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As new strains strike, brace for norovirus outbreaks that can sicken staff, patients

Canadians offer valuable insights into fighting an outbreak

Cruise ships have become notorious for norovirus outbreaks that ruin passengers' exotic vacations. But as two new strains sweep the country, norovirus wields the greatest punch against long-term care facilities and hospitals, where outbreaks afflict patients and employees and lead to absenteeism and staff shortages.

More than 1,300 norovirus outbreaks occurred nationwide in the fall of 2006. While half of them were in long-term care facilities, a significant number occurred in hospitals, the Centers for Disease Control and Prevention in Atlanta reported. For example, in New York state, 26 (8%) of 333 outbreaks of acute gastroenteritis occurred in hospitals. In North Carolina, health authorities confirmed that norovirus was the cause of death of a 90-year-old nursing home patient last year. That is the first time the virus has been directly identified as a cause of death in the United States.[1]

Norovirus outbreaks are likely to increase this fall and winter, as well, as part of a seasonal trend, says **Jacqueline Tate**, PhD, an officer with CDC's Epidemiologic Intelligence Service. With new strains, the transmissibility will be even greater than usual, she says. "There can be high attack rates associated with norovirus because it has such a low infectious dose," she says.

In 2008, norovirus surveillance will increase as it becomes reportable through the National Outbreak Reporting System. Norovirus has an incubation period of just 12-48 hours and is characterized by vomiting, diarrhea, abdominal cramping and nausea. To limit transmission, CDC recommends strict adherence to infection control and environmental decontamination. **(See article on p. 123.)**

Although norovirus is not usually life-threatening, hospital outbreaks are disruptive and even debilitating. Royal University Hospital in the Saskatoon Health Region in Canada weathered a norovirus outbreak last winter, which sickened 34 patients, 88 employees, and 16 physicians. The health region now shares its "lessons learned" from the 2006 outbreak

with other hospitals.

Saskatoon Health Region has used the experience to improve its overall response plan for infectious diseases, but it also is bracing for the possibility of another norovirus outbreak. "Plan ahead because outbreaks can strike at any time," advises **Donna Wiens**, RN, BN, CIC, regional manager for infection prevention and control.

Hospital sets up Incident Command System

As it usually does, the norovirus outbreak in Saskatoon began in the community. Most likely the first patient came to the emergency room with severe gastroenterological symptoms and was admitted.

"We had reports from a unit saying, 'We're seeing vomiting and diarrhea in [several] patients. Please come and investigate,'" recalls Wiens.

Soon it became clear that there had been other, unrecognized cases. Some employees already had gotten ill. "Often, once you investigate, [you realize] the situation is bigger than you realize," she says. "Reports started coming from other units saying, 'We have this problem, too.' We had at least four units that had confirmed cases of norovirus during that same outbreak period."

Within a couple of days, the health region decided to convene an Incident Command System, which brought together a team that included managers, infection control, employee health, and public health. The team met each day — or sometimes twice a day — to review the cases and strategies to stop transmission.

The outbreaks cannot be controlled without taking stringent measures to prevent transmission, says Wiens. Norovirus "may be self-limiting in an individual. You get sick and you get better. But it's very transmissible. We know that people can get sick more than once. The immunity is very short. Outbreaks are not quickly self-limiting.

"I've seen outbreaks poorly controlled that went on for six weeks or more. They just keep recirculating in a population," she says.

While the health region focused on infection control, the command team provided feedback and communication to the staff as well as the public through regular press releases, pamphlets, and daily updates to employees. "You have to work closely with staff to get their buy-in and get the best result possible," says **Jean Morrison**, RN, MN, MHSA, chief nursing officer and vice president, performance excellence.

Combating the outbreak

To control the outbreak, the health region implemented a number of measures at Royal University Hospital:

• **Employee health monitored employee illnesses and sent staff home, as necessary.** Health care workers can have too much dedication to their jobs. "That was one of our challenges. Staff felt they needed to come to work even if they didn't feel well, and they got sick at work," says Morrison. Employee health tracked the cases of staff illness — and made sure that employees

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Preventing the spread of norovirus infection

The Centers for Disease Control and Prevention provides the following guidance to health care facilities seeking to control a norovirus outbreak:

• **Isolation precautions:** Patients with suspected norovirus infection should be managed with standard precautions with careful attention to hand hygiene practices. However, contact precautions should be used when caring for diapered or incontinent persons, during outbreaks in a facility, and when there is the possibility of splashes that might lead to contamination of clothing. Persons cleaning areas heavily contaminated with vomitus or feces should wear surgical masks as well. In an outbreak setting, it may be prudent to place patients with suspected norovirus in private rooms or to cohort such patients.

• **Environmental disinfection:** CDC recommends either chlorine bleach or U.S. Environmental Protection Agency (EPA) approved disinfectants for use in controlling norovirus outbreaks. All disinfectants should be used on clean surfaces for maximum performance. Please see the U.S. Environmental Protection Agency (EPA) web site (www.epa.gov/oppad001/list_g_norovirus.pdf) for a list of hospital disinfectants registered by the EPA with specific claims for activity against noroviruses. It should be noted that evidence for efficacy of disinfectants against norovirus are usually based on data of efficacy against feline calicivirus (FCV) as a surrogate for norovirus. However, feline calicivirus (a virus of the respiratory system in cats) has different physio-chemical properties to norovirus and there is debate on how well data on inactivation of FCV reflect efficacy against norovirus.

— Chlorine bleach should be applied to hard, nonporous, environmental surfaces at a minimum concentration of 1,000 ppm (generally a dilution 1 part household bleach solution to 50 parts water) This concentration has been demonstrated in the laboratory to be effective against surrogate viruses with properties similar to those of norovirus. Health care facility staff should use appropriate PPE (e.g., gloves and goggles) when working with bleach. In areas with high levels of soiling and resistant surfaces, up to 5,000 ppm chlorine bleach may be used.

— EPA-approved disinfectants should be used according to manufacturers' instructions.

— Quaternary ammonium compounds are often used for sanitizing food preparation surfaces or disinfecting large surfaces (e.g., countertops and floors). However, because noroviruses are nonenveloped virus particles, most quaternary ammonium compounds (which act by disrupting viral envelopes) do not have significant activity against them.

— Phenolic-based disinfectants have been shown to be active against noroviruses in the laboratory. However, this activity may require concentrations two- to fourfold higher than manufacturer recommendations for routine use.

— Heat disinfection [i.e., pasteurization to 60°C (140°F)] has been suggested, and used successfully under laboratory conditions, for items that cannot be subjected to chemical disinfectants such as chlorine bleach.

Additional measures:

• Avoid sharing staff members between units or facilities with affected patients and units or facilities that are not affected.

• Group symptomatic patients and provide separate toilet facilities for ill and well persons.

• Instruct visitors on appropriate hand hygiene and monitor compliance with contact isolation precautions.

• Close affected units to new admissions and transfers.

(Editor's note: A CDC fact sheet on norovirus in health care facilities is available at www.cdc.gov/ncidod/dhqp/id_norovirusFS.html.) ■

stayed home for 48 hours after the symptoms resolved, as recommended by CDC.

• **Staff could not "float" among units.** Staff were restricted from moving from a unit with norovirus cases to one that was unaffected. However, staff who served multiple units, such as radiology technicians, and physicians still needed to visit the affected areas.

• **Some units were closed to new admissions or transfers.** The hospital was able to direct patients to acute care beds in other units. In some cases, however, surgeries were delayed or rescheduled.

• **Visitors were restricted from entering affected units.** Exceptions were made for the family members of patients who were terminally ill or, in some cases, for the primary caregivers of some patients.

• **Environmental surfaces, including door handles, railing, taps, counters, equipment, were cleaned thoroughly.** The hospital switched to an accelerated hydrogen peroxide-based cleaner and became more aggressive about cleaning surfaces.

• **Employees did not wear their uniforms outside the hospital.** After every shift, employees changed their shoes and put their uniforms in a bag to wash them. "We wanted to decrease any chance we were sending infections back to the community," says Morrison.

After the outbreak subsided, Saskatoon Health Region reviewed its policies and decided to make some changes. To reduce the risk of hand contamination, employees were required to remove artificial nails. Their fingernails must be clipped short and polish-free.

The hospital also is encouraging employees to change out of their uniforms at the end of a shift and not wear them home. New lockers are being installed to give employees a place to store their street clothes.

Meanwhile, the hospital also learned that individual units need the flexibility to make decisions that suit their needs. To enable that, the hospital is creating unit-specific response plans that allow staff to have input when an infectious disease emerges or some other disaster occurs. "We will be putting together a template to make decisions and act at the unit level," says Morrison.

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Power nap: Why sleeping on the job boosts safety

'Strategic naps' improve alertness

Encouraging nurses to sleep on the job may be one of the safest steps you can take.

That may seem paradoxical, since of course you don't want employees to be asleep when they should be taking care of patients. But a "strategic nap," taken during a scheduled break, can combat fatigue and improve alertness, sleep experts say.

In fact, the VA Palo Alto (CA) Health Care System has implemented the Strategic Nap Program to improve alertness, a pilot program that is being expanded to other VA hospitals around the country. "Sleeping at work is just odd," acknowledges **Steven K. Howard**, MD, staff physician and director of the Patient Safety Center of Inquiry at the VA Palo Alto. "But if it's done the correct way, it can actually lead to safer care."

While it may be challenging to convince employers to implement a nap program ("You have to educate people and put the positive spin on it," says Howard), the problems caused by lack of sleep are well-known. In fact, after 17 hours of wakefulness, performance drops and is equivalent to a 0.05 blood alcohol level, or about two drinks.[1]

In 2003, an Institute of Medicine panel emphasized the impact of fatigue on nurses who work night shifts or extended shifts. It cited a study that showed impaired performance after 12-hour shifts and recommended limits on nursing hours.[2]

"[T]here is no evidence to suggest that any amount of training, motivation, or professionalism is able to overcome the performance deficits associated with fatigue, sleep loss, and the sleepiness associated with circadian variations in alertness," the IOM panel concluded.

But restructuring the nursing work environment is controversial and complex. Hospitals can take immediate steps to improve alertness by creating a culture that enables "strategic naps," says **Mark Rosekind**, PhD, president and chief scientist at Alertness Solutions in Cupertino, CA.

Light exposure, caffeine, and physical activity are among the strategies for improving wakefulness, says Rosekind, an internationally known sleep expert who previously headed the Fatigue Countermeasures Program at the National Aeronautic and Space Administration (NASA) Ames Research Center. But strategic napping should be incorporated into a culture of safety, he says. In one study, when pilots on transpacific flights of nine hours duration took naps averaging 26 minutes, they had a boost in performance of up to 34%.[3]

Naps ranging from 15 minutes to 40 minutes are most effective, says Rosekind. Longer naps may allow someone to go into deep sleep, leaving them groggy and temporarily disoriented when they awaken and possibly disrupting their nighttime sleep, he says.

"A strategic nap is one of the most effective strategies to boost alertness and performance," says Rosekind.

'Our job is vigilance'

Howard became personally aware of the impact of sleep deprivation when he was a medical resident in anesthesiology. Like other residents, he just tried to tough it out.

Fatigue is especially problematic in anesthesia, Howard's field, because of the need to monitor the dosages given to patients for hours during surgery. "Our job is one of vigilance," says Howard, who is associate professor of Anesthesia at the Stanford

University School of Medicine in Palo Alto. "Alertness is extremely important and sometimes challenging."

Howard began working with the VA's National Patient Safety Center to address the issue. He led a randomized, controlled study of 49 medical residents and nurses who worked at least three consecutive night shifts in the emergency department. On the third night, a randomly selected group had a 40-minute nap in a darkened room (with a bed and linens) between 3 a.m. and 4 a.m.

Faster reactions, fewer lapses

Performance tests at 7:30 a.m., after the third night shift, showed that the napping group had "faster reaction times and fewer vigilance lapses," Howard and his colleagues reported. The nurses and physicians also reported that they felt less sleepy. However, the nap group had fewer correct answers on a memory recall test at 4 a.m., when they awoke. The differences had disappeared when they were retested at 6:30 a.m. The nappers also were able to perform a catheter insertion more quickly than the non-napping group.[4]

Armed with data from that and other studies that showed improved performance after a short nap, Howard worked with hospital leadership to develop the Strategic Nap Program. It does not require any additional staff; employees are encouraged to take a nap during a scheduled break, such as a lunch or dinner break.

It wasn't difficult to find a place for napping. Some break rooms had a couch. A library was furnished with a reclining chair. A meditation room was vacant at night. Whatever the solution, the space needs to be very convenient because employees won't leave their work area to find a place to nap, Howard says.

When Howard evaluated the nap program, he found that employees on the night shift were more likely to use it than those on the day shift. Nurses reported feeling more alert after the naps. And education was critical, he says. "People tended to utilize the strategy more after we taught them about it and sanctioned it," he says.

Howard acknowledges that there are other issues that affect sleep and wakefulness. Employees may have a second job, or family responsibilities, or untreated sleep problems. But the Strategic Nap Program highlights the importance of being rested — and may begin to change the paradigm, he says.

"We know people are impaired because they're sleep-deprived. That's accepted in health care," he says. "Clearly it's not accepted to come to work if you've been drinking or on drugs. But we come to work impaired all the time."

Insomniacs have more errors

In fact, sleep problems are common among nurses. Rosekind surveyed 2,082 nurses and found that more than one quarter (27%) suffered from insomnia — difficulty falling asleep, staying asleep, or both — but only about 30% had sought medical treatment.

Those with sleep problems reported more medical dispensing errors and "charting deviations from standard practice." They also were significantly more likely to report having trouble staying awake at work.

The findings show the importance of educating nurses about sleep and insomnia, encouraging them to receive treatment for sleep problems, and implementing alertness strategies, says Rosekind, who previously directed the Center for Human Sleep Research at the Stanford University Sleep Center.

"When you help people manage their schedules, help them understand about sleep, they will be safer, healthier, and more productive on the job," he says.

Rosekind recognizes that transforming attitudes about sleep will take time. "In our culture today, we really care about what we eat, how we exercise. Sleep is not even in the ballpark yet, and it's just as important," he says.

(Editor's note: For more information on the VA's Strategic Nap Program, contact Steve Howard, MD, at showard@stanford.edu. More information on Alertness Solutions is available from www.alertness-solutions.org.)

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HCWs face violence, abuse from patients

Study: Need for better reporting, training

After the shock of the 9/11 terrorist attacks, hospitals beefed up their security. But a study of New Jersey hospitals shows that hospitals need to take further measures to protect health care workers from the more common violent events — verbal and physical assaults from patients in the emergency department.

Hospitals need a uniform method of reporting events, improved training, and better coordination between security personnel and employee health and other clinicians, according to a report issued by the Occupational Health Surveillance Program of the New Jersey Department of Health and Senior Services.

"There is definitely attention being paid to this issue, but [there's] not a clear-cut trend in how to respond to it," says **Corinne Peek-Asa**, MPH, PhD, professor of occupational and environmental health at the University of Iowa School of Public Health and an expert on workplace violence.

Peek-Asa conducted the study, which was sponsored by the National Institute for Occupational Safety and Health, as part of a broader review of California's violence prevention activities

California was the first state to pass a law addressing workplace violence in health care; it requires hospitals to conduct security assessments, respond to identified risks, and provide regular training to employees on safety and security measures. Peek-Asa used New Jersey as a comparison to represent the status quo at hospitals that do not have specific legislative or regulatory imperatives to address workplace violence.

"I would hope this kind of study would encourage states to examine what their own practice is," says **Eddy Bresnitz**, MD, MS, deputy commissioner for public health services with the New Jersey health department and the New Jersey state epidemiologist.

The problem of violence in emergency departments is widespread, he says. "There's no part of this country that doesn't have significant populations [with] drug or mental health problems or other problems that could contribute to violence in an emergency department," he says.

In the study, the 50 hospitals varied greatly in the extent of the measures they had taken. Some were strong in one area, but weak in another. "Having a strong training program was largely unrelated to having strong components in other areas," Peek-Asa says.

For example, in one hospital, a vocal advocate in nursing may have influenced the creation of strong training programs, while in another hospital a security director may have implemented better procedures and equipment for that area.

"Every hospital had done something. We did not find a hospital that had not at least thought about this issue," she says.

Nurses suffer most assaults

Violent events are often underreported. But the analysis of data from 1992 to 2001 provides a picture of the violence that occurs in emergency departments.

Patients were the "perpetrator" in 85% of incidents, and nurses were the employees most likely to be assaulted (43%). Incidents were most likely to occur when employees were trying to restrain or subdue a patient or with combative patients, but 30% of the incidents occurred during medical care or nursing functions.

In three-quarters of the cases, an emergency department employee suffered a strain, sprain or spasm, and about two-thirds involved a bruise or contusion. In one-third (32.9%) of the cases, an employee missed at least one day of work due to injury from the incident.

Verbal abuse is endemic in emergency departments, interviews with nurses revealed. Some 27% of the nurses reported that verbal abuse occurred more than 96 times per year. About a third reported being physically assaulted. But whether the incident was physical, verbal, or a threat, 72% of the nurses said they did not report it.

Much of the violence relates to the stressful conditions of American emergency departments. "We have overcrowded conditions in virtually all our emergency rooms," reports **Aline Holmes**, RN, APNC, senior vice president for clinical affairs at the New Jersey Hospital Association in Princeton. The hospital association is now working with the Emergency Nurses Association to create a workplace violence prevention program.

Most of the New Jersey hospitals (82%) provided training on workplace violence prevention. But the study identified weaknesses in security and prevention programs and offered recommendations for improvement. Here are some of the key points:

• The reporting and surveillance of violent events is uncoordinated. Some events were reported to security, while those involving injury were reported to employee health. Hospitals need to assess their reporting gaps, develop a uniform reporting system, and improve dialogue between security and clinicians in the emergency department. "We found that even very large events weren't on the OSHA [U.S. Occupational Safety and Health Administration] logs at all," says Peek-Asa.

• Most hospitals did not have a formalized way for nurses, physicians, or other employees to communicate information about violent patients. Most often, nurses told each other information informally, but physicians, security personnel, and others may be left out. Hospitals could use code words on an exam room door or color coding on charts to provide that information.

• Not everyone in the emergency department received training. Physicians were often left out, as were clerical staff, volunteers and contract employees. "You have to have ongoing training throughout the course of the year and everybody needs to be trained," says Peek-Asa.

• Training programs did not address the specifics of the hospital's own emergency department. Training should be tailored for the facility, and it should include interactive sessions and role-playing.

(Editor's note: A copy of the report, Workplace Violence and Prevention in New Jersey Hospital Emergency Departments, *is available at http://www.state.nj.us/health/eoh/survweb/documents/njhospsec_rpt.pdf.)* ■

Need a lift? Why one sling doesn't fit all

Choose based on medical needs

A patient who is recovering from abdominal surgery needs to be lifted from the bed to a chair. Another patient with a pressure ulcer needs to be repositioned. Putting a sling under these patients to use lift equipment seems out of the question.

Yet an array of sling choices are available, enabling nurses and nursing assistants to use lift equipment even with patients with delicate medical conditions. In fact, lift equipment has evolved to provide solutions for patient handling dilemmas of acute care, says **Andrea S. Baptiste**, MA (O.T), CIE, an ergonomist/biomechanist with the Patient Safety Center at the James A. Haley VA Medical Center in Tampa, FL. Baptiste was the chair of a task force that created a Patient Care Sling Selection and Usage Toolkit (http://www1.va.gov/visn8/patientsafetycenter/safePtHandling/toolkitSlings.asp.)

Many employee health professionals are not aware of the choices beyond the "universal sling," she says. But just as health care workers should assess patient handling needs, they should consider the most appropriate sling, Baptiste adds.

"The decision about what sling you're going to use is dependent on the transfer you're trying to accomplish, the patient's medical condition or medical status, and their functional ability," she says. "Do they have head control? If they don't have head control, then you need a high back to support their transfer.

"The seated sling is most commonly used to transfer the patient in a seated position. If you have someone who needs to stay supine, you just need a supine sling," she says.

Because different units handle patients with different acuity levels, sling selection will vary. Frontline health care workers need to be involved in the choice, just as they are in evaluating and selecting safe needle devices, Baptiste notes.

"The biggest mistake people make is they find one solution for one [type of lift] and then they say, 'OK, let's put these all the units.' The needs in other units may be totally different," she says.

Here are some things you should know about slings:

• **Slings are categorized by function.** There are five categories of slings, based on the function you need to perform. A standing sling provides assistance to patients who are weight-bearing and need help standing upright. It may be used in a sit-to-stand lift. A seated sling often is considered the universal sling. The patient remains seated during the lift. The sling may come with head support, padding, positioning handles, or special fabrics. Supine slings are also available for patients who need to remain flat.

Patients wear an ambulation sling when they need fall protection while they're walking. It is often used in a rehabilitation unit when patients are just beginning to walk again. The limb support sling holds a patient's limb in place while the nurse performs wound care, bathing, or other procedures. "Holding a limb in an outstretched position

(Continued on page 130)

MEDICAL CONDITIONS AFFECTING SLING SELECTION

Medical Condition	Consequence	Discussion
Abdominal /Surgical Wounds	Pain and discomfort	Sling fit should allow for minimal compression on wounds site. Pressure on wounds site or painful body areas could cause interference in the healing process of the skin, and or increased pain to the patient.
Amputation	Slipping or a fall from the sling.	Specialty amputee slings may be required. Using a regular seated sling can cause a risk for the patient (especially above the knee amputations) to be improperly balanced and lead to slipping or a fall from the sling
Compromised Skin Integrity, Pressure Ulcers, Severe Edema	Skin breakdown, interference with granulation healing process	Client becomes vulnerable to skin breakdown injury, or interference in the skin granulation healing process from the sling shearing or shear forces created during sling application and use
Contractures, Spasms, Splints and Traction	Unexpected stiffness, risk of falling or slipping out of the sling	These conditions leave the patient vulnerable to unexpected stiffness and movement in the sling during the transfer.
Deceased or Comatose Patient, Paralysis and Paresis	Lack of core stability may result in risk of injury or patient fall	These patients may not have enough body core stability (ability to sit, or hold head or neck) to make the sling safe. To prevent slippage and a risk of injury or falls, a supine sling as opposed to a seated sling may be warranted
Fractures, Hip and Knee Replacement, Joint and Bone conditions, Splints and Tractions (Shoulder Surgery)	Joint pain or dislocation from sling style/type and required positioning	The sling style may cause pain to joints, and affected limbs from the nature of the alignment required to fit into the sling. The slings require some positioning that may be contraindicated for the effected limb, knowledge of the allowable amount of flexion is required when assessing for the appropriate sling type.
History of Fall	Patient fall	If the patient has unpredictable intermittent weakness then a fully supportive sling (supine) sling may be required when using the patient lift. This is to prevent the patient from falling and becoming injured during the transfer

Medical Condition	Consequence	Discussion
Obese Patient	Compromised breathing, back pain, tearing of the skin	Poor sling fit can compromise breathing by compressing the thoracic cavity as when too tight or small across the shoulders. Back pain and the possibility of pain and pressure or tearing of the skin may result from poor posture positioning.
Postural Hypotension	Fainting, falls, dizziness	Postural hypotension puts the patient at risk for fainting, falls or dizziness during the transfer. We need to anticipate that the patient could become flaccid during the transfer and use a sling that can provide the added extra support to prevent a fall or hyperextension of a body part (e.g. supine sling).
Respiratory Compromise, Thoracic Injuries	Respiratory distress, Shoulder or thoracic discomfort/pain	These patients will not tolerate internal shoulder rotation or a posture in which they are not semi sitting during the transfer. Putting them in this situation can lead to further respiratory distress. A seated sling and strict seating posture may be required. A sling that is too small will compress the shoulders
Tubes, Stomas	Impedance/blockage in drainage of tube	During sling applications and use, be sure the sling fit does not put pressure on tubes sites, tubing's or stoma's sites. This may cause impedance of drainage and may result in pain.
Unstable Spine/Orthosis	Spinal instability, pain	Chosen sling needs to be appropriate to maintain the spinal restrictions. In situations that spinal precautions are in place a supine sling may need to be used in conjunction with a backboard with Dr. approval of the procedure. Other spinal problems may require that weight be shifted to different body parts to prevent pain and compression to the area. Example a seated sling used in a sitting position will not put pressure on the thoracic spine.

Source: VISN 8 Patient Safety Center of Inquiry, James A. Haley VA Medical Center, Tampa, FL.

(Continued from page 127)

for five minutes can put a lot of stress on the shoulder [of nurses]," says Baptiste. **(For more information on selecting slings for different medical conditions, see chart on pp. 128-129.)**

• **New sling technology can reduce repositioning injuries.** With the new repositioning sling, caregivers can slide the sling under the patient and hook it to just one side of the lift. It is especially easy to use with a ceiling lift, notes Baptiste, and may help reduce pressure ulcers. A new product called Vander-Clips by Vancare of Aurora, NE, hooks to the patient's sheet and allows the lift to roll the patient over.

• **Slings require different attachment points on the spreader bar.** Lifts are available with 8-point spreader bars, which provide more versatility in the use of the slings. For example, you would need the wider 8-point bar to transfer a patient in the supine position. The universal, or seated, sling can be used with a 2-point bar.

• **Sling comes in different sizes and materials.** A mesh sling could be used while bathing a patient and an open-bottomed sling can be used with toileting. A reinforced sling would be the appropriate choice for a bariatric patient. Amputees have special slings as well. Infection control is a challenging issue with slings, which sometimes mysteriously disappear when they're sent off to be laundered. Some facilities use disposable slings.

• **You can't mix and match slings and lifts.** Don't use slings from one manufacturer with a lift from another manufacturer. Each lift vendor makes a range of slings, says Baptiste. If you're concerned about the sling choices, be sure to ask before you purchase the lift equipment.

• **Don't keep damaged slings.** With constant use and laundering, slings will become damaged. "If they're frayed or worn, you should throw them out," she says.

• **Some equipment allows for lifts without**

CNE instructions

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

Correction

Continuing nursing education question No. 13 in the October issue of *Hospital Employee Health* was incorrectly worded, though the answer was still **"B."** We regret any confusion. The question should have read as follows:

13. According to the EpiNet database of the International Health Care Worker Safety Center, what proportion of all sharps injuries occur from suture needles?
A. 12%
B. 21%
C. 33%
D. 51%

CNE *questions*

17. Which of the following steps did employees take in the Saskatoon Health Region in Canada to combat a norovirus outbreak?
A. Employees received testing to see if they were carrying the norovirus.
B. Employees called into a hotline to see if they should come to work.
C. Employees with norovirus worked on units with patients who had norovirus.
D. Employees stayed home for 48 hours after their norovirus symptoms subsided.

18. According to Mark Rosekind, PhD, what length nap is most effective to improve alertness?
A. 15-40 minutes
B. 30-50 minutes
C. As little as five minutes
D. Naps are not an effective way to improve alertness.

19. A study of workplace violence and prevention in New Jersey hospitals found that which ED workers suffered from the most violent assaults?
A. Physicians
B. Nurses
C. Triage clerks
D. Security officers

20. The "Flu Survival Kit" distributed to employees at Delaware County Memorial Hospital in Drexel Hill, PA, includes:
A. hand-sanitizing wipes
B. information on hand hygiene
C. "myth-busting" information on flu vaccine
D. All of the above

Answer Key: 17. D; 18. A; 19. B; 20. D.

slings. Lateral transfers can be accomplished with an air-assisted device or other slides. Chairs that convert into stretchers can be used for transport and can enable caregivers to transfer patients laterally. ■

Boosting flu shot effort one worker at a time

Hospital creates personalized effort

When it comes to influenza immunization, there's something to be said for a little one-on-one attention.

That's the concept behind this year's flu vaccination campaign at Delaware County Memorial Hospital in Drexel Hill, PA. Department managers will hand-deliver packets that are personally addressed to each of the hospital's 1,600 employees and volunteers.

The "Flu Survival Kit" packets have eye-catching labels and contain hand-sanitizing wipes with information on hand hygiene. There is myth-busting information about the flu vaccine that is based on comments by employees who signed declination statements last year. By turning in a completed word search puzzle from the packet, employees can be placed into a random drawing for prizes.

"They needed to be educated about the seriousness of the flu," says **Sarah Brown**, MD, director of the hospital's employee health service. "We had to dispel the myth that the flu vaccine causes the flu. We needed to emphasize the need [for them] to keep from giving the flu to their patients.

"You can transmit the virus to others from one to four days before you experience any symptoms of the flu. It's possible to transmit the flu virus before you even know you're sick. I don't think people realize that," she says.

Flu vaccination coverage has varied widely in the hospital. Some departments have attained 98% or even 100% coverage. Labor and delivery and the neonatal intensive care unit were among the highest.

Others were as low as 7%. The lowest rates were in offsite departments, such as physical therapy. "That told me I have to make a greater effort to go there more often and administer the vaccine," says Brown, who uses a roving cart to deliver the vaccine directly to the departments. ■

CNE objectives

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

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

COMING IN FUTURE MONTHS

- Beyond 'employee health': Transforming the occ health perspective
- NIOSH targets 'Prevention through Design'
- Addressing obesity in the work force
- Predicting the impact of a pandemic on the work force
- Push continues for patient handling laws

United States Postal Service

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PS Form **3526**, September 1999 *(Reverse)*

2007 SALARY SURVEY RESULTS

Hospital Employee Health®

Rx for your career: Strategies to get the salary you deserve

Most EHPs get small annual raise

You have many years of experience in nursing, special training in occupational health, responsibilities that impact the hospital's bottom line. When it comes to compensation, are you getting what you deserve?

A majority of employee health professionals (56%) received an annual salary increase of 1% to 3%, according to the 2007 *Hospital Employee Health* salary survey. About 16% received no raise. Most of the respondents also had a long tenure — 80% had 22 years or more in health care and almost half (49%) had 10 years or more in occupational health.

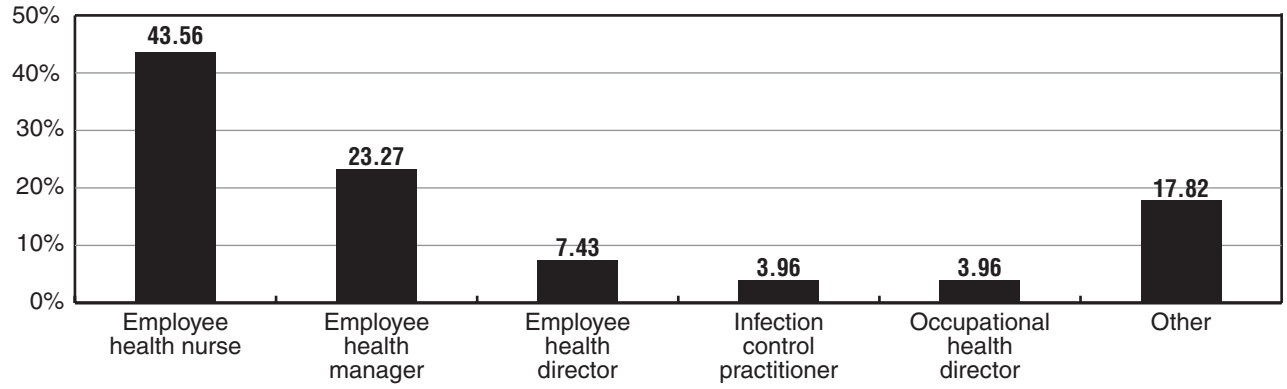
There were 202 respondents to the survey. They were most likely to work in a nonprofit hospital with 300 or fewer beds. The predominant salary ranges were $50,000 to $59,999 (26%) and $60,000 to $69,999 (25%), although another 20% earned from $70,000 to $89,999. Most (60%) have a bachelor's or master's degree.

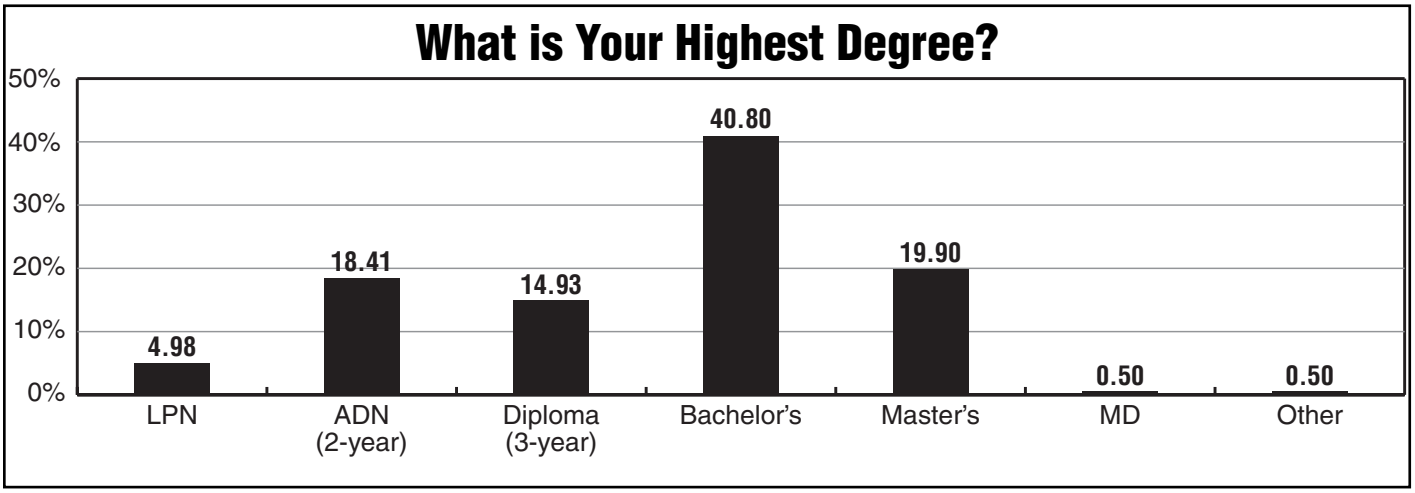
"To the degree to which you are mature in your career life, you are at the top of your range," **Charlene M. Gliniecki**, RN, MS, vice president, human resources, at El Camino Hospital in Mountainview, CA. "The market may not bear more. If you get the cost of living or a little bump, you are the lucky person."

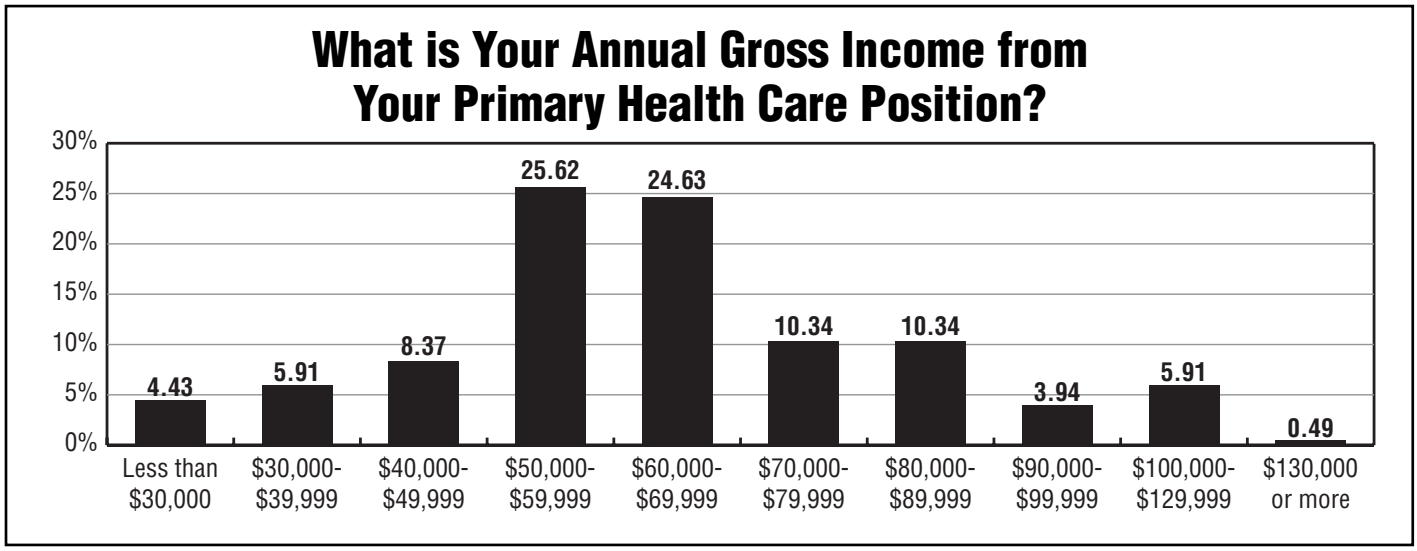
Yet there may be some ways to increase your earning potential — by qualifying for performance bonuses, seeking pay equity, or even altering your job description and title.

Before you make the case that you should receive more compensation, make sure you are displaying

What is Your Current Title?







professional leadership and following best practices in your field, advises **Ann R. Cox**, CAE, executive director of the American Association of Occupational Health Nurses (AAOHN) in Atlanta. For example, you need to have a broad scope that includes injury and illness prevention and you should have input into your hospital's safety program and disaster planning.

"It really comes down to what a person wants professionally for themselves," she says. "If they want to contribute and be rewarded for that contribution, then they need to be looking where the optimal practice opportunities are for the future."

Go for a performance bonus

If you are ready and willing to prove your worth to the organization, find out more about your hospital's compensation philosophy. Are you eligible for incentive pay? This may involve setting specific goals that correspond with the hospital's goals or bottom line. For example, you may set a goal of reducing workers' compensation costs by reducing injuries, or improving return to work rates.

"This is usually paid for by stretching beyond what you're been doing or taking your performance beyond [the routine], — an increase in productivity or effectiveness that you can demonstrate with metrics," says Gliniecki.

You may even partner with another manager who has a performance goal that includes reducing turnover or absenteeism, or reducing bloodborne pathogen exposures and patient handling injuries, she suggests.

Additional training or involvement with professional organizations may give you leadership skills. For example, in November, AAOHN will publish a revised self-assessment tool that occupational health nurses can use to evaluate their competencies. According to the AAOHN, the occupational health nurse's responsibilities and areas of opportunity have expanded into such areas as case management, counseling and crisis intervention, health promotion, legal and

regulatory compliance, worker and workplace hazard detection, and business leadership. (See the *AAOHN Journal* at www.aaohn.org for more information.) AAOHN also holds an annual Conference for Leadership Advancement. The 2007 course, held in September, focused on communication skills.

If you're too overwhelmed with day-to-day functions, such as providing TB screens or giving flu vaccinations, consider ways to gain extra help, advises Cox. For example, nurses on light duty in the workers' compensation program may be available to help administer vaccines, freeing you up to take on other responsibilities.

> ***"Sometimes if you're in your job for quite a while you might fall behind the market. If you left the job and they were recruiting for someone, would they have to revise the range to be successful in recruiting for that person? It might be that you need a wage range adjustment."***
> **— Charlene M. Gliniecki, RN, MS, vice president, human resources, El Camino Hospital, Mountain View, CA.**

Check out your pay equity

If your hospital doesn't offer incentive pay, or you're not eligible because you're not a manager, you still may have other avenues for improving your compensation. One is to insure that you have pay equity.

"Sometimes if you're in your job for quite a while you might fall behind the market," says Gliniecki. "If you left the job and they were recruiting for someone, would they have to revise the range to be successful in recruiting for that person? It might be that you need a wage range adjustment."

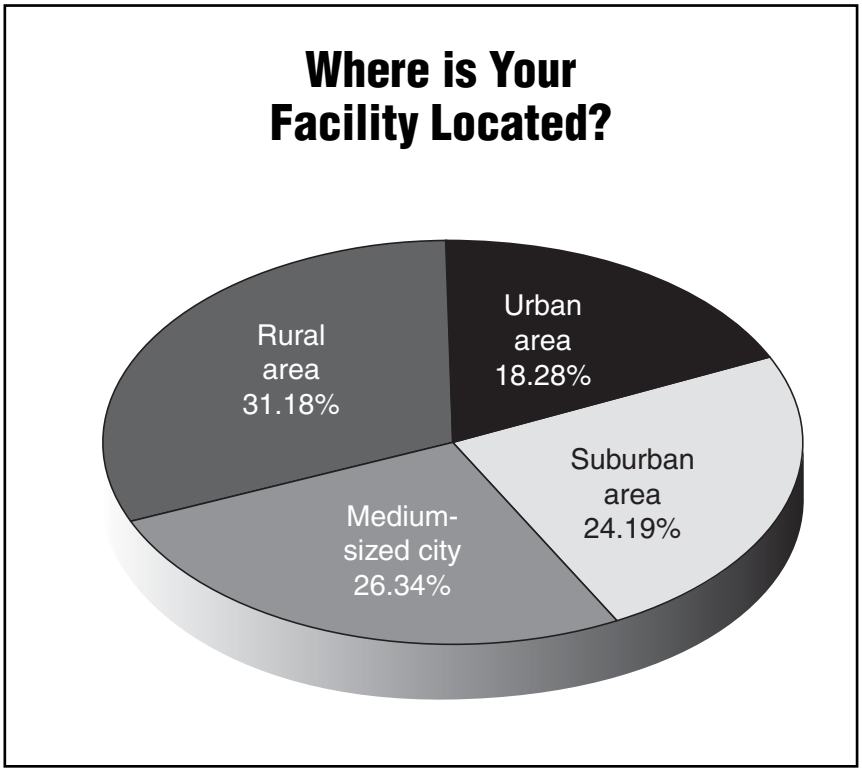
You can find out about pay equity, both external and internal (for positions similar to yours) through the compensation manager in human resources, she says. Local chapters of AAOHN or the Association of Occupational Health Professionals in Healthcare (AOHP) or a union also may be able to share local compensation information for employee health nurses.

At El Camino Hospital, employee health nurses are aligned with other clinical nurses in the hospital, says Gliniecki. If nursing pay rises due to a nursing shortage, the employee health nurse will receive the raise, she says.

However, that is not always the case. At Saint Francis Medical Center in Peoria, IL, inpatient nurses at the bedside receive financial incentives that are not available to "ambulatory care" nurses who work in other areas, says **Denise Knoblauch**, RN, BSN, COHN-S/CM, clinical case manager in the Center for Occupational Health and president emeritus of AOHP. "The hospitals are trying to keep the nurses at the bedside. Financial incentives are very striking there," she says. In some cases, employee health nurses still may be eligible for a career ladder program, which provides financial incentives for obtaining additional education or certification or participating in hospital committees.

Consider your job duties and review your job description, advises Knoblauch. You may find that the current description doesn't fully address the scope of your responsibilities, and you may be able to revise it in a way that creates a new career path. For example, when Knoblauch became a "clinical case manager," she moved into a higher pay range.

"Pick up on the pieces of what you're doing and put the puzzle together in a different way,"



she says. "Maximize who you are."

Something better than money?

After you've analyzed your job responsibilities and performance, you may decide that pushing for a little more money isn't what's most important to you. Instead, you'd rather push for some additional help in employee health. Or, as Gliniecki says, "Maybe what you really want is not to be working 12-hour days or 10-hour days."

Again, you'll have to make the case that you don't have enough resources — and that you can do more for the organization to raise productivity and lower workers' compensation costs. It's hard to find benchmarks for the "right" number of employee health nurses to number of employees. Employee health services differ greatly in the scope of their practice; some include other duties such as infection control or health promotion.

You can do your own informal survey with colleagues at hospitals that you know are similar to your own. You also need to articulate what you would do differently if you had assistance, and how it would save the hospital money, says Gliniecki. Try to quantify a return on investment — such as how root-cause analysis of injuries or a stronger patient handling program would save money through reduced injuries.

"At the end of the day, it probably comes down to how good a salesperson you are," says Gliniecki. ■