



Infection Control *for* Physician Practices

Prevention strategies for physicians, patients and health care professionals



IN THIS ISSUE

- Two revised guidelines for IC practitioners cover
- New guidelines focus on respiratory etiquette 27
- **Chart:** CDC's isolation guide-lines highlighted in one page of recommendations table 28
- Antibacterial drug resistance threat grows unabated 29
- New CDC surveillance of infection control will be open to ambulatory sites 30

Financial Disclosure:

Editor Melinda Young, Managing Editor Gary Evans, Associate Publisher Coles McKagen, Associate Managing Editor Jennifer Corbett, Consulting Editor Patrick Joseph, MD, and Katherine West, Nurse Planner, report no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies having ties to this field of study.

OCTOBER 2007

VOL. 1, NO. 4 • (pages 25-32)

Physician offices should take note of revised infection control guidelines

Pediatric IC and isolation precautions released

If you haven't revised your facility's infection control policies and procedures within the past month, then they probably are out of date.

Two major groups have released revised guidelines that had been in the works for several years.

The first was the updated "Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings 2007." When published this past summer, the guidelines replaced the 1996 version.

For the first time the new guidelines focus on ambulatory care and other health care settings. The transition of the health care delivery system from acute care hospital settings to ambulatory care and other settings is the primary reason listed for why the guidelines needed a major revision from the 1996 version.¹

"It's brand new and exciting because the guidelines not only go into detail about what you should do with patients seen in clinical settings like ambulatory settings, but they discuss what to do with long-term care and home health care," says **Vicki L. Brinsko**, RN, CIC, infection control coordinator at the Vanderbilt University Medical center in Nashville, TN. Brinsko is on the Healthcare Infection Control Practices Advisory Committee, which has spent three years on revising the isolation precautions guidelines.

"Medical care is changing," says **Elise Beltrami**, MD, MPH, medical epidemiologist in the division of healthcare quality promotion at the Centers for Disease Control and Prevention (CDC). The CDC sponsored the isolation precautions guidelines, and staff from the division of healthcare quality promotion was involved in the revision.

"We used to be a hospital infection program, but our work isn't just hospitals, and health care is changing, which is why we became the division of healthcare quality promotion — to emphasize that it's not hospital-specific," Beltrami adds.

Multidrug resistant organisms also are a focus of the revised

**NOW AVAILABLE ON-LINE! Go to www.ahcmedia.com
Call (800) 688-2421 for details.**

guidelines, Beltrami says.

The guidelines' executive summary lists the increase in multidrug-resistant organisms in all health care settings and the emergency of new pathogens, including severe acquired respiratory syndrome (SARS) and concern about evolving organisms, such as community-associated methicillin-resistant *Staphylococcus aureus* (MRSA), and the risk of bioterrorism as fueling a need for addressing a broader scope of issues in the isolation guidelines.¹

The new isolation guidelines will have an impact globally, since medical societies and health care departments across the world will

follow their recommendations, Brinsko notes. (See sample page of chart from isolation guidelines, p. 28.)

"And as soon as the guidelines are published you look for ways to update them," Brinsko says. "Since the 1996 guidelines, we've had SARS, monkeypox, and the fear of a pandemic flu and bioterrorism."

Likewise, so many patients have moved from the "horizontal plane" to the "vertical plane," she says.

"We see many more outpatient surgeries and same-day surgeries, including things like a 1996 hip replacement that would result in a week or two stay 10 years ago, and now it's just about overnight," Brinsko says.

The second revised guidelines are sponsored by the American Academy of Pediatrics (AAP) and are called, "Infection Prevention and Control in Pediatric Ambulatory Settings." Published in the September 2007 issue of *Pediatrics*, the guidelines focus primarily on hand hygiene, but also address needle safety and respiratory hygiene.²

"If one summarizes infection control in two words, I think most infection control experts would say, 'hand hygiene,'" says **Lorry G. Rubin, MD**, chief of pediatric infectious diseases for Schneider Children's Hospital of the North Shore-Long Island Jewish Health System in New Hyde Park, NY. Rubin is on the AAP's Committee on Infectious Diseases, which worked on the revised infection prevention policy statement.

"We used to say hand-washing, but now we say hand hygiene because of the alcohol-based handrubs, which are completely acceptable and preferred over soap and water," he says. "Over multiple uses, it's less damaging to the hands, less drying and irritating than the use of soap and water."

While hand washing and alcohol rubs are routine in most hospitals, where dispensers are located at the room exits, it's less ubiquitous in ambulatory settings, Rubin says.

Nonetheless, hand washing should be standard procedure each time a health care professional has a patient contact, he says.

"Whether the patient is sitting in bed as an inpatient or sitting on an end table when the doctor or nurse walks in the room, the [health care worker] should use hand hygiene before they touch the patient," Rubin says.

Often, this habit and mentality is not routine for physicians and nurses in outpatient settings, he notes.

Infection Control for Physician Practices (ISSN #1936-1874), is published monthly by AHC Media LLC, 3525 Piedmont Road, Building Six, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodicals postage paid at Atlanta, GA 30304. POSTMASTER: Send address changes to **Infection Control for Physician Practices**, P.O. Box 740059, Atlanta, GA 30374.

Subscriber Information

Customer Service: (800) 688-2421 or fax (800) 284-3291. Hours of operation: 8:30-6. Monday-Thursday, 8:30-4:30 Friday EST. World Wide Web: <http://www.ahcmedia.com>. E-mail: customerservice@ahcmedia.com.

Subscription rates: U.S.A., one year (12 issues), \$199. Add \$12.95 for shipping & handling. Outside U.S., add \$30 per year, total prepaid in U.S. funds. Discounts are available for group subscriptions. For pricing information, call Tria Kreutzer at (404) 262-5482. Missing issues will be fulfilled by customer service free of charge when contacted within one month of the missing issue date. **Back issues**, when available, are \$30 each. (GST registration number R128870672.)

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

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

This activity has been approved for 5.5 nursing contact hours using a 60-minute contact hour.

Provider approved by the California Board of Registered Nursing, Provider #14749, for 5.5 Contact Hours.

AHC Media LLC is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

AHC Media LLC designates this educational activity for a maximum of 5.5 *AMA PRA Category 1 Credits*[™]. Physicians should only claim credit commensurate with the extent of their participation in the activity.

This activity is effective for 36 months from the date of publication.

Target audience: Primary care physicians, nurses, and health care workers.

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

Editor: **Melinda Young**.

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

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

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

Associate Managing Editor: **Jennifer Corbett**, (404) 262-5431, (jennifer.corbett@ahcmedia.com).

Senior Production Editor: **Nancy McCreary**.

Copyright © 2007 by AHC Media LLC. **Infection Control for Physician Practices** are trademarks of AHC Media LLC. The trademarks **Infection Control for Physician Practices** are used herein under license. All rights reserved.



Editorial Questions

For questions or comments, call **Gary Evans** at (706) 310-1727.

"It's not on the minds of practitioners, particularly those who are not dealing with acutely ill patients," Rubin explains. "So the orthopedist who examines a patient's knee should do hand hygiene, as well, but it's not viewed as a make and break technique."

What these practitioners fail to realize is that any patient could be colonized with an antibiotic-resistant organism that could be transferred from the patient to the health care practitioner to the next patient, he adds.

Infection control naturally is easier in hospitals where there are the necessary equipment and trained staff to handle an emergency isolation situation, Brinsko says.

"In ambulatory settings, you have patients come in who don't know if they're infectious," she says.

The revised isolation guidelines address this issue, focusing on the commingling of patients in large rooms, such as long-term care community rooms and psychiatric group therapy rooms, Brinsko says.

"You won't have to do the Draconian measures that you'll have in the inpatient acute intensive care unit, but there are guidelines to follow," she says.

Hand hygiene, respiratory and cough etiquette are discussed in the guidelines. **(See story on respiratory etiquette, right.)**

"This is something my mother taught me in the 1950s — cover your mouth when sneezing or coughing, and some people don't do that," says Brinsko.

Also, health care workers in ambulatory settings need to be alert to signs that patients have antibiotic-resistant infections, such as MRSA. Skin lesions could be a sign of a resistance problem, Brinsko says.

"They need to make sure the health care environment is cleaned after patients with suspected infection leave the area," Brinsko says. "I don't know how stringently doctor's offices think about these things, but it should be back to the basics."

In pediatric clinics and offices, the toys should be cleaned in a dishwasher or by other sanitary means, Rubin says.

"Some people advise having a child bring his or her own book or toy to the office rather than having these available in the waiting room," Rubin notes. "Or if a health care worker sees a child put a toy in his or her mouth, then that toy should be separated and cleaned before being returned to the waiting area."

Also, it wouldn't hurt doctors' offices to have

an infection control expert on hand to provide staff education, Brinsko adds.

"At Vanderbilt, we go out every six months and do mock inspections of clinic areas," Brinsko says. "We answer questions and look at the physical environment, review charts, and do all sorts of things to help the clinic areas and ambulatory areas to be on their toes like the inpatient areas are."

All health care workers who have patient contact should update their flu vaccine each year, Brinsko advises.

Employees also should be immunized against hepatitis B, Rubin says.

"The additional vaccine preventable diseases that office people, particularly those who have contact with young children, should be immune to or immunized against are measles, mumps, varicella, and pertussis," Rubin says.

"I'm a strong believer in the flu vaccine for all health care providers," Brinsko says.

References

1. Siegel JD, Rhinehart E, Jackson M, et al. Guideline for isolation precautions: Preventing transmission of infectious agents in healthcare settings 2007. *Healthcare Infection Control Practices Advisory Committee; Centers for Disease Control and Prevention*. June 2007; 1-219. Available on-line at http://www.cdc.gov/ncidod/dhqp/gl_isolation.html.
2. Committee on Infectious Diseases. Infection prevention and control in pediatric ambulatory settings. *Pediatrics* 2007; 120(3):660-665. ■

New guidelines for respiratory etiquette

Cough or sneeze into elbow sleeve

Concern about several emerging health problems, including the severe acute respiratory syndrome (SARS), bioterrorism agents, and an anticipated influenza pandemic have contributed to a strengthened focus on respiratory etiquette in two revised guidelines.

Both the "Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings 2007," published by the Centers for Disease Control and Prevention (CDC) and "Infection Prevention and Control in Pediatric Ambulatory Settings," which was published in the September 2007 issue of *Pediatrics*, address cough and respiratory etiquette.

The Infection Prevention and Control guidelines include a table of what to do to minimize transmission of influenza and other respiratory tract pathogens. Among its listed sources are the CDC's 2007 isolation guidelines.

Several items on the list of respiratory hygiene recommendations might be controversial in ambulatory settings, says **Lorry G. Rubin, MD**, chief of pediatric infectious diseases for Schneider Children's Hospital of the North Shore-Long Island Jewish Health System in New Hyde Park, NY. Rubin is on the American Academy of Pediatric's (AAP) Committee on Infectious Diseases, which worked on the revised infection prevention policy statement.

For example, here are some of the recommendations listed in the AAP guidelines:

- Educate patients and accompanying persons on the need for and components of respiratory hygiene/cough etiquette.¹
- When space and chair availability permit, cluster chairs for a coughing patient and accompanying persons at least 3 feet away from other patients.¹
- Consider having masks available to symptomatic patients by staff.¹
- In addition to hand hygiene before and after

patient contact, health care personnel should consider wearing a mask when examining an ambulatory patient with suspected influenza.¹

The implementation of respiratory hygiene and cough etiquette has been promulgated by the CDC in waiting areas, Rubin says.

"They came up with these because of SARS a couple of years back," Rubin says. "You may remember that there was transmission of SARS in waiting rooms of hospitals and doctors' offices."

This problem led to the concept of starting infection control when a patient walks into the door of an ambulatory facility or emergency department, Rubin explains.

"So these guidelines are designed to prevent transmission of SARS or to decrease influenza transmission, and they're probably relevant for many respiratory pathogens," he adds.

"This is about teaching patients through signs and education to have cloth available, to cough into their elbow instead of hands, to use hand hygiene, and to use hand hygiene after handling respiratory secretions," Rubin says. We have a hand sanitizer next to the elevator so people can give themselves a squirt when they enter the elevator."

These types of precautions would be very new

Appendix A¹

Type and Duration of precautions recommended for selected infections and conditions

Infection/Condition	Precautions		
	Type*	Duration [†]	Comments
Abscess			
Draining, major	C	DI	No dressing or containment of drainage; until drainage stops or can be contained by dressing.
Draining, minor or limited	S		Dressing covers and contains drainage.
Acquired human immunodeficiency syndrome (HIV)	S		Post-exposure chemoprophylaxis for some blood pressures. ⁸⁶⁶
Actinomycosis	S		Not transmitted from person to person.
Adenovirus infection (see agent-specific guidance under gastroenteritis, conjunctivitis, pneumonia)			
Amebiasis	S		Person-to-person transmission is rare. Transmission in settings for the mentally challenged and in a family group has been reported. ¹⁰⁴⁵ Use care when handling diapered infants and mentally challenged persons. ¹⁰⁴⁶
Anthrax	S		Infected patients do not generally pose a transmission risk.
Cutaneous	S		Transmission through non-intact skin contact with draining lesions possible; therefore, use Contact Precautions if large amount of uncontained drainage. Hand-washing with soap and water preferable to use of waterless alcohol-based antiseptics, since alcohol does not have sporicidal activity. ⁹⁸³
Pulmonary	S		Not transmitted from person to person.
Environmental: aerosolizable spore-containing powder or other substance		DE	Until decontamination of environmental is complete, ²⁰³ wear respirator (N95 mask or PAPRs), protective clothing; decontaminate persons.

* Type of Precautions: A, Airborne Precautions; C, Contact; D, Droplet; S, Standard; when A, C and D are specified, also use S.

† Durations of precautions: CN, until off antimicrobial treatment and culture-negative; DI, duration of illness (with wound lesions, DI means until wounds stop draining); DE, until environment completely decontaminated; U, until time specified in hours (hrs) after initiation of effective therapy; Unknown: criteria for establishing eradication of pathogen has not been determined.

Source: Siegel JD, Rhinehart E, Jackson M, et al., and the Healthcare Infection Control Practices Advisory Committee, 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, June 2007. Available at <http://www.cdc.gov/ncidod/dhqp/pdf/isolation2007.pdf>.

for most ambulatory practices, Rubin says.

For example, people often have been taught to cough into their hands, and coughing into the elbow might seem odd.

But the idea is that many respiratory pathogens are transmitted by fingers. When people cough into their hands, they might shake someone's hand or grab a telephone or push a button to an elevator before they are able to wash or sanitize their hands, Rubin explains.

"These practices might be more practical for adults than for pediatric practices," he notes. "If a person comes into the office with certain symptoms of a cough and respiratory secretions, then you offer the person a mask while he or she is in the waiting area, and that's impractical for children of certain ages."

Also the notion that a patient will be treated by a health care practitioner with a mask is a foreign experience to many patients in outpatient pediatric settings, Rubin says.

The CDC has free posters that outpatient clinics and offices could display about respiratory hygiene and the flu, says **Vicki L. Brinsko**, RN, CIC, infection control coordinator at the Vanderbilt University Medical center in Nashville, TN. Brinsko is on the Healthcare Infection Control Practices Advisory Committee, which revised the isolation precautions guidelines.

"These will help especially as we approach the upcoming flu season, and in pediatric settings you have RSV starting up," Brinsko says.

Another strategy is to create "sneeze stations," she suggests. "In the Vanderbilt clinic we have sneeze stations where tissues are available, along with hand gel and a garbage can to place the tissue in after you've finished using it," Brinsko says. "Doctors' offices can offer tissues or masks to people who say, 'I've got this really bad, and I think I might have the flu.'"

The doctors' office should keep a tissue box at hand and have the staff checking in patients offer them tissues so they won't contaminate other patients, Brinsko adds.

The isolation guidelines go into details about what defines respiratory hygiene and cough etiquette, as well as how to perform hand hygiene after handling respiratory secretions, she says.

"Put an emphasis on washing hands and practice hand hygiene with alcohol gel with every patient," Brinsko suggests. "A lot of those little masks come in boxes that are pop-up, almost like a Kleenex, and they're not intrusive when they're available for people to use."

Reference

1. Committee on Infectious Diseases. Infection prevention and control in pediatric ambulatory settings. *Pediatrics* 2007; 120(3):660-665. ■

Antibacterial resistance makes IC imperative

Study highlights potential dangers ahead

The world faces a crisis due to antibacterial drug resistance, and pharmaceutical companies and physicians have failed to stay far enough ahead of adaptable bacteria, according to a new study.¹

About 2 million nosocomial infections occur each year in the United States, and more than two-thirds of the pathogenic microorganisms responsible for these infections are resistant to at least one antibiotic.¹

"Looking into the future, we could have a population that dies from bacterial infections," says **Arthur C. Croft**, DC, MS, MPH, PhD-candidate, director of the Spine Research Institute of San Diego in Spring Valley, CA. Croft is the lead author of the study.

"Everyone is concerned right now with viruses, like bird flu," he says.

But the risk of one genetic mutation spelling disaster for large populations is not high, Croft adds.

"I think while everyone has been concerned about that risk, the simmering antibiotic resistance problem has been unattended," he says.

"When people go to the doctor and they're sick, the doctor says, 'This looks like a virus, but let's give antibiotics anyway.'" Croft explains. "The theory is that the virus will weaken them to a secondary antibiotic infection."

But this is part of the problem that has contributed to overuse of antibiotics in the United States, he says.

"In this country, the culture is that we want to fix a problem quickly and do it easily by taking a pill," Croft adds. "And we take a child to the pediatrician, and we think the child has an illness that needs to be treated with antibiotics, we expect to leave with a prescription in our hands, and we don't want to hear that it is just a virus — so don't worry about it."

Often, antibiotic prescriptions are handed out to placate parents and patients, Croft says.

Over time, excessive prescribing has contributed to the world's growing problem with antibiotic resistance, he adds.

Another contributing factor is an overreliance on agricultural antibiotics, Croft says.

"One problem is our practice of using antibiotics that are the same or similar to those used in humans in agricultural animals, such as pigs, cattle, sheep, and goats," Croft says. "The problem is that you can develop within that system-resistant strain of bacteria that is passed on directly or in other ways to human beings."

Farm animals are fed more than 40% of the antibiotics manufactured in the United States. High volume of antibiotics are given to the food animals both as prophylaxis and as growth promoters.^{1,2,3}

Another problem is that local community outbreaks are increasing," Croft says. "Vancomycin resistance is an increasing problem because these strains are just spread around, often by people who are asymptomatic."

Hospital settings are susceptible to drug-resistant organisms, which is why hospitals are placing more emphasis on infection control, he notes.

At the same time that drug-resistant strains are spreading and that the newer drugs designed to defeat them are losing potency, there are very few new antibacterial agents in the drug development pipeline, Croft says.

"The pharmaceutical companies are not working on this problem in earnest because it's not very profitable," Croft says.

If a large pharmaceutical company decides to develop a new antibiotic to deal with drug-resistant strains, it could sink billions of dollars into development, and then six months after the drug is on the market, some bacterial strains may become resistant to it, rendering the drug less useful, Croft explains.

"So it's much more profitable to look at new antidepressants, analgesics, and erectile dysfunction drugs," he adds.

References

1. Croft AC, D'Antoni AV, Terzulli SL. Update on the antibacterial resistance crisis. *Med Sci Monit* 2007; 13(6):

RA103-RA118.

2. Levi SB. The challenge of antibiotic resistance. *Sci Am* 1998; 278:46-53.

3. McEwen SA, Fedorka-Cray PJ. Antimicrobial use and resistance in animals. *Clin Infect Dis* 2002; 54(Suppl3):D93-S106. ■

Web-based surveillance allows CDC to expand sites

Tracking system follows infections

The infection tracking system of the Centers for Disease Control and Prevention (CDC) no longer will be limited to certain hospitals, the CDC recently announced.

The revised web-based, National Healthcare Safety Network (NHSN) will allow the CDC to track infections at all health care facilities in the United States.

"The new NHSN is built on experience and has expanded capabilities significantly," says **Chesley Richards**, MD, deputy director of the division of healthcare quality promotion at the CDC.

"First, it's a web-based system, and while the focus is still on hospitals, it has allowed us to have flexibility to look at other environments," Richards says. "We know as more health care moves out of hospitals, more infection control issues move to other settings, including ambulatory centers, nursing homes, and doctors' offices."

This new tool will make it possible for the CDC to do more for outpatient settings, Richards adds.

"We've grown the system to 700 hospitals, and now we're opening it up to any health care facility in the country," Richards says.

Dialysis centers and long-term care centers associated with hospitals are becoming a part of the surveillance network as well.

"One of the challenges is the types of data collected are most pertinent to hospitals, so we'll build into the system definitions and surveillance practices more pertinent to outpatient practices," Richards says. "We'll engage professionals in

COMING IN FUTURE MONTHS

■ IC coordinator shows how to conduct successful mock audit

■ Here's a model program for infection control compliance

■ Update on hepatitis C cluster in NYC ambulatory surgery centers

■ Check out this clinic's best practices in IC

■ How might health care-associated pneumonia affect your practice?

those settings so we can provide tools more pertinent to those settings.”

For example, as more surgeries move to ambulatory surgery centers, there is less time for data collection, he explains.

“Patient comes in and has day surgery and then goes home,” Richards says. “When the surgery was done in the hospital, they’d stay for several days, and we’d have time to see an infection develop and collect data on it.”

Ambulatory settings don’t permit that luxury, so it’s causing CDC officials to rethink how they conduct surveillance work, he adds.

Some of the demonstration projects the CDC is funding involve collecting electronic data from pharmacies and laboratories.

“The web-based system is encrypted and secure so data entered in are secure, and we protect the confidentiality of patients,” Richards says.

“As we move closer to an electronic health record that can be accessible from hospitals or other settings then this electronic format is the type of record we can use to populate some of our surveillance records,” he explains. “We see the future of health care surveillance more and more

CNE/CME instructions

Physicians and nurses participate in this CNE/CME program by reading the issue, using the provided references for further research, and studying the questions. Participants should select what they believe to be the correct answers, then refer to answer key to test their knowledge. To clarify confusion surrounding any questions answered incorrectly, please consult the source material. After completing the semester’s activity, you must complete the evaluation form that will be provided and return it in the reply envelope to receive a credit letter. ■

CNE/CME objectives

After reading each issue of *Infection Control for Physician Practices*, the infection control professional will be able to:

- Identify potential sources of outbreaks and infections in the physician office and outpatient clinic;
- implement infection control guidelines to protect patients and staff
- cite regulatory requirements and standards of care required for infection prevention in physician practice. ■

using those kinds of data, and that’s what gives us tools to do more in the outpatient setting where people move to various health care providers.”

When a hospital joins the network, it has a dedicated contact in the hospital that has access to the NHSN system for inputting data, which remains a manual process, Richards says. “Where we want to transition is to utilize electronic data already available in the lab and other systems,

CNE/CME questions

13. According to new infection control guidelines produced by the American Academy of Pediatrics, hand hygiene should be practiced at which intervals?
 - A. Every 20 minutes.
 - B. Every time a health care worker has contact with a patient.
 - C. Each time the health care worker passes the alcohol handrub dispenser in the clinic’s hallway.
 - D. All of the above
14. Which of the following is a recommendation about respiratory hygiene in the American Academy of Pediatrics’ revised infection control guidelines?
 - A. Educate patients and accompanying people on the need for and components of respiratory hygiene/cough etiquette.
 - B. When space and chair availability permit, cluster chairs for a coughing patient and accompanying people at least 3 feet away from other patients.
 - C. Consider having masks available to symptomatic patients by staff.
 - D. All of the above
15. A new study reports that antibiotic drug-resistant infections are on the rise. Which of the following best explains why this is occurring?
 - A. Antibiotic handrubs, antibiotic cleaning agents, and other over-the-counter supplies have had a big impact on the rise of multidrug resistant bacteria.
 - B. United States physicians are overprescribing antibiotics, and farm animals are being given antibiotics routinely as prophylaxis.
 - C. Doctors prescribe antibiotics too often, and some municipal water systems place small doses of antibiotics in their water supplies to prevent bacterial growth.
 - D. None of the above
16. The Centers for Disease Control and Prevention has a new web-based surveillance system to track infections across the United States. How is this system different from the CDC’s 30-year-old infection control surveillance system?
 - A. It’s open to all health care facilities, including ambulatory sites.
 - B. It collects data from hospitals from coast to coast.
 - C. It gathers data 100% electronically.
 - D. All of the above

Answers: 13. B; 14. D; 15. B; 16. A.

which will cut down on the manual system."

Confidentiality is one of the challenges to this transition, he notes. "We've got demonstration projects where we're receiving data, and it's in that phase, but the biggest challenge is building systems that protect confidentiality of patients and making sure data is secure in the way it moves," Richards says.

Private information technology vendors have been working with the CDC on this project, and the CDC is working with the Centers for Medicare & Medicaid Services (CMS), which also has some projects in which hospitals are required to collect data for their quality improvement projects.

"What we're doing with CMS is developing some methods where the data they collect can come into our system also, so we don't have to require people in the hospital to collect data twice," Richards says. "This decreases the collection burden, and it may be important in the future for physician practices and other outpatient settings."

Since CMS runs Medicare and Medicaid payments, which are the leading insurance payments physicians receive, especially in the care of older adults, CMS' participation helps. "Our goal is to try to work things out with CMS where we have overlapping interests," Richards says.

Physicians should be interested in the NHSN because there has been a dramatically increased interest among consumers in legislators in understanding why health care providers have not made advances in reducing health care-associated infections, Richards says.

"There has been a lot of intense legislative activity in a number of states, mandating that hospitals have to report their infection rates publicly," he says. "This has happened in hospitals, but this is a movement that could extend to outpatient settings, especially to ambulatory surgery centers and dialysis centers."

More importantly, health care-associated infections have a severe impact on patients, and it's good patient care to take the necessary infection control precautions to prevent infections, Richards says. "The third reason why physician practices should be interested in this area is because with the changing health care system, we see much more complicated patients being managed in outpatient settings that historically would have been hospitalized," he adds. "They are at high risk and have indwelling devices, catheters and central lines and are receiving care in the outpatient setting."

These types of patients are at a high risk of

EDITORIAL ADVISORY BOARD

Consulting Editor:

Patrick Joseph, MD
Chief of Epidemiology
San Ramon (CA) Regional
Medical Center and
President, California
Infection Control
Consultants
San Ramon

**Judie Bringham, RN, BSN,
CIC**
Infection Control
Practitioner
Duke University Medical
Center
Durham, NC

William Schaffner, MD
Chairman
Department of
Preventive Medicine
Vanderbilt University
School of Medicine
Nashville, TN

Katherine West,
BSN, MEd, CIC
Infection Control Consultant
Infection Control/
Emerging Concepts
Manassas, VA

becoming infected with staph and methicillin-resistant *Staphylococcus aureus* (MRSA), Richards says.

The NHSN builds on the CDC's National Nosocomial Infection Surveillance (NNIS) system, which has existed for more than 30 years and has helped IC professionals and hospitals improve infection control practices and surveillance.

NHSN's partners include the Department of Veterans Affairs (VA) hospitals, and eight states have designated NHSN as the system to use when implementing legislation requiring hospitals to report health care-associated infections.

"We have put out press releases and have a web site and have presented at professional meetings, and right now that's drummed up a lot of business," Richards notes.

"We've seen a dramatic increase, a doubling in numbers of hospitals in the system," he says. "We have 80% of all the hospitals in New York, and 70%-80% in South Carolina."

California has just passed legislation that will use part of the NHSN system for the state's reporting initiative, as well, he adds.

"By the end of 2008, we expect to have 1,500 to 2,000 hospitals in our system," Richards reports.

"The number of outpatient sites will be more variable," he notes. "We have a lot of development work to do to really tailor our tools to the needs of an outpatient environment, because these vary so dramatically."

Still, the CDC has opened up the system to all health care facilities, and as various entities join the NHSN, the CDC will continue to develop the work that will make sure the system is relevant to each system's needs, Richards says. "We want people to join the system," he adds. ■