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JCAHO: Hospitals should track HCW flu vaccines, improve vaccination rates

Proposed standard doesn't include declinations

For many hospitals, encouraging health care workers (HCWs) to receive the flu vaccine is an annual exercise in futility. Yet soon it may be a standard from the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

The Oakbrook Terrace, IL-based Joint Commission has proposed a standard that would require hospitals to provide influenza-related education and free access to influenza vaccine to all staff, students, volunteers, and licensed independent practitioners. Hospitals would be required to document who receives the vaccine, track immunization rates, and implement efforts to improve those rates. (See standard, p. 27.)

"It's one of our many ongoing efforts to try to help our organizations get on top of infection-related issues," says Nancy Kupka, DNSc, MPH, RN, project director, division of standards and survey methods.

An influenza immunization standard could become effective as early as January 2007, she says.

"Reducing the risk of influenza and pneumococcal disease in institutionalized older adults" is JCAHO's National Patient Safety Goal. The Joint Commission also is responding to efforts by the Centers for Disease Control and Prevention (CDC) in Atlanta and several professional societies to improve influenza vaccination rates of health care workers, Kupka says.

Only about 36% of HCWs receive the vaccine each year, according to the CDC's national health interview survey. The CDC advocates educating HCWs on the benefits of the vaccine for themselves and patients as

IN THIS ISSUE

■ **JCAHO's sure shot:** Proposed standard seeks better HCW influenza vaccination rates cover

■ **Almost perfect:** With its controversial mandatory flu vaccination program, Virginia Mason Medical Center achieves 96% coverage. 27

■ **Targeting TB:** CDC's new guidelines add flexibility, reduce screening tests for some hospitals, and call for 'periodic' fit-testing. 28

■ **Latent TB:** Why many TB-infected HCWs don't receive treatment — and what employee health professionals should do about it 31

■ **Facing up to flu:** One infectious disease expert says we should treat H5N1 like SARS 33

Financial Disclosure:

Editor Michele Marill, Managing Editor Jill Robbins, Editorial Group Head Coles McKagen, and Consulting Editor MaryAnn Gruden report no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies having ties to this field of study.

Special Report: Infection Control and Employee Health

This issue of *Hospital Employee Health* highlights important developments in infection control as they relate to employee health, including tuberculosis prevention, influenza vaccination, and pandemic influenza.

MARCH 2006

VOL. 25, NO. 3 • (pages 25-36)

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well as free access to the vaccines.

Yet some contend that those voluntary efforts are not enough. Two CDC advisory panels, infection control professional societies, and quality improvement organizations have called for mandatory declinations, or policies that require health care workers to sign a declination statement if they refuse to be vaccinated. (See *HEH*, December 2005, p. 146.)

The Joint Commission is treading lightly in this area. In its field review, which closed Feb. 12, JCAHO asked, "Should the Joint Commission require mandatory staff immunizations and require organizations to provide access to

immunizations at the work site? How difficult would it be for your organization to collect and analyze data for staff in your organization who declined to be immunized?"

"We try to develop standards using the best science available," says Kupka. "We also have to survey the field to [determine] the barriers for implementation."

JCAHO gauges options

In its background statement, JCAHO explained: "Through this field review, the Joint Commission is interested in learning your thoughts about whether influenza vaccination should be made mandatory among caregivers in various health care settings, what categories of individuals should be vaccinated, whether the option to decline vaccination for legitimate or other reasons should be provided, and whether and how organizations can track declination rates."

Kupka noted that the standard would apply to health care workers who have contact with patients at high risk of complications from influenza; it would not apply to all employees of a hospital.

She acknowledged that some health care organizations might face administrative difficulties in tracking immunizations of staff, volunteers, independent practitioners, and students. "We want something that's complete and achievable," she says.

Setting a reasonable standard

The Joint Commission's proposed standard is reasonable, says **William Buchta**, MD, MPH, medical director of the Employee Occupational Health Service at the Mayo Clinic in Rochester, MN. "Everything they're recommending, we're doing here at Mayo and more."

Buchta was co-author of a position statement from the American College of Occupational and Environmental Medicine opposing mandatory declination statements. Requiring hospitals to collect the statements from employees would be unnecessary and an "administrative mess," he says.

This year, Mayo put its efforts into an "enhanced flu vaccine program" for units that care for high-risk patients, such as intensive care, transplant, and hematology. Employees in those units who have not been vaccinated receive repeated reminders. Some units have achieved 100% compliance, but others hover

Hospital Employee Health® (ISSN 0744-6470), including **JCAHO Update for Infection Control** and **Bioterrorism Watch**, is published monthly by Thomson American Health Consultants, 3525 Piedmont Road, Building Six, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodicals postage paid at Atlanta, GA 30304. 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: ahc.customerservice@thomson.com. Web site: www.ahcpub.com.

Subscription rates: U.S.A., one year (12 issues), \$469. Outside U.S., add \$30 per year, total prepaid in U.S. funds. Discounts are available for multiple subscriptions. For pricing information, Call Steve Vance at (404) 262-5511. 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.)

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

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Joint Commission on Accreditation of Healthcare Organizations

Proposed standards for immunization of staff, students, volunteers, and licensed independent practitioners against influenza

Standard IC X.X. The risk of influenza infection and transmission is reduced throughout the organization.

Rationale

Transmission of influenza from staff, students, volunteers, and licensed independent practitioners to patients, clients, or residents can create serious health care problems, especially among those who are at high risk for complications related to influenza. In addition, influenza among those in the work force, especially during an epidemic, can compromise the ability of an organization to provide care for its patients, clients, or residents. Annual vaccination is an important method for preventing influenza and its severe complications. Only 34%-36% of staff and licensed independent practitioners are immunized against influenza each year (unpublished National Health Interview Survey data, Centers for Disease Control and Prevention; 2003).

Elements of Performance

1. The organization identifies the kinds of patients, clients, or residents that are at high risk for influenza-related complications.
2. The organization identifies staff, students, volunteers, and licensed independent practitioners who work with or near these patients, clients, or residents.
3. The organization establishes an influenza immunization program for these staff, students, volunteers, and licensed independent practitioners.

This program:

4. provides access to influenza immunization at the work site and at no cost to these staff, students, volunteers, and licensed independent practitioners;
5. educates these staff, students, volunteers, and licensed independent practitioners about the value of flu vaccination, nonvaccine-related control, and the epidemiology, transmission, and diagnosis of influenza;
6. maintains records of staff, students, volunteers, and licensed independent practitioners who have received vaccination;
7. monitors influenza vaccination rates among staff, students, volunteers, and licensed independent practitioners who work with patients, clients, or residents that are at high risk for influenza;
8. implements enhancements to improve those rates.

Source: Joint Commission on Accreditation of Healthcare Organizations, Oakbrook Terrace, IL.

closer to 50%, Buchta says. Overall, as of December, Mayo's vaccination rate was 67%.

Greg Poland, MD, director of the Mayo Vaccine Research Group and president of the International Society for Vaccines, has been a strong proponent of mandatory influenza vaccination programs, with the option of declination. He says he's disappointed with the Joint Commission's proposed standard.

"It's an incremental step in the right direction," says Poland. "It continues the model of a voluntary program. There are no instances published of voluntary programs with sustained high rates of influenza immunization."

But by issuing a standard, the Joint Commission is putting hospitals on alert that influenza immunization of health care workers is important. That alone will have significant impact, says Poland. ■

Flu vaccine rate rises to 96% with mandate

Court ruling exempts unionized nurses

The nation's only hospital to mandate influenza vaccination of health care workers achieved a 96% vaccination rate, despite a court ruling that exempted unionized nurses from the "fitness for duty" requirement.

Even the nurses, who had challenged the rule at Virginia Mason Medical Center in Seattle, responded to the call for vaccination. More than 90% received the vaccine, the hospital reported.

"We're really proud of them," says **Joyce Lammert**, MD, PhD, the hospital's deputy chief of medicine. "We think they're upholding their moral and ethical obligation. They really care

about patient safety.”

Under the hospital’s policy, all employees must receive the annual influenza vaccine as a “fitness for duty” condition of employment or receive an accommodation for medical or religious reasons. Those who receive accommodations must take either prophylactic antiviral medication or wear a mask during the active flu season (January through March). Most have chosen to wear a mask, Lammert says.

The Washington State Nurses Association asserted that the hospital could not unilaterally change a condition of employment for the 600 unionized registered nurses. An arbitrator agreed, in a decision that was upheld in January by the U.S. District Court. In accordance with that ruling, the vaccination mandate does not apply to them.

Less than 1% of about 5,000 other employees requested an accommodation, Lammert says. About 10 employees refused to receive the vaccine and were terminated, she says.

“We’ve always had an active immunization program,” she says. “The highest we’ve ever gotten is the low 50 [percentages]. As of today, we’re close to 100%. The proof is in the pudding. It clearly worked.”

‘Save Lives, Immunize’

Virginia Mason’s flu policy originated from the work of the flu team, which included Lammert, managers, physicians, nurses, medical assistants, and customer service representatives. As they discussed preventing transmission to vulnerable patients and improving immunization rates, she recalls that one medical assistant commented, “I can’t believe this isn’t a requirement.”

The hospital leadership supported a strong policy that would make influenza vaccination a condition of employment. But just as the hospital planned to implement the policy, in the 2004-2005 season, a vaccine shortage curtailed the vaccinations.

Last fall, the hospital began with focus groups and a contest for a campaign slogan. The winner: “Save Lives, Immunize.”

The hospital placed a major emphasis on education. A vaccine expert and bioethicist spoke at educational forums. Employees attending programs were eligible for door prizes. The flu team produced a video on the benefits of flu vaccination for both employees and patients. It featured hospital employees and physicians, including a

cardiac thoracic surgeon who had been sidelined for a week by the flu the year before.

“It probably won’t get an Academy Award, but it was a great video that helped humanize what we were trying to do,” Lammert says.

Clearly, some employees were angry about the new requirement, which encompasses independent practitioners (such as physicians), volunteers, and students. The nurses’ union argued that education would be the most effective way to improve vaccination rates.

“We absolutely support nurses, and everyone, getting the flu vaccine,” says **Anne Tan Piazza**, spokeswoman for the Washington State Nurses Association. “What we’re opposed to is having that be a mandatory condition of employment.”

Employees who didn’t want the vaccine were counseled one-on-one, says Lammert. “We worked very, very hard with every single person,” she says.

Elsewhere in the country, some employee health professionals and union leaders criticized the Virginia Mason policy as overly coercive. But the hospital received kudos from **Greg Poland**, MD, director of the Mayo Vaccine Research Group and president of the International Society for Vaccines.

“My prediction is that the time will come when Virginia Mason will get some kind of a gold medal for their thinking about quality of care,” he says. “I think they’re going to get accolades for this.” ■

CDC guidelines may mean fewer TB tests

Update calls for risk-assessment, ‘periodic’ fit-tests

Hospitals will perform fewer tuberculosis screening tests but may provide more training for TB skin test placers and readers under new guidelines released by the Centers for Disease Control and Prevention (CDC) in Atlanta.

The guidelines also more clearly link the CDC’s recommendation for “periodic” fit-testing of respirators to the requirement by the U.S. Occupational Safety and Health Administration (OSHA) requirement for annual fit-testing.

This is the first update of the *Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Healthcare Facilities* since 1994, when the nation was fighting a resurgence of TB. The new document reflects current realities, such as lower

overall rates of TB in the United States but higher rates among subpopulations, such as foreign-born Americans.

"It's our hope that the guidelines are more flexible," says **Michael Iademarco**, MD, MPH, CDC's associate director for science and an author of the guidelines. "You need flexibility to design, for each setting, the proper measures to optimally prevent the transmission of TB."

Risk assessment receives major emphasis in the guidelines, which call for only baseline testing of health care workers if a facility is "low risk." Even hospitals that treat TB patients could eliminate annual testing of some employees, such as those with no patient contact or who work in areas where they would not encounter TB patients.

That doesn't mean low-risk facilities are off the hook when it comes to TB prevention, cautions Iademarco, who is a captain in the U.S. Public Health Service. Rather, they should divert those resources used for screening to other TB control measures, such as regular risk assessments, education of health care workers, and careful monitoring.

"There's a tendency for people to focus on the TST [tuberculin skin test] and the fit-testing. But those two things are just tools in the larger programmatic effort to prevent transmission," he says. "Design a program that works for your setting and measure that it works."

An annual period of fit-testing?

The new guidelines include some subtle but important changes from the draft guidelines, which were released in late 2004. They recommend that health care settings "perform fit-testing during the initial respiratory protection program training and periodically thereafter in accordance with federal, state, and local regulations." The document then references the OSHA respiratory protection standard.

The CDC also recommends that patients with suspected or confirmed TB wear a surgical mask, if possible, when they are not in an isolation room. "Surgical or procedure masks are designed to prevent respiratory secretions of the wearer from entering the air," the guidelines state.

Bill Borwegen, MPH, health and safety director of the Service Employees International Union (SEIU), was pleased with that wording. "I think the CDC makes an eloquent argument about why periodic fit-testing is crucial," he says, noting that the CDC guidelines and OSHA standard "dovetail and complement each other."

Others also interpret the new guidelines as supporting annual fit-testing. "I think we have to assume [the required period for fit-testing is] annual," says **William Buchta**, MD, MPH, medical director of the Employee Occupational Health Service at the Mayo Clinic in Rochester, MN. "How can you assume anything else?"

Congressional action has temporarily prevented OSHA from spending federal funds to enforce the annual fit-testing rule. But that does not apply to state-plan states, such as Minnesota. Mayo has reduced the number of health care workers who participate in the respiratory protection program and conducts more "on-demand" fit-testing, as needed, Buchta says.

Iademarco contends that the guidelines do not support annual fit-testing. They are silent on the "periodicity" because of the lack of sufficient evidence, he says.

"Periodic is left undefined," he says. "The evidence and expert opinion did not allow for further definition. So the weight of the evidence leads us to recommend initial and periodic fit-testing."

The reference to the OSHA standard is merely a function of CDC protocol, he says. "There is a CDC policy that says in written guidance you must reference and acknowledge other potentially overlapping policies," he says.

Foreign-born HCWs at risk

Overall, the TB guidelines address the current realities of TB transmission, which has declined nationally but remains a concern in some subpopulations, such as the foreign-born.

"Preventing the transmission of tuberculosis among health care workers is one of the highest priorities," says Iademarco. "We need to do that in the context of the changing epidemiology of tuberculosis."

Foreign-born health care workers may have a greater risk of acquiring TB infection from the community than from their workplace, Iademarco notes. Employers need to distinguish between false positive screening tests due to BCG vaccination and true positives that should lead to evaluation for treatment of latent TB infection. **(See related article on p. 31.)**

Meanwhile, health care workers must maintain a high level of suspicion that enables them to detect TB disease. "As we move towards elimination [of TB], health care workers are on the front lines of

(Continued on page 31)

CDC TB Screening Risk Classifications

This excerpt from the 2005 TB guidelines explains the new recommendations regarding risk assessment and TB testing:

The three TB screening risk classifications are low risk, medium risk, and potential ongoing transmission. The classification of low risk should be applied to settings in which persons with TB disease are not expected to be encountered, and, therefore, exposure to *M. tuberculosis* is unlikely. This classification should also be applied to HCWs who will never be exposed to persons with TB disease or to clinical specimens that might contain *M. tuberculosis*.

The classification of medium risk should be applied to settings in which the risk assessment has determined that HCWs will or possibly will be exposed to people with TB disease or to clinical specimens that might contain *M. tuberculosis*.

The classification of potential ongoing transmission should be temporarily applied to any setting (or group of HCWs) if evidence suggestive of person-to-person (e.g., patient-to-patient, patient-to-HCW, HCW-to-patient, or HCW-to-HCW) transmission of *M. tuberculosis* has occurred in the setting during the preceding year. Evidence of person-to-person transmission of *M. tuberculosis* includes 1) clusters of TST or BAMT conversions; 2) HCWs with confirmed TB disease; 3) increased rates of TST or BAMT conversions; 4) unrecognized TB disease in patients or HCWs; or 5) recognition of an identical strain of *M. tuberculosis* in patients or HCWs with TB disease identified by DNA fingerprinting.

If uncertainty exists regarding whether to classify a setting as low risk or medium risk, the setting typically should be classified as medium risk.

TB Screening Procedures for Settings (or HCWs) Classified as Low Risk

- All HCWs should receive baseline TB screening upon hire, using a two-step TST or a single BAMT to test for infection with *M. tuberculosis*.
- After baseline testing for infection with *M. tuberculosis*, additional TB screening is not necessary unless an exposure to *M. tuberculosis* occurs.
- HCWs with a baseline positive or newly positive test result for *M. tuberculosis* infection (i.e., TST or BAMT) or documentation of treatment for LTBI or TB disease should receive one chest radiograph result to exclude TB disease (or an interpretable copy within a reasonable time frame, such as six months). Repeat radiographs are not needed unless symptoms or signs of TB disease develop or unless recommended by a clinician.

TB Screening Procedures for Settings (or HCWs) Classified as Medium Risk

- All HCWs should receive baseline TB screening upon hire, using a two-step TST or a single BAMT to test for infection with *M. tuberculosis*.
- After baseline testing for infection with *M. tuberculosis*, HCWs should receive TB screening annually (i.e., symptom screen for all HCWs and testing for infection with *M. tuberculosis* for HCWs with baseline negative test results).
- HCWs with a baseline positive or newly positive test result for *M. tuberculosis* infection or documentation of previous treatment for LTBI or TB disease should receive one chest radiograph result to exclude TB disease. Instead of participating in serial testing, HCWs should receive a symptom screen annually. This screen should be accomplished by educating the HCW about symptoms of TB disease and instructing the HCW to report any such symptoms immediately to the occupational health unit. Treatment for LTBI should be considered in accordance with CDC guidelines.

TB Screening Procedures for Settings (or HCWs) Classified as Potential Ongoing Transmission

- Testing for infection with *M. tuberculosis* might need to be performed every eight to 10 weeks until lapses in infection control have been corrected and no additional evidence of ongoing transmission is apparent.
- The classification of potential ongoing transmission should be used as a temporary classification only. It warrants immediate investigation and corrective steps. After a determination that ongoing transmission has ceased, the setting should be reclassified as medium risk. Maintaining the classification of medium risk for at least one year is recommended.

Inpatient Settings with More Than 200 Beds

- If fewer than six TB patients for the preceding year, classify as low risk. If greater than or equal to six TB patients for the preceding year, classify as medium risk.

Inpatient Settings with Fewer Than 200 Beds

- If fewer than three TB patients for the preceding year, classify as low risk. If greater than or equal to three TB patients for the preceding year, classify as medium risk.

Outpatient, Outreach, and Home-Based Healthcare Settings

- If fewer than three TB patients for the preceding year, classify as low risk. If greater than or equal to three TB patients for the preceding year, classify as medium risk.

recognizing tuberculosis," he says.

The new guidelines include the most recent information on Quantiferon-TB Gold, which currently is the only blood test available to detect TB infection. The test is more specific than skin tests and distinguishes between *Mycobacterium tuberculosis* infection and BCG vaccination.

The CDC also addressed concerns that were raised in response to the draft guidelines, which contain tougher training standards for those who place and read TB skin tests. But the agency backed off of more strongly worded recommendations and instead emphasized that the "suggested TST training recommendations are not mandatory." Rather, the training levels suggested would be for a "model" program, the guidelines state. ■

Most HCWs decline treatment for latent TB

Reluctance can put patients at risk

Health care workers with positive TB skin tests frequently decline treatment for latent tuberculosis infection, putting themselves, their co-workers, and patients at risk, tuberculosis experts say.

As few as one-quarter to one-half of health care workers who meet the criteria for treatment may receive it, studies show.¹ The consequences can be far reaching. In a 2003 case, a nurse with active TB exposed about 1,500 patients, including newborns in a nursery and maternity ward in New York City. Eleven years earlier, she had declined treatment for latent TB infection when she arrived at the hospital from the Philippines and registered a positive skin test result of 15 mm induration.

"As we've learned from the literature and our experience, a lot of health care workers think having a positive skin test is not due to infection but due to having [previous] BCG [vaccination]," says **Cynthia Driver**, DrPH, director of epidemiology with the TB Bureau of the New York City Department of Health and Mental Hygiene. "There's a need for greater understanding. In many cases, [the positive result] is due to infection."

Health care workers also may be reluctant to follow a nine-month regimen when they have no symptoms of disease. "In Florida, less than 30% of all people to whom we prescribe TB medications for latent TB infection ever complete the treatment," says **David Ashkin**, MD, FCCP, state TB controller.

Hospitals face increasing concerns about latent TB infection as the population of foreign-born workers rises. Health care workers mirror the larger community in their risk for TB disease, with foreign-born workers at significantly greater risk. In New York state, foreign-born health care workers had an incidence of TB disease of 17.5 per 100,000 in 2002 compared to two for U.S.-born workers, according to a study of TB among health care workers.²

In its report on the New York City nurse, the Centers for Disease Control and Prevention (CDC) urged employee health and infection control practitioners to improve adherence to treatment for latent TB infection among health care workers who work in high-risk settings.¹

The use of Quantiferon-TB Gold also will provide stronger evidence of infection for those health care workers who had BCG vaccination, TB experts say.

Follow up positive TB screens

Screening employees for TB and tracking them to make sure they return to have the test read requires focus, perseverance, and resources. But the job isn't done until employee health practitioners have followed up on positive results, TB experts say.

"One of the biggest problems we see with tuberculosis, unfortunately, is missed opportunities," says Ashkin, a pulmonologist who also is medical executive director of A.G. Holley Hospital in Lantana, FL, the last remaining TB sanitarium.

Reports about health care workers with active TB serve as a wake-up call, he says. "These cases are usually signs that the systems we have in place aren't always working," he says.

First, employee health professionals need to ensure that health care workers follow up on positive results. In a Boston case, a surgical resident who worked in four hospitals received a positive skin test result in a pre-placement evaluation in June 2004 and was referred to the Boston Public Health Commission TB Clinic. She never showed up for her appointment.

By January 2005, she had respiratory symptoms that were diagnosed as pneumonia, according to a report in the *Boston Globe*. (The health commission and hospital declined to discuss the specifics of the case.) By June 2005, the surgical resident was diagnosed with tuberculosis.

As a result, about 5,000 patients and health care workers were tested for TB infection at Boston Medical Center, Cape Cod Hospital in Hyannis,

Brockton (MA) Hospital, and the VA Boston Healthcare System, West Roxbury campus. In Boston, four patients and 13 health care workers had positive results that were tied to the exposure.

The U.S. Occupational Safety and Health Administration (OSHA), which does not have a standard related to tuberculosis, conducted inspections at the four hospitals and issued advisory letters to them. The other hospitals had relied on Boston Medical Center to conduct the TB screening, but had not ensured that the screening and follow up occurred, OSHA found. All hospitals have since changed their policies and procedures.

“There needs to be an emphasis on that complete process of follow-up of a positive skin test,” says **Anita Barry**, MD, MPH, director of communicable disease control at the Boston Public Health Commission. That includes a chest X-ray, education of the health care worker and, when appropriate, a full discussion about the need for treatment for latent tuberculosis infection, she says.

Documentation of the TB test and follow-up is critical, says Barry. “It’s like immunization,” she says. “If you don’t have documentation, it’s like it never happened.”

Even with BCG, a positive is a positive

BCG vaccination of foreign-born health care workers can be a complicating factor in the decision making about treatment of latent TB infection.

“BCG is the most commonly given vaccine in the world today,” says Ashkin. “A lot of countries do a really, really good job of convincing their population that if they get BCG that they won’t get tuberculosis. Most people who get BCG truly believe their PPD is not from tuberculosis but is secondary to BCG.”

Yet in *Morbidity and Mortality Weekly Report*, CDC TB experts noted that BCG should not routinely be considered the reason for a positive TB skin test: “Because [health care workers] with a history of BCG are frequently from high TB prevalence countries, positive test results for *M. tuberculosis* infection in [health care workers] with previous BCG vaccination should be interpreted as representing infection with *M. tuberculosis*. Although BCG reduces the occurrence of severe forms of TB disease in children and overall might reduce the risk for progression from LTBI to TB disease, BCG is not thought to prevent *M. tuberculosis* infection. Test results for *M. tuberculosis* infection for [health care workers] with a history

of BCG should be interpreted by using the same diagnostic cut points used for [health care workers] without a history of BCG vaccination.”

The positive skin test reaction from BCG vaccination wanes after about five years, the report notes. The CDC issued updated guidelines on treatment for latent TB infection in 2000, countering previous recommendations that cautioned against treating people older than 35 years old. That limitation is not supported by scientific data, the CDC concluded.³

In the New York City case, which occurred in 2003, the Filipino nurse declined treatment for latent TB infection, citing her BCG vaccination. She also said that “most adults from the Philippines, where TB is endemic, have positive TST results and generally do not take treatment,” according to the CDC report. She had an annual TB symptoms screen and one chest X-ray, all of which showed no sign of TB disease.¹

In September 2003, she developed a cough, wheezing, and shortness of breath. When her chest X-ray was read as normal, she was treated for asthma. Her symptoms persisted for another two months, and she had a CT scan of her chest and a bronchoscopy. She was believed to have hypersensitivity pneumonitis until a biopsy confirmed the presence of *M. tuberculosis*. “Genotyping of the *M. tuberculosis* isolate did not match any pattern in the New York City or national databases,” the CDC reported.

The hospital identified 32 co-workers, 613 infants, and 900 patients who were potentially exposed to the nurse. Only 227 infants and 216 maternity patients received medical evaluation — of those, five infants had a positive TB test (including one who had received BCG vaccination). Twenty-five of the co-workers had a previously positive TB skin test; they all declined treatment for latent TB infection. The other seven co-workers tested negative for TB infection.

Quantiferon produces clearer result

Quantiferon-TB Gold is a new tool that may convince health care workers that they have a true positive result and may influence their decisions about treatment, says Ashkin. “In anecdotal experience, it has been very helpful to me when I’m able to say, ‘We have Quantiferon, here’s the report, and you are truly positive.’”

After that positive result is conveyed, health care workers must make an informed decision about treatment and need adequate education,

TB experts say. The CDC's updated TB guidelines state that after TB disease is excluded, health care workers "should be treated for LTBI unless medically contraindicated."⁴ However, health care workers who decline treatment should not be excluded from the workplace, CDC says. **(For more information on the TB guidelines, see related article on p. 28.)**

Health care workers who otherwise are healthy are reluctant to take a nine-month regimen of isoniazid, the recommended treatment, which can cause liver toxicity. "We don't know what the overriding concern is among health care workers," says **Sonal Munsiff**, MD, director of New York City's Bureau of TB Control. "Is it the fear of toxicity or the belief that they don't have infection, that it's from BCG?"

A study of 297 health care workers with TB disease conducted by Munsiff, Driver, and others found that only 23% of those who met the criteria for latent TB infection received treatment. Health care workers at ambulatory facilities were less likely to have received the treatment.²

Will avian flu act more like SARS?

ID experts counter CDC recommendations

Avian influenza challenges our usual assumptions about how influenza is spread and how to protect health care workers from infection. It may be best to think of it as a potential SARS-like disease, not a version of the seasonal flu.

That is the conclusion of **Eric Toner**, MD, FACEP, senior associate at the Center for Biosecurity at the University of Pittsburgh Medical Center, who conducted a literature review of influenza transmission.¹ His views are contrary to those of the Centers for Disease Control and Prevention (CDC) in Atlanta, which is recommending droplet precautions for both seasonal and pandemic influenza — or the use of surgical masks rather than N95 filtering face-piece respirators.

The distinction is important for hospitals, which have been urged to prepare for pandemic influenza. Providing personal protective equipment is one aspect of those preparations.

Toner doesn't actually advocate stockpiling N95s. "It's hard enough, given the limited amount of money for preparedness, to stockpile enough surgical masks to last through a pan-

"Only 5% to 10% of the people infected with TB ever get active disease," says Ashkin. "You're asking people who are relatively well to take a medication. A lot of people are really reluctant to take it."

Of those who begin the treatment, many do not adhere to it. "I don't think we emphasize enough that you have to complete the therapy," says Ashkin. "If you don't complete it, you don't get the full benefit."

References

1. Centers for Disease Control and Prevention. *Mycobacterium tuberculosis* transmission in a newborn nursery and maternity ward — New York City, 2003. *MMWR* 2005; 54:1,280-1,283.
2. Driver CR, Stricof RL, Granville K, et al. Tuberculosis in health care workers during declining tuberculosis incidence in New York state. *Am J Infect Control* 2005; 33:519-526.
3. Centers for Disease Control and Prevention. Targeted tuberculin testing and treatment of latent tuberculosis infection. *MMWR* 2000; 49(RR06):1-54.
4. Centers for Disease Control and Prevention. Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in health care settings, 2005. *MMWR* 2005; 54(RR17):1-141. ■

demic," he says. "I don't think there's any way to stockpile enough N95s or PAPRs [powered air-purifying respirators] to last through a pandemic. I believe in doing what's possible."

But Toner cautions that some of the commonly held beliefs about influenza may not apply to H5N1, the avian strain now circulating through Asia and part of Europe.

"Studies that were done previously with regard to seasonal flu that showed fairly limited transmission in hospital settings may not apply in a pandemic situation," says Toner.

Transmission of H5N1 would differ from seasonal strains in one important way: Virtually everyone has partial immunity to seasonal strains. The U.S. population has no immunity to H5N1, which carries a mortality rate of about 50%.

"Transmission is different, attack rates are different, severity is different," says Toner. "It's better to think of this as a novel virus. I wish we had a better name for it."

"People [could] think of this as SARS but with two very important distinctions. It has a very short incubation period — two days vs. five to seven days for SARS. And it has pre-symptomatic and asymptomatic transmission. That fundamentally changes control strategies."

Of course, the primary difference between H5N1 and the seasonal strains (H3N2 and H1N1) is that avian influenza is not easily transmitted

among humans. In all but two cases, public health authorities can trace human cases of H5N1 to contact with sick birds. It still is an avian disease.

The CDC and its infection control advisors believe that if avian influenza becomes transmissible among humans, it will behave like other influenza strains. The CDC is recommending droplet precautions for pandemic influenza, noting, though, that when patients undergo aerosolizing procedures, such as bronchoscopy, a higher level of protection might be required.²

“There is no reason to believe a pandemic strain would operate any differently than a seasonal strain in terms of the mechanism of the virus causing transmission,” says **Michael Bell**, MD, associate director for infection control at the Division of Healthcare Quality Improvement with the National Center for Infectious Diseases. “Yes, there are small differences. But at the end of the day, it’s still influenza. It makes sense to treat it that way while doing careful monitoring [of transmission].”

The CDC’s interim infection control guidelines for avian influenza recommended airborne precautions “given the uncertainty about the exact modes by which avian influenza may first transmit between humans” (www.cdc.gov/flu/avian/professional/infect-control.htm). But those guidelines are being revised, and the Pandemic Influenza Response Plan released by the U.S. Department of Health and Human Services recommends using droplet precautions.

“While we initially felt there was a need for airborne precautions, a subsequent review by CDC and discussions at HICPAC [the Healthcare Infection Control Practices Advisory Committee] indicated that there does not appear to be a difference in transmission,” says **Patrick Brennan**, MD, chief medical officer and senior vice president at the University of Pennsylvania Health System and chair of HICPAC.

Toner acknowledges that influenza is spread primarily by large droplets, but he notes that some studies have indicated airborne spread, as well. A person can become infectious as soon as 24 hours after being infected, even if they have no symptoms, he notes.

Public health authorities are most concerned about community spread, but Toner notes that early in a pandemic, nosocomial transmission could play an important role, particularly since “the people who are most symptomatic are those who are shedding most.”

One positive finding: “It seems that influenza, in general, including the 1918 virus, is probably not as

CE questions

9. Which of the following does the proposed standard on influenza immunization of health care workers from the Joint Commission on Accreditation of Healthcare Organizations require?
 - A. All workers with direct patient contact must receive the vaccine or sign a declination statement.
 - B. Health care workers who work with high-risk patients must receive the vaccine.
 - C. Hospitals must achieve at least a 60% rate of influenza immunization of its health care workers with direct patient contact.
 - D. Hospitals must provide free access to the influenza vaccine to health care workers and must try to improve vaccination rates.
10. When Virginia Mason Medical Center required influenza vaccination of health care workers as a condition of employment, the state nurses’ association successfully contested that requirement for unionized nurses. What was the hospital’s ultimate vaccination rate?
 - A. 46%
 - B. 67%
 - C. 82%
 - D. 96%
11. According to the new *Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Healthcare Facilities*, which health care workers are at greatest risk of TB?
 - A. Those caring for TB patients.
 - B. Those working in the emergency department.
 - C. Foreign-born workers.
 - D. All health care workers are at equal risk.
12. According to experts, what is a common reason that health care workers decline treatment for latent TB infection?
 - A. They believe their positive TB test is from BCG vaccination.
 - B. They don’t believe the treatment is effective.
 - C. They aren’t aware of the need for treatment.
 - D. They have previously received treatment and it didn’t work.

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

CE 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 **June** issue, you must complete the evaluation form provided in that issue and return it in the reply envelope provided to receive a certificate of completion. ■

transmissible as was previously thought," says Toner. "The number of people infected by each victim looks to be on the order of two as opposed to 10 or 20, as had been speculated in the past."

But if H5N1 mutates and becomes transmissible among humans, its transmission characteristics will not necessarily be identical to known flu strains, particularly early in the course of a pandemic.

"There may be a period where H5N1 becomes more SARS-like, meaning a longer incubation period, little or no asymptomatic spread," he says. "In that case, SARS-like infection control measures would be critically important."

Already there are signs that H5N1 doesn't behave like the seasonal strains, he says. "H3N2 (seasonal influenza) is a disease that exclusively infects the upper respiratory tract," he says. "H5N1 affects the lower respiratory tract. You would predict [that] its transmission characteristics would be quite different. Furthermore, H5N1 appears to infect the GI tract, which is not true with other human flus. And H5N1 affects other tissues including the central nervous system."

Bell acknowledges that infectious disease experts will need to watch the patterns of H5N1 closely and make adjustments in recommendations, if necessary. But he notes that the main distinction of H5N1 is the lack of immunity — an attribute that affects spread among populations but doesn't mean person-to-person transmission will occur differently.

"There's a difference between population-based outbreak dynamics vs. infection control for individual protection," he says.

The high mortality of H5N1 so far may lead some health care facilities to choose a higher level of protection for staff, Bell says. But they may also want to have a plan to shift from airborne precautions to droplet precautions if it becomes clear during a pandemic that the higher level of protection is not necessary, he says.

In fact, once a pandemic is widespread in the community, hospital-based transmission may be of less concern, says Toner. "Then a surgical mask is probably the best you can do and probably all that makes sense at that point," he says. "It's probably even more important to put the mask on the patient than to put the mask on the health care worker."

References

1. Toner, E. Do public health and infection control measures work to prevent the spread of flu? *CBN Weekly Bulletin* Oct. 31, 2005; University of Pittsburgh Center for Biosecurity.
2. Centers for Disease Control and Prevention. Pandemic influenza toolkit: Infection control. www.hhs.gov/pandemicflu/plan/pdf/S04.pdf. ■

Pandemic infection control practices for HCWs

This is the current Centers for Disease Control and Prevention (CDC)/Department of Health and Human Services (HHS) guidance related to personal protective equipment (PPE) for health care workers during an influenza pandemic.

Infection control practices for pandemic influenza are the same as other human influenza viruses and primarily involve the application of standard and droplet precautions during patient care in health care settings. This guidance also applies to health care personnel going into the homes of patients. During a pandemic, conditions that could affect infection control may include shortages of antiviral drugs, decreased efficacy of the vaccine, increased virulence of the influenza strain, shortages of single-patient rooms, and shortages of personal protective

CE 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. ■

COMING IN FUTURE MONTHS

■ Successfully treating HCWs for latent TB infection

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equipment. These issues may necessitate changes in the standard recommended infection control practices for influenza. The CDC will provide updated infection control guidance as needed.

- **PPE for standard and droplet precautions**

PPE is used to prevent direct contact with the pandemic influenza virus. PPE that may be used to provide care includes surgical or procedure masks, as recommended for droplet precautions, and gloves and gowns, as recommended for standard precautions. Additional precautions may be indicated during the performance of aerosol-generating procedures. Information on the selection and use of PPE is provided at www.cdc.gov/ncidod/hip/isolat/isolat.htm/.

- **PPE for special circumstances**

— *PPE for aerosol-generating procedures*

During procedures that may generate increased small-particle aerosols of respiratory secretions (e.g., endotracheal intubation, nebulizer treatment, bronchoscopy, suctioning), HCWs should wear gloves, gown, face/eye protection, and a N95 respirator or other particulate respirator. Respirators should be used within the context of a respiratory protection program that includes fit-testing, medical clearance, and training. If possible, and when practical, use of an airborne isolation room may be considered when conducting aerosol-generating procedures.

— *PPE for managing pandemic influenza with increased transmissibility*

The addition of airborne precautions, including respiratory protection (an N95 filtering facepiece respirator or other appropriate particulate respirator), may be considered for strains of influenza exhibiting increased transmissibility, during initial stages of an outbreak of an emerging or new strain of influenza, and as determined by other factors such as vaccination/immune status of personnel and availability of antivirals. As the epidemiologic characteristics of the pandemic virus are more defined, the CDC will provide updated infection control guidance, as needed.

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— *Precautions for early stages of a pandemic*

Early in a pandemic, it may not be clear that a patient with severe respiratory illness has pandemic influenza. Therefore, precautions consistent with all possible etiologies, including a newly emerging infectious agent, should be implemented. This may involve the combined use of airborne and contact precautions, in addition to standard precautions, until a diagnosis is established. ■

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JCAHO Update for Infection Control

News you can use to stay in compliance

Joint Commission considers mandating HCW flu shots

Field review sparks polarized response

Mandating seasonal health care worker flu vaccinations — an issue so contentious it led to open revolt in the first U.S. hospital that tried it — is being considered as a new standard by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

Though no action may result from the preliminary analysis that is under way, it is telling that JCAHO is considering taking on an issue that is an open mine field of labor/management, legal, and logistical issues.

According to a Joint Commission field review notice that closed for comment on Feb. 12, JCAHO is “interested in learning your thoughts about whether influenza vaccination should be made mandatory among caregivers in various health care settings, what categories of individuals should be vaccinated, whether the option to decline vaccination for legitimate or other reasons should be provided, and whether and how organizations can track declination rates.” (See related story, p. 2.)

The response was overwhelming and highly polarized, says **Nancy Kupka**, DNSc, MPH, RN, project director in the JCAHO division of standards and survey methods.

“A lot of people have written me e-mails giving very compelling arguments about how they have tried to launch flu immunization programs in their hospitals,” she reports. “They have been doing this for years and they struggle to get people immunized. Then we have had people write and say, ‘This is none of your business. This is an employee health issue. I am a health care worker and you have no right to tell me I need to take this immunization.’”

Such a standoff essentially is what happened after a flu immunization mandate was issued at

Virginia Mason Medical Center (VMMC) in Seattle. (See *Hospital Infection Control*, January 2006, at www.HIConline.com.) Unionized nurses at VMMC cried foul because the mandate was not in their contract language. An arbitrator agreed with the breach-of-contract argument, but the issue remains unresolved.

Having made infection control and patient safety top priorities in recent years, the Joint Commission is serious about taking action on the controversial issue. Still, with fewer than 40% of workers immunized in a given year, it is an open question whether even JCAHO has the clout to issue a mandate in the face of such historical resistance.

“The reason we go for a field review is to get a sense of what the field can do, and what their views are,” she says. “We are asking questions about both mandatory immunization and the use of declination statements. There are pros and cons to both. Virginia Mason Hospital can tell you what some of the cons are.”

Looming pandemic highlights issue

The threat of H5N1 avian influenza mutating into a pandemic strain certainly gives the issue some buzz, but that is not what is spurring the JCAHO action. Seasonal flu kills 36,000 Americans a year and has shown to be transmitted from unvaccinated workers to patients. In an age of patient safety, there is a glaring disconnect in having large numbers of health care workers unvaccinated every flu season.

“This has been a problem for a long time, but

(Continued on page 3)

JCAHO flu vaccine standard would codify CDC guidance

In requesting input whether it should develop a standard requiring seasonal flu immunization, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) made the following key points:

- Transmission of influenza from staff, students, volunteers, or licensed independent practitioners to patients, clients, residents, or co-workers can create serious population health care problems, especially among those known to be vulnerable to complications in the aftermath of influenza.
- Vaccination is an important method of preventing influenza and its severe complications. Fewer than 40% of health care workers are immunized each year (unpublished National Health Interview Survey data, Centers for Disease Control and Prevention; 2003). Some health care organizations conduct vaccination programs, but the effectiveness of these programs has not been systematically evaluated.
- In July 2005, the CDC Advisory Committee on Immunization Practices (ACIP) published a set of recommendations respecting the prevention and control of influenza. The recommendations included the following statement: "Beginning in October each year, health care facilities should offer influenza vaccinations to all workers, including night and weekend staff. Particular emphasis should be placed on providing vaccinations to persons who care for members of groups at high risk for complications. Efforts should be made to educate health care workers regarding the benefits of vaccination and the potential health consequences of influenza illness for themselves, their family members, and their patients. All health care workers should be provided convenient access to influenza vaccine at the work site, free of charge, as part of employee health programs."¹
- ACIP and another CDC committee, the Healthcare Infection Control Practices Advisory Committee (HICPAC), are expected to jointly issue recommendations specific to immunizing health care workers in the near future. The Joint Commission has been in contact with the leadership of these committees and is confident that their proposed and formal recommendations specific to immunization will be congruent with each other.
- The Joint Commission infection control standards do not specifically require organizations to offer influenza vaccinations to staff, students, volunteers, and licensed independent practitioners. However, standard IC.4.10 requires organizations to refer for assessment, potential testing, and immunization staff, students/trainees, volunteers, and licensed independent practitioners who:
 - are identified as potentially having an infectious disease or risk of infectious disease that can put the population they serve at risk; or
 - have been occupationally exposed to infectious agents.
- The Joint Commission believes that integrating the CDC's ACIP and HICPAC recommendations into the infection control standards and the improving organization performance standards would increase patient safety and reduce the number and seriousness of influenza complications among at-risk populations.

Reference

1. Centers for Disease Control and Prevention. Prevention and Control of Influenza. Recommendations of the Advisory Committee on Immunization Practices. *MMWR* 54(R08):1-40. ■

being on the precipice of this pandemic has brought new highlights to it," Kupka says. "Many groups have been working toward coming out with recommendations for flu vaccine. Independent of the pandemic, it would be a good thing to do."

Indeed, the Association for Professionals in Infection Control and Epidemiology has come out in favor of mandatory seasonal flu vaccinations for patient caregivers; the Society for Healthcare Epidemiology of America is calling for workers to sign off on declination statements if they turn down the shot; and the Centers for Disease Control and Prevention (CDC) was preparing new guidance on the issue at press time. The Joint Commission's position on the issue is particularly intriguing, since maintaining compliance with accrediting agencies draws the attention of administrators more than recommendations from a professional association or even the voluntary guidelines of the CDC.

"People who come to work sick can indeed give flu to their patients," Kupka says. "We feel this is a strong patient safety issue. We have always been a patient safety organization. People think we are a regulator but we are a patient safety organization."

The patient safety issue is reflected in the data. In two separate studies in geriatric long-term care facilities, total patient mortality was significantly lower in those sites where health care workers were vaccinated compared to sites where routine vaccination was not offered to health care workers (10% vs. 17% and 14% vs. 22%).^{1,2} Increased rates of health care worker vaccination also correspond with a significant decrease in the incidence of health care-associated influenza.³ While there are elements of the health care work force that remain suspicious of the safety of the annual influenza vaccine, such fears remain unsupported by scientific evidence. On the contrary, a study comparing receipt of flu vaccine vs. placebo revealed no significant difference in side effects.⁴

That said, the Joint Commission can't simply mandate something that is unachievable in health care. Even some strong proponents of flu immunization remind that mandatory policies must carry consequences — including the potentially disruptive measure of dismissing workers.

"What we strive for is the highest achievable standard," Kupka says. "If we come up with standards that nobody can reach, then we have not done any service. If we don't push the field forward — sometimes a little uncomfortably for them — then we have not done anybody a service either. The question is whether or not it is going to be mandatory. There is a big difference between saying you have to offer it to workers and saying you can't let somebody work if they haven't taken it."

Flu shots a national patient safety goal?

Rather than a formal standard, the Joint Commission could establish health care worker flu immunization as an annual patient safety goal. Such goals draw national attention and a high health care administrative priority. JCAHO already has established two annual goals related to infection control: compliance with CDC hand hygiene guidelines, and reporting unexpected patient deaths due to nosocomial infections as sentinel events.

"That really made the CDC [hand hygiene] recommendations come alive," Kupka says. "It was not necessarily the most popular thing to do, but it was an important step in health care."

Similarly, the Joint Commission adopted new infection control standards effective January 2005 that put the onus on top administrators to maintain effective programs to protect patients. "We really put more of an emphasis on implementation, on making changes, on evaluating those changes and putting the responsibility of that on leadership," she says. "[Infection control] is more of an emphasis in our survey process, it's more of an emphasis in our standards, and with the [new JCAHO] patient safety center it has become an emphasis there as well."

Now that the field review has concluded, a review and analysis is under way of the responses. After a thorough review a recommendation may be made to go forward with a standard. "We are looking at this across programs that we accredit," Kupka says. "For each of our programs, we have a professional technical advisory committee that represents the industry. If we feel at that point that we are ready to go forward with the standard, we will

. . . The Joint Commission can't simply mandate something that is unachievable in health care. Even some strong proponents of flu immunization remind that mandatory policies must carry consequences — including the potentially disruptive measure of dismissing workers.

take it to our board committee. The earliest it would go into effect is January 2007, which really means that organizations would have to tool up for flu season in 2007 at the earliest.”

References

1. Carman WF, Elder AG, Wallace LA, et al. Effects of influenza vaccination of health care workers on mortality of elderly people in long-term care: A randomized controlled trial. *Lancet* 2000; 355:93-97.
2. Potter J, Stott DJ, Roberts MA, et al. Influenza vaccination of health care workers in long-term care hospitals reduces the mortality of elderly patients. *J Infect Dis* 1997; 175:1-6.
3. Salgado CD, Giannetta ET, Hayden FG, et al. Preventing nosocomial influenza by improving the vaccine acceptance rate of clinicians. *Infect Control Hosp Epidemiol* 2004; 25:923-928.
4. Margolis KL, Nichol KL, Poland GA. Frequency of adverse reactions to influenza vaccine in the elderly: A randomized, placebo-controlled trial. *JAMA* 1990; 246:1,139-1,141. ■

Patient safety alert: Check if transfers on right meds

Communication breakdowns can be deadly

In a major new emphasis on patient safety, the Joint Commission on Accreditation of Healthcare Organizations is warning that failure to keep track of the medications needed by transferred patients is resulting in preventable deaths.

The Joint Commission issued a *Sentinel Event Alert* that urges intensified attention to ensure the accuracy of medications given to patients as they transition from one care setting to another, or one practitioner to another. The failure to “reconcile” medications during these transitions can cause serious patient injuries and even death, the agency warned.

According to the alert, medication reconciliation should occur whenever a patient moves from one location to another location in a health care facility (for example, from a critical care unit to a general medical unit); or from one health care facility to another or to home; and/or when there is a change in the caregivers responsible for the patient. When effective medication reconciliation does not occur, patients may receive duplicative medications, incompatible drugs, wrong dosages, or wrong dosage forms among the array of potential errors. The medication reconciliation process also provides an important opportunity to assure

that the patient is receiving all medications necessary to his or her care and to eliminate any medications that are no longer needed by the patient.

Last year, there were more than 2,000 voluntary reports of medication reconciliation errors, and a 1999 Institute of Medicine report estimated that more than 7,000 deaths occur each year in hospitals alone due to medication errors. The Joint Commission's sentinel event database also identifies medication errors as one of the most frequently occurring threats to patient safety. The database reveals that 63% of the reported medication errors resulting in death or serious injury were due to breakdowns in communication, and approximately half of those would have been avoided through effective medication reconciliation.

The fact that medication reconciliation errors continue to occur, despite repeated warnings and rigorous standards, prompted the Joint Commission to issue the *Sentinel Event Alert* on medication reconciliation to the more than 15,000 health care organizations it accredits. To reduce the risk of errors related to medication reconciliation, JCAHO recommends that health care organizations:

- put the list of medications in a highly visible place in the patient's chart and include essential information about dosages, drug schedules, immunizations, and drug allergies.
- reconcile medications at each interface of care, specifically including admission, transfer, and discharge. The patient and responsible physicians, nurses, and pharmacists should be involved in this process.
- provide each patient with a complete list of medications that he or she will take after being discharged from the facility, as well as instructions on how and how long to take any new medications. The patient should be encouraged to carry this list and share it with any caregivers who provide any follow-up care.
- implement a process for obtaining and documenting a complete list of the patient's current medications upon admission. This includes a comparison of the medications the organization provides to those on the list. The patient should be asked to describe or confirm any prescription medications, over-the-counter medications, vitamins, herbs, or other supplements that he or she takes.
- communicate a complete list of the patient's medications to the next service provider when the patient is referred or transferred to another setting, service, practitioner or level of care within or outside the organization. ■