

# Hospital Infection Control & PREVENTION

For 36 Years *The Leading Source Of News And Comment On Infection Prevention*

January 2010

Volume 37, No. 1

(Pages 1-12)

## Blunt assessment: Surgeons stuck by suture needles endanger themselves and patients

*OR still the wild, wild West of needle safety*

Veteran surgeon **Ramon Berguer**, MD, routinely stitches up patients in suture seams as tight as a quarter-inch or less, with the needle tip drawing perilously close to his gloved opposite hand. Occasionally it hits with the force to cause a needlestick, but what results is not an injury — but a memory.

"I think, 'Wow, if this was a sharp needle, I would have just had a puncture,'" he says. Berguer is among the minority of surgeons who have transitioned to tapered, "blunt" safety needles for most procedures, avoiding many suture needlesticks that are too often considered part of the job of surgery.

"Sometimes when you are closing the abdomen, you can't really see properly how to put the stitch in, so we put our hands inside, lifting the abdominal wall," says Berguer, chief of surgery at Contra Costa Medical Center in Martinez, CA. "In many of those situations, I have felt the tip of the needle touch my glove."

But instead of incurring a sharps puncture, Berguer feels the reassuring "pop" of the safety needle coming through patient tissue, a sound and sensation he has come to associate with his personal protection from bloodborne viruses.

"After using the blunt needles for a while, I've come to like the little 'pop' that they make," he says. "It's sort of like feeling the seat belt tug against your chest in the car. You just know you are using a needle that — if you happen to drop it or someone pulls on the end of the suture or any one of the small little hiccups that can occur during a case — that the tip isn't going to stick into you or a nurse or the assistant."

As a member of the perioperative committee of the American College of Surgeons, Berguer helped craft the group's most recent statement on sharps injury prevention in the OR.

"As part of our drafting that [2007] statement, we reviewed



**Ramon Berguer**

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#### **Financial Disclosure:**

Editor Gary Evans, Associate Publisher Coles McKagen, 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.

the available data on various devices and techniques and it was pretty clear that the evidence supporting the use of blunt suture needles was very compelling," he says. "[Conventional suture needles] remain the No. 1 cause of sharps injuries in the operating room. The studies clearly show a dramatic reduction in injuries, so the American College recommends that [blunt needles] be used in all operations for the closure of muscle and fascia." (**See related story, p. 5.**)

The ACS recommendation was followed by a joint bulletin by the Occupational Safety and Health Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) stating "employers must use safer devices to replace corresponding conventional sharp-tip suture needles in their workplaces when clinically appropriate." NIOSH and OSHA estimated that sharp-tip suture needles are the leading source of percutaneous injuries to surgical personnel, causing 51% to 77% of those incidents.<sup>1,2</sup>

However, the general perception is that little has changed and the OR remains subject to high rates of sharps injuries with traditional suture needles.

"I'm not sure what it will take — I think it would be helpful if OSHA really started citing ORs for not using them," says **Jane Perry**, MA, associate

director of the International Healthcare Worker Safety Center at the University of Virginia in Charlottesville. "There is a real opportunity here because we know that if blunt suture needles were implemented on a widespread basis for doing internal suturing like muscle and fascia that it could have a big impact on reducing needle-stick injuries in surgery settings. The problem is that surgeons, especially older surgeons, have been hard to convince to switch over to the most recent blunt suture needles — which are actually a lot sharper than the older safety suture needles."

Another issue is that the blunt safety needles can not be used for all surgical procedures. "I use them pretty much on everything except skin and bowel right now," Berguer says. "The dermal layer in the skin is very tough. The blunt needles and the data to support them are only for the use of closure of muscle and fascia."

That means traditional sharp suture needles still are needed on hand and the vast majority of surgeons continue to favor them. "The [blunt needles] work well, but they are only useful for certain steps of the operation," says **Martin A. Makary**, MD, MPH, an associate professor of surgery and director of the Johns Hopkins



**Jane Perry**

Hospital Infection Control & Prevention®, including Infection Control Consultant™ and Healthcare Infection Prevention™ (ISSN 0098-180X), is published monthly by AHC Media LLC, 3525 Piedmont Road, Building Six, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodicals Postage Paid at Atlanta, GA 30304 and at additional mailing offices.

**POSTMASTER:** Send address changes to **Hospital Infection Control & Prevention®**, P.O. Box 740059, Atlanta, GA 30374.

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

Target audience: Infection control practitioners and infectious disease physicians.

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.

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Center for Surgical Outcomes Research. "I use them relatively routinely as do a few other surgeons that I know. For the most part, the national uptake of those needles has been poor — we think less than 10% of surgeons are using the new safety needles. That, in spite of the fact that the ACS official position statement endorses their use."



**Martin A. Makary** In addition to blunt needles, Makary uses other equipment for "sharpless surgery" when possible

(i.e., electrocautery for skin incision).<sup>3</sup> "We found that we are able to do about half of our general surgery operations with a sharpless protocol or without [traditional] needles," he says.

Such practices are the exception however, as the surgical suite remains something of an anachronism in an age when needle safety syringes and sharps disposal containers are in common use throughout the hospital. Though new and improved safety suture needles are being embraced by Berguer and other surgeons, the majority of physicians in the profession still prefer the feel and performance of a traditional sharp suture needle.

"The 'feel' of using the blunt needles is overstated as a problem," Berguer says. "They require a little bit more force initially and surgeons have sort of focused on that as a complaint. The first generation of blunt needles were really blunt and were tough to use, but the new generation of blunt needles have a different taper which makes them easier to use."

Previously difficult to obtain, the blunt needles are now being widely marketed even as education efforts struggle forward. "There still really is very little education of surgeons about the sharps problem and the importance of using blunt suture needles," he says.

As a result, sharps injuries are prevalent in the nation's ORs, though most are not reported because of the perceived hassle and stigma historically associated with a needlestick. There is massive underreporting of injuries in part because the reporting, documentation and prophylaxis process can be burdensome and incompatible with the busy work practice and patient commitments of most surgeons.

"I've probably averaged like most surgeons about one needlestick a year during my career, sometimes more," Berquer says. "I admit to not

reporting two-thirds of those for logistical reasons. It's simply not possible to stop operating."

Having undergone prophylaxis for a potential HIV exposure following a sharps injury four years ago, Berguer is well aware of a process that is both laborious and stressful. "I have not had a needlestick now for about two years and I would like to believe that is due in part to the blunt suture needles," he says. "It is also due to implementing a sharps policy that includes the hands-free passing of sharps instruments and so forth."

Many think the resistance to surgical sharps safety will give way as newer surgeons come into the field, particularly at a time when patient safety has become a consumer advocacy issue.

"Clearly, the way to bring about change is to work with the young surgeons," Berguer says. "They have definitely come out of a different culture towards patient safety and hopefully toward staff safety as well. Things like wearing eye protection, double-gloving, and so forth I think are more widespread among the younger generation of surgeons who are not willing to accept the risk of needlesticks as simply part of their jobs."

## *And the band played on*

However, research by Makary and colleagues is finding that most surgeons are still being trained to use traditional sharps and hold fast to the culture that has long closed out innovation to replace them. For example, surgical trainees may learn early on that there are disincentives to reporting suture stick injuries. For one, they may be subject to grading by superiors who will not be amused if they leave the OR for a prolonged visit to the occupational health service.

"Hospitals are not creating a culture of speaking up," says Makary. "If people are not speaking up regarding their own safety concerns, it's probably a surrogate marker of people not speaking up about patient safety concerns. Many people tell us that they find reporting to be a very cumbersome process for which they have to either collect signatures or be put in long cues or wait lists. They are not provided any coverage of their clinical responsibilities. That, coupled with the stigma as well as the fact that students and residents are often being graded or evaluated by their peers, creates a significant sum total of barriers."

*(Continued on page 6)*

# Elephant in the room is patient on the table

*'A single injury, a single drop of blood'*

Beyond the logistical disincentives, hassles and headaches of reporting to employee health after an injury in the operating room there is the chilling stigma of what the surgeon may find out about herself and possibly be obligated to tell future patients: "I'm HIV-positive."

Indeed, the elephant in the room is the patient on the table, as reporting injuries raises the difficult issues of testing and informing patients.

Still, the prompt reporting of all needlestick injuries is critical to ensuring proper medical prophylaxis, counseling and legal precautions, says **Martin A. Makary**, MD, MPH, an associate professor of surgery and director of the Johns Hopkins Center for Surgical Outcomes Research.

"There's definitely a large number of silent [HIV, HCV] carriers in the health care profession," he says. "There have been documented cases of surgeon to patient transmission in the operating room because the entire operative area is an at-risk area of vulnerability to even the smallest drop of contaminated blood from the surgeon. A single needlestick injury could contaminate a wound with a single drop of blood, resulting in transmission."

In a case that recalled the national turmoil during the Florida HIV dental outbreak in the early 1990s, the Centers for Disease Control and Prevention reiterated in 2009 that HIV provider-to-patient infections remain exceedingly rare.<sup>1</sup> The CDC report suggested that policy revisions should be reconsidered for HIV-infected providers who perform invasive procedures, particularly the issue of informing patients of their infection. Formed in the wake of the Florida HIV case, those policies were written before the current HIV drugs — which can suppress the virus and possibly lower the risk of transmission — were available.

A cardiothoracic surgeon in Israel specializing in open-heart procedures was found to be HIV-positive in January 2007 during evaluation for

fever of recent onset. A look-back investigation of patients operated on by the infected surgeon during the preceding 10 years was conducted under the auspices of the Israel Ministry of Health to determine whether any surgeon-to-patient HIV transmission had occurred. Of 1,669 patients identified, 545 (33%) underwent serologic testing for HIV antibody. All results were negative. "The results of this investigation add to previously published data indicating a low risk for provider-to-patient HIV transmission," the CDC reported.

After considering the clinical details of the surgeon's case, the published literature on HIV transmission from infected health care workers to patients, and the findings of this look-back investigation, a review panel recommended allowing the resumption of work, with no restrictions on the types of procedures the surgeon could perform, provided the surgeon met the following conditions:

- Instruction by infection control personnel at the surgeon's hospital regarding safe practices, including adherence to standard precautions and hand hygiene requirements, double-gloving during all surgery, and immediate reporting of any cuts in gloves or fingersticks, plus agreement by the surgeon to abide by these practices;
- Routine health care follow-up at three-month intervals, including measurement of CD4 T-cell count and HIV RNA;
- Adherence to a prescribed antiretroviral regimen, maintenance of good health, and continued CD4 T-cell level >200 cells/ $\mu$ L, with HIV RNA below the threshold of detection.

On the basis of the published literature, the panel did not require notification of prospective patients of the surgeon's HIV status because of the extremely low likelihood of transmission to patients if the conditions for resuming surgery were met, the CDC concluded.

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# ACS recommends safety needles, double-gloving

The American College of Surgeons (ACS) most recent recommendations on infection prevention and safety in the operating room are summarized as follows:

Sharps injuries and surgical glove tears continue to expose surgeons and operating room (OR) personnel to the risk of human immunodeficiency virus, viral hepatitis B, viral hepatitis C, and bacterial infections from patients. Patients' blood makes contact with the skin or mucous membranes of OR personnel in as many as 50% of operations, with cuts or needlesticks occurring in as many as 15% of operations. Surgeons and first assistants are at highest risk for injury, sustaining up to 59% of the injuries in the operating room. Scrub personnel have the second-highest frequency of injuries in the OR (19%), followed by anesthesiologists (6%) and circulating nurses (6%). For surgeons, suture needles are the most frequent source of sharps injuries.

The American College of Surgeons supports work practices that strive to eliminate, protect, or standardize the use of sharp instruments in the OR. The ACS also recommends the use of structured evaluations and user-based criteria that include performance standards, task analysis, simulation, and training programs for devices intended to reduce sharps injuries in the OR. A team approach to sharps safety is critical to reduce the risk of blood-borne infections resulting from sharps injuries in the operating room. Hospitals and health care facilities should make sharps injury-reduction techniques and instruments available for surgeons and OR personnel.

**Double-gloving.** Glove barrier failure is common with reported perforation rates as high as 61% for thoracic surgeons and 40% for scrub personnel. Double-gloving reduces the risk of exposure to patient blood by as much as 87% when the outer glove is punctured. Double-gloving has certain disadvantages such as decreased tactile sensation. In certain types of surgery (such as neurosurgery), where delicate manipulation of instruments and tissues is required, double-gloving may impair the surgeon's ability to safely perform the procedures. Despite a large body of data documenting the benefits of double-gloving, this technique has not received wide acceptance by surgeons. In many cases, a period of

adaptation and "retraining" seems to be required before practitioners feel comfortable with the technique. New specially designed undergloves have recently become available to make the process of double-gloving more acceptable to surgeons.

- *The ACS recommends the universal adoption of the double glove (or underglove) technique in order to reduce body fluid exposure caused by glove tears and sharps injuries in surgeons and scrub personnel. In certain delicate operations, and in situations where it may compromise the safe conduct of the operation or safety of the patient, the surgeon may decide to forgo this safety measure.*

**Blunt-tip suture needles:** Suture needle injuries pose the greatest risk of sharps injury to the surgeon and scrub personnel. The effectiveness of the use of blunt-tip suture needles in reducing sharps injuries is supported by a number of randomized studies and case series that demonstrate decreases in the rates of glove puncture from as high as 38% down to 6% — and down to zero in some cases — following the adoption of blunt suture needles. The use of blunt suture needles requires no changes in work practices for surgeons. A new generation of blunt suture needles is now on the market with a slightly more tapered tip profile that may provide for easier suturing compared to the earlier needles used in the referenced studies.

- *The ACS recommends the universal adoption of blunt tip suture needles for the closure of fascia and muscle in order to reduce needle-stick injuries in surgeons and OR personnel.*

**The neutral zone:** The hands-free technique (HFT) requires the surgical team to designate a sharps neutral zone (for example, a towel, Mayo stand, magnetic pad, and so on) for the pickup and release of surgical sharps such as needle holders, scalpels, and syringes with needles. In this manner, there is no direct handing of instruments from scrub person to surgeon and back. If the surgeon must not break eye contact with the surgical field during critical parts of the operation where patient safety or workflow might be compromised, a partial HFT may be used whereby sharps are directly handed by the scrub person to the surgeon, but then returned to the scrub person via a neutral zone.

- *The ACS recommends the use of HFT as an adjunctive safety measure to reduce sharps injuries during surgery except in situations where it may compromise the safe conduct of the operation, in which case a partial HFT can be used.* ■

As a result — somewhat remarkably given that we're several decades into a worldwide epidemic of a deadly bloodborne virus — too many surgeons still consider a suture injury during an operation business as usual in 2010.

"There is a mentality that exists that surgeons feel it is just part of the job," Makary says. "People are not always concerned about the risks as they should since there is a macho mentality that sometimes permeates the field."

In a recently published study, Makary and colleagues surveyed surgery residents at 17 medical centers. Of 699 respondents, 415 (59%) said they had sustained a needlestick injury as a medical student.<sup>4</sup> Many said they were stuck more than once; the median number of injuries per injured respondent was two.

"The operating room is just a very high-risk environment," he says. "There are a lot of needles being passed back and forth. There is a lot of stitching involved — a typical operation could involve hundreds of stitches. There are often people in the room who are not accustomed to working together as a team."

Of 89 residents who sustained their most recent needlestick injury during medical school, 42 (47%) did not report their injury to an employee health office — thereby avoiding an evaluation as to whether they needed treatment to prevent HIV or hepatitis C virus, the study found. The survey did find, however, that medical students were very likely (92%) to report the needlestick if they perceived that the patient was at high risk for having a virus such as HIV or hepatitis, compared with 47% of injuries involving "low-risk" patients. The most commonly given reason in the study for why the medical students didn't report needle injuries was the amount of time involved in making a report.

Most of the needlesticks among medical students were self-inflicted and occurred in the operating room when the student felt "rushed," Makary says. Respondents who sustained a needlestick injury in medical school were more likely to sustain a needlestick injury during residency. The researchers concluded that needlestick injuries and underreporting of the injuries are common among medical students and place them at risk for HCV and HIV. Strategies aimed at improving reporting systems and creating a culture of reporting should be implemented by medical centers, they recommended.

## Safety checklist for the OR

The International Healthcare Worker Safety Center at the University of Virginia in Charlottesville reminds infection preventionists to consider the following checklist to injuries and disease transmission in the operating suite.

- Are blunt suture needles, stapling devices, adhesive strips or tissue adhesives used whenever clinically feasible in order to reduce the use of sharp suture needles?
- Are scalpel blades with safety features used, such as round-tipped scalpel blades and retracting-blade and shielded-blade scalpels?
- Are alternative cutting methods used when appropriate, such as blunt electrocautery devices and laser devices?
- Is manual tissue retraction avoided by using mechanical retraction devices?
- Has all equipment that is unnecessarily sharp been eliminated? (Example, towel clips have been identified as a cause of injury in the operating room, yet blunt towel clips are available that do not cause injury and are adequate for securing surgical towels and drapes. Other examples of devices that do not always need to have sharp points include surgical scissors, surgical wire, and pickups.)
- Is double-gloving employed in the surgical setting?
- Do circulating nurses, as well as personnel close to the surgical site, wear eye protection such as goggles or faceshields that have a seal above the eyes to prevent fluid from running down into the eyes?

*For more information, go to [www.healthsystem.virginia.edu/Internet/epinet/](http://www.healthsystem.virginia.edu/Internet/epinet/). ■*

"Medical schools are not doing enough to protect their students and hospitals are not doing enough to make medical school safe," Makary says. "We, as a medical community, are putting our least skilled people on the front lines in the most high-risk situations. Most trainees are still forced to learn to sew and stitch on patients, which puts both providers

and patients at risk."

Medical schools should take advantage of advances in simulation technology and do less training on actual human beings, he adds. At Johns Hopkins Hospital, for example, a hotline has been instituted for all occupational blood exposures. After such a report is received, a rapid response team is activated to deliver appropriate care while preserving confidentiality.

"Some hospitals have excellent simulation centers and some hospitals are making a point of having high-risk patients undergo a sharpless protocol," Makary tells *Hospital Infection Control & Prevention*, "but a lot of training is still occurring by 'practicing' on patients, whereas high-tech simulators now can allow us to rehearse those techniques before people are in the real world."

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## Be ready for both OSHA and H1N1

*New directive for H1N1-related inspections*

You might receive a citation from the Occupational Safety and Health Administration (OSHA) if you fail to assess respiratory hazards related to H1N1 pandemic influenza A, don't use various methods to reduce employee exposure or fail to consider respirators other than N95s when there is a shortage.

Those are a few of the items included in OSHA's compliance directive, which guides inspectors as they consider potential violations. It also includes the key questions OSHA inspectors may ask when visiting a health care site.

## (See related story, p. 8.)

OSHA is enforcing the Centers for Disease Control and Prevention H1N1 guidance to protecting health care workers during pandemic H1N1. (*Editor's note: The OSHA compliance directive can be found at [www.osha.gov/OshDoc/Directive\\_pdf/CPL\\_02\\_02-075.pdf](http://www.osha.gov/OshDoc/Directive_pdf/CPL_02_02-075.pdf).*)

H1N1-related inspections will occur in response to worker complaints, referrals or fatality or catastrophe investigations, OSHA said. Health care workers are considered to have high exposure risk if they are within 6 feet of patients with suspected or confirmed H1N1 (including being in a small patient room with the patient) or if they are transporting those patients in an enclosed vehicle. OSHA considers workers to be at very high exposure risk if they are performing an aerosol-producing procedure — bronchoscopy, sputum induction, endotracheal intubation and extubation, open suctioning of airways, cardiopulmonary resuscitation, or autopsies.

"Since there is a great need for more research on the 2009 H1N1 influenza transmission, workers involved in tasks or activities which place them at high to very high exposure risk must be offered protection from all possible routes of transmission (contact, droplet, and airborne) to assure their protection," OSHA stated.

In an inspection, OSHA compliance officers will first look at written pandemic influenza plans and information about worker training. They will conduct a walk-around, interview employees, and review employee medical and exposure records and injury and illness records. If N95 respirators are in short supply, health care workers may wear respirators in extended use (with multiple patients) or may reuse respirators as long as they remain intact and are not visibly soiled, according to both CDC and OSHA. Yet in a shortage, employers should consider reusable elastomeric or powered air-purifying respirators, OSHA said. OSHA also laid out its expectations to avoid a citation if employees with high-risk exposures aren't wearing N95 respirators or greater:

"[Compliance officers] shall issue a citation for the failure to provide a respirator at least as effective as an N95 respirator to employees providing care in close contact (within 6 feet) of suspected or confirmed 2009 H1N1 influenza patients, unless the employer can establish all of the following:

- There is a shortage of respirators that are at least as effective as an N95 respirator or better;

- The employer made a good-faith effort to obtain other alternative respirators such as N99, N100, or reusable elastomeric respirators;
- The employer made an effort to monitor their supply of N95s and to prioritize their use according to CDC guidance;
- Surgical masks and eye protection devices were provided as an interim measure to protect against splashes and large droplets (Note: surgical masks are NOT respirators and do not provide protection against aerosol-generating procedures);
- Other measures were instituted to protect employees, for example, use of partitions or other engineering controls that might reduce the need for PPE or reducing exposure through cohorting patients. According to the compliance directive, OSHA inspectors will expect hospitals to use engineering and administrative controls, such as airborne infection isolation rooms, sneeze guards to protect clerical intake workers, policies to limit exposure of unprotected health care workers, and offering vaccination free of charge.

OSHA inspectors also may cite employers for failing to "ensure the use" of other personal protective equipment, such as goggles or face shields, or for failing to fully implement a respiratory protection program that includes training and fit-testing. ■

## What OSHA inspectors will ask about H1N1

*Be OSHA-ready with the answers*

The Occupational Safety and Health Administration's compliance directive to protect health care workers from H1N1 pandemic influenza A includes a series of questions inspectors may ask when on a health care site visit. Know the answers to these and you're OSHA ready in terms of H1N1:

### Planning

- Has the employer conducted a risk assessment to determine employees' exposure risk to 2009 H1N1 influenza?
- Has a plan been created using the information gathered in the risk assessment?
- Is there a person responsible for maintenance of the program and training of employees on the program?

- Has the employer developed procedures for early identification/isolation of cases (i.e., methods for screening suspected pandemic patients and sick employees)?

- Does the employer have a policy for dealing with sick workers (i.e., encouraging sick workers to stay at home)?
- Does the employer have a schedule for cleaning or decontaminating workplaces?

### Engineering controls

- Does the employer perform very high risk aerosol-generating procedures on suspected or confirmed 2009 H1N1 influenza patients?
- Does the facility have functioning airborne infection isolation room(s) (AIIR)? If so, is it operable?
- Has the employer implemented other measures for isolating employees from 2009 H1N1 influenza cases (e.g., installation of sneeze guards, windows at clerical intake areas and other barriers between workers and the general public)?
- Has the employer provided no-touch waste containers for used tissues?

### Administrative controls

- Does the employer provide and promote vaccination and if indicated post-exposure prophylaxis?
- Does the employer use a separate room(s) to isolate a person suspected to have 2009 H1N1 influenza; does the room(s) contain its own hand-washing sink, toilet, and bath facilities, when possible?
- Has the employer implemented communication measures to educate patients, employees and visitors (e.g., posting signs at entry points instructing patients, staff and visitors of the policies and of symptoms of influenza)?
- Are surgical masks used on suspected or confirmed 2009 H1N1 influenza patients who can tolerate use?

### Personal protective equipment, including respirators

- Has a hazard assessment determined the need for personal protective equipment (PPE)?
- Has the PPE been provided (e.g., eye protection, surgical masks, respirators)?
- Is PPE available in different sizes?
- Have employees been trained on the proper use of PPE?
- Does the employer ensure the use of PPE?
- Are respirators provided to employees who are entering the rooms of, or in close contact with (e.g., within 6 feet) individuals with suspected or

confirmed 2009 H1N1 influenza patients?

- Are respirators provided to employees who perform aerosol-generating high-risk procedures on suspected or confirmed 2009 H1N1 influenza cases?
  - If respirators are provided, is there a respiratory program in place and has it been reviewed and updated to include 2009 H1N1 influenza risks/exposures?
  - Are employees fit-tested on the respirators they use?
    - If surgical masks are used, what are the circumstances of use (e.g., what is the exposure risk category for employees using surgical masks; what engineering, administrative, or work practice controls have been put in place to supplement the use of surgical masks)?
    - Are there policies in place to keep respirators (or other PPE) clean and well maintained?
    - If there is a respirator shortage, what policies are being used to address protection of employees (e.g., consider additional engineering controls; measures to limit contact; use of

surgical masks on patients who can tolerate use; other administrative controls)?

#### Training

- What guidance is being given to workers covered under this directive who transport individuals who may be ill or exhibit influenza-like symptoms?
- Are employees aware of the signs and symptoms of 2009 H1N1 influenza?
- Are employees familiar with the employer's H1N1 program?
  - Are employees aware of the PPE available?
  - Do employees know what to do if they suspect someone may have 2009 H1N1 influenza and who to report suspected cases to in the facility?
  - Do they know how to protect themselves from contracting 2009 H1N1 influenza and what to do if they have symptoms during the scheduled work time?
  - Do employees know what the facility's policies are for sick employees (e.g., staying at home)? ■

## Infection liability grows, cases harder to defend

*Straight talk from an outspoken attorney*

Infection preventionists recently received some legal advice, and it wasn't quite as bleak as the old admonition to put everything you own under your spouse's name. But it was close. The sky is apparently the limit for the growing liability of health care-associated infections (HAIs).

"There is a need for more cooperation between the legal community, the risk managers and the infection preventionists," said **Russell Nassof**, JD, national practice leader of TRC Companies Inc. in Phoenix. "If we don't get this cooperation, unfortunately we are going to be faced with increasing liability for health care-associated infections."

The trends of converging change include government regulations, health care standards, payer reimbursements, and new definitions in the legal standards under which HAIs are viewed, he said recently in Washington, DC, at a conference held by the Association for Professionals in Infection Control and Epidemiology.

"HAIs were previously considered to be an 'inherent risk' from a legal standpoint, but now

they have become something that we call a 'serious preventable event,'" Nassof said.

In a sense, infection prevention has been a victim of its own success stories, as the oft-cited reports of the virtual eradication of methicillin-resistant *Staphylococcus aureus* (MRSA) in Europe are now expected to be repeated state-side. "Back in the 1960s, MRSA infections in places like Scandinavia were sky high, and in these nice little homogenous countries, they were able to get their rates down very low," he said.

Spoken like a true lawyer, and in general Nassof delivered a less-than-optimistic assessment of defending hospitals against HAI claims as reports of zero rates for certain types of infections play out in the national media. "I think with some of the other HAIs, we are going to have a much more difficult time," Nassof said. "But from a legal standpoint [people] are looking at this and saying if they can do it in Hospital A, then we should be able to do it in Hospital B."

Sometimes the solution carries with it new problems of its own, as active screening cultures for MRSA in certain patient populations may open up a new "Pandora's box of problems," he says. "With respect to MRSA there are many issues of prescreening, including funding, logistics, and the legal consequences."

Divergent trends are coalescing and feeding off one another, as federal payers' refusal to

pony up for additional costs generated by infections such as catheter-related UTIs has now translated into patient demands for apologies and bill-less discharge, he noted.

"I can tell you as an attorney that it is going to be very difficult to defend a hospital that has apologized and agreed not to [bill] a patient," Nassof says. "You have to put this information before a jury, so is there a way that hospitals can apologize for an error and yet not jeopardize their case. This is an unanswered legal question. [Similarly,] can you agree not to charge the [infected] patient and still successfully defend a claim before the jury?"

The changes in legal standards include a shift in the classic burden of proof, as hospitals suddenly find they have more '*splainin'* to do than Lucille Ball.

"Previously, the burden has always been on the patient to prove that in fact that they got sick or incurred an injury in the hospital," Nassof says. "Based on certain cases that went on the in the UK and the recent 'Klotz' case in the U.S., it appears that the burden of proof is now shifting to the hospitals. So if you are an acute care facility, it is now up to you to prove that a patient did not get an HAI. The reason for this change is because there was testimony in many of these cases that hospitals are filthy, dirty places; people go there and get sick, not well; and the rate of infection is rampant in acute care facilities." The key U.S. precedent involved one James Klotz, a St. Louis man who recently was awarded \$2.5 million for a debilitating MRSA infection linked to installation of a pacemaker in 2004, according to published reports. "In order to protect themselves from this hospitals are going to need to get more up to speed in their documentation and in their defense of these cases. They need to develop legally defensible data and protocols focusing on what I call the lowest common denominators of HAIs, that is hand hygiene, environmental cleaning, intervention bundles, fail-safe mechanism (i.e., checklists) and doing more audits."

HAIs are getting dangerously close to meeting the definition of "strict liability," he added, another shift in the burden of proof that could make them all the harder to defend.

"You as IPs will need to put on more of a legal hat when you are doing your work," he said. "One of the biggest problems we see is that oftentimes hospitals have the best policies

and procedures, yet clearly they are not meeting the goals and the elements of the policies. I can tell it is worse if you have policies and procedures in place and you're not meeting them, than if you had no policies and procedures in place at all. It is easier to defend you. Be sure you are meeting the terms of the policies and procedures you have in place."

By the same token, do not revise policies without supporting documentation. And even if your poor compliance with an infection prevention principle such as hand hygiene, try to get trends moving in a favorable direction and document the movement.

"I can defend you easier if you have trend going in the right direction — even if you are only at 50% [compliance] — than if you have a trend that is going up and down even if you occasionally hit 90%," Nassof said. "The other thing we want to look at all the time is that if you are doing audits, make sure that you do them on a consistent basis." ■

## Grim autopsies: H1N1, a true killer in some cases

### *Shades of 1918*

Though a growing sense of public apathy threatens to reduce H1N1 influenza A to the Rodney Dangerfield of pandemics, those who have experienced or witnessed a severe case of infection will not soon forget this erstwhile "swine flu." A thin spectrum of highly severe cases has occurred since the virus first appeared, and a newly published study indicates that trend continues for an unlucky minority of people.

In fatal cases of 2009 H1N1 influenza, the virus can damage cells throughout the respiratory airway, much like the viruses that caused the 1918 and 1957 influenza pandemics, report researchers from the National Institutes of Health (NIH) and the New York City Office of Chief Medical Examiner. The scientists reviewed autopsy reports, hospital records, and other clinical data from 34 people who died of 2009 H1N1 influenza infection between May 15 and July 9, 2009. All but two of the deaths occurred in New York City. A microscopic examination of tissues throughout the airways revealed that the virus caused damage primarily to the upper

airway — the trachea and bronchial tubes — but tissue damage in the lower airway, including deep in the lungs, was present as well. Evidence of secondary bacterial infection was seen in more than half of the victims.

The team was led by **Jeffery K. Taubenberger**, MD, PhD, of the National Institute of Allergy and Infectious Diseases (NIAID) at NIH. The findings are reported in the *Archives of Pathology & Laboratory Medicine*, now available online and scheduled to appear in the February 2010 print issue.<sup>1</sup>

The new report also underscores the impact 2009 H1N1 influenza is having on younger people. While most deaths from seasonal influenza

occur in adults over 65 years old, deaths from 2009 H1N1 influenza occur predominately among younger people. The majority of deaths (62%) in the 34 cases studied were among those 25 to 49 years old; two infants also were among the fatal cases. Ninety-one percent of those autopsied had underlying medical conditions, such as heart disease or respiratory disease, including asthma, before becoming ill with 2009 H1N1 influenza. Seventy-two percent of the adults and adolescents who died were obese. This finding agrees with earlier reports, based on hospital records, linking obesity with

## 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

Upon completion of this educational activity, participants should be able to:

- Identify the clinical, legal, or educational issues encountered by infection preventionists and epidemiologists;
- Describe the effect of infection control and prevention issues on nurses, hospitals, or the health care industry in general;
- Cite solutions to the problems encountered by infection preventionists based on guidelines from the relevant regulatory authorities, and/or independent recommendations from clinicians at individual institutions. ■

## CNE/CME questions

1. Proponents of blunt suture needles emphasize that the safety equipment can now replace traditional sharp suture needles for all surgical procedures.
  - A. True
  - B. False
2. In a recently published study, what percentage of the 89 surgical residents who sustained a needlestick injury reported the injury to the employee health office?
  - A. 28%
  - B. 33%
  - C. 47%
  - D. 67%
3. According to the Occupational Safety and Health Administration, H1N1-related inspections will occur in response to:
  - A. worker complaints.
  - B. referrals.
  - C. fatality or catastrophe investigations.
  - D. All of the above
4. The landmark "Klotz case" underscores the increasing liability of health care associated infections. It resulted in \$2.5 million judgment in favor of a patient infected with:
  - A. *Clostridium difficile*.
  - B. methicillin-resistant *Staphylococcus aureus*.
  - C. H1N1 influenza A.
  - D. *Klebsiella* species.

## COMING IN FUTURE MONTHS

■ Complying with new HICPAC guidelines

■ Key changes and compliance issues in new UTI guidelines

■ A closer look at Joint Commission patient safety goals

■ OSHA inspections for H1N1 infection prevention

an increased risk of death from 2009 H1N1 influenza.

The researchers examined tissue samples from the 34 deceased individuals to assess how 2009 H1N1 influenza virus damaged various parts of the respiratory system. "We saw a spectrum of damage to tissue in both the upper and lower respiratory tracts," Taubenberger says. "In all cases, the uppermost regions of the respiratory tract—the trachea and bronchial tubes — were inflamed, with severe damage in some cases."

## Reference

1. Gill JR, Sheng Z, Ely SF, et al. Pulmonary pathologic findings of fatal 2009 pandemic influenza A/H1N1 viral infections. *Arch Pathol Lab Med* 2010;134:E1-E9. Published in advance of print at: <http://arpa.allenpress.com/arpaonline/?request=index-html>. ■

## CNE/CME answers

- 1. B; 2. C; 3. D; 4. B.**

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## What can possibly go wrong? Don't ask

*Checklist, teaching tool can help keep it simple*

By **Patti Grant**, RN, BSN, MS, CIC  
Infection Preventionist, Dallas

Your infection prevention and control program is textbook perfect. You have verified that each little nuance of the Centers for Medicare & Medicaid Conditions of Participation, The Joint Commission accreditation requirements, and your state licensing rules, are covered in policy, procedure, and program(s). You can fluidly cross-reference the pieces and are confident about accessing requested information quickly. Most definitely, you are ready. So what can go wrong during any of the multiple surveys you'll experience?

If you've been in infection prevention and control (IP&C) for any length of time:

- a) you've already learned not to ask that question; because
- b) what can go wrong will; and,
- c) *that* something will be painfully obvious and outrageously avoidable.

If you are wondering if there is sarcasm in the above description your imagination is not working overtime — you are sensing exposure to a uniform disappointment of more than just a few of your IP&C colleagues. Let's face it, we do this full time and most of us do IP&C beyond the required 40-hour work week. Yet during formal environmental rounds and/or while walking through the facility to a meeting, obvious and avoidable breeches in IP&C basics might be observed. For example:

- A housekeeping cart pushed up against the cart holding the lunch trays waiting to be delivered to patients (guidance: separation of clean and dirty)
- Using a clean Zip-Locked biohazard bag to deliver ice to the patient bedside to freshen water pitchers (guidance: signage dictates practice)
- Clean linen stacked on a rolling cart to be delivered to patient rooms without a sheet covering it (guidance: protect clean linen from

the environment)

Why don't health care workers see and avoid these contradictions in real time? The answer is as obvious as the challenges we face: IP&C is not their only responsibility. They are focusing on getting the lunch trays to the patient while still hot, keeping the ice clean while avoiding cross-contamination during transfer, and getting linens to the bedside in an efficient manner. We notice simple red flags immediately, yet, our advanced IP&C training is **not** required to see and correct these everyday IP&C concerns.

Too often I've seen protracted, albeit textbook-perfect, assessment forms given to bedside staff to complete related to infection prevention. This type of detailed tool should be used by those who do IP&C as their chosen profession, not by bedside staff who also are incorporating safe medication administration, environment of care safety, and correct application of the myriad evidence-based practices to optimize good outcomes.

After about 20 years as an infection preventionist I've come to believe that 'less is better' when it comes to messaging to those that work at the bedside. IP&C is not their sole mission, so we must pick and choose the barest of IP&C practices to emphasize. Not easy decisions, yet minimize we must, because too much information complicates the bare-bones messaging setting us up for failure through over saturation.

Aside from continuous hand hygiene compliance we must determine, based on the culture and services provided at our health care facility, what are the 'drop-dead' minimums that must be in place at all times. Once you've decided on that list — and keep it to one page — provide a supplemental document as a teaching tool that includes the rationale for each IP&C component. There are no secrets here: provide the check-off and rationale (the *why* teaching) documents together. These two documents *are you* without your physical presence. I have a generic one-page check-off list and supplemental teaching (rationale) document that has served me well over the years. (**See charts, p. 2; insert.**)

Report back compliance on tool completion as part of your annual program goals. Your part is to provide real-time feedback with problems reported and require a time-driven action plan on their end to address deficiencies. When finance did this, they answered that "PPE" meant "pay period ending." Obviously, I had some teaching to do! ■

## Your Hospital Name Here: INFECTION PREVENTION (IP) ROUNDS

### Minimum Requirements: Major Issues & Staff Questions

DEPARTMENT: \_\_\_\_\_ DATE: \_\_\_\_\_

Observation/Question	Finding	Corrective Action*
All doors that are storage areas (of any sort) have the correct <u>signage outside door</u> ?		
Area Clean & Clutter Free?		
Ice Machine Clean?		
Who Cleans Ice Machine?		
Handwashing Sinks Stocked? Is Alcohol Hand Rub/Gel Available at Patient Entry?		
All Refrigerators Labeled? Only items inside per sign? Are temperature logs 100%?		
Anything stored under the sink?		
Supply Carts/Linens with solid bottom?		
Where is the IP&C Manual? How Do You Get IP&C Questions Answered?		
The Name of the Isolation System we use here?		
Who can isolate a patient? How?		
What is PPE? Where is the PPE on your unit? When do you use it?		

\* Corresponds with 3-page "IP Rounds: Minimum Requirements – Major Issues & Staff Questions"

Place YOUR Name and Extension Here ... and include "Questions?" Call ...

Source: Patti Grant, RN, BSN, MS, CIC, Dallas.

## INFECTION PREVENTION (IP) ROUNDS

### Minimum Requirements: Major Issues & Staff Questions

Observation & Question	Expected Outcome & Answer	Rational: Outcome/Answer
<u>All doors that are storage areas (of any sort) have the correct signage outside door</u>  NOTE: The goal here is to leave “NO DOUBT” as to what is behind the door	Clean/Dirty/Soiled/Staff Only/Environmental Services/Electrical, etc. .... The sign must be permanent/easily read. The items inside can <b>only</b> be as indicated by the door signage	Separation of Clean/Dirty is a basic IP practice, and applies to all types of healthcare facilities (acute, clinic, etc.). Signage must always equal practice (can’t have dirty items in a clean storage area).
Is unit/area <u>Clean</u> and <u>Clutter Free</u> ?	Halls/Patient Rooms/Storage Areas (even soiled) must be clean and free of clutter. Clutter-free areas are easier to clean and trap less dust/hidden sharps, etc.	“If it looks clean it is clean” for the public and walk-through during an inspection. If an area looks dirty 99.9% of the time ‘they’ will <i>really start looking</i> for underlying problems (opening doors, cabinets)
Is the <u>Ice Machine Clean</u> ?	The entire ice machine, including the part under the ‘grid’ where ice falls, must be clean. If there is “build-up” this must be removed. If the ice machine cannot be made to look new, please consider buying a new one	Although ice machines have not been heavily associated with infection in US hospitals ... this is a ‘hot topic’ during inspections. Appearances and logic go together: If a hospital can’t keep the ice machine clean then ...
<u>QUESTION:</u> Who Cleans the Ice Machine?	Housekeeping? Environmental Services? Nursing Staff? Nutrition?	Knowing who is responsible is key: working as a team by notifying when it’s dirty.
Are <u>all sinks stocked</u> with paper towels and soap? Is the <u>sink area clean</u> ? Does the <u>faucet work without splatter</u> ?	All handwashing areas are to be fully stocked and operational. NOTE: If Clean or Dirty sink only, place signage. Keep alcohol hand-rub to at least ¼ full and then replace with new one so don’t run out. Use when leaving or entering a room.	An area used for cleanliness must be clean: e.g. a sink used for handwashing can’t be used to empty urine.
Is alcohol hand-rub available in all patient care areas? In Admitting/interview areas?		Supplies for hand hygiene must be present at all times: notify housekeeping or nursing if low.
Observation & Question	Expected Outcome & Answer	Rational: Outcome/Answer

Prepared: Patti Grant; RN, BSN, MS, CIC  
Place YOUR Name and Extension Here ... and include “Questions?” Call ...

Are <u>all</u> refrigerators marked with signage?	Staff Only; Medications Only; Patient Nourishments Only: Biohazard Only, etc.  NOTE: The goal here is to leave “NO DOUBT” as to what is in the refrigerator.	<i>All</i> refrigerators must have signage/storage as marked. This is to prevent cross-contamination and potential enteric illness. Don’t want to run the risk of medications in with milk or blood and body fluids, etc.
Are the <u>temperature logs for MEDICATION and PATIENT NOURISHMENT</u> 100% filled out?  NOTE: This <u>includes corrective action</u> for temps outside acceptable ranges.	Who’s responsible for checking/charting the temperature of patients food refrigerator. If not done notify their supervisor, don’t just let it go. This is usually done by food and nutrition.  Pharmacy is most often responsible for checking the medication refrigerator.  If medication refrigerator isn’t used 24/7 (like a clinic closes on weekends) there must be an alarm system to document an electrical outage occurred.	Patients, unlike healthcare workers, are compromised: They are under medication that impedes their judgment and procedures/treatments that interfere with their normal routines. Because of this impaired state, we must be 100% responsible for the quality/temperature of the food and medications they ingest ... the temperature log is the major tool inspectors look for to “prove” this is done for patients.
Are there <u>items stored under the sink</u> ?	Nothing under sick (some facilities allow ONLY the single bottle of cleaning solution currently being used be kept under the sink).	Items stored under a sink can become wet/mold/mildew. A bottle of cleaning solution is not clean <i>or</i> dirty, and must be kept easily accessible.
Are <u>tops/sides/bottoms of linen/clean supply carts with solid protection</u> ?  NOTE: Check <u>bottom shelf</u> of all supply/linen carts to make sure it is “solid”	Carts carrying/storing Clean items must have all sides/top/bottom covered during transport. If clean items are then stored behind a door, then the one access side can be lifted up. If stored in a hallway, flap must be down unless in immediate use.	During transport water/dust and debris can ‘splash’ up onto clean supplies’ or ‘fall from the ceiling’ or ‘be flung onto the sides’ of clean supplies. To keep this from happening, clean supplies must be protected during transport and use.
Observation & Question	Expected Outcome & Answer	Rational: Outcome/Answer

Prepared: Patti Grant; RN, BSN, MS, CIC  
 Place YOUR Name and Extension Here ... and include “Questions?” Call ...

<b>QUESTION:</b> Where is your “Infection Prevention & Control and/or Employee Health Manual?”	Every area has this manual and each employee must know where to find it. If this is on-line via an ‘intranet’ then know how to find it also.	This is <i>your right</i> as an employee to have access to the policy/Procedures, and to access information 24/7 to help contain infection.
<b>QUESTION:</b> What is the name of the isolation system used at your facility and where can you find the policy?	The most recent CDC sanctioned system is called “Standard Precautions” and most hospitals use this system.	With rare exception this policy is based on the CDC 2007 publication “Guideline for Isolation Precautions in Hospitals”
<b>QUESTION to RN/LVN:</b>  True or False:  Only physicians and infection prevention staff can isolate a patient.	Many hospitals no longer require an MD order to place a patient in isolation since the nurse is there 24/7.  What is the policy at your facility?	Not everything happens Monday - Friday during business hours ... IP is a 24/7 business and nursing should be empowered to protect the patient, staff, and general community from diseases designated as CDC and/or state health department “communicable”
<b>QUESTION:</b> What does PPE mean? Where is the PPE?  NOTE: Any decontam area must have full PPE in room	“Personal Protective Equipment” (PPE): gloves in every room; gown, mask, goggles, face shield must be on each unit so can access if needed.	At a minimum, gloves must be in every patient treatment area (clinics included). Every area must also have full range PPE available, and possibly in room if frequently used (eg: E/D trauma, L&D, etc.)

Prepared: Patti Grant; RN, BSN, MS, CIC  
 Place YOUR Name and Extension Here ... and include “Questions?” Call ...

Source: Patti Grant, RN, BSN, MS, CIC.

## 2009 SALARY SURVEY RESULTS

# Hospital Infection Control & PREVENTION

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## Infection preventionists hold the battered line amid devastated economy, H1N1 flu pandemic

*Freeze out: A third of IPs receive no raises in 2009*

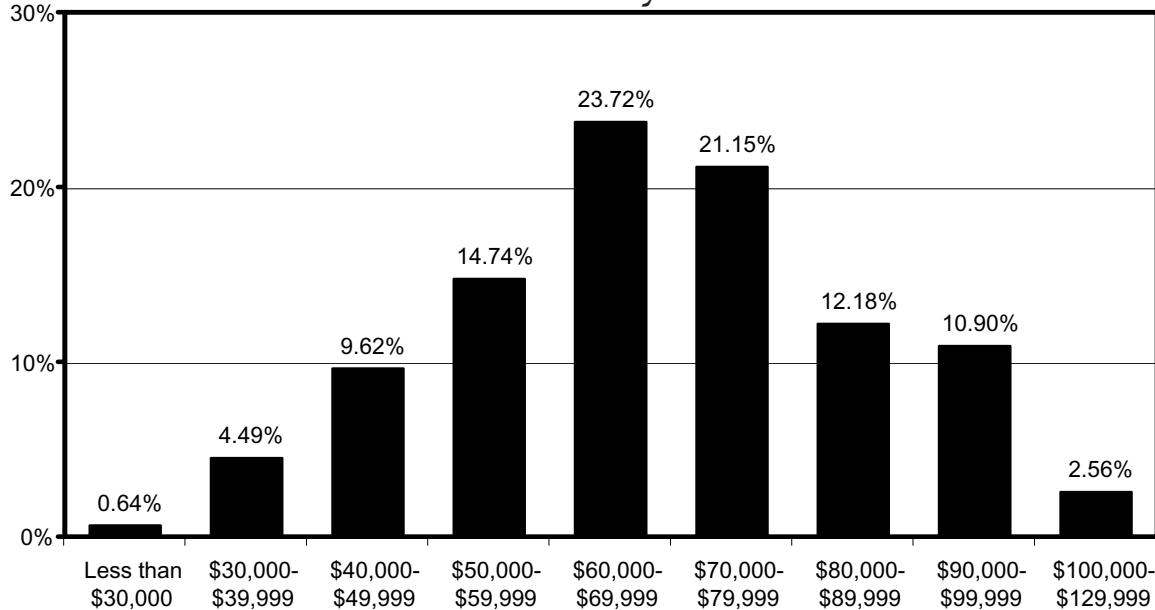
After an economic wildfire that swept through health care and laid waste to entire industries in other sectors, infection preventionists may be a little singed around the edges — but they're still standing.

The majority even got some kind of raise, underscoring their longstanding job security and value to health care facilities in age of patient safety and increasing liability for health care-associated

infections, according to the 2009 salary survey by *Hospital Infection Control & Prevention*.

Sure, we're drawing the glass half full here, in part in contrast to corporate America, much of which has been sitting on empty, its employees clinging to jobs and having long forgotten raises. But the great "Decession" took its toll on health care as well, often considered a recession-proof harbor in any economic storm. As a result, 32%

### What is Your Annual Gross Income from Your Primary Care Position?



of infection preventionists reported no raises for the period, up from the 20% that reported no wage growth in 2007 and 14% in 2006.

The 2009 survey found a median salary for IPs in the \$60,000 to \$69,999 range, the same as the previous year. The median age range of the 157 respondents was 51 to 55 years old, with most working in small to midsize hospitals of 300 beds or less. In salary percentage breakdowns, 10% were making \$40,000 to \$49,999; 15% were paid \$50,000 to \$59,999; and 24% had salaries in the \$60,000 to \$69,999 range. Another 21% were in the 70,000 to \$79,999 range.

### A glass half empty

It's not hard to take a "half-empty" view of a glass that may even have a few hairline cracks upon closer inspection. And why not? As the federal government scrambled to offset a complete economic collapse, the hospital sector began to take a beating. According to the American Hospital Association, the economic crisis struck hospitals hard and is still manifest in the following trends:

- The proportion of emergency department patients without insurance is increasing.

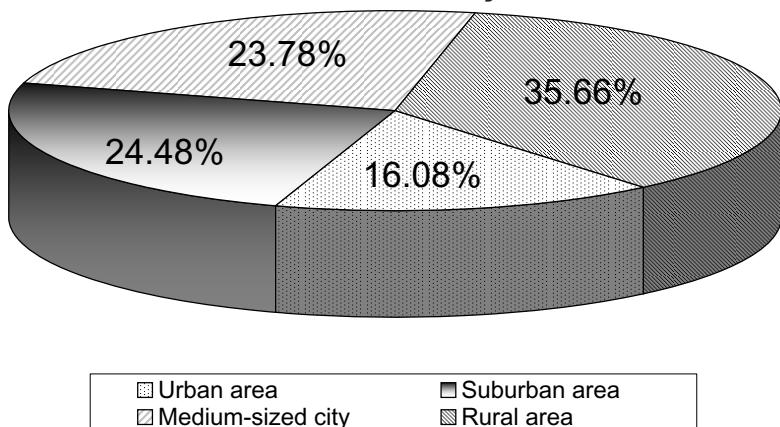
- A higher proportion of patients are unable to pay for care and many hospitals are seeing more patients covered by Medicaid and other public programs for low-income populations.

- Fewer patients are seeking inpatient and elective services raising concerns that individuals are putting off needed care.

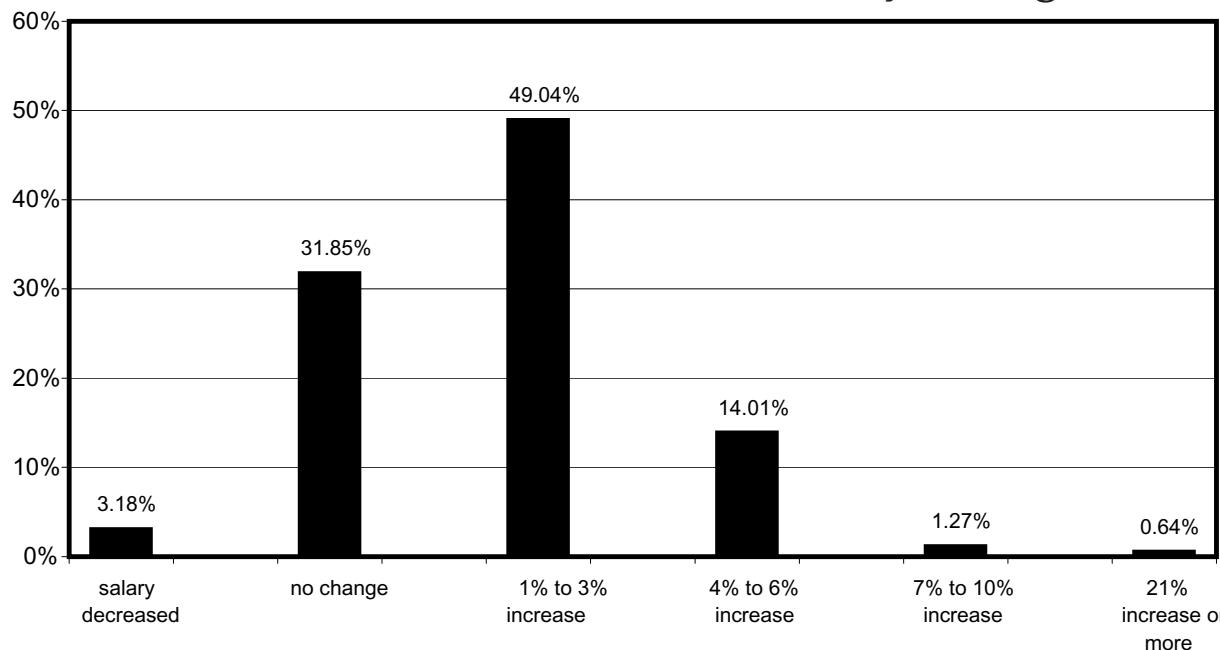
- Community need for subsidized services such as clinics, screenings and outreach is increasing even as charitable contributions are down for many hospitals.

As a result of such trends, infection preventionists and their colleagues in other health care fields saw support staff, travel budgets — and anything else not nailed to the floor — swept away. The Association for Professionals in

### Where is Your Facility Located?



### In the Past Year, How Has Your Salary Changed?



Infection Control and Epidemiology reported many IPs were having budgets slashed and critical functions such as surveillance undercut. In an online survey reported at the 2009 APIC conference 41% of respondents reported cuts in budgets for infection prevention. According to the APIC survey, nearly 40% had layoffs or reduced hours, and a third experienced hiring freezes.

(See **HIC**, July 2009, cover.)

APIC is planning to repeat the survey, but the anecdotal evidence is that IPs are holding the line. "We have not heard of any additional staffing freezes, layoffs, and cutbacks beyond what we reported in that survey," says **Kathy Warye**, CEO of APIC. "This is just informed instinct — not data — but my sense is that institutions are kind of holding the line."

There are hopeful signs amid the debris, she tells *HIC*. "I have been hearing that health care institutions are performing better financially overall because patients with elective surgery and that sort of thing are starting to come back," Warye says. "As the economy has gotten a little bit better, health care organizations have seen some benefit from that. Their revenue sources, from what I understand, are starting to tick up just a bit, so hopefully we will not see any more additional cutbacks and freezes as the overall health care picture continues to improve."



**Kathy Warye**

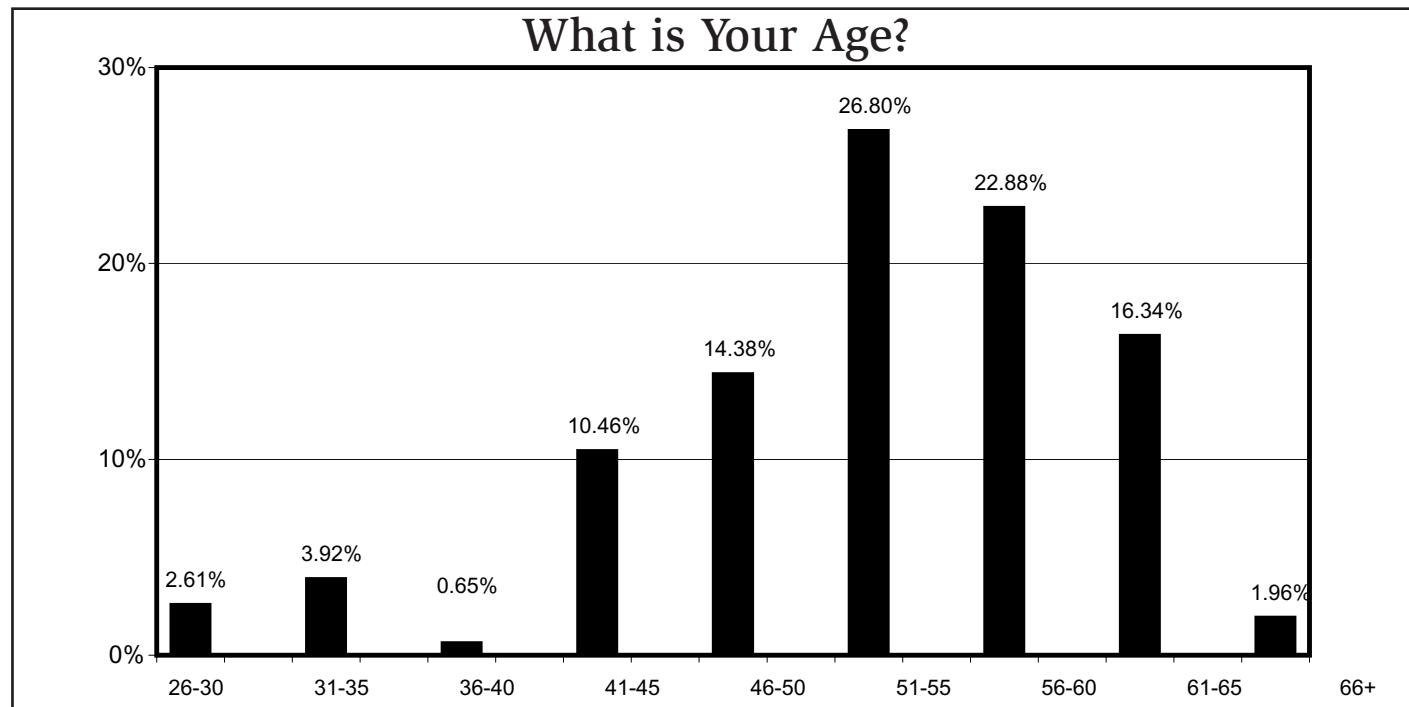
Still, the H1N1 influenza A pandemic is exacting a heavy price in resources to departments already pared down to the bone by the economic situation. The other concern is that these economic-driven cuts may become the "new normal" even as the economy rebounds, with health care administrators reluctant to restore funding and remove department constraints. "We are not hearing — and again this is anecdotal — that those resources are being restored," Warye says. "I think hospitals are just like every other business — once you cut something the tendency is to hold the line there. It is only with a very sound argument over time that resources begin to trickle back."

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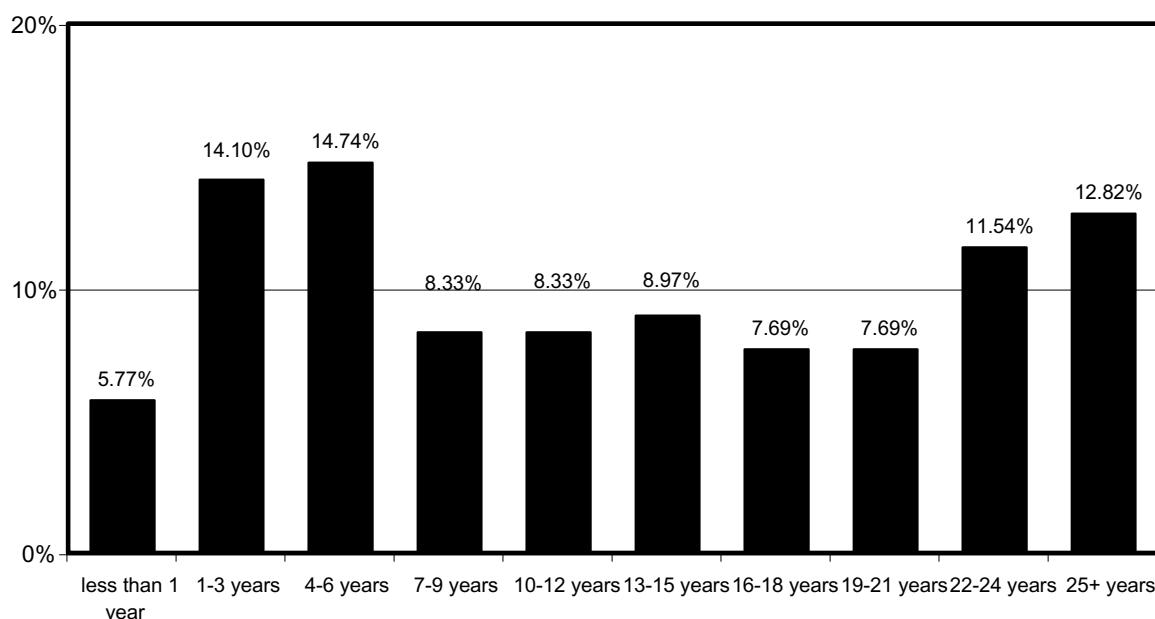
### ***Joint Commission's critical role***

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A key ally in this fight will be The Joint Commission, which has increasingly emphasized the importance of infection prevention in its quality improvement initiatives. Indeed, the Joint Commission focused on improving hand hygiene problems as the first project of its Center for Transforming Healthcare. The new center is The Joint Commission's key foray into national health care reform, which must include a quality component — including preventing health care-associated infections (HAIs) — if it is to become an effective and affordable reality, says **Mark**



## How Long Have You Worked in Infection Control?



**Chassin**, MD, MPP, MPH, president of The Joint Commission. "We know that for every HAI that is prevented, we will save money and we save the patient that suffering." (**See our supplement, *The Joint Commission Update for Infection Control*, in the December 2009 HIC.**) Asked about budget woes and cutbacks widely reported by infection preventionists, Chassin said the Joint Commission has not lowered its expectations of hospitals due to the economic situation. "The Joint Commission standards and national patient safety goals — in other words, requirements for health care organizations that underpin safety and quality — don't change with economic fluctuations," he told *HIC*. "If we find that there is a problem with infection prevention and control, we will work with the organization to solve it whether it is a staffing problem, a training problem, or an implementation problem. We are not seeing in our own survey results any substantial increase in problems due to reduced staffing in these critical programs. But our surveyors look for that, as well as lack of compliance with requirements for other reasons."

In addition, a recently published paper on Joint Commission leadership standards specifically cited infection prevention, noting that "a hospital's performance is demonstrated through its performance with respect to other important hospitalwide systems, such as those for information management, infection control, and

medication management."<sup>1</sup>

The challenge for APIC and individual IPs is to leverage such perceptions of increasing importance into the reality of restored and expanded resources.

"We are working very closely with the Joint Commission to increase their awareness and sensitivity to the resources issues," Warye says. "We need to continue with this drumbeat of evidence and messaging around infection prevention and control, and put more tools in our members' hands to make the 'business case.'"

APIC is currently developing a new tool to address IP staffing and resources. "It's not going to be a situation where we say you should have 'x' number of infection preventionists to 'x' number of beds because we know that hospitals are far more complicated than that," she says. "We are looking at a whole combination of human, technological and other resources so that an IP can come up with the best-case scenario of how to allocate those within her specific institution."

### Reference

1. Schyve, Paul. Leadership in healthcare organizations: A guide to Joint Commission leadership standards. Governance Institute, 2009: Available at: <http://www.jointcommission.org>.

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