones at three, six, and nine months in 2009, with the expectation of full implementation by Jan. 1, 2010.) As of Jan. 1, 2010, hospitals should have addressed the following issues to comply with this goal.

- Based on the a risk assessment, the hospital educates staff and licensed independent practitioners about health care-associated infections, multidrug-resistant organisms, and prevention strategies at hire and annually thereafter. The education provided should recognize the diverse roles of staff and licensed independent practitioners and be consistent with their roles within the hospital.

- The hospital implements a surveillance program for multidrug-resistant organisms based on the risk.

- The hospital measures and monitors multidrug-resistant organism prevention processes and outcomes including the following:

- Multidrug-resistant organism infection rates using evidence-based metrics

- Compliance with evidence-based guidelines or best practices

- Evaluation of the education program provided to staff and licensed independent practitioners

- The hospital provides multidrug-resistant organism surveillance data to key stakeholders, including leaders, licensed independent practitioners, nursing staff, and other clinicians.

- The hospital implements policies and practices aimed at reducing the risk of transmitting multidrug-resistant organisms that meet regulatory requirements and are aligned with evidence-based standards (for example, the Centers for Disease Control and Prevention (CDC) and/or professional organization guidelines).

- When indicated by the risk assessment, the hospital implements a laboratory-based alert

system that identifies new patients with multidrug-resistant organisms. The alert system may be either manual or electronic or a combination of both of these methods. The alert system may use telephones, faxes, pagers, automated and secure electronic alerts, or a combination of these methods. In addition, if indicated by the risk assessment, the hospital implements an alert system that identifies readmitted or transferred multidrug-resistant, organism-positive patients. ■

Joint chief: Quality must be part of health reform

National health care reform must include a quality component — including preventing health care-associated infections — if it is to become an effective and affordable reality, **Mark R. Chassin**, MD, president of The Joint Commission, notes in a commentary posted on the Joint Commission web site (<http://www.jointcommission.org>).

“Eliminating the preventable complications that today harm millions of patients would easily save the many billions of dollars lawmakers are struggling so hard to locate,” Chassin wrote in a commentary that was originally posted in *Modern Healthcare Online* on July 22, 2009. Though warning that it will not be easy to transform quality in health care, he emphasizes that health care reform should target quality because “avoidable injuries from medications, preventable infections, surgical complications that should not occur, and problems resulting from poor communication among health care providers cost hundreds of billions of dollars each year. . . . If you add in the consequences of the inappropriate use of health services (think antibiotics for colds), the possible savings are staggering.”

Americans “don’t understand why doctors and nurses and technicians in hospitals and nursing homes don’t wash their hands every time they should. . . . People are getting impatient with the slow pace of improvement in patient safety. . . . The key to transforming our health care system into one in which patients can feel confident in the safety of the care they receive is to incorporate proven quality improvement methods already in use in other environments [i.e., nuclear power] into the delivery of health care,” Chassin wrote. ■