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Inside

- **Ecstasy use:** Do you know the warning signs? 158
- **Cardiac monitors:** Stop false alarms by following these simple steps 160
- **Myocardial infarction:** Find out the new definition and how it will change your practice 161
- **Pediatric transfers:** Here's what your policy must include 162
- **Journal Reviews:** Patient perception of privacy; falls prevention programs for elderly patients 163
- **Domestic violence:** Use these valuable resources to help victims 164
- **News brief:** Find out the latest statistics for elderly patients and ED visits 165
- **Inserted in this issue:** Patient handout for home safety; Sample pediatric transfer policy; Fax-Back Survey on documentation

October
2001

Do you know how to treat an overdose of Ecstasy? ED cases are skyrocketing

New report: ED visits increased by 58% last year

A 15-year-old girl is brought to the ED with hallucinations, blurred vision, and drowsiness after taking a hit of Ecstasy. A 20-year-old patient is brought in by ambulance with a 105.5°F temperature after taking 30 hits of Ecstasy, and is intubated after having grand mal seizures.

These are just two recent cases reported by the ED at Dartmouth-Hitchcock Medical Center in Lebanon, NH. If you haven't treated a patient on Ecstasy yet, you probably will soon, predicts **Linda Courtemanche, RN, CSPI**, managing director of the New Hampshire Poison Information Center at Dartmouth-Hitchcock.

ED visits stemming from use of Ecstasy — a “club drug” used at all-night “rave” dance parties, have risen by 58% (from 2,850 visits in 1999 to 4,511 in 2000) according to a new report from the Rockville, MD-based Substance Abuse and Mental Health Services Administration (SAMHSA). **(See resource box to obtain the complete report, p. 159.)**

New report provides 'benchmark' for disaster training in the ED

In light of the recent terrorist attacks on New York City and Washington, DC, the critical question arises: Are you adequately trained for a disaster? It's not a simple question to answer, but now you have a measuring stick to assess how well you are prepared.

A new report from the Dallas-based American College of Emergency Physicians (ACEP) and the U.S. Department of Health and Human Services (HHS) Office of Emergency Preparedness gives you a “benchmark” to prepare for nuclear, biological, and chemical (NBC) incidents with specific training objectives. **(See resource box for information on obtaining the complete report, p. 166.)**

(See “Disaster training,” on page 166)

EXECUTIVE SUMMARY

ED visits due to use of the “club drug” methylenedioxymethamphetamine (MDMA) or “Ecstasy” have dramatically increased, and overdoses have resulted in several deaths from intracranial hemorrhage.

- Most users mistakenly believe the drug is harmless.
- Beta-blockers are contraindicated.
- Life-threatening symptoms are ventricular dysrhythmias, extreme hyperthermia, status epilepticus, and cerebral edema.

Although users often believe Ecstasy is harmless, it’s actually a dangerous psychoactive drug that has resulted in numerous fatalities, warns **Diane Gurney**, RN, MS, CEN, ED educator at Cape Cod Hospital Emergency Center in Hyannis, MA.

Methylenedioxymethamphetamine (MDMA) can produce a significant increase in heart rate and blood pressure, she says. “The effects, which enable the users to dance for extended periods, may also lead to dehydration, hypertension, and heart or kidney failure,” she adds.

In high doses, the drug can cause a marked increase in body temperature, which can lead to muscle breakdown and kidney and cardiovascular system failure, says Gurney. “It also may lead to heart attacks, strokes, and seizures in extreme cases.”

Here are effective ways to assess and treat patients who have taken the drug:

- **Know symptoms to watch for.**

Toxicology and urine screens are frequently negative for MDMA, so you’ll have to rely on clinical symptoms, says Courtemanche.

Users often drink excessive amounts of fluids, says **Matthew D. Sztajnkrycer**, MD, PhD, a toxicology fellow in the department of emergency medicine at the University of Cincinnati Medical Center.

“Mood-modifying amphetamines like MDMA also result in a feeling of closeness to others and a euphoric mood,” Sztajnkrycer adds. This is due to release of serotonin and blockade of reuptake, he explains.

Patients presenting with mild toxicity may be sweaty and restless, with dilated pupils, and they may

Signs of Ecstasy Use

- Dilated pupils
- Increased body temperature
- Perspiration
- Rapid irrational speech/difficulty speaking
- Elevated blood pressure (after the patient is dehydrated, he or she will become hypotensive and have positive orthostatic signs)
- Incoordination;
- Body tremors
- Increased respirations
- Nausea
- Increased pulse rate

Signs of more severe toxicity:

- Inability to sweat
- Cramps in the legs, arms, and back
- Dizziness
- Headache
- Vomiting
- Fainting
- Symptoms of dehydration

Source: Diane Gurney, RN, MS, CEN, ED Educator, Cape Cod Hospital Emergency Center, Hyannis, MA.

complain of nausea, vomiting, or abdominal cramping, according to Sztajnkrycer. “Patients using MDMA classically manifest grinding of teeth and jaw clenching, hence the use of pacifiers at raves,” he adds.

- **Give patients a thorough assessment.**

Your assessment should include a full set of vital signs, a urine analysis, and electrolytes, says Courtemanche. “Urine dipstick for blood is a ‘quick-and-dirty’ way to check hypertension,” she says.

In summary, you should do the following, according to Sztajnkrycer.

1. Obtain a complete set of vital signs, including a core temperature.
2. Perform continuous cardiac monitoring.
3. Take care to avoid further agitation, especially when using physical restraints.
4. Assess for life-threatening dysrhythmias or hyperthermia.
5. Look for evidence of seizure activity or focal neurological signs.

COMING IN FUTURE MONTHS

■ Effective strategies for child abuse intervention

■ Update on family-centered care in the ED

■ How to treat non-English-speaking patients

■ Tips for assessing trauma patients

6. Obtain a fingerstick on any patient with an altered mental status.

7. Assess fluid status.

Perform continuous neurological assessments and watch for kidney failure, warns Gurney. "Also, protect the patients from themselves if they are in a high state of agitation, try to keep their metabolic rate at a normal level, and watch for any symptoms of muscle breakdown/kidney failure," she recommends.

Danger: Cardiovascular collapse

- **Watch for signs that a patient's life is in danger.**

In severe cases of hyperthermia or hypotension, cardiovascular collapse may occur, warns Courtemanche. Treatment consists of rapid cooling, just like any other hyperthermia, recognition of the possibility of hyponatremia, and supportive care: IV fluids, correction of temperature, and intubation, if necessary, she adds.

Signs of more severe toxicity are increased motor activity, diaphoresis, tachycardia, hypertension, and mildly elevated core temperatures, says Sztajnkrycer.

"As toxicity progresses, seizures may develop," he says. "Core temperatures may climb above 40°C. Patients appear delirious or comatose, renal failure may occur secondary to rhabdomyolysis, and hypertension or hypotension may occur."

Life-threatening manifestations of MDMA toxicity include ventricular dysrhythmias, extreme hyperthermia, status epilepticus, and cerebral edema, says Sztajnkrycer.

Deaths have been reported from intracranial hemorrhage, says Sztajnkrycer. "A particular concern is cerebral edema," he adds. "Many users believe that they should drink copious amounts of water to prevent dehydration."

While patients may need fluid boluses to reverse fluid deficits, be careful not to aggravate cerebral edema, cautions Sztajnkrycer.

Deaths from cerebral edema have been the subject of several case reports, Sztajnkrycer acknowledges. "However, if patients have evidence of volume depletion such as elevated urine specific gravity, tachycardia and hypotension, fever or tachypnea with increased insensible losses, then fluids are indicated," he says.

Isotonic fluids (normal saline) are a better choice than hypotonic (half-normal saline) to reduce iatrogenic hyponatremia and provide intravascular volume, says Sztajnkrycer. "In the setting of significant hypertension, excessive fluid administration has resulted in pulmonary edema," he cautions.

- **Check urine for the presence of myoglobin.**

Excessive motor activity, trauma, and hyperthermia may contribute to rhabdomyolysis, the breakdown of muscle, says Sztajnkrycer. "Typically, this

SOURCES AND RESOURCE

For more information about treating patients who have taken Ecstasy, contact:

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A complete copy of the Substance Abuse and Mental Health Services Administration's (SAMHSA) 2000 Emergency Department Data from the Drug Abuse Warning Network (DAWN) can be downloaded free of charge from the SAMHSA web site: www.samhsa.gov. Click on "Statistics/Data," "Drug Abuse Statistics," "Drug Abuse Warning Network," and "Reports & Tables from DAWN Emergency Department Component." Choose "Download Entire Report." A special report on "club drugs," including Ecstasy also can be downloaded free of charge. Click on "Statistics/Data," "Drug Abuse Statistics," "Drug Abuse Warning Network," and "The DAWN Report: Club Drugs."

is noted by elevations in [serum creatine phosphokinase]," he says. "The muscle protein myoglobin is nephrotoxic, causing acute tubular necrosis in part by precipitation in the renal tubules."

A quick way to determine the presence of myoglobinuria is to perform a urine dipstick and microscopic assay, says Sztajnkrycer. "The presence of blood in the absence of [red blood cells] is highly suggestive of myoglobinuria," he says.

Alkalinization of the urine is believed to prevent myoglobin-induced renal failure, he notes.

- **Don't miss life-threatening hyperthermia.**

Hyperthermia may develop from increased exertion, and you should initiate rapid cooling for temperature

over 40°C, says Sztajnkrzyer.

“The key is not to overlook obtaining a core temperature in an agitated or combative patient, thereby missing potentially lethal hyperthermia,” he stresses. Psychomotor agitation is a hallmark of amphetamine toxicity, he explains.

- **Know medications to use.**

According to Sztajnkrzyer, benzodiazepines are first-line agents for seizures, sympathomimetic excess, and hemodynamically stable narrow complex tachycardias. “Beta-blocker use is relatively contraindicated due to the concern of unopposed alpha stimulation with resultant hypertensive crisis,” he adds.

- **Look for evidence of other trauma.**

All patients with altered mental status need to initially be evaluated with spine precautions, says Sztajnkrzyer.

He adds that the patient may have sustained secondary trauma and is unable to explain what happened.

Patients on MDMA also have blunted pain perception, so you should have a high index of suspicion for occult trauma, he adds.

Often the story told by a patient is “sketchy at best,” says Sztajnkrzyer. “Perhaps no one saw the patient fall down three or four steps, but this could be enough to cause a devastating C-spine injury,” he explains. ■

Stop false alarms on cardiac monitors

You may think that false alarms on cardiac monitors are a mere annoyance, but they put patients at risk, argues **Rebecca A. Steinmann, RN, MS, CEN, CCRN, CCNS**, ED clinical nurse specialist at Northwestern Memorial Hospital in Chicago.

“The problem is that staff become so accustomed to this ‘background noise’ that they don’t respond immediately to the true life-threatening alarms,” she says. **(For more information on the side effects of noise, see *ED Nursing*, August 2001, p. 137.)**

Although manufacturers have designated different visual patterns and sounds to the varying levels of alarm priorities, staff tend to disregard alarms, says Steinmann. “The vast majority of the time, the alarms are false alarms,” she explains.

False alarms also add to the noise in the individual patient’s room, says Steinmann. “How would you feel if you were a family member hearing your mother’s cardiac monitor flash alarm messages, and wonder why no one from the nursing staff is coming in to the room to investigate the situation?” she asks.

Reducing the number of false alarms is absolutely

EXECUTIVE SUMMARY

False alarms of cardiac monitors put patients at risk, because staff become accustomed to them and don’t respond to life-threatening alarms.

- Settings should be individualized for every patient when they are attached.
- Carefully place the patches on clean, dry skin.
- Select a lead that has a tall R-wave.
- Adjust alarm limits for infants, who have normal heart rates of 140.

critical to ensure that life-threatening alarms are immediately noted and acted upon, urges Steinmann. “This is both for patient physiologic safety and psychological comfort,” she says.

Here are ways to prevent false alarms:

- **Understand how the monitoring system works.**

Steinmann recommends asking clinical nurse specialists or your facility’s “super users” to train ED nurses.

Staff should be required to demonstrate initial and ongoing competency with the monitoring system, says Steinmann. “Periodic inservices from the vendor can also be very beneficial for ongoing updates,” she adds.

- **Individualize alarms.**

It’s not enough to simply attach the patient to the monitor, says Steinmann. “To reduce the number of false alarms, the alarms for each physiologic parameter being monitored should be individualized for each patient,” she explains.

The monitors should be custom adjusted for every patient when they are attached, according to **Michael Buelow, RN, CEN**, an ED nurse at InteliStaf, a staff relief agency based in Phoenix.

“As is often the case, this task falls to the nurse,” he says. “Most ED nurses, however, have never been taught the fine points of this. They just slap the patches on and use Lead II, no matter what.”

Find a monitor lead that shows a smooth baseline and large positive (upward) QRSs, advises Buelow. “Usually this will be Lead II, but don’t hesitate to experiment with different leads to get what you need,” he says.

Buelow recommends setting the height of the QRS complexes (using the “gain” or “size” adjustment) so they can be easily seen, but no taller than necessary.

When the gain is set very high, small muscle-movement artifact may also be amplified enough to cause false alarms, he explains.

- **Immediately respond to every alarm.**

Resist the urge to ignore an alarm, says Buelow. “If it is a false alarm, identify and correct the cause,” he

SOURCES

For more information about reducing false alarms of cardiac monitors, contact:

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says. "There are even times when it may be appropriate to turn off the alarms as a last resort."

- **Apply monitor patches to clean, dry, intact skin in the appropriate locations.**

Cardiac monitoring systems work by collecting, amplifying, and displaying the tiny electrical activity of the heart. "Like any other electrical system, the cardiac monitor requires sturdy connections to complete the circuit," says Buelow.

Carefully consider the interface between the monitor patch and the skin, says Buelow. "This is the most common place for trouble," he says.

The most common noise producer is patient movement that the machine senses as tachycardia, Buelow explains. "To prevent this, one must carefully place the patches on clean, dry skin and select a lead that has a tall R-wave," he says.

Dirt, body oils, lotions, and Vick's VapoRub all reduce conduction from the body to the machine, which increases false alarms, says Buelow.

He explains that any barrier between the silver gel and the skin will prevent good conduction of electricity. "If necessary, use some alcohol pads or soap and water to cleanse the skin," he recommends.

Avoid large muscle masses, as the electrical activity of moving voluntary muscles can cause interference, says Buelow. "Select relatively hairless areas, and shave only if absolutely necessary," he says.

Consider removing and reapplying the patches if needed, he adds.

- **Adjust settings for infants.**

When you turn on most monitors, the rate alarms are usually preset at 60 and 120, notes Buelow. "A common error is to attach an infant, whose normal heart rate is 140, to a monitor that has a default tachycardia alarm at 120, and not adjust the alarm limit upward," he says. ■

Do you know the new definition of MI?

Do you know the definition of a myocardial infarction (MI)? You may be surprised to find out what new guidelines from the Dallas-based American Heart Association have to say.¹

The new definition actually describes MI as including a typical rise and gradual fall of cardiac troponin I or T, or a more rapid rise and fall of CK-MB, explains **Katherine Littrell**, RN, PhD, of the cardiovascular center of medical affairs for Genentech, based in South San Francisco, CA.

In addition, you also need one of the following to diagnose MI, says Littrell:

- ischemic symptoms;
- development of pathological Q-waves from the ECG;
- ECG changes indicative of ischemia;
- coronary intervention such as angioplasty.

An MI is both myocardial cell death *and* ischemia, says Littrell. "Before this change in definition, there was a lot of confusion about the newer cardiac marker troponin," she adds. "Troponin will elevate any time there is myocardial cell death, but it was not reaching what we called the acute MI level."

There was misunderstanding about whether these patients had an MI, she explains. "Actually, these patients did have myocardial cell death," she says. "So while they had a smaller MI, they still had an MI."

This new definition moved all patients who had elevated cardiac troponin and ischemic symptoms into the non-ST-segment elevation MI group, she explains. "Once the patient is determined to have a myocardial infarction or unstable angina, this will help guide the therapies," says Littrell.

The new definition of an MI now rules in many patients previously diagnosed with severe, stable or unstable angina, explains **Julie Bracken**, RN, MS, CEN, director of nursing education for the ED at Cook County Hospital in Chicago and the Des Plaines, IL-based Emergency Nurses Association representative to the National Heart Attack Alert Program. "The new diagnosis is a "small MI," she says.

This changes the way you'll treat these patients, says Littrell. "Maybe this patient had a positive troponin level and also ST-segment depression," she says. "So the patient would be considered high risk."

This means many more patients should be placed on the acute MI pathway or protocol for treatment, says Bracken. "ED nurses must be prepared to initiate ordered treatment to a larger number of patients," she says.

SOURCES

For more information on the new definition of myocardial infarction, contact:

- **Julie Bracken**, RN, MS, CEN, Cook County Hospital, 1835 W. Harrison St., Chicago, IL 60612. Telephone: (312) 633-7683. Fax: (312) 633-8539. E-mail: juliebracken@msn.com.
- **Katherine Littrell**, RN, PhD, Genentech, Cardiovascular Center of Medical Affairs, Room 24333, 1600 Grandview Blvd., South San Francisco, CA 94080. Telephone: (650) 225-8610. E-mail: littrell@gene.com.

According to Littrell, you should consider administering aspirin, heparin (either unfractionated heparin or low molecular weight heparin), a GP IIb/IIIa inhibitor, a beta-blocker, and nitroglycerin IV. “For continuing or recurrent ischemia, the patient may be considered for coronary catheterization or revascularization,” she says.

Reference

1. Guidelines 2000 for cardiopulmonary resuscitation and emergency cardiovascular care. *Circulation* 2000; 102(suppl 1):I-172-175. ■

Develop clear policies for pediatric transfers

Do you know which sick and injured children should be transferred to specialized facilities? Do you know the appropriate type of transport to use and which staff members should accompany the child?

You should have a specific policy in place for these nerve-wracking scenarios, according to new guidelines for pediatric care, *Care of Children in the Emergency Department: Guidelines for Preparedness*, jointly published by the Dallas-based American College of Emergency Physicians (ACEP) and the Elk Grove Village, IL-based American Academy of Pediatrics (AAP).

When a pediatric patient is seriously ill or injured, having a clear transfer policy in place can potentially save the child’s life, says **Evelyn Lyons**, RN, MPH, EMS-C director for the Illinois Department of Public Health, based at Loyola University Medical Center in Maywood, IL.

“Every ED should develop appropriate guidelines,

policies, and procedures for obtaining consultation and arranging transport,” she asserts. “This will help to minimize delays.” (See **Sample Pediatric Transfer Policy, inserted in this issue.**) Your policy should include:

- **Criteria for transfer.**

Your policy should include specific criteria for admission to the pediatric unit, admission to the pediatric intensive care unit, and transfer to a pediatric center, recommends **Barbara Weintraub**, RN, MPH, MSN, pediatric emergency services coordinator at Northwest Community Hospital in Arlington Heights, IL.

- **Procedure for consultations with specialists.**

Consultation with pediatric medical and surgical specialists at a pediatric tertiary care center or trauma specialists at a trauma center should occur as soon as possible after evaluation of the patient, says Lyons.

- **Identification of referral centers.**

Your policy should identify facilities that provide specialized pediatric critical care or trauma services, says Lyons.

These specialized referral centers provide 24-hour telephone consultation to assist you in the evaluation and management of critically ill and injured children, says Lyons.

“In addition, most of these referral centers provide pediatric interfacility transport services to facilitate the transport of critically ill or injured children to specialized centers when indicated,” she notes.

- **Arrangements for children with special needs.**

You should have specific protocols for transferring patients with special needs, including spinal cord injuries and burns, says Weintraub.

- **Emergency Medical Treatment and Active Labor Act (EMTALA) compliance.**

As the transferring facility, you must ensure that the patient is stabilized before transport, says Lyons. To comply with EMTALA, you must transfer only patients who need a higher level of care, she cautions.

- **Method of transportation.**

Your policy needs to address the way patients will

EXECUTIVE SUMMARY

You should have a policy in place to address transfers of pediatric patients, with criteria for admission and/or transfer to other facilities.

- Address the type of transport to be used.
- Delineate which staff members will accompany the child.
- Specific protocols should be used for children with special needs.

SOURCES AND RESOURCE

For more information about pediatric transfer policies, contact:

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A copy of the policy statement, "Care of Children in the Emergency Department: Guidelines for Preparedness" (published in the April 2001 issue of *Pediatrics Annals of Emergency Medicine*) can be and downloaded free from the web site: www.aap.org. (Click on "Policy Statements." Under heading "C," click on "Care of children in the emergency department: Guidelines for preparedness.")

be transported, says Weintraub. This should be based on the patient's needs, your location, your destination, weather considerations, and the availability of various transport modalities in your area, such as helicopter vs. ground transport, she adds. "This ensures a smooth transfer from your facility to a higher level of care," she emphasizes. ■



Barlas D, Sama AE, Ward MF, et al. **Comparison of the auditory and visual privacy of emergency department treatment areas with curtains vs. those with solid walls.** *Ann Emerg Med* 2001; 38:135-139.

If a patient is in a treatment area with curtains, he or she feels there is significantly less visual and auditory privacy than if he or she is in a room with solid walls, says this study from North Shore University Hospital in Manhasset, NY.

A total of 108 adult patients were surveyed. Patients received care in one of three locations: a room with solid walls and a door, a curtained area next to the nurse's station, or a curtained area away from the nurse's station.

Patients in the curtained areas tended to believe that they could overhear others and that others could overhear personal information and see personal parts of their bodies. Patients in the curtained areas reported an overall lower sense of privacy.

Of all patients, 92.6% felt that they had experienced as much privacy as they expected, with no difference between areas.

If privacy is compromised, ED patients may be reluctant to share personal information or be examined, the researchers assert. They add that patients also may be less satisfied with the care they receive.

Although the Joint Commission on Accreditation of Healthcare Organizations permits use of curtains in the ED if they provide adequate visual and auditory privacy, patient privacy and confidentiality in EDs with curtain partitions may be inadequate in many cases, argue the researchers.

Although almost all patients reported that they received as much privacy as expected, four patients surveyed withheld portions of their history or refused part of their physical examination because of lack of privacy.

"Four of 108 individuals surveyed may appear to be few, but in an ED with an annual census close to 40,000, several individuals may be withholding potentially important information or refusing portions of their examination daily," they conclude.

The authors recommend the following:

- When renovating your ED, consider patient privacy along with the conflicting need for direct patient observation and efficient patient flow.
- If curtain partitions are used, ensure that they are always completely drawn around treatment areas, particularly when patients are undressed.
- Keep in mind the limited auditory barrier provided by curtains.
- Replace lightweight curtains with thicker, more sound-absorbent material.
- Increase the space between treatment bays. ▼

Weigand JV, Gerson LW. **Preventive care in the ED: Should emergency departments institute a falls prevention program for elder patients? A systematic review.** *Acad Emerg Med* 2001; 8:823-826.

A falls prevention program for patients age 65 and older could result in significant reduction of risk, according to this study from Northeastern Ohio Universities College of Medicine in Rootstown and Summa Health System in Akron, OH.

The researchers reviewed 26 articles in the emergency medicine literature to assess the effectiveness of an ED intervention for patients 65 and older who are at high risk for falls. Here were key findings:

- One study showed that an intervention decreased subsequent falls in elderly patients who presented with a fall.
- Two studies showed it was possible to identify ED patients at risk for falls.
- Falls in elders result in significant morbidity and mortality.
- With a structured intervention in ED patients who have fallen, there were decreases in the number of falls, the risk of recurrent falls, and the number of hospitalizations.

The researchers recommend that EDs consider clinical interventions to identify, counsel, and refer ED patients 65 or older who are at high risk for an unintentional fall.

Counseling to reduce the risk of falling may include exercise, training to improve balance, safety-related skills and environmental hazard reduction, and monitoring and adjusting medications as needed, they suggest. (See **patient handout on Home Safety, enclosed in this issue.**) ■

New tools for domestic violence victims

What is *your* ED doing on Oct. 10 for Health Cares About Domestic Violence Day? This year, you can commemorate the day by using a plethora of new resources for screening, hosting awareness events, and educating patients.

“Domestic violence is a health care problem of epidemic proportions,” says **Lisa James**, program manager for the San Francisco-based Family Violence Prevention Fund (FVPPF).

“Because so many women turn to the ED to treat injuries and illness caused by abuse, you may be the first and only person who can identify the abuse and help the victims,” she says.

On Oct. 10, you should host an awareness-raising event about domestic violence and launch programs to identify and help patients experiencing abuse, James urges.

RESOURCE

The Family Violence Prevention Fund offers materials and resources for EDs pertaining to domestic violence. Copies of “Screening to Prevent Abuse,” “Battering During Pregnancy,” “Domestic Violence Healthcare Protocols,” and “Emergency Department” Health Resource Packets of materials are available free of charge. Patient safety cards are available in several languages. The cost is \$6 for 50 cards, plus \$5 shipping and handling. Laminated 3x5 practitioner reference cards cost \$5 for 5 cards, plus \$5 shipping and handling. To order, contact:

- **Family Violence Prevention Fund**, 383 Rhode Island St., Suite 304, San Francisco, CA 94103-5133. Telephone: (415) 252-8089. Fax: (415) 252-8991. E-mail: ordering@fvpf.org. Web: www.fvpf.org. (Click on “Health Care.”)

The FVPPF offers numerous educational resources for identifying abuse and helping patients, as follows: (See **resource box for ordering information, above.**)

- **Event-planning packet.** This year, FVPPF is offering a free “Screening to Prevent Abuse” packet, which you can use to plan an event in your ED, James reports.

The packet includes camera-ready art for safety cards, posters, and advertisements; sample e-mails that providers can send on Oct. 10 to co-workers about domestic violence; sample letters to the editor or op-eds that can be submitted to local papers; screening and assessment tips; sample provider and patient materials; and ideas for activities from providers across the country.

James offers the following ideas for activities this year:

- hanging posters in waiting rooms that advertise resource numbers and staff’s willingness to screen;
- writing a newsletter article on domestic violence or an op-ed for a local paper;
- committing to try routine screening for one week;
- inviting a speaker to conduct a brown-bag lunch on domestic violence for staff.

- **Screening guidelines.** Use these to teach nurses to ask about abuse, and integrate them into your ED domestic violence protocols, recommends James.

The FVPPF recommends that you routinely screen for domestic violence, regardless of if there are injuries or indicators of abuse, says James. She says that if a patient discloses abuse, you should do the following three things:

1. Express concern and support.
2. Provide basic information about domestic violence.
3. Offer the patient referrals to local community based domestic violence experts, an on-site social worker, or the national hotline number (800) 799-SAFE.

- **Laminated practitioner reference cards.**

James recommends carrying these in your pockets as a reminder to ask about abuse and how to respond if the patient says yes.

- **Information packets.** These include a packet specifically designed for nurses and a packet with tools on how to respond to domestic violence in the ED.

- **Patient materials.** You can give these to patients who disclose abuse or when you suspect abuse, says James. "These include multilingual and multicultural safety cards, educational brochures, and discharge instructions," she says.

- **Chart stamps.** These prompt you to screen and facilitate accurate documentation of the violence, says James.

- **Materials to create a domestic violence program.** These include posters to hang in ED waiting rooms and treatment rooms to let patient know that they can talk to you about abuse and pins that invite patients to discuss abuse. "We also have sample protocols from EDs across the country that can be adapted for individual departments," says James. ■



Report: 63% of elderly visited ED last year

If you are seeing a dramatic increase in elderly patients, you're not alone. According to a new report from the Atlanta-based Centers for Disease Control and Prevention (CDC), the elderly have the highest rate for ED visits of any group: 63% of those older than 75 went to an ED at least once in 1999.

This statistic is part of a survey of ED use in 1999 released by the CDC's National Center for Health Statistics. **(For ordering information, see box, above right.)**

Here are other key findings:

- There were 103 million visits to emergency departments in 1999, an increase of 14% since 1992. This comprises 35,000 additional patients each day.

SOURCES

A complete copy of the *National Hospital Ambulatory Medical Care Survey: 1999 Emergency Department Summary* can be downloaded from the CDC web site at no charge. Go to www.cdc.gov, and click on "Data and Statistics," "National Center for Health Statistics," "NHCS," "National Hospital Ambulatory Medical Care Survey," and "Emergency Department Visit Data."

- More than one-third of visits were related to injuries. Almost 30% of injuries seen in the ED occurred at home.
- Stomach and abdominal pain, chest pain, and fever were the most common reasons for an ED visit.
- There were 1.4 million visits due to adverse drug reactions or other complications from medical care in 1999, up 80% from 1992.
- Medications were used in 73% of all visits.
- From 1992 to 1999, the number of drugs prescribed increased by 34%.
- Older patients were more likely to have medications ordered or prescribed for them.
- Medication for pain relief was the most frequent class of drugs administered to children under 15 years of age. Pain medications were given more frequently than antibiotics, the use of which has been declining since 1993.
- Patients with Medicaid were more likely to use the ED than those who had other forms of insurance or were without insurance.
- The African-American population used the ED at about twice the rate of the white population in 1999. Between 1992 and 1999, the visit rate for black persons 65 years of age and over rose by 59% but did not change for white persons in this age group.
- About 14% of patients arrived at the ED by ambulance.
- On average, patients waited about 49 minutes to see the doctor, but this varied considerably by hospital location and size of the ED.
- About 17% of ED visits were deemed to be emergent, that is the patient should be seen within 15 minutes of arrival. Another 30% of the visits were classified as urgent enough for the patient to need to see the doctor within an hour.
- About 13% of ED patients were admitted to the hospital. Among those with a primary diagnosis of heart disease, 60% were admitted. ■

Disaster training

Continued from page 157

The report recommended that training start in nursing school and provides an overview of nursing roles in a disaster, says **Bettina Stopford**, RN, chair of the national Weapons of Mass Destruction (WMD) work group for the Des Plaines, IL-based Emergency Nurses Association and chief nurse for the Denver-based U.S. Public Health Service's Central U.S. National Medical Response Team for WMD. (See **specific recommendations of the report, below.**)

The report gives you specific guidelines for what your disaster training should include, says Stopford.

Stopford recommends the following to comply with the recommendations of the report:

- Have an active plan in place in advance to mitigate the long-term effects of a large-scale disaster.

- Ensure that ED staff education has a functional component. (See **list of training courses to take, right.**)

- Give nurses hands-on training with appropriate personal protective equipment. (For more information on secondary contamination, see **ED Nursing, August 2001, p. 129**);

- Make sure you experience the role changes or expanded roles required in a disaster.

- Include a role review, Incident Management System review, and a brief tabletop-type exercise for orientation.

- Provide nurses with a brief annual review, along with the two disaster drills required by the Joint Commission on Accreditation of Healthcare Organizations. "This can be tagged onto the infection control and safety training review which is required annually," Stopford suggests.

- Practice the following:

Report's Recommendations

- Develop a continuing education course covering the weapons of mass destruction (WMD) performance-level objectives for all emergency nurses.
- Use both self-study and instructor-led continuing education programs.
- Work with professional organizations to promote integration of the WMD content into established hospital training programs.

Source: American College of Emergency Physicians, Dallas, and Office of Emergency Preparedness. *Developing Objectives, Content, and Competencies for the Training of EMTs, Emergency Physicians, and Emergency Nurses to Care for Casualties Resulting from NBC Incidents.* Washington, DC.

- safety/ED lockdown;
- staff recall lists;
- rapid triage such as Simple Triage and Rapid Treatment, developed by the Hoag Hospital in Newport Beach, CA, and the Newport Beach Fire Department for a multiple casualty incident;

SOURCE AND RESOURCES

For more information about the American College of Emergency Physicians and Department of Health and Human Services report, contact:

- **Bettina Stopford**, RN, Denver Health Medical Center, 777 Dannock St., MC 8200, Denver, CO 80204. Telephone: (303) 436-3431. Fax: (303) 436-6828. E-mail: bettina.stopford@dhha.org.

The full 197-page report, *Developing Objectives, Content, and Competencies for the Training of Emergency Medical Technicians, Emergency Physicians, and Emergency Nurses to Care for Casualties Resulting From Nuclear, Biological, or Chemical (NBC) Incidents* from the American College of Emergency Physicians (ACEP) and the Office of Emergency Preparedness can be downloaded free of charge at ACEP's web site www.acep.org. Click on "EM Practice," "EMS," and "NBC Final Report."

Louisiana State University offers training for health care providers in counterterrorism. Courses include *Emergency Response to Domestic Biological Incidents*. For more information, contact:

- **Louisiana State University, Academy of Counter-Terrorist Education**, 334 Pleasant Hall, Baton Rouge, LA 70803. Telephone: (225) 578-1375. Fax: (225) 578-9117. E-mail: ace@doce.lsu.edu. Web: www.doce.lsu.edu/ace.

The U.S. Public Health Service offers instruction for health care personnel, including how to protect yourself from the effects of weapons of mass destruction, techniques and methods to protect the hospital physical plant, and current treatments for injuries/illnesses from nuclear, biological, or chemical incidents. For more information, contact:

- **U.S. Public Health Service Noble Training Center**, P.O. Box 5237, Fort McClellan, AL 36205. Telephone: (256) 820-9135. Fax: (256) 820-8694. Web: www.ndms.dhhs.gov. (Click on "Links," then "Federal Counterterrorism Sites," then "Noble Training Center.")

- triage to other areas of the hospital;
 - role identification;
 - supplies;
 - personal protective equipment;
 - the Incident Management System such as Hospital Emergency Incident Command System, an emergency management system made up of positions on an organizational chart, developed by the San Mateo (CA) County Health Services Agency;
 - communication, including broadcast, fax, and radios;
 - decontamination;
 - active surveillance systems;
 - contact with resources;
 - integration with the community for resources.
- Hold an annual tabletop drill for managers and charge staff. “You need to see what kind of thinking needs to take place to best manage a disaster,” says Stopford. “This should be followed up by a hands-on drill with mock victims.” ■

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**AMERICAN HEALTH
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BASIC EMTALA: What EVERY Medical Professional Should Know

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Presented by Robert A. Bitterman, MD, JD, FACEP
with Mary Kay Boyle, RN, JD

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▼ Did you know that triaging a large does not fulfill the mandate for a medical screening exam (MSE)?

▼ Did you know that your institution must have board approval for anyone other than a physician to perform an MSE (including nurses in OB who perform an exam, confer with a physician over the phone, and then release the patient)?

▼ Did you know that people presenting to an ED only for collection of forensic evidence do not trigger EMTALA?

Whether you work in the ED, on the med/surg floor, in admitting, in an outpatient facility or in another area, you have a role in helping your facility comply with EMTALA.

And while all staff members cannot be expected to know all of the ins and outs of this complex legislation, it can cost you and your hospital thousands of dollars in fines and lawsuits if you and your staff don't understand and follow the basic guidelines of the "patient anti-dumping" regulation.

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At the conclusion of this teleconference, participants will be able to list ways in which they can help their hospital comply with EMTALA.

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CE objectives

[For more information on the CE program, contact American Health Consultants at (800) 688-2421.]

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. (See *Do you know how to treat an overdose of Ecstasy? ED cases are skyrocketing; Stop false alarms on cardiac monitors; Do you know the new definition of MI?* and *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

- When treating a patient on Ecstasy, what are the first line agents for sympathomimetic excess, hemodynamically stable narrow complex tachycardias, and seizures, according to Matthew D. Sztajnkrzyer, MD, PhD, a toxicology fellow in the department of emergency medicine at the University of Cincinnati Medical Center?
A. isotonic fluids such as normal saline
B. hypotonic fluids such as half-normal saline
C. benzodiazepines
D. beta-blockers
- Which of the following is an effective way to prevent false alarms on cardiac monitors, according to Michael Buelow, RN, CEN, an ED nurse at InteliStaf?
A. Use Lead II monitor lead for all patients.
B. Set the "gain" adjustment very low.
C. Set the "gain" adjustment very high.
D. Select a lead that has a tall R-wave.
- Which of the following is accurate regarding the new definition of myocardial infarction, according to Katherine Littrell, RN, PhD, of the Cardiovascular Center of Medical Affairs for Genentech?
A. a rapid rise and rapid fall of cardiac troponin I or T
B. a typical rise and gradual fall of cardiac troponin I or T
C. absence of elevation of cardiac marker troponin
D. absence of ischemic symptoms
- Which of the following is true regarding patient perception of privacy, according to a study published in the *Annals of Emergency Medicine*?
A. Patients in rooms with solid walls and a door had the same perception of privacy as those who were in curtained partitions.
B. Most patients in curtained areas reported that their expectations for privacy were not met.
C. A majority of patients treated in curtained areas refused to provide a complete medical history.
D. Patients in curtained areas said their expectations for privacy were met, but they perceived less privacy than patients treated in rooms.

Sample Pediatric Transfer Policy

I. GUIDELINES FOR INTERFACILITY CONSULTATION AND/OR TRANSFER FOR EVALUATION OF PEDIATRIC MEDICAL PATIENTS (NONTRAUMA)

A. Physiologic Criteria

1. Depressed or deteriorating neurologic status
2. Severe respiratory distress responding inadequately to treatment and accompanied by any one of the following:
 - a. Cyanosis
 - b. Retractions (moderate to severe)
 - c. Apnea
 - d. Stridor (moderate to severe)
 - e. Grunting or gasping respirations
 - f. Status asthmaticus
 - g. Respiratory failure
3. Children requiring endotracheal intubation and/or ventilatory support
4. Serious cardiac rhythm disturbances
5. Status post cardiopulmonary arrest
6. Heart failure
7. Shock responding inadequately to treatment
8. Children requiring any one of the following:
 - a. Arterial pressure monitoring
 - b. Central venous pressure or pulmonary artery monitoring
 - c. Intracranial pressure monitoring
 - d. Vasoactive medications
9. Severe hypothermia or hyperthermia
10. Hepatic failure
11. Renal failure, acute or chronic requiring immediate dialysis

B. Other Criteria

1. Near drowning with any history of loss of consciousness, unstable vital signs or respiratory problems
2. Status epilepticus
3. Potentially dangerous envenomation
4. Potentially life-threatening ingestion of, or exposure to, a toxic substance
5. Severe electrolyte imbalances
6. Severe metabolic disturbances
7. Severe dehydration
8. Potentially life-threatening infections, including sepsis
9. Children requiring intensive care
10. Any child who may benefit from consultation with, or transfer to, a Pediatric Critical Care Center

II. GUIDELINES FOR INTERFACILITY CONSULTATION AND/OR TRANSFER FOR EVALUATION OF PEDIATRIC TRAUMA PATIENTS

A. Physiologic Criteria

1. Depressed or deteriorating neurologic status
2. Respiratory distress or failure
3. Children requiring endotracheal intubation and/or ventilatory support
4. Shock, compensated or uncompensated
5. Injuries requiring any blood transfusion
6. Children requiring any one of the following:
 - a. Arterial pressure monitoring
 - b. Central venous pressure or pulmonary artery monitoring
 - c. Intracranial pressure monitoring
 - d. Vasoactive medications

HOME SAFETY

GENERAL INFORMATION:

What is home safety? Your home can be a safe place by making a few changes around the house. It is important to make sure your home is safe if you or a family member is recovering from an illness. This is also true when you or someone you live with uses a cane, walker, wheelchair, or is elderly. Listed below are many ways to help make your home a safer place.

- **All Areas:**

- **Electrical Cords:**

- Make sure all electrical cords are in good condition. Do not use any piece of equipment if the cord is torn.
- Keep all electrical cords out of the way of traffic, including telephone cords.
- Cover electric outlets with safety plugs to keep children from hurting themselves.

- **Fire and Burn Safety:**

- Have smoke or heat detectors installed. Check the batteries in the detectors and replace when dead. Or, replace the batteries twice a year on the first of January and again on the first of July.
- Know what the fire escape route is from each room of your home.
- Consider having a fire escape or portable ladder installed in rooms on the second floor or higher.
- Cover any exposed heating pipes and radiators to prevent burns.
- Have the furnace checked and cleaned each year.
- Set the temperature of the water heater no higher than 120°F (48.8°C). This will prevent family members from being burned.
- Keep gasoline in safety approved and labeled container in the garage. Keep the container away from open flames. Also, keep it away from paper, rags, and other things that burn easily.

- **Floors:**

- Remove area and throw rugs if you have a family member who uses a cane, walker, wheelchair, or is elderly. Or have all the edges nailed down. This will help prevent falls.
- Thick carpet can make movement difficult if you are in a wheelchair or use a walker with wheels. You may need to replace wall-to-wall carpet with a thinner brand.
- Tape or nail down any loose edges of carpet.
- Have any holes and rough areas in the floor, steps, or sidewalks repaired.
- Keep traffic areas and the floor free of clutter.
- If you spill something, wipe it up as soon as possible to prevent falls.

- **Lighting:**

- Make sure all rooms and hallways are well lit.
- Place bright night lights in hallways and rooms to make it safe if you or a family member gets up at night.
- Check lamps to make sure you are using the right bulb. The lampshade can burn if the bulb is too bright for that lamp.

- **Stairways:**

- Put brightly colored tape on the edges of steps if you do not see well. This will help you see where to put your foot.
- Make sure there are secure handrails in all stairways.

• **Wheelchair Access:**

- ▣ Install ramps outside doors to help wheelchair-bound people come and go if needed.
- ▣ Also have ramps installed over raised doorsills so that wheelchairs can move easily from room to room.
- ▣ Widen door frames if needed so a wheelchair can go easily through the door.

• **Bathroom:**

- ▣ Put grab bars on bathtub and shower walls. Also put grab bars on the wall next to the toilet.
- ▣ Place nonskid strips or a tub mat on the floor of the bathtub and shower.
- ▣ If you have trouble getting into or out of the bathtub, try placing a tub seat in the bathtub. Or, a plastic chair can be put in the shower so you can sit while showering. Make sure the chair has nonskid feet. This will keep it from slipping when you sit down.
- ▣ Attach a hand-held showerhead. This will make it easier to rinse while sitting on a chair in the bathtub or shower.
- ▣ Have easy-to-turn handles put on your shower/bathtub and sink handles.
- ▣ Use a high-rise toilet seat if you have problems getting up or down from the toilet.
- ▣ Place another chair with nonskid feet by the sink. You can then sit down if you get tired or become faint while working at the sink.
- ▣ Hang mirrors, shelves, and racks at a level low enough to reach if you are in a chair or wheelchair.
- ▣ Unplug electrical appliances when not using. Keep the electrical appliances away from water.

• **Bedroom:**

- ▣ Make sure the bed cannot move when you sit down. Do this by taking off the wheels if it has any.
- ▣ You may want to use an electric hospital bed if you are weak or confused. Overhead trapeze bars can be hooked to the bed frame. You can use this trapeze to raise yourself up and move in bed. Keep the side rails up to prevent you from falling. Make sure the wheels of the bed are locked.
- ▣ Put a bell or whistle within reach so that you can call someone if you need help.
- ▣ Keep a phone beside your bed to use if you have an emergency and need help right away.
- ▣ Make sure you can easily reach a bedside lamp. If you get up at night, always turn the bedside lamp on first. This will help prevent falls. Keep a flashlight with good batteries on your bedside table if you cannot put a lamp by your bed.
- ▣ Keep a commode chair, urinal, or bedpan close to the bed if needed.

• **Kitchen:**

- ▣ Put a small fire extinguisher within easy reach and teach family members how to use it. Have the fire extinguisher checked as often as recommended by the company that made it.
- ▣ You may need to reorganize your kitchen. Put the cooking supplies, food, dishes, and pans that you use the most where you can easily reach them.
- ▣ You may need to have your kitchen counters lowered if you are in a wheelchair.
- ▣ Keep knives and other sharp objects away from children.
- ▣ Keep pot handles turned in. This will keep someone from hitting the handle and causing the pot to fall.

• **Living Room:**

- ▣ Have your furniture moved if needed so that you can move easily through the room.
- ▣ Add extra cushions as needed to raise the height of chairs or couches. This will make it easier to stand up and sit down.
- ▣ Put a phone where you can easily get to it.

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B. Anatomic Criteria

1. Fractures and deep penetrating wounds to an extremity complicated by neurovascular or compartment injury
2. Fracture of two or more major long bones (i.e., femur, humerus)
3. Fracture of the axial skeleton
4. Spinal cord or column injuries
5. Traumatic amputation of an extremity with potential for replantation
6. Head injury when accompanied by any of the following:
 - a. Cerebrospinal fluid leaks
 - b. Open head injuries (excluding simple scalp injuries)
 - c. Depressed skull fractures
 - d. Decreased level of consciousness
7. Significant penetrating wounds to the head, neck, thorax, abdomen or pelvis
8. Major pelvic fractures
9. Significant blunt injury to the chest or abdomen

C. Other Criteria

1. Children requiring intensive care
2. Any child who may benefit from consultation with, or transfer to, a trauma center or a pediatric critical care center

D. Burn Criteria (Thermal or Chemical) — Contact should be made with a Burn Center for children who meet any one of the following criteria:

1. Second- and third-degree burns of more than 10% of the body surface area for children younger than 10 years of age
2. Second- and third-degree burns of greater than 20% of the body surface area for children over 10 years of age
3. Third-degree burns of greater than 5% of the body surface area for any age group
4. Burns involving:
 - a. Signs or symptoms of inhalation injury
 - b. Respiratory distress
 - c. The face
 - d. The ears (serious full-thickness burns or burns involving the ear canal or drums)
 - e. The mouth and throat
 - f. Deep or excessive burns of the hands, feet, genitalia, major joints or perineum
5. Electrical injury or burns (including lightning)
6. Burns associated with trauma or complicating medical conditions

Source: Illinois Emergency Medical Services for Children, Springfield.