



Hospital Employee Health[®]



Vaccinate health care workers first in pandemic flu outbreak

HCWs are essential to maintain health care

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If pandemic influenza strikes, health care workers with patient contact should be the top priority for vaccination, two federal advisory panels have recommended.

Keeping health care workers on the job will be critical if the nation's health care system is stressed by a new influenza strain, the Advisory Committee on Immunization Practices (ACIP) and the National Vaccine Advisory Committee (NVAC) agreed in a July meeting. As *Hospital Employee Health* went to press, the final pandemic influenza preparedness plan was expected to be released soon.

"Our group really thought that preserving the health care worker work force was a key to reducing all types of mortality, not just influenza-related mortality," explains Michele Pearson, MD, medical epidemiologist at the Centers for Disease Control and Prevention (CDC) in Atlanta, who headed a subgroup of infection control experts who considered pandemic influenza vaccine priorities.

"Health care workers were really essential not only for taking care of influenza patients and reducing hospitalizations and deaths related to that, but also for other patients who may be in the hospital," she says.

The likely scenario for a pandemic is bleak. Some 25% to 30% of the U.S. population will become sick, influenza experts predict. Each wave of a flu outbreak in a community will last six to eight weeks, and there may be more than one wave.

The range of influenza-related hospitalizations and deaths could vary substantially, says Carolyn Bridges, MD, a CDC medical epidemiologist and flu expert. But the most vulnerable often are infants, the elderly, and those with more than one high-risk medical condition.

Yet as past pandemics have shown, healthy children and adults also can be stricken. "At the peak of a pandemic, 10% of workers or more may be out of work on a given day," Bridges says. The duration of illness for an uncomplicated case of influenza would be five days, she notes.

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Antiviral medications will be an important component of a response to pandemic influenza, and again, health care workers will be a high-priority group. After all, although animal trials are under way in the development of a vaccine against avian influenza, H5N1, currently there is no vaccine available.

“It’s possible the pandemic may be going on for some time before we have vaccine available,” Bridges adds.

Hospitals and public health departments will need an efficient mechanism for delivering the vaccine — if and when it becomes available.

About 9 million health care workers have

direct patient contact or are involved in essential support positions and would need the vaccine, according to CDC estimates. They would require two doses to develop an immune response.

The NVAC agreed unanimously that the federal government should purchase all pandemic influenza vaccine to streamline access.

ACIP and NVAC approved a tiered priority schedule for vaccination, which assumes that limited vaccine would be available at the start of a pandemic. Only vaccine produced in the United States is expected to be used here, as other countries would seek to safeguard their supplies, Bridges explains.

The priorities are:

- **Tier 1A:** Health care workers with direct patient contact, as well as those personnel involved in manufacturing the vaccine. They include “essential support personnel” at hospitals, such as laboratory, dietary, and blood collection. Tiering assumes that two-thirds of health care workers would need to be vaccinated, which would require one month’s supply of the current manufacturing capability of influenza vaccine. FluMist, the intranasal vaccine that uses live, attenuated virus and is produced by Gaithersburg, MD-based MedImmune Inc., could be used by healthy health care workers.
- **Tier 1B:** Those 65 and older who have at least one high-risk medical condition and younger people with two or more high-risk conditions.
- **Tier 1C:** Household contacts of infants younger than 6 months and immunocompromised individuals and pregnant women.
- **Tier 1D:** Key public leaders.
- **Tier 2A:** All other high-priority groups — people older than 65 who do not have a high-risk medical condition or younger people with only one health risk.
- **Tier 2C:** People involved with key infrastructure, such as transportation, utilities, and public safety.
- **Tier 3:** Other key government decision makers and mortuary workers.
- **Tier 4:** The rest of the population, with the goal of providing vaccine to all Americans who want to be vaccinated.

Bridges notes that the 1918 pandemic, unlike epidemics or other pandemics, resulted in high mortality rates among young adults. “We may reorder any tier based on the epidemiology of the pandemic,” she says.

Vaccination will not be the answer for everyone. In long-term care, infirm residents are at

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

Vice President/Group Publisher: **Brenda Mooney**, (404) 262-5403, (brenda.mooney@thomson.com).

Editorial Group Head: **Coles McKagen**, (404) 262-5420, (coles.mckagen@thomson.com).

Managing Editor: **Jill Robbins**, (404) 262-5557, (jill.robbins@thomson.com).

Senior Production Editor: **Ann Duncan**.

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Editorial Questions

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

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high risk, yet they may have a low immune response to the vaccine, influenza experts say. They will be a target for antiviral medications, the panels agreed.

Oseltamivir is effective in reducing complications and deaths related to influenza when administered within 24 hours of onset of symptoms, says NVAC member **Andrew Pavia**, MD, professor in the department of pediatrics, division of infectious diseases, at the University of Utah School of Medicine in Salt Lake City.

Patients hospitalized with influenza would be the top priority for antiviral treatment because of their risk of death from influenza complications, the NVAC agreed.

Because of the likely delay in vaccine availability, prophylactic use of antivirals could be a consideration for emergency department (ED), intensive care unit (ICU), and emergency medical service personnel, explains **Ben Schwartz**, MD, senior science adviser in the National Vaccine Program Office. To prevent pandemic influenza, health care

workers would need a once-a-day treatment for six weeks.

But the supply of antivirals also will be a concern. The U.S. government stockpile contains only 2.3 million courses of treatment with oseltamivir (Tamiflu), a neuraminidase inhibitor that is considered more effective and less susceptible to resistance than older versions of antivirals. More has been ordered, but it's not yet clear how large the stockpile will be, Schwartz adds.

"There is currently no production of neuraminidase inhibitors in the United States." He notes that domestic manufacture is expected by late 2005, but will produce only 15 million courses per year. "Stockpiled drugs will be the major source of supply," Schwartz adds.

Even if that stockpile is greatly expanded within the next year or two, it would not be sufficient to be used for prophylaxis and could not prevent the spread of influenza in the community, Pavia notes.

The second-highest priority for antiviral use would be for treatment of health care workers

More antivirals are needed in the national stockpile

All Americans should have access, IDSA says

The national stockpile isn't enough. That is the alarm being sounded by at least two organizations concerned about pandemic influenza preparedness and the stockpile of antiviral medications.

Trust for America's Health, a nonprofit organization that advocates disease prevention, estimates that 500,000 Americans could die and 2.3 million could be hospitalized in the next influenza pandemic.

Even if the federal government adds 3 million courses of treatment of oseltamivir (Tamiflu) to the 2.3 million in the stockpile, as expected, it will be woefully inadequate, according to a Trust report.¹

"Despite the health and economic implications of [a pandemic], pandemic planning efforts are lagging in the U.S., especially when compared to the United Kingdom and Canada," the report said. The Trust urged Congress to increase funding for the stockpile.

The Infectious Diseases Society of America (IDSA) also urged the Department of Health and Human Services to dramatically increase the antiviral stockpile.

In its letter, the IDSA called the current stockpile "totally inadequate and unlikely to provide any meaningful benefit to our population." The organization said it supports a stockpile that would be

"adequate to treat everyone who becomes ill."

Some states have developed stockpiles of their own to ensure availability.

The potential importance of oseltamivir was highlighted by a recent report that the drug improved the survival rate of mice infected with the avian influenza strain H5N1. In a test of three dosage levels, eight of 10 mice given the highest daily dosage survived, while none of the mice given placebo survived.²

In other influenza news:

- Influenza vaccines have been added to the National Vaccine Injury Compensation Program. Anyone seriously injured by the vaccine may be eligible for compensation for past and future medical expenses, pain and suffering, and lost wages. More information is available from www.hrsa.gov/osp/vicp, or (800) 338-2382.
- Education on vaccine storage, including webcast seminars, is available free from the Dickson Co. in Addison, IL. For more information, go to education@vaccinestorage.com.

References

1. Trust for America's Health. *A Killer Flu?* Washington, DC; June 2005. Web site: www.healthyamericans.org/reports/flu/Flu2005.pdf.

2. Yen H, et al. Virulence may determine the necessary duration and dosage of oseltamivir treatment for highly pathogenic A/Vietnam/1203/04 [H5N1] influenza virus in mice. *J Infect Dis* 2005; 192:665-672. ■

with direct patient contact and emergency medical service personnel who develop influenza symptoms.

Pavia adds that the prophylactic use of antivirals among health care workers ranked higher in Canadian preparedness plans. But in the U.S. priorities approved by NVAC, prophylactic treatment of ED and ICU staff would be the seventh priority level — only if enough antiviral medication was available.

“While you would lose a few days of productivity, you would likely prevent deaths and hospitalizations [due to pandemic influenza] very effectively,” he explains.

While ACIP and NVAC set priorities for vaccination, logistical issues remain unanswered. For example, a representative of Becton, Dickinson & Co. of Northfield, IL, advised the panels that syringes currently are produced and supplied for just-in-time delivery. Stockpiling syringes and other ancillary products would be necessary to provide the supplies needed to administer millions of doses of vaccine. ■

Hospitals should move to declination statements

HCWs need to sign if refusing influenza vaccine

Asking health care workers to sign a declination statement if they don't receive their annual influenza vaccine soon may become the standard of care.

The Advisory Committee on Immunization Practices (ACIP), an advisory panel of the Centers for Disease Control and Prevention (CDC) in Atlanta, voted overwhelmingly to recommend the use of declination statements, along with other measures, to improve health care worker vaccination rates. They did not specify the wording of declinations.

The Joint Commission on Accreditation of Healthcare Organizations will consider the patient safety implications of the recommendations and whether new elements of performance within a standard should be drafted, says **Robert Wise**, MD, vice president of the division of standards and survey methods.

Declination statements have been viewed by some as a heavy-handed way to pressure health care workers into getting the vaccine. Although

health care workers are among the top priority groups for influenza vaccination, their annual rates are less than 40%.

Yet advocates say it places the burden primarily on hospitals, which vary greatly in the effort they expend on influenza vaccination.

“If it's done the way the ACIP intended it, every institution will have to reach out and touch every single health care worker,” says **William Schaffner**, MD, chair of the department of preventive medicine at Vanderbilt University in Nashville, TN. “That means promoting it and bringing it literally to the arm of every single health care worker.”

The recommendation for declination statements is embedded in a set of recommendations that promote education and strategies to encourage vaccination. The recommendations also were approved by another federal advisory panel, the Healthcare Infection Control Practices Advisory Committee. (See *Hospital Employee Health*, August 2005, p. 93.)

But the American College of Occupational and Environmental Medicine (ACOEM) opposes the use of declination statements. ACOEM was expected to approve a position statement in late July, which stated, “A coercive program has the potential to harm the employer-employee relationship.”

The draft statement further said, “There is no evidence to suggest that such programs will increase compliance, and the burden of requiring compliance from those who have already chosen not to participate would tax employee occupational health resources that could otherwise be devoted to positive reinforcement for compliance.”

“It diverts resources from encouraging people to get the vaccine to becoming policemen and tracking people down to get letters signed by people who aren't going to get the vaccine anyway,” explains **William Buchta**, MD, MPH, medical director of the Employee Occupational Health Service at the Mayo Clinic in Rochester, MN, and an author of the ACOEM position statement.

Instead, federal agencies should focus on the need for comprehensive, interactive education of health care workers on influenza and vaccination, says **Bill Borwegen**, MPH, health and safety director of the Service Employees International Union. “It's just such a negative way to approach this issue. They're missing the most important parts of the program, which are the education and the free availability of the vaccine. . . . I'm a

firm believer that through a good education program, you can dramatically increase vaccination rates.”

As a monitoring tool, the declination statement can help hospitals determine true vaccination rates and compare rates by unit or department. For example, some health care workers may receive the vaccine from their private providers or other venues, which would not normally be counted by the hospital’s vaccination program.

The declination statement also can ask health care workers to state their reason for refusing to accept vaccination. Studies have shown that health care workers often have misperceptions about the vaccine; they believe it is not effective or can cause the flu. As healthy young adults, they may believe they are in a low-risk group and may not realize that they need the vaccine to protect vulnerable patients.¹

“I think the declination is a matter of record keeping,” says **Jane Siegel**, MD, professor of pediatrics and infectious disease specialist at the University of Texas Southwestern Medical Center in Dallas. “I think it’s important from a quality-improvement standpoint to have some record keeping and to know who’s getting the vaccine.”

Wake Forest University Baptist Medical Center in Winston-Salem, NC, implemented a policy of declination statements last year and still is evaluating their impact.

“We wanted to make clear that they were not only putting themselves and their families at jeopardy of getting influenza, but they were putting their patients at risk,” says **Jon Abramson**, MD, chair of ACIP and chair of the department of pediatrics at Wake Forest.

The declinations are patterned after similar statements that parents sign when they refuse to allow their children to be vaccinated, he says.

For years, the hospital has included check boxes on the flu vaccine consent form for employees who didn’t want the vaccine — with options to explain why, says **Scott J. Spillmann**, MD, MPH, director of medical center employee and occupational health services at the Wake Forest University Baptist Medical Center.

“I don’t think the fact that we had additional wording in the declination turned people off,” he says. “We have been asking for input for several years now in order to refine and improve our campaign.”

The hospital has about 100 “campaign coordinators” who work in units throughout the hospital to provide vaccination for 12,000 employees,

ACIP issues its 2005-2006 influenza recommendations

The Advisory Committee on Immunization Practices (ACIP) updated its recommendations for influenza vaccination with these key points:¹

- ACIP recommends that people with any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) who can compromise respiratory function or the handling of respiratory secretions or who can increase the risk for aspiration be vaccinated against influenza.
- ACIP emphasizes that all health care workers should be vaccinated against influenza annually, and facilities that employ health care workers be strongly encouraged to provide vaccine to workers by using approaches that maximize immunization rates.
- Use of both available vaccines (inactivated and live, attenuated influenza virus [LAIV]) is encouraged for eligible people every influenza season, especially those in recommended target groups. During periods when inactivated vaccine is in short supply, use of LAIV is especially encouraged when feasible for eligible people (including health care workers) because it could considerably increase availability of inactivated vaccine for people in groups at high risk.
- The 2005-2006 trivalent vaccine virus strains are A/California/7/2004 (H3N2)-like, A/New Caledonia/20/99 (H1N1)-like, and B/Shanghai/361/2002-like antigens. For the A/California/7/2004 (H3N2)-like antigen, manufacturers may use the antigenically equivalent A/New York/55/2004 virus, and for the B/Shanghai/361/2002-like antigen, manufacturers may use the antigenically equivalent B/Jilin/20/2003 virus or B/Jiangsu/10/2003 virus.
- The Centers for Disease Control and Prevention (CDC) and other agencies will assess the vaccine supply throughout the manufacturing period and will make recommendations preceding the 2005-06 influenza season regarding the need for tiered timing of vaccination of different risk groups. In addition, the CDC will publish ACIP recommendations regarding inactivated vaccine subprioritization (tiering) on a later date in *Morbidity and Mortality Weekly Report*.

Reference

1. Harper SA, et al. Prevention and control of influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2005; 54(Early Release):1-40. ■

students, and volunteers. Typically, the hospital has a vaccination rate of about 68%. (Last year, with restricted vaccine supply, the vaccination rate was about 60%, according to Spillmann.)

Signatures are collected on the forms, but the hospital doesn't try to track down employees who haven't had the vaccine or signed a form, he says.

Spillmann has noted some common reasons for refusing the vaccine, including fear of needles and fear of vaccine side effects.

"Despite our education attempts, there still are people who fear getting influenza from the vaccine." The hospital tries to address those issues in its educational campaign, which includes posters, mass emails, and educational presentations, he adds.

Nationally, the spotlight on influenza vaccination has been heightened by concern about the potential for pandemic influenza. Increasing vaccination rates of both health care workers and the broader community means better manufacturing capacity, ACIP members said.

Although the current vaccines would not be effective against avian influenza such as H5N1, infection control experts say vaccination could help reduce the risk of cross-transmission of the disease with regularly circulating viruses. **(For more information on pandemic influenza, see cover story.)**

In other recommendations to improve health care worker vaccination rates, ACIP agreed hospitals should:

- **Vaccinate all eligible health care workers**, including students, against influenza annually to protect their patients, themselves, their families, and their communities, and to reduce health care worker absenteeism.
- **Use strategies that have been shown to increase influenza vaccine acceptance**, including mass vaccination clinics, mobile carts, flu deputies (i.e., peer vaccinators), vaccination access during all work shifts, role modeling, and support by institutional leaders.
- **Use health care worker influenza vaccination rates as one measure of patient safety and quality.**

Reference

1. National Foundation for Infectious Diseases. *Improving Influenza Vaccination Rates in Health Care Workers: Strategies to Increase Protection for Workers and Patients*. Bethesda, MD; 2004. Web site: www.nfid.org/publications/hcwmonograph.pdf. ■

Why can't we have better respirator fit?

NIOSH fit criteria are a year away

Why can't N95 filtering facepiece respirators fit better? Amid the turmoil over annual fit-testing, employee health professionals are asking for better products and product information.

It may be a while before they get them.

The National Institute for Occupational Safety and Health (NIOSH) is working on new certification requirements that would require manufacturers to make better-fitting respirators. The changes will not be available for at least a year.

"We should be able to get access to information that we can use in purchasing decisions," notes **James Garb**, MD, director of occupational health and safety at Baystate Health System in Springfield, MA, echoing the sentiments of many.

Yet for now, fit-testing remains the only way for hospitals to know whether they have chosen a well-fitting or poorly fitting respirator. If most of your employees fail the fit-test, you haven't selected a good model for your work force.

"It's just a consumer nightmare," says **James Johnson**, PhD, CIH, QEP, chemical and biological safety section leader at Lawrence Livermore National Laboratory in Livermore, CA.

Johnson is chair of the ANSI Z-88 secretariat, which sets voluntary respirator standards.

Customers can ask for information about respirator fit, but they may not be able to get it because manufacturers don't necessarily test their models, he continues, and they don't have to follow a standard protocol in testing, so there's no way to compare their test results with those of another company.

NIOSH eliminated fit-testing as part of its certification criteria for filtering facepiece respirators in 1995, placing a focus, instead, on testing the filtration properties rather than the fit. Fit-testing of individual employees would ensure proper fit, NIOSH said. That and other changes influenced the manufacture of less expensive respirators, government officials said at the time.

"There's no requirement at this point in the certification process for the respirator to fit a person," Johnson explains. "Since filtering facepieces have no requirement for fit in the certification

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JCAHO Update for Infection Control

News you can use to stay in compliance

JCAHO moving to change historical hand hygiene failures

Surveyors from the Joint Commission on Accreditation of Healthcare Organizations are putting an unprecedented emphasis on infection control's most frustrating problem — hand washing.

Historical arguments and time-honored excuses for the typical 40% compliance range are out. The Joint Commission is now looking — by direct observation — at hand hygiene as a cardinal principle of infection control. Period. One of the prime factors in the change is that the Joint Commission continues to make hand hygiene a national patient safety goal.

"There is no partial compliance with national patient safety goals," said **Tammy Lundstrom**, MD, JD, epidemiologist at Detroit Medical Center. "You either do it or you don't."

Moreover, the new no-nonsense attitude dovetails the tone increasingly taken by infection control professionals, who say the health care system has been too passive for too long on this critical patient safety issue.

Of note was the "no more excuses" message delivered by one of the top hand washing researchers in the nation at the annual meeting of the Association for Professionals in Infection Control and Epidemiology (APIC) held recently in Baltimore.

"We repeatedly document the fact that hand hygiene compliance rates are abysmal, particularly in the highest risk areas, such as the ICU," said **Elaine Larson**, RN, PhD, CIC, professor of pharmaceutical and therapeutic research at Columbia University School of Nursing in New York City. "There is an actual significant inverse correlation between the risk and the importance of hand hygiene and the extent to which people do it. Why do we continue to do observational studies to identify this problem and do so little about it?" she asked.

Scalded by increasing bad press about hospital infections, the Joint Commission has focused heavily on infection control in the last few years. For example, to meet the hand hygiene patient safety goal, JCAHO requires compliance with the evidence-based recommendations in the hand hygiene guidelines issued by the Centers for Disease Control and Prevention (CDC) in 2002.¹

"Staff should know what is expected of them with regard to hand hygiene and should practice it consistently," the JCAHO patient safety goal states. "Implementation of all CDC guidelines with Category IA, IB, or IC evidence is required." (See recommendations, p. 112.)

By taking this action, the Joint Commission essentially codified the voluntary CDC guidelines, setting a standard for medical care that could echo in the courtroom.

"The Joint Commission has taken it to a whole new level by [saying] you must do CDC guidelines," said Lundstrom, a physician with a law degree. "That really ends up setting a national standard, which becomes a legal standard. It's difficult to defend not implementing CDC IA guidelines if you should have a lawsuit related to a nosocomial infection," she added.

"The [JCAHO] scoring has changed for the hand hygiene requirement," Lundstrom continued. "The JCAHO surveyors going out on [patient] tracers are observing each and every health care worker as they perform tasks to make sure that they adequately wash their hands.

"They used to say a minimum of 90% compliance was expected, but now they are scoring by observation. It is a kind of 'three strikes and you are out' rule," she noted. "If they find three instances in different health care workers not washing their hands . . . one occurrence equals one observation of noncompliance. Three strikes

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JCAHO: Adopt strongest hand hygiene measures

CDC IA, IB, IC measures should be followed

The Joint Commission on Accreditation of Healthcare Organizations requires that health care facilities adopt the most strongly recommended hand hygiene measures in the Centers for Disease Control and Prevention (CDC) guidelines.¹

These measures are classified by the CDC in the following three categories:

Category IA. Strongly recommended for implementation and strongly supported by well-designed experimental, clinical, or epidemiologic studies.

Category IB. Strongly recommended for implementation and supported by certain experimental, clinical, or epidemiologic studies, and a strong theoretical rationale.

Category IC. Required for implementation, as mandated by federal or state regulation or standard.

The recommendations include the following key measures:

HAND WASHING AND HAND ANTISEPSIS

- When hands are visibly dirty or contaminated with proteinaceous material or are visibly soiled with blood or other body fluids, wash hands with either a nonantimicrobial soap and water or an antimicrobial soap and water (IA).
- If hands are not visibly soiled, use an alcohol-based hand rub for routinely decontaminating hands in all other clinical situations (IA).
- Decontaminate hands before donning sterile gloves when inserting a central intravascular catheter (IB).
- Decontaminate hands before inserting indwelling urinary catheters, peripheral vascular catheters, or other invasive devices that do not require a surgical procedure (IB).
- Decontaminate hands after contact with a patient's intact skin (e.g., when taking pulse or blood pressure, and lifting a patient) (IB).
- Decontaminate hands after contact with body fluids or excretions, mucous membranes, nonintact skin, and wound dressings if hands are not visibly soiled (IA).
- Before eating and after using the restroom, wash hands with a nonantimicrobial soap and water or with an antimicrobial soap and water (IB).
- Antimicrobial-impregnated wipes (i.e., towelettes) may be considered an alternative to washing hands with nonantimicrobial soap

and water. Because they are not as effective as alcohol-based hand rubs or washing hands with an antimicrobial soap and water for reducing bacterial counts on the hands of health care workers (HCWs), they are not a substitute for using an alcohol-based hand rub or antimicrobial soap (IB).

SELECTION OF HAND HYGIENE AGENTS

- Provide personnel with efficacious hand hygiene products that have low irritancy potential — particularly when these products are used multiple times per shift (IB). This recommendation applies to products used for hand antisepsis before and after patient care in clinical areas and to products used for surgical hand antisepsis by surgical personnel.
- To maximize acceptance of hand hygiene products by HCWs, solicit input from these employees regarding the feel, fragrance, and skin tolerance of any products under consideration. The cost of hand hygiene products should not be the primary factor influencing product selection (IB).
- Do not add soap to a partially empty soap dispenser. This practice of “topping off” dispensers can lead to bacterial contamination of soap (IA).

ADMINISTRATIVE MEASURES

- Make improved hand hygiene adherence an institutional priority, and provide appropriate administrative support and financial resources (IB).
- Implement a multidisciplinary program designed to improve adherence of health personnel to recommend hand hygiene practices (IB).
- As part of a multidisciplinary program to improve hand hygiene adherence, provide HCWs with a readily accessible alcohol-based hand-rub product (IA).
- To improve hand hygiene adherence among personnel who work in areas in which high workloads and high intensity of patient care are anticipated, make an alcohol-based hand rub available at the entrance to the patient's room or at the bedside, in other convenient locations, and in individual pocket-sized containers to be carried by HCWs (IA).

Reference

1. Centers for Disease Control and Prevention. Guideline for hand hygiene in health care settings: Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. *MMWR* 2002; 51(RR16):1-44. ■

and you are out," Lundstrom added.

In keeping with the CDC guidelines — which heavily emphasize the use of alcohol-based hand rubs — the Joint Commission expects hospitals to involve health care workers in the selection of hand hygiene agents.

The requirement is similar to the Occupational Safety and Health Administration's mandate that frontline workers be involved in the selection of needle safety devices.

Some things to look at in hand hygiene agents are the feel, fragrance, and skin tolerance, Lundstrom told attendees.

ICPs should investigate any interactions between the agents, hand lotions, and gloves. Evaluate various dispensing technologies and make sure that people are not topping off partially empty dispensers, she added. "CDC also puts performance indicators at the end of their document, and JCAHO will be looking for these when they come in," Lundstrom said. "At least, they did in our three facilities surveyed to date."

The performance measures include a recommendation to periodically monitor and record adherence as the number of hand hygiene episodes performed by personnel. Moreover, they include providing feedback to personnel regarding their performance.

Rather than risk a Hawthorne effect by showing up in person, Lundstrom has developed a system of unannounced staff observers.

"What we do is we have a secret observer every week," she said, referring to a neonatal intensive care unit.

"That observer is one of the staff who commonly or always works on that unit. We pick out one staff [member] from the duty roster and make them the observer of the week.

"We ask them not to tell . . . then we go and just do validation observations. I feel more comfortable about it than having me go up there, because if the doctors see me coming, they wash their hands," Lundstrom explained.

Another CDC hand hygiene performance measure is to monitor the volume of alcohol-based hand rub used per 1,000-patient days.

"We have never found this helpful; there are too many storage places to [keep track of]," she said, adding that tracking is further complicated by the fact that any staff member can refill an empty dispenser.

"So it is very hard for us to keep track on a unit-by-unit basis. In any case, we were doing it [as best we can], and JCAHO found

it acceptable," Lundstrom pointed out.

In addition, posters, e-mail messages, tipsheets, and even computer screen savers, are used to reinforce the message that hand hygiene prevents patient infections, she said.

The Joint Commission has raised the bar, and a few eyebrows went up with it when word spread that full compliance was the new expectation. Part of the reason for that is that concept of partial compliance with hand hygiene has become ingrained in the health care system.

In an era of patient safety, the accepted failure rate is shocking when it is put down in cold hard print. Consider this excerpt from a recently published article in *The Lancet*: "It is no longer acceptable for hospitals with substandard adherence to these basic interventions to excuse their performance as being no worse than the dismal results in published reports. Most institutions still tolerate defect or failure rates in hand hygiene of 40% of more — levels that would be considered shocking in any other industry."²

No excuses/no tolerance

Similarly, it's time to end the excuses, such as one group of health care workers implying the problem lies in another group. Likewise, the old argument that health care workers are too busy to disinfect their hands between patients is a non-starter.

"We have all kinds of reasons why this is OK," Larson told attendees. "I hear this all of the time. We expect the public to understand how important our work is. We have emergency after emergency and it's so important we have legitimate excuses for failing to perform routine tasks."

But patients and the lay press — who are becoming more aware of the problem of hospital-associated infections — find the old explanations rather astonishing.

"People look at you like you were speaking another language. It does not make sense," Larson added. "We would never tolerate a pilot [saying he or she was] too distracted, too tired . . . to assure that all systems are functioning before a flight."

Yet another observational research paper documenting failed compliance is not what is needed, she added. "Those of us who are doing research sometimes distance ourselves by merely saying, 'Ok. I published it. It's out there. It's up to you.' That's not acceptable. We cannot beg away from our own responsibility," Larson explained.

That responsibility extends beyond caregivers

to top administration, which is sensitive to the issue of Joint Commission accreditation problems.

“Stop just doing surveillance and recording the problem, and start really taking more of a leadership role,” Larson said forthrightly at the conference.

“I am speaking to every one of you. Every one of you in the back row — every one of you here — grasp the power that really is yours and you are not necessarily using. Start making administrative and systems changes to assure patient safety,” she stressed.

Larson advocated creation of a patient safety “NET,” basing the acronym on the phrase “No Excuses/No Tolerance.”

“This NET strategy would represent a safety net to reduce health care-associated infections,” she said. “I know that none of us can do it alone. On the other hand, we can do a lot more than we think we can and a lot more than we are doing. We have got to get the commitment [from top administration],” Larson continued.

“Our constituency is no longer the staff nurse working in the ICU. It is the top administration where you work, through all levels of staff to implement best practices,” she pointed out.

In that regard, the Joint Commission may have done infection control a big favor in changing the default mode from acceptance of noncompliance to expectation of full compliance. While tough-minded, the approach need not lapse into the typical blame-and-shame medical error mode, she noted. “We don’t always do what we are supposed to do, either. We need to help each other, not in a punitive way, but by changing the culture so that the expectation is that you do the right thing and you do it all the time.

“If you don’t do it, you fess up, you fix it, and you move on. We need to empower every staff member to make it happen and correct it when it doesn’t,” Larson added.

(Editor’s note: For the complete CDC hand hygiene guidelines and associated materials, go to www.cdc.gov/handhygiene.)

References

1. Centers for Disease Control and Prevention. Guideline for hand hygiene in health care settings: Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. *MMWR* 2002; 51(RR16):1-44.

2. Huskins WC, Goldmann DA. Controlling methicillin-resistant *Staphylococcus aureus*, aka ‘Superbug.’ *Lancet* 2005; 365(9456):273-275. ■

Federal patient safety legislation signed into law

The Joint Commission on Accreditation of Healthcare Organizations hailed the enactment of federal patient safety legislation that will encourage the voluntary reporting of medical errors, serious adverse events, and their underlying causes.

Preventing these occurrences represents one of the greatest challenges to health care.

The Patient Safety and Quality Improvement Act of 2005 will promote cultures of safety across health care settings by establishing federal protections that encourage thorough, candid examinations of the causes of health care errors and the development of effective solutions to prevent their recurrence.

“This bill is a breakthrough in the blame-and-punishment culture that has literally held a death grip on health care,” said **Dennis S. O’Leary**, MD, president of the Joint Commission.

“When caregivers feel safe to report errors, patients will be safer because we can learn from these events and put proven solutions into place,” he explained.

Since first encouraging similar legislation in 1997, the Joint Commission and other health care and patient safety advocates have testified on numerous occasions before congressional committees to urge passage of a comprehensive patient safety bill.

The Patient Safety and Quality Improvement Act provides full federal privilege to patient safety information that is transmitted to a patient safety organization. The Joint Commission expects to create or become part of a patient safety organization under the auspices of its new International Center for Patient Safety and seek federal approval under a new process to be created by the Department of Health and Human Services.

Continuing analyses of the underlying causes of adverse events that have been reported to the Joint Commission’s Sentinel Event Database permits the Joint Commission to regularly alert the health care community to potential patient safety dangers and provide recommendations regarding preventive solutions. However, the number of adverse-event reports submitted to the Joint Commission each year represents a small fraction of the actual number of adverse events that experts estimate occur. ■

(Continued from page 110)

process, many manufacturers don't worry about it anymore," he adds.

Today, there are N95 respirator models that hardly fit anyone, studies show.

Fit-tests and fit characteristics work together to ensure that a respirator actually provides the protection it is designed to have, explains **Chris Coffey**, PhD, chief of the laboratory research branch of the NIOSH Division of Respiratory Disease Studies in Morgantown, WV.

Fit-tests are important to ensure that a specific model and size fits the unique facial structure of an individual, he says, but adds, "Fit-tests are not infallible. There are going to be people who pass the fit-test in error."

Respirators also need to have good leakage characteristics, Coffey notes. "Not every respirator is going to fit everybody. But you can't just rely on a fit-test to keep screening out respirators that don't fit a large portion of the population."

In fact, different models even from the same company can have a dramatically different performance. In a study of 18 models, he found three that fit performed well out of the box, even without fit-testing.

Yet the performance of the other respirators dropped off sharply. The highest pass rate for any respirator using a qualitative fit-test method (Bitrex or saccharin) was 55%. With one respirator model, only three of 24 people tested with Bitrex passed and no one passed the saccharin test. Five respirator models failed all fit-tests using the Portacount.¹

Quantitative fit-testing resulted in a better fit than did qualitative fit-tests. Although fit-testing improved performance, it did not guarantee adequate protection, the study found.

"The findings of this study demonstrate that, with the current state of fit-testing, it may be of more benefit to the user to wear a respirator model with good-fitting characteristics without fit-testing than to wear a respirator model with poor-fitting characteristics after passing a fit-test," the authors concluded.

"The performance of poor-fitting respirator models is improved to a greater extent with fit-testing than respirator models with generally good-fitting characteristics. The highest level of protection is provided by passing a fit-test with a respirator model that has good-fitting characteristics," they wrote.

Consumers can ask manufacturers for their

own fit-testing data, respirator experts say.

"We do extensive research on fit in designing the respirators to fit different people and ranges of people," says **Craig Colton**, CIH, of 3M Co. in St. Paul, MN.

NIOSH has relied on fit-testing to weed out poorly fitting respirators. Yet a 2001 study by the Bureau of Labor Statistics and NIOSH found that only 57% of employers conducted fit-testing on N95s and other respirator types that require a tight face seal.²

NIOSH now is working on criteria for "total inward leakage" — tests that encompass all components of the respirator, including the filtration protection, the face seal, and any exhalation valve.

"That type of quantitative performance requirement does not currently exist. Our goal is to define that requirement and implement it as a part of certification testing," says **Les Boord**, acting director of the National Personal Protective Technology Laboratory of NIOSH in Pittsburgh.

Respirators that fail to meet the "recognized performance benchmark" will not receive NIOSH certification — which means they won't meet Occupational Safety and Health Administration (OSHA) standards for protecting employees.

In an equally important move, NIOSH is redefining the range of faces that a respirator must fit. Currently, respirator fit is measured against a sample population that was designed in the late 1960s to be representative of the U.S. work force.

Today's work force differs greatly; immigration and social change has led to racial and ethnic diversity, and changes in lifestyle have meant more obese and overweight workers.

"We will implement this current contemporary fit-test panel appropriate for the American population. That will become the sizing instrument that's used for respirator performance," says **Heinz Ahlers**, acting chief of the NIOSH respirator branch in Pittsburgh.

The change in the fit-test panel alone should influence the manufacture of better-fitting respirators, Johnson adds. In fact, models may need to be available in more than three sizes to fit the range of workers, he says. "[This] is something that needs to be done."

New standards for better-performing respirators will not alter the need for annual fit-testing, respirator experts say. For example, as people age, their facial structure changes, and they may need a different size or model of respirator.

Other changes can be subtle, Ahlers says. "If you decide in the course of the year that it would be a little more comfortable if the straps were looser, or you get a little worried about exposures and make the straps tighter, either one of those decisions can result in a poorly fitting respirator."

Because different respirator styles could have slightly different user seal checks, wearers should be reminded how to do the seal check correctly. "[Annual fit-testing] familiarizes the worker with the mask, it demonstrates and provides data that the mask fits. It also provides the opportunity for hands-on training," he says.

Manufacturers concur that fit-testing is necessary. "We support annual fit-testing, the frequency required by OSHA standard, if you're going to ensure correct and safe use," notes Colton.

Technology and fit performance might evolve in the future to allow less frequent fit-tests. But for now, annual fit-testing is an essential part of proper protection, Ahlers says.

Voluntary questionnaire tracks chemo effects

No abnormal findings in medical surveillance

Hospitals are using questionnaires as a way to monitor the possible health effects on employees who work with chemotherapeutic agents. But there are no guidelines that tell hospitals what to ask or how to implement the program.

At St. Luke's Hospital in Bethlehem, PA, **Stephanie Dillman**, RN, employee health coordinator, developed a voluntary program with a questionnaire, physical exam, and lab tests that focus on possible areas of concern.

She worked with the inpatient nurse manager of the oncology unit, the outpatient infusion center manager and others in the oncology department to develop the program. (See copy of questionnaire, inserted in this issue.)

About 200 people handle chemotherapeutic agents at the health system's three hospitals, but fewer than 10 employees have participated in the surveillance. No abnormal findings have been uncovered.

"My impression is that [the employees] are comfortable with what they're doing and don't feel there's a real concern," Dillman notes.

Yet the hospital felt it was important to offer the screening, based on recommendations from

If hospitals feel overwhelmed by that, they should reevaluate how many employees are designated to wear respirators, he advises.

"Current NIOSH respirator program recommendations are made for workers who are at risk," says Ahlers.

"Public health recommendations may be made by hospitals on the basis of protecting all persons in a hospital in the event they may be exposed to some risk." That involves a different scope, he adds.

References

1. Coffey CC, Lawrence RB, Campbell DL, et al. Fitting characteristics of eighteen N95 filtering-facepiece respirators. *Journal of Occupational and Environmental Hygiene* 2004; 1:262-271.

2. National Institute for Occupational Safety and Health, Bureau of Labor Statistics. *Respirator Usage in Private Sector Firms, 2001*. Morgantown, WV; 2003. Web site: www.cdc.gov/niosh/docs/respsurv/pdfs/respsurv. ■

the National Institute for Occupational Safety and Health (NIOSH) and the Oncology Nursing Society in Pittsburgh.

A 2004 NIOSH alert recommended medical surveillance of employees, among other practices, for safe handling of hazardous drugs. (For more information, see box, p. 117.)

"A questionnaire is the place to start to identify people who have the potential for exposure and see if they're having any problems," says **Thomas Connor**, PhD, a research biologist with NIOSH in Cincinnati and author of the alert.

The Oncology Nursing Society (ONS) provides a web-based course of safe handling of hazardous drugs, as well as a text. Both include information on medical surveillance. The web course includes live on-line chats to allow for interactive sessions. (More information is available at www.ons.org.)

Surveillance for effects related to hazardous drug exposure is not unlike surveillance of blood-borne pathogen exposure or tuberculosis screening, says **Martha Polovich**, MN, RN, AOCN, an oncology clinical nurse specialist at Southern Regional Medical Center in Riverdale, GA, and a member of the NIOSH working group on antineoplastic and other hazardous drugs. She also was an author of the ONS guidelines, *Safe Handling of Hazardous Drugs*.

"It's the backdoor way of looking at the effectiveness of your [safe handling] program," adds Polovich. "If your program is working the way it

NIOSH recommends medical surveillance of HCWs

In an alert on the handling of hazardous drugs, the National Institute for Occupational Safety and Health included the following recommendations related to medical surveillance:

- ✓ In addition to preventing exposure to hazardous drugs and carefully monitoring the environment, make medical surveillance an important part of any safe handling program for hazardous drugs.
- ✓ If you handle hazardous drugs, participate in medical surveillance programs given at your workplace.
- ✓ If you handle hazardous drugs but have no medical surveillance program at work, see your private health care provider for routine medical care. Be sure to inform him or her about your occupation and possible exposures to hazardous drugs.
- ✓ Refer to the Occupational Safety and Health Administration (OSHA) manual: *Controlling Occupational Exposure to Hazardous Drugs*, Section VI, Chapter 2 (OSHA 1999). It recommends workers handling hazardous drugs be monitored in a medical surveillance program that includes taking a medical and exposure history, physical examination, and some laboratory tests.
- ✓ Refer to guidelines of professional organizations such as the American Society of Health System Pharmacists (1990) and the Oncology Nursing Society (Brown, et al, 2001), which recommends medical surveillance as the recognized standard of occupational health practice for hazardous drug

handlers. The American College of Occupational and Environmental Medicine (ACOEM) also recommends surveillance for these workers in their Reproductive Hazard Management Guidelines (1996).

- ✓ Use a worker's past exposure history as a surrogate measure of potential exposure intensity.
- ✓ If you are an occupational health professional who is examining a drug-exposed worker, ask questions that focus on the worker's symptoms relating to the organ systems that are known targets for the hazardous drugs.
 - For example, after an acute exposure such as a splash or other drug contact with skin or mucous membranes, focus the physical examination on the exposed areas and the clinical signs of rash or irritation to those areas.
 - Include a complete blood count with differential and a reticulocyte count in the baseline and periodic laboratory tests. These may be helpful as an indicator of bone marrow reserve.
- ✓ Monitor the urine of workers who handle hazardous drugs with a urine dipstick or a microscopic examination of the urine for blood (Brown, et al, 2001). Several antineoplastic agents are known to cause bladder damage and blood in the urine of treated patients.
- ✓ Conduct environmental sampling and/or biological monitoring when exposure is suspected or symptoms have been noted.

Source: NIOSH Publication No. 2004-165: *Preventing Occupational Exposure to Antineoplastic and Other Hazardous Drugs in Health Care Settings*; September 2004.

should, you shouldn't see any health effects. But that doesn't mean you shouldn't look for them.

"The minimum someone has to do is to be able to identify the people who are at risk, based on employment activities. Then they do need to do some baseline assessment at hire, and some form of periodic assessment, whether that's a questionnaire to look for health effects or a questionnaire plus some lab work. Then they have to have a plan for monitoring an employee who has an acute exposure from a spill, including follow-up," she says.

The surveillance program at St. Luke's includes questions about reproductive health history, the use of personal protective equipment, and a list of symptoms. The lab work includes a liver function test, a complete blood count with differential, creatinine level, and urinalysis.

It is reassuring when the results come back negative, Dillman adds. "It's not something that's easily monitored. When you do nuclear medicine, they can sweep the room to see if there's been

any exposure, but they can't do that with chemo. You're just assuming that your personal protective equipment is working and your work practice is good." ■

Tackling depression: The opportunity no one takes

One in 20 employees may suffer in silence

On any given day, depression may be sidelining one in 20 of your workers. They may call in sick, or they may show up but struggle through the day with lower productivity.

At Mercy Medical Center-North Iowa in Mason City, depression has moved from the shadows to the forefront of employee health and wellness. Education, awareness, and counseling

have targeted depression and enabled the hospital to provide services without stigma, says **Kelly Putnam**, MA, the hospital's health promotion coordinator.

Although it's difficult to directly link counseling and education on depression to productivity, the hospital has seen a reduction in work-related injuries, lost workdays, and workers' compensation costs since it began, she says.

"This is the world-class opportunity for employee health that virtually no one is taking advantage of. We know that [depression] is prevalent; it's expensive. The good news is that it's highly treatable." Putnam explains.

There are some other bottom-line reasons to address depression in hospitals, she notes. Workers with depression have almost twice the annual medical claims as nondepressed counterparts. Depression is more prevalent among women — and the health care work force is predominantly female.

Those were arguments Putnam used to convince hospital administrators that depression was an important employee health issue to tackle.

"This is a huge opportunity to not only address some short-term costs and productivity issues, but also to help people feel better," she points out.

Mercy Medical Center's program stems from its highly successful wellness program, called Kailo (pronounced ky-lo), which means "whole," "uninjured," or "of good omen."

Kailo differs from traditional wellness programs that focus on nutrition, diet, exercise, and health promotion.

In 1996, Putnam and her colleagues conducted an employee survey and focus groups to find out about employees' health concerns.

"Psychosocial health concerns were their No. 1 primary concern — stress, depression, fatigue, relationship issues, even domestic violence," she says.

Putnam and her colleagues built a wellness program that emphasized those issues, such as work-life balance and reducing stress.

'Not like anything you've seen'

Wellness needed an image makeover, Putnam decided. She wanted Mercy Medical Center's 2,800 employees to check out Kailo, even if they had never before attended a wellness seminar. It was marketed as a new twist on wellness — not mass health screenings or weight-loss programs

CE questions

9. Health care workers will be the top priority for vaccination in the event of pandemic influenza. What is one major reason they are "Tier 1A"?
 - A. Health care workers need to be vaccinated before they can vaccinate others.
 - B. Health care workers are more susceptible to influenza.
 - C. OSHA requires vaccination to protect workers.
 - D. Health care workers need to be on the job to care for patients.
10. Why is the American College of Occupational and Environmental Medicine opposed to requiring declination statements from health care workers who do not receive the influenza vaccine?
 - A. They would be coercive and burdensome.
 - B. They are not required by OSHA.
 - C. Declination statements should be voluntary.
 - D. Vaccination rates are high enough.
11. NIOSH is working on new certification requirements for N95 filtering facepiece respirators. They would:
 - A. Fine-tune the fit-testing process.
 - B. Change filtration mechanism used in N95s.
 - C. Set a performance standard for fit.
 - D. Prohibit their use in health care.
12. When Mercy Medical Center-North Iowa polled employees about their personal health concerns, they responded with what issues?
 - A. high blood pressure and diabetes
 - B. stress, depression, and other psychosocial issues
 - C. weight loss and nutrition
 - D. exercise and aging

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

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 **December** 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. ■

or guilt trips about what employees should be doing.

"Kailo: It's not like anything you've seen before," the marketing campaign said.

Employees were intrigued. When they attended the lunch-and-learn sessions, called Kailo Breaks, they received food, camaraderie, motivational talks, and a true break from work. The programs are held during work time.

Meanwhile, employees still have access to cholesterol, blood pressure, and other screenings, on an individual and confidential basis. The fitness classes focus on stretching and relaxation. There are raffles and prizes, but they reward participation, not weight loss or fitness goals.

"We decided from the beginning we needed to not make this a behavior-based program; it was a supportive-based program," says Putnam.

"People were exhausted and stressed out," she says. "There were lots of shaky relationships in the workplace and home. The last thing they needed was a wellness program that said, 'By the way, we want you to be thinner and eat better.'"

Putnam also spent time in all the units, building relationships. That trust was essential before the program could expand to address depression, she says.

One-on-one counseling offered

Kailo grew, becoming a popular, employee-centered program. It has three employees, including Putnam, and a budget of \$300,000.

Kailo for One was added as an individualized counseling service that is an alternative to the traditional employee assistance program (EAP). Laura McKibbin, a licensed clinical social worker, leads one-on-one sessions with employees. (She is paid through the EAP budget.)

Kailo for One promotes a "You talk; we'll listen" approach: If it's important to you, we want to hear it. The old paradigm of a restricted number of sessions is gone. (The hospital still has a traditional EAP that handles issues such as fitness-for-duty referrals.)

This is a "nonstigmatized, comfortable place where people trust coming for help," Putnam says. Employees responded to the concept — in the first year of the program, utilization of counseling services rose by 171%, she says.

Employees who visit Kailo fill out an assessment that includes the Beck Depression Inventory. Of 950 assessments completed, 77 indicated the employee was at high risk for depression.

They received letters inviting them to come to Kailo for One. (Four employees who were identified as at risk for suicide received immediate phone calls.) Forty-five employees ultimately attended counseling sessions.

A post-counseling Beck Inventory showed a success rate of reduced symptoms of more than 80%, Putnam says.

Hospitalwide campaign promotes program

Mercy Medical Center took a direct approach to depression with a hospitalwide awareness effort dubbed "Beyond Bootstraps."

First, senior administrators and supervisors received training on the signs of depression and how to refer employees who may need help. Health educators and wellness staff attended departmental meetings and launched a marketing campaign with fliers, brochures, e-mails, newsletter articles, and health fair displays.

Ultimately, about 1,000 employees attended educational sessions on signs and symptoms of depression. The message: Go "Beyond Bootstraps" to help friends, family, and co-workers who suffer from depression.

"It kind of detoxified the diagnosis of depression," says **Jenean Wolterman**, MA. "People are more comfortable with the diagnosis, and they recognize that it's not a personal defect. It can be something chemical, it can be situational, and it's treatable.

"It helps the employees themselves and their families to seek medical care earlier than they might have," she says. "It helps co-workers not to just look at people and [think] 'Just get over it.'"

COMING IN FUTURE MONTHS

■ Why you might need to step up your respiratory protection

■ New techniques to track influenza vaccination

■ CDC releases final pandemic flu preparedness plan

■ Training for TB screeners: What you'll need to do under new guidelines

■ Should you stockpile antiviral medications to combat influenza?

Combating depression remains an important part of the Kailo program. About 60% of employees who come to Kailo for One measure positive for depression, says Putnam.

"It's a sensitive area, but there are ways to handle it that are perfectly legal, respectful, and compassionate, yet more proactive," she says.

(Editor's note: Mercy Medical Center provides an education depression kit in its Kailo to Go program. It also provides consulting for other hospitals that want to re-create the program. More information is available at www.kailo.org.)

Reference

1. Putnam K, McKibbin L. Managing workplace depression: An untapped opportunity for occupational health professionals. *AAOHN Journal* 2004; 52:122-129. ■

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. ■

Go on-line for this month's Bioterrorism Watch

The September/October 2005 issue of *Bioterrorism Watch* is available on-line at www.hospitalemployeehealth.com, exclusively for subscribers of *Hospital Employee Health*.

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Oncology Program/Baseline Screening History

Name _____ Male Female
(Last) (First) (M.I.)

Date of Birth _____ SS# _____ Telephone # _____

Home Address _____
(Street) (City) (State/Zip Code)

Type of work: RN/Pharmacy/Other

Previous type of work: _____

Personal Physician's Name: _____

Address: _____

Allergies: _____

HISTORY

1. What serious illnesses or injuries have you had? _____

2. Have you ever been hospitalized? _____ If so, what for? _____

3. Do you consider yourself to be in good health? Yes No
If No, state reason: _____

4. Are you receiving medical treatment at the present time? Yes No
If Yes, state reason and physician: _____

5. Have you ever:
- A. been refused employment for health reasons? Yes No
 - B. been restricted in your work for health reasons? Yes No
 - C. been forced to leave employment for health reasons? Yes No
 - D. been refused for or discharged from military service for health reasons? Yes No
 - E. had an on-the-job exposure/spill of chemotherapy agents? Yes No
 - F. had a job that affected your health or the health of your fellow workers? Yes No

6. Describe the frequency of your job-related use of:
Chemotherapy agents
Hang daily: 1-2 x 1 day, 3-5 x 1 day, > 5 x day OCC 1-2 x week 1-5 x/month
Mix daily: 1-2 x 1 day, 3-5 x 1 day, > 5 x day OCC 1-2 x week 1-5 x/month
Radiation: Describe exposure _____

Nuclear material: Describe exposure _____

Do you have, have you ever had, or have you ever been told that you have any of the following:

1. frequent headaches	Yes <input type="checkbox"/> No <input type="checkbox"/>	26. change in bowel habits	Yes <input type="checkbox"/> No <input type="checkbox"/>
2. dizziness or fainting, light headedness	Yes <input type="checkbox"/> No <input type="checkbox"/>	27. blood in your stool	Yes <input type="checkbox"/> No <input type="checkbox"/>
3. convulsions, fits, or epilepsy	Yes <input type="checkbox"/> No <input type="checkbox"/>	28. hemorrhoids	Yes <input type="checkbox"/> No <input type="checkbox"/>
4. any disease of brain, nerves, or muscles	Yes <input type="checkbox"/> No <input type="checkbox"/>	29. liver disease, hepatitis, or cirrhosis	Yes <input type="checkbox"/> No <input type="checkbox"/>
5. nervous or mental trouble	Yes <input type="checkbox"/> No <input type="checkbox"/>	30. kidney or bladder problems of any type	Yes <input type="checkbox"/> No <input type="checkbox"/>
6. alcoholism or alcohol abuse	Yes <input type="checkbox"/> No <input type="checkbox"/>	31. protein albumin or blood in your urine	Yes <input type="checkbox"/> No <input type="checkbox"/>
7. drug abuse or addiction	Yes <input type="checkbox"/> No <input type="checkbox"/>	32. tumor or cancer	Yes <input type="checkbox"/> No <input type="checkbox"/>
8. eye disease of any type	Yes <input type="checkbox"/> No <input type="checkbox"/>	33. rupture or hernia	Yes <input type="checkbox"/> No <input type="checkbox"/>
9. vision trouble	Yes <input type="checkbox"/> No <input type="checkbox"/>	34. allergies of any types (including medicines)	Yes <input type="checkbox"/> No <input type="checkbox"/>
10. ear diseases of any type	Yes <input type="checkbox"/> No <input type="checkbox"/>	35. any problem with blood vessels including varicose veins or phlebitis	Yes <input type="checkbox"/> No <input type="checkbox"/>
11. hearing loss or ringing in the ears	Yes <input type="checkbox"/> No <input type="checkbox"/>	36. leg cramps	Yes <input type="checkbox"/> No <input type="checkbox"/>
12. diabetes	Yes <input type="checkbox"/> No <input type="checkbox"/>	37. broken bones or bone diseases	Yes <input type="checkbox"/> No <input type="checkbox"/>
13. thyroid trouble	Yes <input type="checkbox"/> No <input type="checkbox"/>	38. Joint trouble, including:	Yes <input type="checkbox"/> No <input type="checkbox"/>
14. any other gland or hormone problem	Yes <input type="checkbox"/> No <input type="checkbox"/>	A. injuries	Yes <input type="checkbox"/> No <input type="checkbox"/>
15. hair loss	Yes <input type="checkbox"/> No <input type="checkbox"/>	B. arthritis or bursitis	Yes <input type="checkbox"/> No <input type="checkbox"/>
16. any kind of heart problem	Yes <input type="checkbox"/> No <input type="checkbox"/>	C. dislocations	Yes <input type="checkbox"/> No <input type="checkbox"/>
17. rheumatic fever	Yes <input type="checkbox"/> No <input type="checkbox"/>	D. restricted movements	Yes <input type="checkbox"/> No <input type="checkbox"/>
18. chest pain, angina	Yes <input type="checkbox"/> No <input type="checkbox"/>	39. foot trouble of any type	Yes <input type="checkbox"/> No <input type="checkbox"/>
19. any kind of lung problem	Yes <input type="checkbox"/> No <input type="checkbox"/>	40. back problems of any type	Yes <input type="checkbox"/> No <input type="checkbox"/>
20. persistent cough	Yes <input type="checkbox"/> No <input type="checkbox"/>	41. neck problems of any type	Yes <input type="checkbox"/> No <input type="checkbox"/>
21. coughing up blood	Yes <input type="checkbox"/> No <input type="checkbox"/>	42. skin disease or rashes	Yes <input type="checkbox"/> No <input type="checkbox"/>
22. hay fever	Yes <input type="checkbox"/> No <input type="checkbox"/>	43. high blood pressure	Yes <input type="checkbox"/> No <input type="checkbox"/>
23. sinus trouble	Yes <input type="checkbox"/> No <input type="checkbox"/>	44. anemia or other blood diseases	Yes <input type="checkbox"/> No <input type="checkbox"/>
24. asthma	Yes <input type="checkbox"/> No <input type="checkbox"/>	45. hair loss	Yes <input type="checkbox"/> No <input type="checkbox"/>
25. stomach or intestine problem	Yes <input type="checkbox"/> No <input type="checkbox"/>	46. any other impairment to your health	Yes <input type="checkbox"/> No <input type="checkbox"/>

In the past year have you had any of the following problems?

1. numbness or tingling	Yes <input type="checkbox"/> No <input type="checkbox"/>	9. enlarging nodes, glands, or lumps	Yes <input type="checkbox"/> No <input type="checkbox"/>
2. stiffness or aching in joints or muscles	Yes <input type="checkbox"/> No <input type="checkbox"/>	10. change in skin color	Yes <input type="checkbox"/> No <input type="checkbox"/>
3. mole, wart, or growth that is enlarging, changing color, or bleeding	Yes <input type="checkbox"/> No <input type="checkbox"/>	11. change in weight of 10 pounds or more	Yes <input type="checkbox"/> No <input type="checkbox"/>
4. easy bleeding or bruising	Yes <input type="checkbox"/> No <input type="checkbox"/>	12. tiredness	Yes <input type="checkbox"/> No <input type="checkbox"/>
5. excessive thirst	Yes <input type="checkbox"/> No <input type="checkbox"/>	13. loss of appetite	Yes <input type="checkbox"/> No <input type="checkbox"/>
6. frequent or painful urination	Yes <input type="checkbox"/> No <input type="checkbox"/>	14. pain or difficulty swallowing	Yes <input type="checkbox"/> No <input type="checkbox"/>
7. blood in your urine	Yes <input type="checkbox"/> No <input type="checkbox"/>	15. shortness of breath	Yes <input type="checkbox"/> No <input type="checkbox"/>
8. unexplained fever	Yes <input type="checkbox"/> No <input type="checkbox"/>		

Have you ever:

Has anyone in your family, living or dead had:

1. Smoked tobacco and inhaled? Yes <input type="checkbox"/> No <input type="checkbox"/>	1. diabetes Yes <input type="checkbox"/> No <input type="checkbox"/>
A. Do you now? Yes <input type="checkbox"/> No <input type="checkbox"/>	2. cancer Yes <input type="checkbox"/> No <input type="checkbox"/>
B. How many years have you smoked? # _____	3. alcoholism Yes <input type="checkbox"/> No <input type="checkbox"/>
	4. lung problems Yes <input type="checkbox"/> No <input type="checkbox"/>
C. How many packages do/did you smoke per day? # _____	5. heart trouble Yes <input type="checkbox"/> No <input type="checkbox"/>
	6. any hereditary or contagious disease Yes <input type="checkbox"/> No <input type="checkbox"/>
	7. blood disorder Yes <input type="checkbox"/> No <input type="checkbox"/>
	8. other Yes <input type="checkbox"/> No <input type="checkbox"/>

Medications used in past year: (include oral contraceptives if taken)

Baseline Exam:

In your entire work history describe your use of personal protective equipment (PPE)

Pick one:

- ___ I used PPE every time
- ___ I used PPE sometimes
- ___ I used PPE occasionally
- ___ I rarely used PPE
- ___ I never used PPE
- ___ I have been hanging/mixing chemotherapy for years and just started to use PPE when the guidelines told us we had to

Reproductive History:

1. Have you or your partner ever had a problem conceiving a child? Yes No

If yes, please specify: present partner _____ previous partner _____

When/date: _____

2. Have you or your partner consulted a physician for fertility or other reproductive problem?

Yes No If yes, date: _____

If yes, please specify who consulted the physician: self ___ partner ___ self & partner ___

If yes, please state the diagnosis that was made: _____

3. Have you or your partner ever conceived a child resulting in a miscarriage, stillbirth, or physical abnormality?

Yes No

If Yes, date: _____ present partner? _____ previous partner? _____

4. If yes to question # 3, please specify the type of outcome:
 miscarriage _____ stillborn _____ physical abnormality _____
5. If the outcome was a physical abnormality, please specify or describe the type: _____

6. What is the occupation of your current spouse or partner? _____
7. For women only: Have you ever had any menstrual irregularities? Yes No
 If yes, please specify the type of menstrual irregularity: _____
 If yes, what was the date when this irregularity began? _____
 What was the date when this irregularity stopped? _____

I, the undersigned, do hereby certify that the answers to the above questions are true to the best of my knowledge and understand that any falsification, misrepresentation, or omission concerning those answers may affect my treatment and or the diagnosis of work-related chemotherapy health concerns. I give permission for the results of my medical examination and for the personal medical history I have completed to be transmitted to the designated corporate physician, and to relevant health care providers.

Applicant's Signature _____
Date

Examining provider's notes on history:

Source: St. Luke's Hospital, Bethlehem, PA.