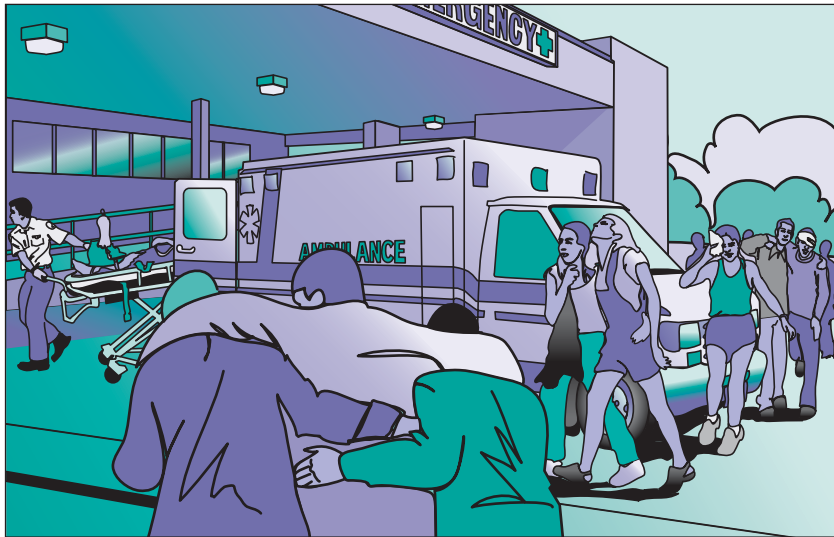


OSHA First Receivers Document

Shows How to Protect and Prepare “Greeters and Treaters” During a Mass Casualty Incident

It might be a chemical spill from a local manufacturing plant or a train wreck nearby. Perhaps it's a biological substance such as anthrax or sarin gas. It might even be a deliberate release of radioactive material. The “first receivers,” the staff likely to be on the front line when a host of contaminated patients begins flooding through the doors of your hospital's emergency department, must be prepared. As these patients enter, it's possible and even likely that they will bring contamination with them—on their hair, skin, clothing, or personal effects. How do you prepare and protect your facility and its first receivers from harm as a result of their contact with contaminated patients?



staff (for example, triage, decontamination, medical treatment, and security) who have roles in receiving and treating contaminated victims, as well as those whose roles support these functions (for example, setup and patient tracking).

First receivers are different from traditional first responders,

such as firefighters, law enforcement, hazmat teams, and ambulance service personnel, who typically act at the site of an incident or the location at which the primary release occurred. Traditional first responders often face the threat of an ongoing release of material generated at the incident, frequently requiring that they wear the highest level of personal protective equipment (PPE) until the released hazards are fully characterized. OSHA's “Best Practices” document applies to first receivers when the hospital is not the primary incident site but instead is remote from the location where the

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Who Are First Receivers?

In its January 2005 document titled “Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances,” the Occupational Safety and Health Administration (OSHA) defines *first receivers* as a subset of first responders. First receivers, says OSHA, typically include clinicians and other hospital

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hazardous substance release occurred. This limitation assumes that for the purposes of these recommendations, the exposure of hospital-based first receivers is limited to the amount of hazardous substance arriving at the hospital on the victims and on their clothing and personal belongings.

Key Features of OSHA Document

The OSHA document offers practical information to help hospitals address employee protection and training as part of emergency planning for mass casualty incidents involving hazardous substances. The document helps hospitals select PPE and points the way to the latest training methods for preparing first receivers. It is based on the latest interpretations of OSHA standards, published literature, current hospital practices, stakeholder input, and the practical limitations of currently available respiratory protective devices. Moreover, the document consolidates OSHA standards and interpretations on what kind and how much training to give first receivers. The best practices cited in the document build on health and safety programs that hospitals should already have in place under existing OSHA regulations and Joint Commission accreditation requirements.

The OSHA document advises hospitals on how to use these best practices and offers guidance in how to select PPE for the reasonably anticipated worst-case situation. It also explains the rationale for OSHA's conclusions on first receiver respiratory protection, glove selection, and protective clothing. OSHA's recommendations focus on the unknown

Joint Commission Standard on Emergency Management

The following is the Joint Commission's standard on emergency management, along with a key EP:

EC 4.10: The health care organization addresses emergency management.

Element of Performance 21: The plan identifies means for radioactive, biological, and chemical isolation and decontamination.

hazards associated with mass casualty incidents, including acts of terrorism, and the document specifies a minimum level of PPE for protecting first receivers against those hazards.

These best practices can be applied when certain preconditions exist at a hospital. The OSHA document includes tables that list preconditions that encourage a comprehensive approach for first receiver protection that includes a fully developed and implemented emergency management plan. Additional tables include the recommendations for a PPE ensemble and first receiver training. Also included are appendixes that show examples of emergency management plans.

OSHA recommends that hospitals use this "Best Practices" document in conjunction with other available emergency preparedness information sources. The document also cites the Joint Commission's current Environment of Care standards for emergency management.

Mirroring Joint Commission Standards

Joe Cappiello, the Joint Commission's vice president of Accreditation Field Operations, states, "Both OSHA and the Joint Commission are on the same path, use the same terms, and recommend similar strategies. The Joint Commission's standards provide the

framework for identifying risks, and the OSHA document provides best practices in meeting those requirements. The document doesn't say the health care facility has to provide all the resources to handle an emergency, but it does say the hospital must identify where those resources will come from in an emergency."

"The OSHA 'Best Practices' document is a great step forward," says John Fishbeck, associate director of the Joint Commission's Division of Standards and Survey Methods. "Hospitals have struggled with this issue, and the document allows for more realistic expectations for health care workers during large-scale communitywide disasters. Parts of the document are quite close to Joint Commission standards, which were in place in January 2001, right before 9/11." Dale Woodin, deputy executive director of the American Society for Healthcare Engineering (ASHE), which had input into the document, agrees: "This is a very useful resource for organizations trying to improve their emergency preparedness planning," Woodin says.

Different PPE for Different Purposes

Craig Thorne, M.D., was a member of the OSHA team that visited hospitals to gather information used in preparing the document. He explains that hospital employees need to be trained appropriately to use the PPE. "This document is based on the assumption that the release site for the hazardous substance is remote from the hospital," says Thorne. "If the threat or the release occurs at the hospital, then it's probably a matter for hazmat professionals."

Thorne also reminds readers that OSHA standards are often highly

Finding the OSHA "Best Practices" Document on the Internet

The January 2005 OSHA document titled "Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances" can be found at http://www.osha.gov/dts/osta/bestpractices/html/hospital_firstreceivers.html.

OSHA is publicizing and promoting its first receivers document to hospitals, medical associations, and professional groups. It will be highlighted at a conference on occupational medicine and a meeting of an industrial hygiene organization. The document will also be featured during a nationwide telecast on terrorism. To focus attention on the document and explore its ramifications, OSHA is currently planning a 1½-day conference for fall 2005 at the Ronald Reagan Center on the Mall in Washington, DC. More information on the actual date will be forthcoming from OSHA.

detailed. "Many of OSHA's training standards related to weapons of mass destruction are designed for hazmat responders. Although those workers may be based at a hospital, hazmat workers must go to the site of a release and therefore need more protection and more training to work in what may be a highly dangerous environment."

One objective of OSHA's "Best Practices" document is to inform health care organizations that first receivers can use a different level of protection. In fact, one of the tables defines different levels of training for different types of first receivers.

Changing the Paradigm

Preparation for the OSHA "Best Practices" document dates back to December 2002, when OSHA and the Federal Emergency Management Agency (FEMA) held a summit in Washington, DC, to explore the subject of best practices, including PPE for first responders and first receivers. A survey team then traveled to various hospitals around the nation to identify benchmarks, and an extensive search was done of the literature in the wake of 9/11. A draft of the resulting "Best Practices" document was vetted heavily by federal agencies, by health care associations such as the American Hospital Association, and also by the private

sector. "We were able to obtain collective buy-in from our stakeholders," recalls David Ippolito, director of OSHA's Office of Science Technology Assessment. "With this document, we've moved first receivers away from the first responder paradigm."

One result of this change in paradigm is the identification of a level of respiratory protection different from that for first responders that will, with rare exception, properly protect first receivers. To determine whether it is one of those rare exceptions, a hospital needs to continue to conduct its own hazard vulnerability analyses and PPE assessments.

Until recently, it was generally assumed that OSHA required or recommended a self-contained breathing apparatus for first receivers facing unknown hazardous substances associated with victims arriving at the hospital. The "Best Practices" document clarifies this issue. Substantial difficulties may arise for health care workers who attempt to care for patients while wearing this type of equipment. Among those difficulties are slips, trips, falls, limited tank capacity, and overexertion, particularly for infrequent users. "Our on-site visits showed that the vast majority of hospitals was using powered air-purifying

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respirators (PAPR),” says Ippolito. “These are more practical because they can be donned quickly and don’t encumber standard medical practice. Within the limitations of the applicability of these best practices, which are clearly presented in the document, our findings also substantiate that this level of respiratory protection will provide adequate protection.”

Don Wright, M.D., directs the Office of Occupational Medicine for OSHA. He hopes that establishing an emergency management plan will help hospitals focus on the National Incident Management System (NIMS). Developed by the Department of Homeland Security, NIMS integrates effective practices in emergency preparedness and response into a comprehensive national framework to enable responders at all levels to work together to manage domestic incidents no matter what the cause, size, or complexity, including catastrophic acts of terrorism and disasters. “NIMS promotes interoperability of

the higher emergency response community,” says Wright, “and it means that communities and states will use the same functions and the same nomenclature, so that an incident commander in one location will be responding to an emergency in much the same way as an incident commander in another area.” The incident command structure is both modular and scalable, so it can be used for something small and local or something large and catastrophic.

The Bottom Line

“We’d like hospitals to use this information in developing their own emergency management plans,” says Wright. “We hope this document will help them understand why they have to develop a mass casualty incident plan and the importance of communicating proactively with all the players involved in a mass casualty incident, from first receivers to first responders, the local fire department, and the hazmat teams in their area.”

Among those who contributed significantly to the Joint Commission standards on emergency management

and to the OSHA document is Kristi L. Koenig, M.D., F.A.C.E.P., now the director of public health preparedness in the Department of Emergency Medicine at the University of California at Irvine. “Emergency preparedness isn’t a matter of having a protective suit. It’s the whole management system, consistent with what’s out there in the community, including how different agencies will work together. We can’t assume any emergency will happen the way it did before. We have to be ready for the next big thing. And we will be—if we have the infrastructure in place.” 