

# Environment of Care<sup>®</sup> News

The Official Joint Commission Environment of Care, Emergency Management, and Life Safety News Source

January 2010  
Volume 13 Number 1

## Contents

- 1 Creative Emergency Management Planning—**  
*Providence Health and Services, San Fernando Valley, Thinks Outside the Box*
- 4 OSHA & WORKER SAFETY: Putting the Brakes on Health Care “Road Rage”—**  
*Recognizing and Opposing Disruptive Behavior to Help Maintain Safety and Security*
- 6 CASE STUDY: Keeping It Cool—**  
*The University of Wisconsin Hospital and Clinics Creates a Refrigerator Temperature-Monitoring Solution*
- 8 Q & A: Fire Safety in the Health Care Environment—**  
*Authoritative Answers to Common Questions About the Environment of Care*

## Creative Emergency Management Planning

### *Providence Health and Services, San Fernando Valley, Thinks Outside the Box*



*Providence's mobile command center runs off a generator and is completely self-contained.*

It starts as a rumble beneath your feet. Soon the room is shaking, and things are beginning to fall off the shelves. People yell and alarms sound. It's an earthquake—and you wonder if your building will hold up and whether your emergency management plan will, too.

In a region prone to these disasters, Providence Health and Services, San Fernando Valley, used some creative thinking to make sure its facilities are as ready as they can be. Even if your organization doesn't sit on a fault

line, Providence's outside-the-box solutions will inspire you to see how your organization can develop innovative ways to meet the challenges of your unique locale.

Providence Health and Services is made up of three medical centers—Providence Saint Joseph Medical Center, Providence Holy Cross Medical Center, and Providence Tarzana Medical Center—which roughly form a 15-mile triangle in Southern California. Among the three

*Continued on page 2*

 **Joint Commission Resources**

Executive Editor: **Kristine M. Miller, M.F.A.**  
Senior Project Manager: **Christine Wyllie, M.A.**  
Manager: **Diane Bell**  
Executive Director: **Catherine Chopp Hinkley, Ph.D.**

Technical Support and Review Provided by  
Standards Interpretation Group,  
Division of Accreditation Operations:  
**Patricia Adamski, R.N., M.S., M.B.A.,** Director;  
**George Mills, M.B.A., F.A.S.H.E., C.H.F.M., C.E.M.,**  
Senior Engineer; **Jerry Gervais, C.H.F.M., C.H.S.P.,**  
Associate Director/Engineer; **John D. Maurer,**  
C.H.F.M., C.H.S.P., Associate Director/Engineer;  
**Michael Chisholm, C.H.F.M.,** Associate  
Director/Engineer

Division of Standards and Survey Methods:  
**John Fishbeck, R.A.,** Associate Director

Contributing Writers: **Kathleen Vega, Catherine Rategan, Brian Moore**

#### Editorial Advisory Board

**Tracy L. Buchman, D.H.A., C.H.S.P., C.H.C.M.,**  
University of Wisconsin Hospital and Clinics, Madison, WI  
**Jen Carlson, M.P.H., M.B.A.,** Loyola University Health System, Maywood, IL  
**Katherine Grimm, M.P.H.,** HealthEast Care System, St. Paul, MN  
**David P. Klein, PE.,** Department of Veterans Affairs, Washington, DC  
**Michael Kuechenmeister, F.A.S.H.E., C.H.F.M., C.P.E.,**  
West Chester Medical Center, Cincinnati, OH  
**John W. McKinney III, Atrium Medical Center,**  
Middletown, OH  
**William R. (Bill) Morgan, S.A.S.H.E., C.H.F.M.,**  
St. Alphonsus Regional Medical Center, Boise, ID  
**Jim Riggs, M.P.A., C.S.P.,** University Health Systems, Greenville, NC  
**George A. (Skip) Smith, C.H.F.M., S.A.S.H.E.,**  
Catholic Health Initiatives, Denver, CO  
**Thomas S. (Scott) VanDerhoof, Major, U.S.A.F., M.S.C.,**  
C.A.A.M.A., Air Force Medical Operations Agency, Office of the Surgeon General, Brooks City-Base, TX

#### Subscription Information

The 2010 12-issue subscription rates for the United States, Canada, and Mexico are \$319 for both print and online and \$299 for online only; for the rest of the world, the rates are \$410 for both print and online and \$299 for online only. Back issues are \$25 each (postage paid). Add \$25 for air mail delivery. Orders for 20–50 single/back issues receive a 20% discount. Site licenses and multi-year subscriptions are also available. To begin your subscription, call 800/746-6578, fax orders to 218/723-9437, or mail orders to Joint Commission Resources, 16442 Collections Center Drive, Chicago, IL 60693. For more information, call 800/746-6578. *Environment of Care® News* (ISSN 1097-9913) is published monthly by Joint Commission Resources, 1515 West 22nd Street, Suite 1300W, Oak Brook, IL 60523.

© 2010 Joint Commission on Accreditation of Healthcare Organizations. No part of this publication may be reproduced or transmitted in any form or by any means without written permission.

Joint Commission Resources, Inc. (JCR), a not-for-profit affiliate of The Joint Commission, has been designated by The Joint Commission to publish publications and multimedia products. JCR reproduces and distributes these materials under license from The Joint Commission.

E-mail us at [ecnews@jcrinc.com](mailto:ecnews@jcrinc.com) with your article ideas. Visit us on the Web, at <http://www.jcrinc.com>. To contact the Standards Interpretation Group with standards questions, phone 630/792-5900.

## Creative Emergency Management Planning (continued)

Continued from page 1

facilities, the organization has 930 licensed beds, more than 2,000 physicians, and nearly 5,000 employees.

Because Providence is located in a well-known earthquake zone, the organization's hazard vulnerability analysis (*see* Standard EM.01.01.01, Element of Performance [EP] 2, right) rates earthquakes as the highest risk for all three facilities. Consequently, the organization has carefully considered how it would continue operations in the aftermath of an earthquake.

## Maintaining Oxygen Utilities in a Quake

Backing up its oxygen utilities was a prime concern for Providence. “The rigid tubing that connects our liquid oxygen storage tank to the hospital would probably not remain intact during a moderate earthquake and would almost certainly fail during a severe earthquake,” says Steven Storbakken, C.H.S.P., C.H.E.M., San Fernando Service Area director of emergency preparedness and safety. “These connections have failed in past disasters at local hospitals. The oxygen tank itself would probably be okay and still have liquid oxygen in it. But we would have no way to access it.”

To ensure an appropriate backup to its oxygen utility (and thus meet Standard EM.02.02.09, EP 6—*see* page 3), the organization considered many different options, including stockpiling portable compressed oxygen within “E” cylinders containing 24.96 cubic feet of oxygen and “H” cylinders containing approximately 250 cubic feet of oxygen. “We decided that backing up this way would be difficult—not to mention presenting safety issues and being very cost-prohibitive—because of the sheer number of cylinders necessary to provide an

### Standard EM.01.01.01, Element of Performance 2

The hospital conducts a hazard vulnerability analysis (HVA) to identify potential emergencies that could affect demand for the hospital's services or its ability to provide those services, the likelihood of those events occurring, and the consequences of those events. The findings of this analysis are documented. (*See also* EM.03.01.01, EP 1; IC.01.06.01, EP 4\*)

\* Effective January 1, 2010.

effective backup,” says Storbakken. After carefully examining the issue, the organization decided to find a way to continue providing access to its liquid oxygen during an emergency.

Providence presented its oxygen backup problem to its oxygen vendor, seeking the vendor's help in finding an effective solution. “We came up with a very clever idea: a medical-grade, braided stainless steel hose line that can connect our facility to the liquid oxygen tank during an emergency situation such as an earthquake,” says Storbakken. “This flexible hose sits on a cart that can be wheeled outside and connected to the liquid oxygen unit.” (*See* the photo on page 3.) The organization's plant operations staff are trained on how to connect the hose and check the oxygen's purity before implementation.

“The beauty of this system is that it's easy to store and easy to use,” says Storbakken. “We can store the cart in the facility until an emergency situation arises, wheel the cart out to the liquid oxygen tank, and connect the hose in about 15 minutes.”

Because it's constructed of medical-grade materials, the hose is clean and appropriate for oxygen use. And because of its flexibility, the hose is unlikely to break during an earthquake.

The cart also serves other storage functions. “Personal protective equipment (PPE), tools, oxygen-purity meters, and hose-protective covers are stored on the cart with the hose, so we have everything we need in an emergency situation,” says Storbakken. “The meter allows the plant operations staff to check the purity of the oxygen before turning on the backup oxygen flow. And once the hose is attached, the covers are placed over the hose so vehicles can run over it without damaging it.”

“When we worked with our vendor on this system, we thought about how it would be used during our most vulnerable time—3 A.M. on a holiday weekend,” says Connie Lackey, San Fernando Service Area manager of emergency preparedness. “We knew we needed the equipment and a plan that could be implemented easily, even in the middle of the night when our staffing resources are the most limited. Because the system is portable and easy to use, we feel confident that anyone who is properly trained can hook up the system and ensure oxygen continuity.”

In addition to being practical, the unit is relatively cost effective for the organization. “Other oxygen backup solutions, such as oxygen-generation equipment used in portable military hospitals, can run in the hundreds of thousands of dollars,” says Storbakken. “This solution ran in the tens of thousands, is much quicker and easier to implement, and uses none of our critical emergency power.”

## A Mobile Emergency Command Center

Depending on where your organization is located, preparing for an earthquake may not be a top priority.



*This flexible oxygen tank hose won't break during an earthquake.*

However, planning for emergencies ranks high on your organization’s “to do” list. Providence has another creative emergency management idea—one that’s not just specifically for earthquake regions: a mobile command center.

The Joint Commission’s emergency management (EM) standards require organizations to consider six critical areas in emergency planning: communication, resources and assets, safety and security, staff responsibilities, utilities management, and patient and clinical support activities. Providence designed its mobile command center to help

ensure that it meets these six areas. This 36-foot custom trailer can serve a variety of purposes for the

organization, depending on the situation and needs of the organization. (See the photo on page 1.) “Initially, we were looking for a way to have additional temperature-controlled storage at our facilities,” says Lackey. “At the same time, we wanted the ability to move our emergency command

center outside to a safe location, if needed. We looked at these two needs and came up with a solution that could meet them as well as many others,

depending on the emergency.” Everything in the unit is removable, so the organization can quickly reconfigure the trailer to serve another purpose, as needed.

Because the unit operates off a generator, it is completely self-contained and independent of the organization’s main utilities. This independence makes the unit very useful during emergencies when there are utility outages.

The trailer has some other unique features that can further help the organization comply with various aspects of the EM standards. For example, the trailer can serve as a communication hub for the organization, ensuring continuity of communication during an emergency (see Standard EM.02.01.01, left). The unit will soon be equipped with satellite equipment, allowing for 24 Internet connections (12 Voice over Internet Protocol [VoIP] and

*Continued on page 11*

**Standard EM.02.02.09, Element of Performance 6**  
The hospital uses its hazard vulnerability analysis (HVA) as a basis for defining the preparedness activities that will organize and mobilize essential resources. (See also IM.01.01.03, EPs 1–4)

**Standard EM.02.01.01**  
The hospital has an Emergency Operations Plan.

## Putting the Brakes on Health Care “Road Rage”

### Recognizing and Opposing Disruptive Behavior to Help Maintain Safety and Security

The synonyms for *disruptive behavior* and *intimidation* are as varied as the individuals who engage in it—and those who are targeted. Among those names are bullying, emotional abuse, harassment, organizational road rage, psychological violence, relational aggression, lateral violence, and mobbing. Whatever you call it, intimidation seems to be everywhere, even in health care organizations.

Joint Commission Standard EC.01.01.01 urges hospitals to manage safety and security and to protect individuals against risks such as workplace violence. On July 9, 2008, to alert health care organizations to this widespread practice, the Joint Commission issued the *Sentinel Event Alert* “Behaviors That Undermine a Culture of Safety.”<sup>1</sup> According to the *Alert*, intimidating behaviors can “foster medical errors, contribute to poor

patient satisfaction and preventable adverse outcomes, increase the cost of care, and cause qualified clinicians, administrators, and managers to seek new positions in more professional environments.”

This was followed by a new “Leadership” (LS) chapter standard, LD.03.01.01, which took effect on January 1, 2009, and addresses disruptive and inappropriate behavior in two of its Elements of Performance (EPs):

- EP 4: The hospital/organization has a code of conduct that defines acceptable and disruptive and inappropriate behaviors.
- EP 5: Leaders create and implement a process for managing disruptive and inappropriate behaviors.

These standards require health care organizations to create new training, post a code of conduct for staff members, and set up a mechanism for

health care workers to report inappropriate behavior.

### Defining Disruptive Behavior

What is intimidating behavior? How does it threaten safety and security? How is it different from bad manners or incivility? For many people, the answer to the last question is: I know it when I see it. Following are several examples of the kinds of disruptive behavior that can threaten safety and security and limit or destroy the effectiveness of health care teams in caring for patients:

- Targeting individuals for mistreatment
- Belittling or denigrating someone’s opinion
- Using condescending language and attitude
- Engaging in patronizing nonverbal communication, such as eye rolling, raised eyebrows, smirking, and so on
- Refusing to answer legitimate questions
- Incessantly criticizing, finding fault, and scapegoating
- Displaying an attitude of superiority regarding another’s knowledge, experience, and/or skills
- Undermining the effectiveness of a person or a team
- Spreading rumors and making false accusations
- Putting staff members in conflict with each other
- Engaging in tantrums and angry outbursts
- Engaging in any unnecessary disruption



Experiencing intimidation in the health care environment disrupts a culture of safety.

## Root Causes, Contributing Factors, and Results

The next question is, why health care? Is there anything about this field that makes it susceptible to bullying and intimidation? “Health care is by nature hierarchical and authoritarian,” says Gary Namie, Ph.D., co-founder and director of the Workplace Bullying Institute (<http://workplacebullying.org>).

“Hospitals are where people live and die and have their lives saved by wonderful skilled people, who at the same time can be thoroughly dehumanizing to one another. Add to that the rush, or ‘stat,’ nature of acute care hospitals. Between cases, some people can be brutal to each other.” Namie also points to the many caring, compassionate people in the field who can be targets for intimidation. “They’d rather help people and keep a low profile than fight back.”

Another experienced and knowledgeable observer in the field of organizational intimidation is David C. Yamada, J.D., a professor at the Suffolk University Law School in Boston. “I hear stories from lower-level employees at some hospitals about loud, angry behavior from people who show a lack of respect for their work,” he says. “It could just be having a tough boss. But regardless of the label, we have to draw a line between behaviors that are targeted and malicious and those that aren’t. When it becomes malicious and they feel someone is out to get them, that’s a big distinction compared to what might be characterized as incivility or discord.”

Yamada points to three reasons that health care is susceptible to disruptive behavior. “First, it’s an area of work that’s inherently stressful,” he says, “and when people feel under the gun, they may not be able to control their emotions. Second is the current

## Some Statistics on Intimidation

The Institute for Safe Medication Practices (ISMP) was concerned about workplace intimidation and its effect on patient safety and security, so it surveyed<sup>3</sup> health care professionals, including nurses, pharmacists and other providers.

Of the more than 2,000 who responded, nearly one-quarter had encountered disruptive behavior by physicians and medication providers. That behavior ranged from subtle questioning of judgment to more explicit threatening behavior. Nearly one-quarter of respondents said that they often encountered condescending language or tone of voice (21%) or impatience with questions (19%). Almost half (48%) of respondents reported being the recipients of strong verbal abuse or threatening body language (43%) at least once during the previous year.

According to the study, 38% of nurses experienced strong verbal abuse and 69% encountered reluctance from prescribers to answer questions or return phone calls.

economic downturn, which is worsening tensions on the clinic or hospital floor. Third is the hierarchical nature of health care organizations, with ranks of physicians, nurses, and other health care professionals. All this encourages intimidating behavior.”

Edward Stern, senior program analyst in Expert Systems at the Occupational Safety and Health Administration (OSHA), points out the effects of intimidation among staff members who witness these episodes. “When coworkers see one of their own being bullied, they wonder whether they might be next,” Stern says. “The negative effects of this kind of treatment on the workplace are hard to measure.”

The Joint Commission’s *Sentinel Event Alert* points out that, although most formal research focuses on intimidating and disruptive behavior among physicians and nurses, evidence shows that it occurs among other health care professionals, such as pharmacists, therapists, and support staff, as well as among administrators. Furthermore, says the *Alert*, this behavior creates “an unhealthy or even hostile work environment—one that is readily recognized by patients and their families. Health care organizations that ignore these behaviors

also expose themselves to litigation from both employees and patients.”

## Zero Tolerance for Bullying

Disruptive behavior often goes unreported because victims and witnesses alike fear retaliation and the stigma associated with being labeled a whistle-blower. Not many people have the courage to confront the bully. And, says the Joint Commission *Sentinel Event Alert*, “staff within institutions often perceive that powerful, revenue-generating physicians are let off the hook for inappropriate behavior due to the perceived consequences of confronting them.” The *Alert* cites a physician behavior survey by The American College of Physician Executives which found that 38.9% of the respondents agreed that “physicians in my organization who generate high amounts of revenue are treated more leniently when it comes to behavior problems than those who bring in less revenue.”<sup>2</sup>

Namie considers intimidation a form of workplace violence that’s primarily psychological. “If a health care organization tolerates bullying, it tolerates violence,” Namie says. “Bullies often come across as hard-driving and ambitious. The people who pick up a gun

*Continued on page 10*

# CASE STUDY

## Keeping It Cool

### ***The University of Wisconsin Hospital and Clinics Creates a Refrigerator Temperature-Monitoring Solution***

**B**lood, tissues, reagents, and medicines all must be stored at specific temperatures or within a narrow temperature range. These temperature requirements are provided by the product supplier or manufacturer. Moreover, Joint Commission standards require that health care organizations comply with the specified requirements, monitor temperatures according to a schedule, and document the corrective action they take when there is a temperature failure. (See “Applicable Joint Commission Standards,” page 7.) For most of its refrigeration equipment, the University of Wisconsin Hospital and Clinics (UWHC) clinical staff had performed the required monitoring using electronic thermometers and paper temperature logs—a system that was not always successful. (See “The University of Wisconsin Hospital and Clinics (UWHC),” right.)

UWHC found a solution to its temperature-monitoring woes and

learned some valuable lessons during implementation.

#### **The Problems with Paper-Based Monitoring**

UWHC’s paper log process had four main deficiencies. First, the manual nature of the system led to inevitable human errors, such as missed entries. Second, the system did not force personnel to document the corrective action taken when a temperature problem was found. Third, the system did not alert UWHC upon a temperature failure so that it could take immediate action. Fourth, and most seriously, the electronic thermometers displayed only the then-current temperature and the high and low over a defined time period, typically 24 hours. The piece of information crucial to determining whether the contents were still safe to use—how long the temperature failure had lasted—was not available.

These deficiencies also resulted in difficulties in several accreditation sur-

#### **The University of Wisconsin Hospital and Clinics (UWHC)**

UWHC is part of the UW Health System, which consists of the health care organizations of the University of Wisconsin—Madison, including the following: UW Medical Foundation, UW Hospital and Clinics, UW School of Medicine and Public Health, American Family Children’s Hospital, and UW Carbone Comprehensive Cancer Center.

veys. “Over a two-year period, three accreditation surveys noted various failures in our temperature-monitoring programs,” recalls Tracy Buchman, D.H.A., C.H.P.A., C.H.S.P., safety director, UWHC. Most of these involved some level of failure attributable to the manual paper-log temperature-monitoring system.

#### **UWHC Finds a Solution: Out with the Paper**

The broad scope of the temperature-monitoring problems led Bill Blommer, the director of plant engineering at UWHC, to bring the issue to UWHC’s Regulatory Committee. “Because temperature monitoring is an organizationwide challenge, we needed an organizationwide solution,” says Blommer. The committee agreed and created a team to investigate possible solutions, putting Blommer in charge. The team



*The University of Wisconsin Hospital and Clinics now uses remote temperature monitoring and technology to manage refrigerator temperatures.*

included leaders from UWHC's pharmacy, clinical laboratory, maintenance, and purchasing divisions.

The team almost immediately focused on remote temperature-monitoring technology as the best available solution. (See "How Remote Temperature-Monitoring Technology Works" on page 9.) "We have hundreds of pieces of equipment that maintain a variety of temperatures and ranges and that contain diverse materials, like blood, tissues, specimens, reagents, and medicines," says Blommer. "Wireless remote-monitoring technology has the flexible programming we needed and the easy expandability we wanted as more departments and units participated." After requests for proposal and a couple of demos, the team made its selection.

"The system's specifications looked like it would solve all of our problems," says Blommer. "It eliminated the human error component from the monitoring part of the program, it collected and stored continuous information so we had the duration information we never had before, it notified us when the defined temperature parameters were not met, and it forced us to document the corrective action we took."

But UWHC met—and overcame—a number of facility and user issues during installation and implementation of its remote temperature-monitoring system.

## Facility Issues

The installation problem UWHC encountered arose from the design and construction of its hospital building. The building was constructed using an interstitial design (meaning that there is as much space above the ceiling as below it) that locates hospital systems in the ceiling space, allowing engineering crews to maintain the systems without interfering with hospital operations. Interstitial design

### Applicable Joint Commission Standards

A number of Joint Commission standards have bearing on refrigerator temperature monitoring. They are shown here.

**From the *Comprehensive Accreditation Manual for Hospitals***  
**EC.02.04.03, EP 3:** The organization inspects, tests, and maintains non-life support equipment identified on the medical equipment inventory. These activities are documented.

**MM.03.01.01, EP 2:** The hospital stores medications according to the manufacturers' recommendations or, in the absence of such recommendations, according to a pharmacist's instructions.

**From the *Comprehensive Accreditation Manual for Laboratories***  
**EC.02.04.03, EP 10:** The laboratory monitors temperature-controlled spaces and equipment at frequencies established by the laboratory, using manufacturers' guidelines. The temperature is documented.

**QSA.02.13.01, EP 2:** The laboratory stores reagents as described on the label or by the manufacturer.  
**Note:** *Reagents include, but are not limited to, quality control materials, calibration materials, standards, substrates, water, alcohols, diluents, and other test kit components.*

**TS.03.01.01, EP 8:** The organization maintains daily records to demonstrate that tissues requiring a controlled environment are stored at the required temperatures.  
**Note 1:** *Types of tissue storage include room temperature, refrigerated, frozen (for example, deep freezing colder than  $-40^{\circ}\text{C}$ ), and liquid nitrogen storage.*  
**Note 2:** *Tissues requiring no greater control than "ambient temperature" (defined as the temperature of the immediate environment) for storage would not require temperature monitoring.*

**TS.03.01.01, EP 9:** The organization continuously monitors the temperature of refrigerators, freezers, nitrogen tanks, and other storage equipment used to store tissues.  
**Note 1:** *Continuous temperature recording is not required but may be available with some continuous temperature-monitoring systems.*  
**Note 2:** *For tissue stored at room temperature, continuous temperature monitoring is not required.*

**TS.03.01.01, EP 10:** Refrigerators, freezers, nitrogen tanks, and other storage equipment used to store tissues at a controlled temperature have functional alarms and an emergency backup plan.  
**Note:** *For tissue stored at room temperature, alarm systems are not required.*

also allows for a more open and easily remodeled main floor space.

But the extra building volume of the interstitial design, coupled with the building's metal-clad exterior, effectively reduced the range of the radio frequency (RF) transmitters that

the remote-monitoring system uses to collect data from the refrigeration units and send it on to the data hub. This meant that more of the RF transmitters were needed than were originally planned for.

*Continued on page 9*

Every day the technical experts at The Joint Commission receive calls from health care leaders seeking clarification on EC standards. This column features answers to frequently asked questions as well as perspectives on some truly unique situations. If you would like further information from our staff, please contact The Joint Commission's Standards Interpretation Group (SIG) at 630/792-5900 or e-mail [ecnews@jcrinc.com](mailto:ecnews@jcrinc.com).

## Fire Safety During Study

**Q** *As part of a construction project, we realized that the main structural support beams of our facility are fireproofed, but the secondary beams are not. We feel that we have to undertake a fire safety evaluation system (FSES) study, and we anticipate that it will be two to four months before we can submit the results to The Joint Commission. The building is fully sprinklered. What measures, if any, do we need to take until the FSES is complete?*

**A** Look at standard LS.01.02.01, where interim life safety measures (ILSM) are listed. You should choose which, if any, or all of these measures, should be implemented to compensate for the level of risk associated with the Life Safety Code®\* deficiencies and the scope of the construction activities. However, it may also be that custom measures could be more appropriate for this relatively uncommon deficiency.

## Temporary Barriers

**Q** *Do plastic sheets constitute acceptable temporary barriers in and around construction areas?*

**A** Flammable plastic sheets do not constitute acceptable temporary barriers in and around construction areas. Even though flammable plastic sheets taped across an opening may form a dust seal, they are completely

\* Life Safety Code® is a registered trademark of the National Fire Protection Association, Quincy, MA.

incapable of controlling fire. The only thing they can do is keep air from moving around and control dust and its associated infection control implications. Standard LS.01.02.01, Element of Performance (EP) 7, states that temporary construction partitions should be "smoke tight or made of noncombustible or limited combustible materials that will not contribute to the development or spread of fire." Be sure that you can furnish evidence of "limited combustibility" if you are questioned during survey.

## Temporary Construction Partitions

**Q** *Would it be permissible to use listed fire-retardant treated wood studs and fire-retardant treated plywood for temporary construction partitions? We have noted that the wood studs are acceptable in Type I and II construction per the exception to NFPA 101, 19.1.6.3, which says, "Listed, fire-retardant-treated wood studs shall be permitted within non-load bearing 1-hour fire-rated partitions."*

**A** Yes, it is permissible, as long as the lumber to be used is clearly listed as fire-retardant treated wood.

## Smoke Detectors Out of Service

**Q** *In buildings that are completely sprinklered and are undergoing renovations, is it permissible to cover smoke detectors with a thin plastic wrap rather than put them out of service? Would The Joint Commission view this*

*as a significant impairment requiring the initiation of ILSM?*

**A** Covering smoke detectors renders them inoperable. This may be advisable in some settings, but it does carry obvious risks. If the construction project is likely to generate dust or smoke, bagging or capping the smoke detectors is an option. This is normally done so that the heads can easily be uncovered when construction is not under way for some level of smoke/fire notification.

Another option is to replace the smoke detector heads with heat detectors for the duration of the construction project, if this is compatible with your alarm system. Heat detectors are not sensitive to dust or smoke from construction. Again, care must be exercised with this option because heat detectors are not listed life safety devices. The upside is that with heat detectors, the area under construction is covered with 24-hour protection, however limited.

## Keeping ILSM Documentation

**Q** *How long must we maintain ILSM documentation? Would it be reasonable to dispose of it after a survey has been completed?*

**A** Yes, that would be reasonable, if that is consistent with the organization archival policy. (You may want to consult with risk management.)

Continued on page 9



## Keeping It Cool (continued)

Continued from page 7

After the remote temperature-monitoring system was installed, an implementation problem arose. Frequent temperature failure alerts were eventually attributed to the fact that the temperature probes were originally installed loose and “naked.” This resulted in temperature spikes when a unit’s door was opened and/or when the unit’s compressor cycled on. UWHC solved this problem by affixing the probes to an interior surface and mounting them in glycol. The glycol acts as a buffer so that temperature is “averaged” to protect against frequent spikes or sags in temperature as the doors are opened and closed.

After the system was online and collecting data, analysis revealed that a number of existing refrigeration units simply were not capable of maintaining an even temperature and had to be replaced. Many of these failing units were on the patient floors and were dorm-style units that had been acquired as needed and not subject to any performance specifications. UWHC replaced the failing units with commercial-quality units. These were larger, and sometimes required minor remodeling to the designated space. To avoid any repeats of this problem, UWHC also established specifications for future unit purchasing.

## The User’s Role in Successful Implementation


The users of the subject refrigeration units had a role in successfully implementing the new remote temperature-monitoring system. The new system places initial responsibility for responding to temperature failures on the clinical department using the unit. This “owning” department responds to any temperature failures and uses its clinical expertise to address whether the contents can be used or must be destroyed. If the unit needs to be repaired, an engineer is called while the contents are moved to the designated backup unit. “Establishing ownership of each unit is a key threshold step in adopting the new system,” says Blommer. “After that, the programming begins.”

Each owner must program the temperature requirements for the unit’s contents into the system and must establish the failure-alert protocols for when an alert will sound, who will receive it, and how unresolved alerts will escalate. Defining when the alert should sound was its own challenge. “Often the temperature settled back into range on its own before an employee could respond,” recalls Dean Lawler, M.T., S.B.B., assistant director of clinical labs. So UWHC adjusted its protocols for units with contents less susceptible to minor temperature varia-

## How Remote Temperature-Monitoring Technology Works


Remote temperature-monitoring technology is migrating to health care use from the food services industry. Refrigerator-mounted thermometers transmit the temperature via radio signals to data collectors that are positioned throughout the facility. These collectors are wired to a data hub that stores the information and makes it available for the system’s software. This software contains the unit requirements and alert protocols, can mine the data, and can create compliance reports.

tions. The next challenge was in deciding who would receive an alert and who would receive the escalated alert if no corrective action was taken. These decisions were complicated by the normal staffing concerns but also by the need to train the alert recipients to use the system and to enter the corrective actions taken.

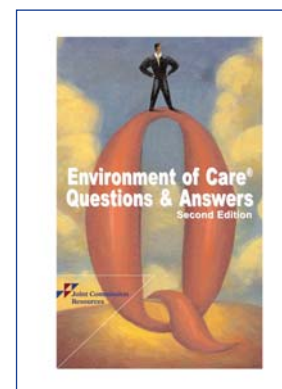
“The technology works and works well,” concludes Blommer. “But there are facility and user issues that must be addressed before you can enjoy all its benefits.” 

## Q & A (continued)

Continued from page 8

There is no requirement for retaining project-specific ILSM for The Joint Commission when those specific projects are completed. However, an organization is required to develop and maintain a policy for use of the ILSM that includes written criteria to evaluate various construction hazards and/or Life Safety Code deficiencies. 

Reprinted from Environment of Care® Questions & Answers, *Second Edition*, © 2009 Joint Commission on Accreditation of Healthcare Organizations



## Putting the Brakes on “Road Rage” (continued)

Continued from page 5

and use it at work—were they at one time the target of bullies? Statistics show that 40% of people who are intimidated simply quit, while 24% are fired and 13% transfer. In other words, the targets pay the price by losing the job they love.”

Says Yamada, “Organizations that are highly dysfunctional may exhibit different forms of aggression. And dysfunction can cut in different directions, because people who have been bullied may become violent.”

Edward Stern, senior program analyst, Directorate of Evaluation and Analysis, OSHA, believes that an exception should be made for occasional lapses. “Sometimes a person just comes to work on a bad day and may lash out at a coworker for a perceived mistake,” he says. “In that case, the team may cut that person some slack. But it’s a far cry from there to a serial intimidator.”

### Suggested Action

The Joint Commission’s *Sentinel Event Alert* spells out a comprehensive program of remedies for disruptive behavior. Among them are the following:

- Educate physicians and nonphysician staff about appropriate professional behavior laid out in the organization’s code of conduct, with particular emphasis on respect.



Ask staff if they’ve experienced bullying.

- Hold all team members accountable for modeling appropriate behavior. Enforce the code of conduct equitably among all staff, regardless of their seniority.
- Mandate zero tolerance for intimidating and disruptive behavior, especially assault and other criminal acts. Incorporate the zero-tolerance policy into medical staff bylaws and employment agreements.
- Reduce fear of intimidation or retribution and protect those who report or cooperate in investigating unprofessional behavior.
- Respond to patients and families who are involved in or witness intimidating behavior. Listen to and empathize with their concerns, thank them for sharing those concerns, and apologize.
- Decide how and when to begin disciplinary action, such as suspension, termination, loss of clinical privileges, and submission of reports to professional licensure organizations.
- Solicit and integrate input from inter-professional team members, including medical and nursing staff members, administrators, and others.
- Offer training and coaching for leaders and managers in relationship-building and collaborative practice, including conflict resolution and how to give feedback on unprofessional behavior. Use cultural assessment tools to measure whether attitudes change over time
- Develop a surveillance system (possibly anonymous) for detecting unprofessional behavior. Use periodic surveys, focus groups, and evaluations by peers and team members to monitor the effectiveness of this system.
- Design strategies to learn whether intimidating and disruptive behavior exists or recurs, such as through direct inquiries at routine intervals with staff, supervisors, and peers.
- Supplement surveillance with tiered, nonconfrontational intervention, starting with informal coffee conversa-

tions to address the problem. If the behavior persists, move toward action and progressive discipline.

- Use mediators and conflict coaches, as needed, to resolve professional disputes.
- Document all attempts to address intimidating and disruptive behavior. (For more information, see the full text of the *Sentinel Event Alert* at [http://www.jointcommission.org/SentinelEvents/SentinelEventAlert/sea\\_40.htm](http://www.jointcommission.org/SentinelEvents/SentinelEventAlert/sea_40.htm).)

### Pending Legislation

At this time, legislation to prohibit intimidating behavior in the workplace is pending in nearly a dozen states. “When you have a staff member who is providing direct patient care while being hounded and sabotaged by other team members, it can create an angry, hostile workforce and thus impair patient care,” says Namie. And Yamada asserts, “Bullying is the most significant form of employee mistreatment that remains largely unaddressed by the law.” At this rate, outlawing intimidation and disruptive behavior and maintaining safety and security may be a measure whose time has come. EC News

*This article was developed through the cooperative efforts of OSHA and The Joint Commission/Joint Commission Resources Alliance.*

### References

1. The Joint Commission: Behaviors that undermine a culture of safety. *Sentinel Event Alert* 40, Jul. 9, 2008. [http://www.jointcommission.org/SentinelEvents/SentinelEventAlert/sea\\_40.htm](http://www.jointcommission.org/SentinelEvents/SentinelEventAlert/sea_40.htm) (accessed Nov. 22, 2009).
2. Keogh T., Martin W.: Managing unmanageable physicians: Leadership, stewardship and disruptive behavior. *Physician Exec* Sep./Oct. 2004, pp. 18–22.
3. Institute for Safe Medical Practices: Intimidation: Practitioners speak up about this unresolved problem (Part I). *Medication Safety Alert*, Mar. 11, 2004. [https://www.ismp.org/Newsletters/acutecare/articles/20040311\\_2.asp](https://www.ismp.org/Newsletters/acutecare/articles/20040311_2.asp) (accessed 11/30/09).

## Creative Emergency Management Planning (continued)

Continued from page 3

12 Wi-Fi connections). It currently has a DirecTV antenna, 12 data ports, and 12 telephone ports. In addition, the unit has a separate communications room with ham radios and scanners (see the photo, right). “This communication room was designed and built in cooperation with our local amateur radio volunteers—the “BEARS” (Burbank Emergency Amateur Radio) group—who donated their time to complete this project,” says Storbakken. “Soon, we will have a dedicated Wi-Fi network and cordless VoIP phone system for the trailer, and eventually the unit can serve as a backup for any one of our hospital’s phone switchboards, if that becomes necessary.”

All four interior walls are made of white board material to aid

visual communication. Several collapsible tables serve as workstations and can be removed when not in use. Each workstation in the unit consists of a desk, a phone jack, an electrical outlet, four voice data ports, and a laptop computer.

The trailer can also help manage resources and assets during an emergency (see Standard EM.02.02.03, above) by serving as temperature-controlled storage for medical/surgical supplies. “We have eight mobile carts that are able to house backup supplies,” says Shannon Kendall, Saint Joseph Medical Center manager of bioterrorism. “If it became necessary, we could roll these carts up into the mobile command center for storage.” The unit is fully air-conditioned and heated, so it can maintain whatever

### Standard EM.02.02.03

As part of its Emergency Operations Plan, the hospital prepares for how it will manage resources and assets during emergencies.

internal temperature is needed.

The unit can also help ensure continuity of clinical care during an emergency (see Standard EM.02.02.11, below) by serving as a triage area. During the flu season, as the organization begins to feel the


effects of both seasonal flu and H1N1 virus, Providence will use the trailer to triage patients. “Our plan is to set up the unit between the parking lot and the emergency department (ED),” says Kendall. “People entering the ED will be triaged in the mobile unit first. All individuals exhibiting flu-like symptoms will be sent to one designated area in the hospital; all others will be sent on to the ED.”

To create its custom trailer, Providence worked with a local company that designs trailers for NASCAR. “They were looking for a way to expand their business, and we provided an interesting opportunity,”

says Storbakken. “Because our mobile unit is a prototype, it was much more cost-effective than other similar units used by police and fire departments, saving us tens of thousands of dollars.”

The flexible oxygen hosing and the mobile command trailer are two of the many successful ideas that Providence has developed to help meet the EM standards. The key to the success of these solutions is their simplicity and cost-effectiveness. “We are constantly looking for straightforward, economical solutions to com-

plicated problems,” says Storbakken. “These solutions help us to provide quality health care and pre-

dictability amid unpredictable situations. By thinking beyond traditional solutions, we have been able to move our emergency planning efforts to the next level.” 

See the upcoming article in the February 2010 issue of EC News to learn about Providence’s creative decontamination solutions.



The communications room in the mobile command center was designed and had its equipment installed by a local amateur radio group.

## Environment of Care News

The Official Joint Commission Environment of Care,  
Emergency Management, and Life Safety News Source

January 2010  
Volume 13 Number 1

**Volume 13, Number 1,  
January 2010**

Send address corrections to:  
**Environment of Care News**  
Superior Fulfillment  
131 W. First St.  
Duluth, MN 55802-2065  
800/746-6578

### Joint Commission Resources

Joint Commission Resources (JCR),  
an affiliate of The Joint Commission,  
is the official publisher and educator  
of The Joint Commission.

1515 West 22nd Street, Suite 1300W  
Oak Brook, IL 60523-2082 U.S.A.  
[www.jcrinc.com](http://www.jcrinc.com)

NON-PROFIT  
ORGANIZATION  
U.S. POSTAGE  
**PAID**  
PERMIT NO. 213  
Palatine, IL

## New EC Tools for 2010!

Check out these new resources to help your organization stay up-to-date on the Joint Commission's Environment of Care requirements, and learn "how-to" strategies to meet those requirements.

**2010 Environment of Care® Essentials for Health Care** provides up-to-date environment of care (EC), emergency management (EM), and life safety (LS) standards and survey information in one convenient, spiral-bound volume. New edition of a JCR best seller  
*Book with CD available February 2010.*

*Item number: ECE10*

*Price: \$139.00*

**Environment of Care® Crosswalk: A Comparison of The Joint Commission's 2010 Environment of Care, Emergency Management, and Life Safety Standards for Hospitals with CMS, OSHA, NFPA, EPA, and Other Regulations** offers a searchable CD with crosswalks between Joint Commission standards and related regulations, including the 2010 EC, EM, and LS standards, and up-to-date links to related regulations such as CMS, OSHA, EPA, and NFPA.

*CD and Guidebook available January 2010*

*Item number: CWECH10*

*Price: \$149*

**The Environment of Care® Toolbox: Forms, Tools, and Checklists** is a CD that offers practical, customizable tools gathered from accredited health care organizations across the country. This new product presents a wealth of forms, charts, grids, spreadsheets, and other documents that facility managers and others involved in maintaining safety in an organization's physical environment can easily adapt.

*Available February 2010*

*Item number: ECDCT10*

*Price: \$149*

 **Joint Commission  
Resources**

For more information or to order these publications, please visit our Web site at  
<http://www.jcrinc.com/> or call our toll-free Customer Service Center at 877/223-6866.

Our Customer Service Center is open from 8 A.M. to 8 P.M. ET, Monday through Friday.

<http://www.jcrinc.com>