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**June
2002**

Are you uncomfortable caring for ICU patients in the ED? Here are strategies

Many ED nurses feel they're 'in over their heads'

An elderly man is a brittle diabetic and hypothermic, and he is on numerous intravenous medications, including insulin, fluids, and dopamine. This patient requires one-on-one nursing care with frequent vital signs, glucoscans, lab draws, an arterial line, and a Bair hugger.

Does this sound like a typical emergency department (ED) patient? Maybe not, but caring for critical care patients for extended periods is occurring in EDs across the country — a practice that is putting patients at risk, according to many emergency nurses interviewed by *ED Nursing*.

The patient above was managed in the ED for nine hours while waiting for an intensive care unit (ICU) bed at Eastern Maine Medical Center in Bangor, according to **Karen Clements**, RN, BSN, department head nurse for the ED.

“It’s becoming the norm to hold ICU and telemetry patients in the ED,” reports **Colleen Bock-Laudenslager**, MS, RN, an ED nurse at Redlands (CA) Community Hospital and a Redlands-based consultant who specializes in staffing. “This morning, we were already holding nine inpatients at 9 a.m.”

The ED at Community General Osteopathic Hospital in Harrisburg, PA,

Stay on top of EMTALA with audio conference

EMTALA rules continue to change — are you up to date?

Keep abreast of all the latest changes with EMTALA Update 2002, an audio conference sponsored by American Health Consultants. The conference, scheduled for Tuesday, June 4, 2002, from 2:30 to 3:30 p.m. Eastern Standard Time, will be presented by Charlotte S. Yeh, MD, FACEP, and Nancy J. Brent, RN, MS, JD. Yeh is medical director for Medicare policy at National Heritage Insurance Co. Brent is a Chicago-based attorney with extensive experience as a speaker on EMTALA and related health care issues.

See EMTALA audio conference, page 104

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EXECUTIVE SUMMARY

Emergency department nurses are managing critical care inpatients for extended periods of time that may put patients at risk.

- Obtain help from ICU nurses or support staff.
- Group all inpatients in the same area, where they are cared for by the same nurse.
- Ask for services typically provided to inpatient wards, and use inpatient charts and medication administration records.

cares for approximately five inpatients a month with a prolonged stay due to lack of available ICU beds, says **Gene O'Donnell**, RN, nurse manager of the ED.

"The premise for patients in the ED is that they are individuals who need emergent episodic care, not sustained intensive care," O'Donnell says. "That is the crux of the problem."

ED nurses don't feel qualified

In the past, when ICU patients were held in the ED, you often were afforded a critical-care nurse who would come down to manage them, says Bock-Laudenslager.

"But since the root cause of the problem is a shortage of nurses and availability of beds, that rarely happens" now, she explains.

Instead, these critical-care patients are often managed by ED nurses who feel they're "in over their heads," says Bock-Laudenslager. "Many of my colleagues tell me they do not feel qualified to take care of these patients for long periods of time," she adds.

She explains that nurses feel unable to provide the same standard of care as the patients would receive in a self-contained, controlled ICU environment. In fact, it's likely that critical-care patients will not receive the same level of care in the ED as they would in the ICU, warns O'Donnell.

"The same patient in an ICU setting may have one nurse, but in the ED has to vie for that nurse's attention with not just one, but maybe two or three other individuals," he says.

As a result, there may be delays in initiation of treatments, medications, and documentation, says O'Donnell.

To make things worse, patients are being held for increasingly long periods of time, reports Bock-Laudenslager. "The bed and staffing shortage is so grim, we have actually discharged ICU patients out of the ED," she adds.

ED nurses are experts at resuscitating and stabilizing patients and transporting to a definitive care area, says Bock-Laudenslager. "Now we are in the position of having to manage patients clinically for longer periods of time than we are used to," she adds.

The patients actually are staying long enough for their condition to significantly change, says Bock-Laudenslager. "Recently, a patient was being admitted to a direct observation bed, and when their condition deteriorated, they were upgraded to an ICU bed, while still in the ED," she says.

Here are strategies to use when managing critical care patients in the ED:

- **Float ED nurses with critical care nurses.**

Clements has ED nurses "shadow" an ICU or critical-care unit (CCU) nurse to gain hands-on experience with arterial lines, intracranial pressure lines, and chest tubes.

"We usually do this for four hours at a time, and they love it," she reports. "We can go months without an arterial line, and this keeps their confidence levels up."

These nurses then share pertinent information with other ED nurses, she explains.

- **Provide nurses with a designated support person.**

O'Donnell recommends assigning a designated support technician exclusively to the nurse caring for ICU patients to perform tasks such as vital signs, intake and output, and recurring labs.

"This individual can help maintain an orderly, clean area for the ICU patient and the other patients the nurse may have under his or her care," he adds.

The support person can also help with "basic human needs," says O'Donnell, such as giving the patient a back rub, running for an extra blanket, handing out diet trays, or getting a phone to the bedside. The nurse, who may be engrossed in keeping a critical patient hemodynamically stable, often overlooks such tasks, he explains.

- **Ask for resources to provide quality inpatient care.**

COMING IN FUTURE MONTHS

■ Effective ways to retain nurses

■ Strategies to avoid conflict with floor nurses

■ Update on congestive heart failure

■ Effective strategies for wound care

SOURCES

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Be sure your ED stocks organizational office tools to support patient care directives, such as copies of inpatient charts with dividers, Bock-Laudenslager says. "These paper tools will allow you to organize your day," she explains.

Also ask administrators to provide the same services to the ED as they would the inpatient wards, such as recurring labs drawn by lab services at appropriate intervals and food trays sent from dietary so you don't have to remember to call to request them, advises Bock-Laudenslager.

- **Use medication administration records (MAR).**

Make use of the MAR generated by pharmacy after it's entered in the computer, Clements recommends. At Eastern Maine's ED, nurses use this to keep track and document the medications a patient is supposed to receive, she adds. "When a patient is held so long in the ED, we sometimes miss the regular scheduled meds."

- **Use reminder boards.**

Clements says boards are posted outside the critical care rooms in her ED, which are easily visible from the nurses station, so nurses can write down the times for medications, repeat labs, and glucoscans. "By doing that, it is visible and not buried in the paperwork," she says.

- **Have ICU nurses act as resources.**

Clements uses "resource nurses" from the ICU who come to the ED periodically to assist with critical care patients.

"They are a huge resource when it comes to questions about the setup of difficult lines, and mixing and titration of some of the more intense drugs," she says.

If a patient is on a monitor, hospital policy requires a nurse to transport the patient from the ED to the ICU, CCU, or telemetry inpatient bed, so the resource nurses often do this, says Clements.

- **Group all inpatients.**

When you mix ED patients with inpatients, it creates a hardship for the nurse, says Bock-Laudenslager.

"The ED nurse is then operating off two different tracks," she explains. "The ED mindset for one cluster of patients is different from the ICU mindset for the other cluster of patients."

At Redlands' ED, a decision was made to cluster all the inpatients under a single ED nurse, she says. "So one nurse is defined as the inpatient nurse," she says. "That nurse is able to organize the shift in a more methodical way."

Complying with the inpatient standards of vital signs monitoring, completion of the plan of care within a certain amount of time, and charting the assessment every eight hours becomes more automatic, says Bock-Laudenslager. (See **article on standardizing care for critical-care patients in the ED, below.**)

"If possible, place the inpatients next to each other so they are closer together," she suggests. ■

Comply with accreditation standards for inpatients

As if caring for critical-care patients for extended periods in the ED wasn't enough of a challenge, you also have requirements from the Oakbrook Terrace, IL-based Joint Commission on Accreditation of Healthcare Organizations to worry about, says **Colleen Bock-Laudenslager**, MS, RN, an ED nurse at Redlands (CA) Community Hospital and Redlands, CA-based consultant who specializes in staffing.

Once the decision is made to admit the patient, an interdisciplinary admission assessment has to be done within a certain number of hours, she says.

The Joint Commission also requires that inpatients have an interdisciplinary plan of care documented, she says. ED nurses may not be familiar with those specific requirements, she says.

"More and more, the Joint Commission has said that once the disposition has been made in the ED to admit the patient, that is when the clock starts for meeting inpatient standards," says Bock-Laudenslager.

This means that you not only have to learn the standard policy and procedures for inpatients, but also comply with all the regulations, she adds. You may receive training on how to implement the interdisciplinary plan

EMTALA audio conference

Continued from cover

The conference will outline a new report that puts a national spotlight on inadequate ED on-call coverage. There is a growing trend of specialists refusing to take call for the ED, partly due to increased liability risks for medical malpractice and violations of EMTALA. If you don't take steps to ensure appropriate on-call coverage for your ED, you're at risk for violations and adverse outcomes. This program also will update you on any legislative efforts to compel managed care plans to reimburse hospitals for EMTALA-related services.

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of care, but if you don't complete these every day, it takes longer to do, she explains.

As holding critical care patients in the ED is becoming more common, surveyors are zeroing in on this area, warns Bock-Laudenslager. "They are pulling ED charts and making sure you are providing the same standards," she says.

Once the decision has been made to admit the patient, you'll also need to provide the same staffing ratio as upstairs, as you should not have two standards of care, says Bock-Laudenslager.

In other words, if a patient is going to be admitted to the ICU, and the requirement is one ICU nurse to two patients, you should configure the same staffing plan in the ED, she explains. "Often, this is next to impossible," says Bock-Laudenslager.

She recommends the following to standardize care across the continuum:

- **Use pre-printed admission orders or clinical pathways for your high-volume diagnoses.**
- **Give ED and ICU nurses the same type of training.** On competency days at Redlands, ED and ICU nurses go through stations together for managing pacers, defibrillators, central lines, and procedures related to sedation and pharmacology, Bock-Laudenslager reports.

- **Put the ED and critical-care departments under one organizational structure.** This allows for standardization of equipment, and provision of education and training along the same curriculum lines, she explains.

- **Ask administrators to hire critical care nurses to create a "hybrid of ED and critical-care talent" in your department.**

Redlands Community Hospital has used this strategy in its ED, she reports. "We learn from each other every day," adds Bock-Laudenslager. ■

Do you screen patients for alcohol abuse?

When a 53-year-old janitor was brought to an ED after a motor vehicle accident, his examination revealed acute alcohol intoxication. The man was reported as an impaired driver and was referred to a program where he successfully obtained treatment.

This success story illustrates the dramatic impact that a simple screening and intervention for alcohol abuse can have in the ED, says **Laurie Flaherty, RN, MS**, an ED nurse at Suburban Hospital in Bethesda, MD, and traffic safety consultant with the Washington, DC-based National Highway Traffic Safety Administration (NHTSA).

However, Flaherty acknowledges that many ED nurses remain skeptical. "That's because the only patients we see are those who "flunk." If they solve their problem, we never see them again," she says.

She notes that ED nurses tend to "believe what they see. If injury prevention works, the direct result is the complete opposite — the absence of the injuries we are working to prevent," she says.

Flaherty says that awareness of current research is the best way to overcome skepticism, and she points to one study showing that 24% of patients who presented

EXECUTIVE SUMMARY

Giving patients a brief screening for alcohol abuse is an effective intervention.

- Screening and referral only take approximately five to 10 minutes.
- Screen patients at risk for developing an alcohol use problem, not just those with an existing problem.
- Instead of asking alcoholic patients if they would like a referral, provide it automatically.

to an urban ED by ambulance were alcoholic,¹ and another study's findings which showed that patients with mild to moderate alcohol problems can be helped through brief screening and intervention in the ED.²

"Research shows that for most people with alcohol use problems who aren't truly dependent yet, brief intervention works and they never progress to dependence," she says. "They never need treatment if we can get to them before they are truly alcoholics."

Here are effective ways to assess for alcohol abuse:

- **Screen patients at risk for developing a problem.**

Flaherty recommends screening of patients who are likely to develop an alcohol use problem, in addition to patients who already have an obvious problem.

"The earlier we interrupt the continuum in the development of alcohol use problems, the greater the chance that we'll be able to positively change behavior," she explains.

Flaherty notes that patients who already have developed alcohol dependence are easily identified. These are the "frequent fliers" who come in with extremely high blood alcohol levels, in delirium tremens, and various health complications related to alcohol dependency, she says.

However, it's not as easy to recognize patients who are developing an alcohol use problem, says Flaherty. These include younger patients who come in after a binge, and patients who are making their first ED visit subsequent to alcohol abuse, she says.

"I think we tend to equate the first ED visit with the first time these patients drink too much. In reality, by the time they show up on our doorstep, it's already a problem," says Flaherty.

Many times the ED visit is a sentinel event, signaling that the problem has moved to another level, says Flaherty. "As emergency nurses, we should take advantage of the opportunity to screen and refer these folks for treatment," she urges.

- **Don't assume screening will take too much time.**

Both screening and referral can be routinely accomplished in fewer than 10 minutes, according to Flaherty.

She adds that you routinely screen patients for other health risks, such as heart disease. "We would never think of discharging a newly diagnosed patient with hypertension without some kind of patient teaching," Flaherty says. "Yet we do it all the time with patients who have alcohol use problems."

She says that alcohol has a huge impact on the ED, as a contributing factor to motor vehicle injury, domestic abuse, violence, self-injury, and numerous health problems. "Yet, we do very little when the opportunity presents to do something," Flaherty says.

Flaherty recommends using a screening and referral

SOURCES AND RESOURCES

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An *Alcohol Screening and Brief Intervention Resource Kit* is available with information about screening and brief intervention for patients presenting to the ED with alcohol problems. Screening tools and a template for locating community resources are included. The kit can be accessed on the American College of Emergency Physicians (ACEP) web site (www.acep.org) at no charge (Click on "Practice Resources," then "Alcohol Screening and Brief Intervention in the ED." Or to obtain a paper copy, contact ACEP Customer Service Department (ask for product 409036). Telephone: (800) 798-1822, ext. 6. E-mail: customer.service@acep.org.)

A report, *Developing Best Practice Standards of Emergency Medical Care for the Alcohol Impaired Patient*, addresses screening and brief intervention for alcohol problems in the ED, measuring alcohol levels, and reporting impaired drivers. To order the report (Report No. DOT HS 809 281) contact: Print and Graphics Team, NTS-21 National Highway Traffic Safety Administration, 400 Seventh St., S.W., Washington, DC 20590. Telephone: (202) 366-2590. Or the report can be accessed at no charge from the NHTSA web site (www.nhtsa.dot.gov). Click on "Traffic Safety Occupant Issues," then "Injury Prevention," then "Impaired Driving (Alcohol and Drugs)," and scroll down to the report title.

tool for use in the ED, such as the one developed by the Dallas-based American College of Emergency Physicians (ACEP). The ACEP kit contains a small laminated card with the screening questions, she says.

You should ask patients these 3 questions

At Harborview Medical Center in Seattle, ED nurses routinely ask patients about alcohol use, says **Bonnie Conley**, MSW, the ED's social work supervisor. Conley recommends asking patients the following questions during a two-minute screening:

1. How much alcohol do you use and how often?

Conley notes that people frequently underreport alcohol use, so there is really no absolute in terms of answers. "Of course, if a patient states that she gets shaky when she doesn't drink for several hours, that's clearly a problem whether or not negative consequences are identified," she says.

Conley sometimes uses results of urine toxicology and blood alcohol levels as a reality check. "So we can say, 'You tell me you only drink a couple of beers a day, but your blood alcohol level is 350.'"

2. Has your use of alcohol negatively impacted your life?

You should consider the responses to these two questions together, says Conley. She gives this example: If a patient reports drinking four beers a day and has not been able to stop, and it has resulted in negative consequences in his life, such as his wife leaving him, then the patient most likely will benefit

by speaking to someone about his drinking.

3. Would you like to talk to someone about your alcohol use?

If a patient says "no" to this question, Conley first explains why a problem with alcohol is suspected. For example, she may say, "I'm concerned that you were assaulted because you were in a state where you weren't able to protect yourself, and I don't want to see you hurt again, perhaps worse," or "I'm hearing from the doctor that you have very serious health issues related to your alcohol use."

She offers the patient written information in case they change their mind. "Quite a few people refuse a complete assessment, but very few refuse to listen briefly while we state our concern and offer the written resources," she says.

If the patient adamantly refuses, Conley says, "If you change your mind while you're here, you can let your nurse know, and I'll come back."

If a patient reports moderate use of alcohol, but also acknowledges other problems or issues that could be linked to alcohol use, Conley recommends asking if they'd like to talk to a social worker or chemical dependency counselor.

However, if you feel certain that a patient has an alcohol abuse problem, it's best to simply refer them to social work, instead of leaving the decision up to the patient, advises Conley. "The patient can always refuse social work services after we arrive." ■

(See resource box on p. 105 for ordering information, and questions to ask patients, above.)

• Ask social workers to watch for red flags.

Social workers at Harborview Medical Center continuously monitor the tracking board, which lists a patient's chief complaint, along with results of blood-alcohol tests and urine toxicology, says **Bonnie Conley**, MSW, social work supervisor for the ED at Harborview Medical Center in Seattle.

She points to chief complaints that may indicate alcohol abuse: seizure, found unconscious, out of control, decreased level of consciousness, and altered mental status. If Conley suspects alcohol abuse, she consults with the ED nurse to determine the need for involvement. (See list of specific interventions taken at the ED, right.)

She cites the following red flags for alcohol abuse: irritability, anxiety, limited memory, and lifestyle disruption such as job loss or poor relationships. "Patients often minimize the impact on their life, despite evidence that things are messed up," she notes.

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2. Hungerford DW, Pollock DA, Knox TH. Acceptance of emergency department-based screening and brief intervention for alcohol problems. *Acad Emerg Med* 2000; 7:1,383-1,392. ■

Here are steps to take if you suspect alcoholism

Here is a list of the interventions that occur in the HED at Harborview Medical Center in Seattle if alcohol or substance abuse is identified:

1. A social worker or a chemical dependency counselor does "motivational interviewing" to assess the patient's substance use issues while increasing his or her awareness of the extent of the problem.

2. The patient is provided with information on options for obtaining detox and treatment as appropriate. From the ED, patients may receive the following interventions:

- **The patient goes to “sobering.”** This is generally for patients who are not amenable to treatment, says **Bonnie Conley**, MSW, the hospital’s ED social work supervisor. “Patients must be drunk and not in withdrawal,” she says.

- **The patient goes to detox.** Patients should be in active withdrawal, requiring medications and monitoring by a nurse, says Conley. “There are two levels of care at detox: acute and subacute. Acute is medical for alcohol detox, and subacute is for substances like heroin and cocaine,” she explains.

Sometimes patients with a history of difficulties during withdrawal are sent to detox when it looks like they’re getting close to going into withdrawal, adds Conley. Patients may be accepted into detox because they have a treatment bed date approaching and need to detox before going, she says.

“Unfortunately, many of our patients do not have private insurance that would cover going directly into treatment,” notes Conley. “So even if we have a patient who is agreeable, they generally have to go through a monthlong process to actually get into treatment.”

- **The patient is admitted.** If withdrawal symptoms are such that acute-care criteria are met, or if the patient is in active withdrawal and there are no beds at detox, the patient is admitted, says Conley.

- **The patient leaves with information on how to obtain detox, treatment, and support.** The following forms of support may be provided, says Conley: Alcoholics Anonymous, a chemical dependency appointment at the facility’s mental health center for the following day, or case management. “There is a limited number of case managers, so there is a waiting list for obtaining one,” she notes.

The process for getting funding and into treatment is reviewed with the patient, and support and encouragement is available through the pre-treatment group at the facility’s mental health center, she adds.

“This is similar to the chemical dependency next-day appointments, but is a group with a staff person as a facilitator,” Conley explains.

Patients cannot go directly from the ED to treatment unless they have a way to pay for it on their own and there is an open bed, she adds.

- **The patient is referred to county personnel for involuntary treatment.** This option is for patients that appear to be gravely disabled due to their substance use. “This process does take some time, but we are becoming increasingly successful at getting people into treatment via this process,” says Conley. ■

Wary of family presence? Consider these options

Have you been frustrated by colleagues resistant to family presence? Or are you sometimes uncomfortable with parents being present yourself?

If so, your emergency department (ED) reflects findings of a new study, which found that 59% of ED nurses did not believe that parents should be present during a major resuscitation.¹ (For more information on this topic, see “New study puts spotlight on family-centered practices: How to make your ED stand out from the crowd” in *ED Nursing*, January 2002, p. 29, and “Should family members be present during resuscitations?” in *EDN*, February 1998, p. 49.)

Many ED staff still choose to exclude family members from the treatment areas, despite research showing the benefits of this practice, says **Suzanne Pugh**, RN, ED nurse manager at Saint Vincents Hospital in New York City.²

“There is an assumption that the family member will be unable to handle the sights, sounds, and smells of what is happening around them,” says Pugh.

Here are strategies to use if colleagues are resistant:

- **Ask for feedback from the patients.**

Family members may express gratitude for being present, which can help to change staff attitudes, says **Katherine Scipione**, RN, MS, director of emergency services at Robert Wood Johnson University Hospital in New Brunswick, NJ.

She points to two examples, which show the dramatic impact that family presence has had in her ED:

— When a young girl was rushed to the ED after falling and lacerating her chin, irrigation and extensive suturing was needed. The child’s worried parents were told they could stay in the room during the procedure,

EXECUTIVE SUMMARY

Although research shows that ED staffs aren’t always comfortable with family presence, there are steps you can take to advocate for this practice.

- Always have a staff member remain with the family member in the treatment or resuscitation room.
- Use the time to explain procedures and aftercare instructions.
- If a patient’s condition is life-threatening, you should always allow the family member to be present, even if only for a moment.

and ED nurses took the opportunity to answer questions about wound care and follow-up plastic surgery treatment, says Scipione.

“The family later told us it really helped them to understand how the wound should be watched carefully for infection,” she adds.

— When an elderly cancer patient was brought into the ED in cardiac arrest, she required intubation and frequent defibrillation. “The husband asked to be able to be with the patient during the resuscitation, which we supported,” says Scipione.

The resuscitation was unsuccessful, but being in the room was comforting to the woman’s husband, recalls Scipione. “He thanked us and said that seeing our efforts assured him that everything possible was done for her,” she says.

• **Have a staff member stay with the family member.**

For both of the above scenarios, family members were accompanied by a staff member who answered questions, notes Scipione, adding that this practice can increase the comfort level of staff members.

Pugh’s ED has added a patient representative to the staff during the busy evening hours to act as a liaison between family members and staff caring for the patient. Part of the representative’s job is to encourage ED staff to include the family in the patient’s care plan.

She adds that the ED has a “volunteer advocate” program that supplements the position up to 20 hours per day, seven days per week.

Is death likely?

• **Always allow families to be with a critically ill patient.**

Even if nurses do not want parents present during a major resuscitation, some support this practice if death is likely.¹

Even when chest compressions are being performed for a patient in cardiac arrest, you should allow family members to be with the patient prior to the pronouncement of death, argues Pugh.

“We have found that families are usually able to do this with some degree of composure,” says Pugh. “They are able to focus on the patient and not be affected by the confusion they walk into.”

Family members are grateful to have been with the patient for a moment when they were still alive, regardless of the circumstances, she adds, pointing to research that shows that 97% of family members who had been present during attempted resuscitation would want to be present again.³

• **Act as an example.**

Pugh now is an advocate for family presence, based

SOURCES

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on her own experience. “Like many ED nurses and managers, I once believed that families should not be permitted in the treatment area, certainly not during a code,” she says. “I believed that they would get in the way and just generally make our job more difficult.”

Pugh’s opinion changed after her grandmother was brought to an ED in respiratory distress. When the doctor insisted Pugh go to the waiting room, she asked the nurse if she could remain in the room.

“I will always be grateful to that nurse who allowed me to watch from a corner and be close to my grandmother as she died,” says Pugh. “Despite my sadness and the noise and confusion, my overwhelming memory is of being with her, and I have no lingering questions.”

With this in mind, Pugh set about the task of changing the perception of her ED colleagues toward family presence. “It has taken time and setting an example,” she says. “I frequently bring family members to the bedside myself, stay with them, and then take them back to the waiting area.”

ED staff now routinely make sure that family is permitted at the bedside, even if only briefly. “Invariably, these families leave the ED and express their gratitude for the care they and the patient received,” reports Pugh.

References

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2. Eichhorn DJ, Meyers TA, Guzzetta CE, et al. Family presence during invasive procedures and resuscitation: Hearing the voice of the patient. *Am J Nurs* 2001; 101:48-53.
3. Doyle CJ, Post H, Burney RE, et al. Family participation during resuscitation: An option. *Ann Emerg Med* 1987; 16:673-675. ■



Improve care of children with special needs

When a child with severe mental retardation and cerebral palsy was brought to the ED for increased seizures, the physician was initially alarmed at the nonresponsiveness of the child.

But after ED staff were able to review a summary that explained the child's condition, the child was treated and released instead of admitted, says **Anita Somplasky**, RN, project coordinator for EPIC Medical Home Initiative in Rosemont, PA, which works to improve care of children with special needs.

"The parent later admitted that she was so used to the child's [nonresponsive] status that she did not think to specifically tell the physician," she adds.

This scenario underscores the importance of planning ahead to manage children with special health care needs in the ED, she emphasizes. Here are ways to improve care:

- **Give parents a "portable care plan."** One of the biggest frustrations that parents report is having to explain the child's entire medical history repeatedly, says Somplasky.

To address this, she developed a "portable care plan" for parents to share with ED staff. By using this tool, a parent of a child with multiple anomalies and respiratory difficulties was able to reduce the time spent in the ED, and time to admission because she didn't have to repeat information to the triage nurse and resident, she reports. (See **Medical Summary**, inserted in this issue.)

EXECUTIVE SUMMARY

Children with special needs may appear to have a medical emergency, but conditions such as nonresponsiveness may be normal for these patients.

- Encourage parents to complete medical summaries that can be shared with ED staff.
- Create a file for special needs children with pertinent information.
- Ask the caregiver how the child normally appears.

Somplasky adds that when a child became ill with a strep infection while on vacation, the parents had the summary with them to facilitate care. "The ED had access to all of the background on medications and chronic conditions that they needed to treat the child, so the visit was expedited," she says.

- **Develop a "frequent-flyer" file.** Somplasky recommends having a file of "frequent flyers" for children who are frequently in the ED and often require admission. "Again, it eliminates the need for repeating information over and over again," she says.

As a pediatric liaison nurse for the ED at Long Beach Memorial Medical Center, **Valerie Lancer**, RN, created a "pink file" so information is immediately available when a special-needs child presents.

For every special-needs child, a face sheet lists the physician and caregiver information along with the insurance status. "It enables us to give care without delay," says Lancer. "Also, the child's physician may be contacted to discuss treatment."

"If the child has been admitted at some point, chances are that a dictated report would be available on the computer," she adds.

The problem is that these children, although "repeaters" to the ED, are often treated in clinics, says Lancer. "There was no interface with other computers to give us information on the specific health problem of this child, the primary caregiver, or insurance status."

Sometimes, caregivers are unable to explain the scope of the child's medical needs and history, adds Lancer. "Many times they will say, 'Oh, it's just a cold,' yet you see a trach in place, with the child's eyes rolled back."

Since many of these children presented when medical records were minimally staffed, the ED needed a system to allow immediate access to the records, explains Lancer.

Lancer says she has spent many hours finding the needed information for each child in the file. "An advantage is that it is not necessary to make changes to the original material, since the problems remains the same, although the primary care physician may change."

"Originally, I thought we would have about 50 children in the file, yet when I resigned from the position, we had almost 600," she says.

If you don't have the history on file, Lancer suggests contacting the child's physician instead of relying solely on the parent.

On one visit to the ED, a nurse called the ear, nose, and throat physician to get a history of a 2-year-old girl born with meconium aspiration, which was a relief for **Marlene Carbullido**, RN, the child's mother and a nurse with the department of public health in Guam.

"That way, I did not have to fill her in on all the treatments and surgeries she has had. I was also relieved to

SOURCES AND RESOURCE

For more information on improving care of special needs children, contact:

- **Marlene Carbullido**, RN, 557 Chalan Macajna, Agana Heights, Guam 96910. E-mail: marlene.carbullido@hotmail.com.
- **Valerie Lancer**, RN, Emergency Department, Long Beach Memorial Medical Center, 2801 Atlantic Ave., Long Beach, CA 90806-1737. Telephone: (562) 933-1400. Fax: (562) 933-2053. E-mail: res03sja@gte.net.
- **Anita Somplasky**, RN, Project Coordinator, EPIC Medical Home Initiative, 919 Conestoga Road, Building 2, Suite 307, Rosemont, PA 19010. Telephone: (610) 520-3653. Fax: (610) 520-9177. E-mail: paaap@voicenet.com. Web: www.paaap.org.

A variety of resources pertaining to children with special needs are available on the Emergency Medical Services for Children (EMSC) web site (www.ems-c.org). Click on "Rehabilitation and Children with Special Needs." *Children with Special Health Care Needs: Technology-Assisted Children (TAC)* (Product ID No. 000700) is a spiral-bound book that covers airways, breathing, circulation assessment, and interventions, with special attention to tracheotomies, mechanical ventilators, central intravenous catheters, feeding tubes, cerebrospinal shunts, and artificial pacemakers. The cost is \$5, including shipping. A fact sheet, *Emergency Care Plans for Children with Special Health Care Needs* (Product ID No. 000717) can be downloaded at no charge. (Click on the publication title). Or, single paper copies are available at no charge by contacting:

- **EMSC Clearinghouse**, 2070 Chain Bridge Road, Suite 450, Vienna, VA 22182. Telephone: (703) 902-1203. Fax: (703) 821-2098. E-mail: emsc@circlesolutions.com. Orders also can be placed on-line at www.ems-c.org/cfusion/OnlineOrder.cfm.

know that the ED nurse had access to her records as a former inpatient," she says.

• **Ask for the caregiver's input.** You should listen to the history provided by the caregiver about the child's normal breathing, behavior, or appearance, and use this in your nursing assessment to determine if an emergency actually exists, says Carbullido.

Sign up now to continue receiving bioterrorism news

We hope you have enjoyed receiving complimentary issues of *Bioterrorism Watch* with your subscription to *ED Nursing*. This month is your last free issue.

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She recalls taking her 1-year-old daughter to the ED after a light fixture fell on her head. "Instead of paying attention to that, the nurse/physician was more interested in her breathing pattern," she says.

Carbullido explains that her daughter, who was diagnosed with bilateral vocal cord paralysis, normally has a stridorous upper airway sound. "The physician subjected her to a needless X-ray only to find out her lungs were clear," she says.

Don't assume you know more about the child's health condition than the caregiver, she says, adding, "You may know the textbook well enough, but the family lives with the condition daily." ■

Web site offers multitude of free tools for ED

As an ED nurse, **Michael McCurdy**, RN, found the Internet to be filled with many free resources pertaining to emergency medicine.

"Unfortunately, these sites were often hard to find, and in using search engines, often the results produced were irrelevant," he says.

Over time, he collected dozens of bookmarks to useful emergency medicine sites, and in 1999, decided to launch his own web site containing only free medical resources. "When I first came on-line, there was not much out there for nurses," he says. "Now whatever you are looking for you can find. The trick is to know how to find it."

Vital Signs

Site: New York Emergency Room RN

Address: www.nyern.com

Contact: Michael McCurdy, RN, 8849 Fort Hamilton Parkway, Brooklyn, NY 11209.

E-mail: host@nyern.com.

To help other ED nurses do this, McCurdy compiled a list of resources for emergency medicine and critical care, with one qualification: It must be available on the web for free.

The site is organized by specialty and topic, with its own internal search engine. The site allows you to access interactive patient simulators; links to free educational tools; on-line medical textbooks and reference books; emergency guidelines, procedures, textbooks, tools, and calculators; interactive electrocardiograms; on-line quizzes and continuing education units; policies and procedures; and medical software, illustrations, tutorials, and drug resources.

“With full-text, cover-to-cover textbooks, you have access to the best clinical content around,” McCurdy says. ■



JOURNAL REVIEW

Smith SR, Baty JD, Hodge D. **Validation of the pulmonary score: An asthma severity score for children.** *Acad Emerg Med* 2002; 9:99-104.

The pulmonary score is an acceptable way to measure asthma severity in ED pediatric patients, says this study from the Washington University School of Medicine and St. Louis Children's Hospital, both in St. Louis.

The study looked at 46 children who came to the ED with an acute asthma exacerbation. Peak expiratory flow rates and pulmonary scores (which rates respiratory rate, wheezing, and accessory muscle use on a 0-3 scale) were measured before and after the first albuterol treatment. The study found that pre- and post-treatment pulmonary scores correlated with peak expiratory flow rates.

For children who are too young or too sick to obtain peak expiratory flow rate, the pulmonary score is a reasonable substitute to assess airway obstruction, the researchers conclude. “The [pulmonary score] appears to be an objective and simple scoring system for the assessment of airway obstruction for children,” they wrote. ■

Use a pocket timer to jog your memory

Carrying a pocket timer, a pager with a timing setting, or a wristwatch with a timer can help jog your memory for a myriad of tasks, suggests **Mary MacLeod**, BSc, RN, BScN, MBA, former manager of the community programs unit for the Ministry of Health and Long-Term Care in Toronto.

“This simple gadget can help take one more thing off your mind,” she says.

MacLeod suggests setting a timer to help you remember the following tasks: restarting of a heparin drip; drawing timed bloodwork on a patient; getting a patient off to a testing area or transferred to another unit; re-calling a patient's family when their line previously was busy; and taking a lunch break. ■

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For questions or comments, call

Joy Daughtery Dickinson at (229) 377-8044.

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CE objectives

After reading this issue of *ED Nursing*, the CE participant should be able to:

1. Identify clinical, regulatory, or social issues relating to ED nursing. (*Are you uncomfortable caring for ICU patients in the ED? Here are strategies; Do you screen patients for alcohol abuse? Improve care of children with special needs; Journal Reviews* in this issue.)
2. Describe how those issues affect nursing service delivery.
3. Cite practical solutions to problems and integrate information into the ED nurse's daily practices, according to advice from nationally recognized experts. ■

CE questions

Please use the enclosed Scantron to answer the CE questions for the January-June 2002 issues. You may refer to those issues when answering your questions. Please return your Scantron and CE Survey in the enclosed envelope.

21. Which is recommended to improve care of inpatients in the ED, according to Colleen Bock-Laudenslager, MS, RN, an ED nurse at Redlands Community Hospital and a consultant?
 - A. having each nurse assigned to one ED patient and one inpatient
 - B. grouping all inpatients under the same nurse and in the same area
 - C. avoiding use of inpatient charts
 - D. providing different training for ED nurses and critical-care nurses.
22. Which is effective regarding screening of patients for alcohol abuse, according to Laurie Flaherty, RN, MS, an ED nurse at Suburban Hospital?
 - A. screening only patients with an obvious problem
 - B. this practice is not effective in the ED
 - C. paying attention to patients at risk for developing a problem
 - D. asking about alcohol abuse only if time permits, because screening and intervention generally take an hour to complete
23. Which is recommended to improve care of children with special needs, according to Anita Somplasky, RN, project coordinator for EPIC Medical Home Initiative?
 - A. avoiding asking caregivers questions about the child's history
 - B. asking parents to explain the child's medical history to each caregiver
 - C. asking parents to complete a medical summary to share with ED staff
 - D. relying on information from caregivers instead of the primary care physician
24. Which is accurate regarding assessing asthma severity in ED pediatric patients, according to a study published in *Academic Emergency Medicine*?
 - A. If it's not possible to get a peak expiratory flow rate, pulmonary scores are an acceptable substitute.
 - B. Peak expiratory flow rates always should be used.
 - C. Pulmonary scores are too complicated to use with young children.
 - D. Pulmonary scores should not be used with older children.

Recommended Best Practices of Emergency Medical Care for the Alcohol-Impaired Patient

The following *Best Practices* are intended to serve as the basis for changing how patients with alcohol use problems are treated in the ambulance, the emergency department (ED), and the trauma center.

Recommended Best Practices for Nurses

- 1. Listen to pre-hospital professionals' report, and elicit patient information indicative of alcohol use problems.**

Pre-hospital professionals often have information related to the patient's circumstances and surroundings that can be key in identifying an alcohol use problem. Listening for this information and eliciting this information from pre-hospital professionals is an important and necessary method of completing a patient assessment.
- 2. Identify alcohol-related events in initial assessment of the patient.**

The nurse should use all five senses during the initial assessment and ask the patient/family/caregiver/emergency medical services professionals direct questions to identify alcohol-related visits to the ED.
- 3. Perform an assessment using appropriate tools, such as history, physical examination, and screening tools.**

Patients with alcohol use problems often have specific physical attributes and can develop specific chronic health problems related to their alcohol use problems. Assessment should include conducting a physical examination, history-taking, and looking for the presence of these signs, symptoms, and chronic physical problems. Assessment also should include the use of a screening tool to identify patients with alcohol use problems that may not be readily apparent or to assess the extent of the alcohol use problem. With multiple other checklists to perform and numerous other patient groups to care for, group also discussed potential reluctance of some emergency nurses to do "one more thing." Strategies for implementation of assessment tools will have to address this potential barrier.
- 4. Document objective findings of assessment, interventions, and plan of care for patient with alcohol use problems.**

All findings of physical exam, history taking, and screening should be documented, as well as any interventions that are implemented and the plan of care for the patient with an alcohol use problem. This documentation will serve as a reference for those rendering care to the patient, once they are transferred or discharged from the ED.
- 5. Collaborate with health care team to implement interventions, such as brief interventions, discharge planning, and referral.**

All aspects of care related to the patient with an alcohol use problem, such as the use of screening tools, the use of brief interventions, discharge planning, and referral for treatment, should be part of a standardized approach, agreed to by all members of the health care team.
- 6. Communicate plan of care to appropriate services, such as physicians, substance abuse counselors, referral agencies, and inpatient caregivers.**

By definition, emergency care is brief, episodic, and crisis-oriented. The alcohol use problem and its treatment will not be a resolved issue by the time treatment is completed in the ED. Therefore, it is imperative to communicate the plan of care for the alcohol use problem to all members of the health care team that will care for the patient upon discharge or transfer. The goals are a seamless continuum of care of the alcohol use problem and the patient with an alcohol use problem.
- 7. Provide care for the alcohol-impaired patient(s) in a professional and nonjudgmental manner.**

It is absolutely inappropriate for the health care professional to treat the patient with an alcohol use problem in any way that might be considered judgmental or unprofessional.

8. Advocate in the community for public education, prevention programs, public policy, and treatment programs for alcohol use problems.

Since hospital policy and public policy both have a direct effect on the nurse, in the nurse's ability to render comprehensive care to the patient with an alcohol use problem, and to find the resources to meet the needs of the patient with an alcohol use problem, it behooves the nurse to become actively involved in the hospital and in their community, to advocate for public education, prevention programs, public policy, and treatment programs for patients with alcohol use problems.

9. Participate in collaborative research, education and data gathering to improve the care of patients with alcohol use problems.

As with any other form of health care, research is necessary to ensure maintenance of the "state of the art." Nurses should conduct and participate in research to improve identification and care of the patient with an alcohol use problem.

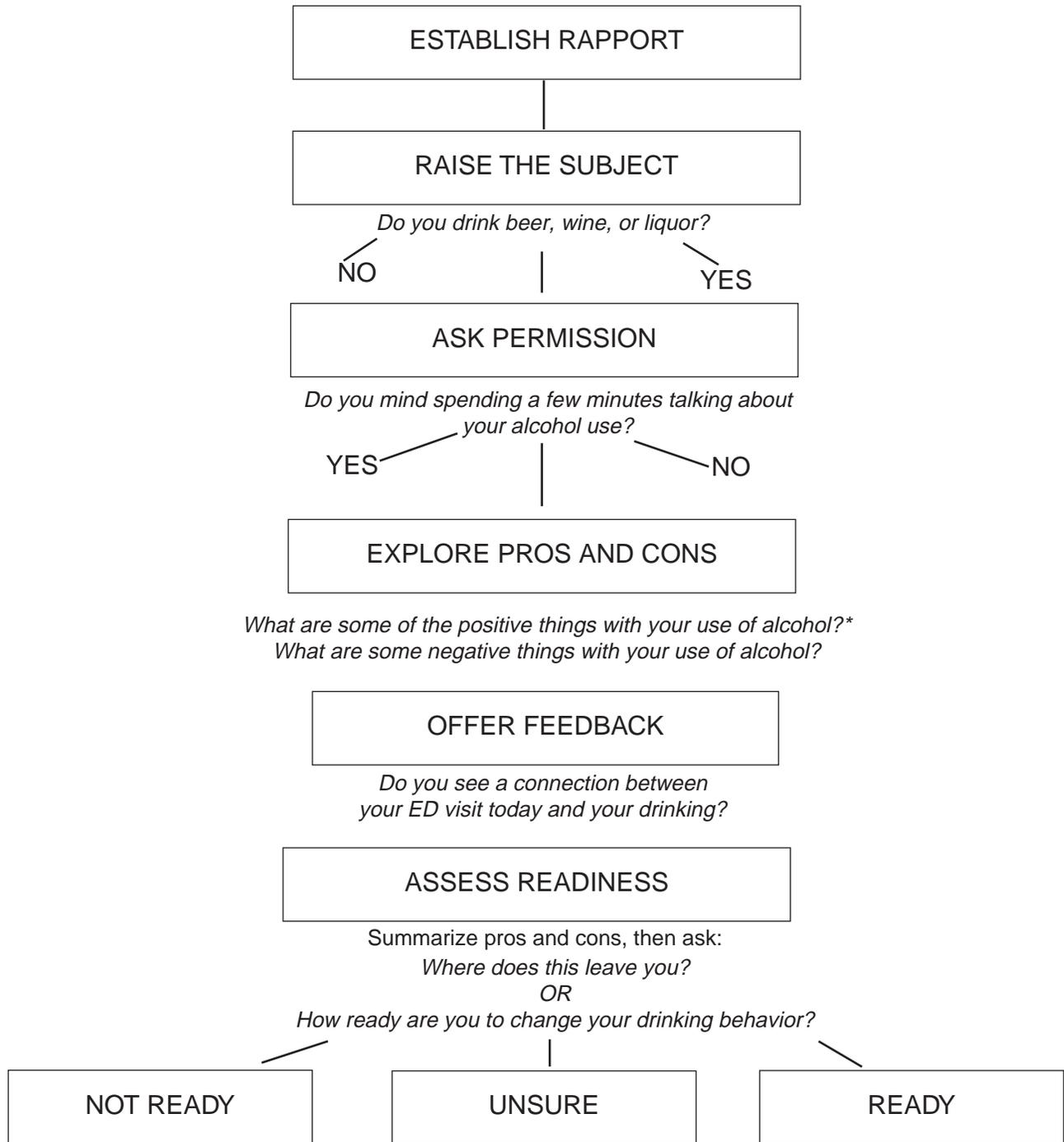
10. Integrate alcohol screening and alcohol education into curricula, continuing education, and standards for emergency health care professionals.

The knowledge base of health care professionals must be elevated, to include more information on alcohol use problems. Alcohol screening and education regarding comprehensive care of the patient with an alcohol use problem should be included in the curricula of nursing schools, medical schools, residency training, emergency medical services training, continuing education for practicing nurses, emergency physicians, trauma surgeons, and pre-hospital professionals; and should be an established and documented standard of nursing care, medical care, and pre-hospital care of the patient with an alcohol use problem.

Source: National Highway Traffic Safety Administration. Developing Best Practices of Emergency Care for the Alcohol-Impaired Patient: Recommendations from the National Conference. Washington, DC; 2001.

Source: Educating Physicians in Community Integrated Care Medical Home Project, Rosemont, PA.

Detection and Intervention of Problem Drinkers in the ED — Brief Negotiation Interview (BNI) Screening Tool



1. Express concern.

2. Offer education and information for follow-up, including recommendations, e.g., "Do not drink and drive."

* If patient tests positively or has Hx of alcohol problems, assess for safe discharge with appropriate referrals and instructions.

1. *What will it take to get you ready?*

2. Offer education, information for follow-up, and recommendations.

1. Help patient identify resources.

2. Make an appropriate referral for treatment.

Source: National Highway Traffic Safety Administration. *Developing Best Practices of Emergency Care for the Alcohol-Impaired Patient: Recommendations from the National Conference*. Washington, DC; 2001.

BIOTERRORISM WATCH

Preparing for and responding to biological, chemical and nuclear disasters

They don't call it *bioterror* for nothing: Fear is the foe when anthrax spores are found within hospital walls

'We feel we were able to ward off a panic . . .'

Clinicians nationwide were beset with hoax powder scares last year at the height of the anthrax attacks, but at one hospital, the threat turned out to be real. Positive cultures for *Bacillus anthracis* were found within hospital walls, setting off a wave of anxiety that threatened to descend into panic.

"There was a mounting level of anxiety among our health care workers," said **Maureen Schultz**, RN, infection control coordinator at Veterans Affairs (VA) Medical Center in Washington, DC. "It had to be dealt with before we could work out any other aspect of the situation."

The events began to unfold last October, when it was discovered that the anthrax letter sent to Sen. Tom Daschle (D-SD) might have contaminated other federal buildings through cross-contamination of mail processed at the Brentwood postal building in Washington, DC.

"It was several days before the contamination was discovered, and by that time, several downstream facilities, including our VA hospital, were contaminated," she said recently in Salt Lake City at the annual meeting of the Society for Healthcare Epidemiology of America (SHEA).¹ In light of the situation, it was recommended that mailrooms in federal buildings be cultured for anthrax.

"One of the things we found frustrating was that we were not given any guidance as to how we should screen the mail," Schultz said. "So we [took] cotton swabs and ran each swab over an approximately 10 to 50 square inch area."

Four of 34 environmental swabs taken in the

hospital mailroom grew *B. anthracis*, with colony counts varying from one to 11. The anthrax was found on a canvas mail tote, a cardboard box that had been mailed, on the top of a mailroom speaker, and on a canvas mail cart.

The fear factor

"Even before the contamination was discovered, [we] decided to take some action because of the growing concern among our employees," she said. "So [we] convened a group from the emergency response team, infection control, safety, and public affairs."

The focus of the response was to determine risk level, provide prophylaxis as needed, decontaminate the environment, and get accurate information to all 1,700 health care workers, patients, and visitors, Schultz said. In order to reduce the high level of anxiety, a series of educational sessions were held, information was posted on the hospital web page, press releases were distributed, and printed materials were given to staff, patients, and families. In addition, a series of "town-hall" meetings was held to fully air the concerns of employees.

"These were informal sessions that we had in our auditorium where many health care workers could come and interact on an informal basis," Schultz said.

The risk to hospital workers was determined to

This supplement was written by Gary Evans, editor of *Hospital Infection Control*. Telephone: (706) 742-2515. E-mail: gary.evans@ahcpub.com.

be low, and only eight staff members were started on prophylactic antibiotics. Those included five mailroom employees who were encouraged to take full 60-day regimens. Another three workers, considered at lower risk, were given 10-day regimens due to possible contact with contaminated mail. The mailroom and surrounding area were decontaminated by an outside contractor.

Overall, some 500 health care workers attended the education sessions, and each town-hall meeting drew more than 200 staff members. With the colony counts low and the contamination limited, the decision was made to limit prophylaxis to only the eight aforementioned employees. That approach was not well received by other health care workers who feared they could have been unknowingly exposed.

"We refused treatment to all other employees, and initially, this created a lot of anxiety among the health care workers, particularly in these large town-hall meetings," Schultz said. "They were demanding ciprofloxacin or doxycycline in case they had come in contact with something contaminated. But we did hold firm on this, and we did not provide prophylaxis to any other employees."

Still, at the SHEA meeting, the Centers for Disease Control and Prevention (CDC) conceded that many of its initial assumptions about anthrax turned out to be false, including the perception that mail handlers were not at risk for inhalational anthrax. Given that acknowledgment, *Bioterrorism Watch* asked Schultz if she would now reconsider the decision to limit antibiotic prophylaxis to a few workers. "Based on the information we have now, no. I don't think we would change that decision." There really was no evidence that any widespread contamination had occurred, she added.

A total of 34 workers reported to the occupational health service for clinical evaluation, but there were no reports of staff refusing to work, and patient care was not interrupted. The initial level of fear and anxiety among many of the workers eased off under the continuous education and communication effort.

"We feel we were able to ward off a panic situation by the actions that we took," she said.

NYC hospital faces similar situation

A similar contamination incident was feared at Memorial Sloan Kettering Institute, a 431-bed cancer center in New York City. Some 1,200 health care workers at Sloan Kettering work in

the same building as Gov. George Pataki's Manhattan office, which was reported to be the target of anthrax mailing. On Oct. 17, possible anthrax (positive by polymerase chain reaction test) was discovered in the governor's office. Pataki and staff vacated their part of the building, and infection control staff and hospital administration at Sloan Kettering developed a response plan to protect their workers.

The hospital employees worked on 10 floors of the 40-story building, including three floors that shared an air-ventilation system with the governor's offices. The response was honed to focus on mailroom staff and some 250 employees who worked on the three floors with shared air. With incomplete information on the scope of potential contamination of Pataki's offices, hospital clinicians decided to perform nasal cultures on the employees on the three floors. **Janet Eagan**, RN, an infection control professional at Sloan Kettering reported at the SHEA conference.² All of the 245 cultures taken were negative.

"I think the nasal swabs were more to allay fear," she said. "We wanted to do something that was proactive."

Public health investigators first used the nasal swab approach after the first anthrax case in Florida, but the CDC would later advise against routine use of the practice. The reliability of the swabs came into question, in part, because even those exposed may test negative as the nose clears of spores. At a Nov. 1, 2002, press briefing, the CDC advised against using nasal swabs "as a nonspecific probe to determine whether anthrax has ever been present in an environment."

Of course, clinicians at Sloan Kettering were dealing with a situation before that clarification was issued, but even then there were doubts about the wisdom of swabbing the workers.

"By the time we agreed to do the nasal swabs, I was kicking myself, thinking what on earth are we going to do with this information," **Ken Sepkowitz**, MD, epidemiologist at the hospital told SHEA attendees. "The nasal swabs was a screw-up, but with the information we had . . ."

With all the swabs negative, no antibiotics were administered. Additional efforts were needed to reassure the "worried well" that they were not at risk. Personnel from infection control, safety, security, and social work all met with the staff. Building management conducted an independent environmental survey of the building.

"E-mails went to all staff that all 245 employees tested had negative results," Eagan said.

“Communication is key. We believe that by having a hands-on approach — actually being there meeting with staff — prevented panic in employees that were very vulnerable.”

Then word came that the original specimen from the governor’s office had been found culture negative on retesting. The hospital had been through an intense false alarm drill, but overall had met the challenge, Eagan said.

“Decisions were made using incomplete information at a time-sensitive pace,” she said. “Staff responded in a positive manner to the high visibility of administrative leadership, infectious disease, and infection control in numerous educational sessions and e-mail alerts.”

References

1. Gordin F, Schultz M, Benator D, et al. A coordinated response to contamination of the hospital environment with *Bacillus anthracis* spores. Abstract 129. Presented at the annual conference for the Society for Health Care Epidemiology of America. Salt Lake City; April 6-9, 2002.
2. Eagan J, Martin K, Prager L, et al. Infection control response to potential anthrax contamination of building with hospital workers. Abstract 130. Presented at the annual conference for the Society for Health Care Epidemiology of America. Salt Lake City; April 6-9, 2002. ■

APIC: Smallpox plan uses outdated infection control

Designating patient facilities a mistake

The Centers for Disease Control and Prevention (CDC) has based its smallpox bioterrorism response plan on “outdated concepts,” and entire sections need to be revised to reflect current epidemiologic strategies, the nation’s leading group of infection control experts warned.

The Association for Professionals in Infection Control and Epidemiology (APIC) commented on the *CDC Interim Smallpox Response Plan and Guidelines*, which has been released as something of a work in progress.

“In general, we are concerned that the draft guidelines appear to be based on outdated strategies used to control this disease decades ago and do not appropriately integrate those infection control strategies and environmental controls utilized in our hospitals today,” the APIC letter stated.

The CDC response plan calls for investigators

to rapidly immunize a “ring” around the first cases. The ring concept uses isolation of confirmed and suspected smallpox cases followed by contact tracing, vaccination, and close surveillance of contacts. The ring approach was used to successfully eradicate smallpox from the world in 1980. But the ring concept was effective when the demographics of smallpox were very different, when few were infected, and the vast majority of people already were immune.

As part of the ring response, vaccine would be administered to people involved in the direct medical care, public health evaluation, or transportation of confirmed or suspected smallpox patients.

“Vaccination, like any preventive strategy, is more effective if given prior to exposure,” APIC argued. “If health care workers are not immunized prior to case identification, these individuals [especially emergency department staff, direct caregivers, and laundry personnel] should be vaccinated immediately upon documentation of a case in their community. It is crucial that we not wait for a case to present in the facility before taking preventative action.”

In addition, it may not be possible to distinguish between febrile response to vaccine or actual exposure in health care workers, APIC warned.

“Approximately 20% of vaccinated employees will develop fever and not be able to work if vaccine is given in response to a suspect or confirmed case,” the association stated. “We need to develop strategies for dealing with staffing shortages whether they are due to febrile reaction to vaccination, true infection/disease, or refusal to care for patients in a smallpox emergency.”

‘Misuse of resources’

APIC also questioned the CDC concept of a “Type C isolation facility” for smallpox patients. As proposed, the sites would be facilities that are at least 100 yards from any other occupied building, or those that have nonshared air-ventilation systems with filtered exhaust.

“We believe it would be a misuse of resources to design, build/retrofit, and maintain a designated facility that is not integrated with the existing health care system,” APIC stated. “Using alternative structures rather than enhancing the current infrastructure is not a wise use of our limited resources.”

Instead, existing facilities could substantially

benefit from dedicating resources to ensuring appropriate air handling and ventilation systems for existing clinics, emergency departments, and isolation rooms. "This would provide the added benefit of controlling more likely exposures to infectious droplet nuclei [tuberculosis, disseminated zoster, chicken pox, measles, etc.] in addition to minimizing or eliminating the likelihood of intrafacility transmission of smallpox," APIC stated.

The association expressed concern that health care delivery might be compromised in separate Type C facilities, particularly if they are not designed to provide services such as intensive care, ventilator support, dialysis, and laboratory resources. Rather than designate facilities for smallpox patients, each hospital should be prepared in advance to activate its program when the first case is identified, APIC argued.

"There needs to be a predetermined area [building or wing, etc.] that meets the 'Type C' facility requirements for isolation," APIC noted. "Part of a facility's planning would include a determination regarding the number of patients that could be housed in the designated area."

Some of the cleaning and disinfection recommendations in the document are out of date with current sterilization principles and practices. That includes "fogging" rooms to disinfect environmental surfaces, the association charged.

"CDC has not recommended the fogging of rooms for many years," APIC stated. "We strongly suggest the deletion of any archaic references to fogging." ■

Stanford sets the standard for bioterrorism planning

A separate piece: Stand-alone plan advised

It's not enough merely to update the bioterrorism component of your current disaster preparedness plan, experts say; you must create a detailed bioterrorism response plan that stands on its own.

That's precisely the philosophy behind the Stanford (CA) Hospital and Clinics (SHC) & Lucile Packard Children's Hospital (LPCH) Bioterrorism Response Preparedness Plan, which is gaining widespread recognition as a model for such plans. In fact, several Kaiser

Permanente facilities in California already have adopted the plan.

"You need a separate [bioterrorism] plan," asserts **Eric A. Weiss**, MD, assistant professor of emergency medicine at Stanford, associate director of trauma at Stanford Hospital, and chairman of the disaster committee and bioterrorism task force. "During most disasters, for instance, you don't rely on the microbiology lab to identify pathogens. Also, infectious disease and infection control staff take on a major, heightened role."

In disasters such as an earthquake, Weiss notes, you generally don't have to worry about the quarantine of patients or the spread of infectious agents. Similarly, you may not have to put on protective clothing or worry about cross-contamination of existing patients who may be immunosuppressed.

A bioterrorism plan had been in place prior to 2001, Weiss says, "but it was really just a skeleton plan — not very comprehensive. It was part of a larger disaster preparedness plan, but a plan to deal with mass casualties from bioterrorism is very different."

When you have a major disaster such as the collapse of the World Trade Center, Weiss notes, local health care providers are likely to come to the hospital and offer to chip in and help wherever they can.

"But what happens when the word goes out that patients are walking around with smallpox?" he asks. "Are providers going to want to stream down to the hospital and potentially infect themselves and their families? You need a response plan to address the safety of health care providers, so they will feel comfortable and want to show up for work."

To create such a plan, the Bioterrorism Planning Task Force was formed, incorporating personnel from 30 or more different departments at both facilities. Those departments include infectious diseases, infection control, emergency medicine, pediatrics, critical care, intensive care units, nursing and hospital administration, dermatology, psychology, social services, and environmental health and safety.

"We began putting the plan together when we identified the fact that the current plan was not adequate," notes Weiss. "We accelerated our activities after Sept. 11. After Sept. 11, *everybody* wanted to be part of it."

[Editor's note: The bioterrorism plan is available on the Stanford web site at www.stanfordhospital.com.] ■