Emergency Management Guide for Business & Industry

Planning ahead can assist business and industry in limiting injuries and damages as well as returning to normal operations more quickly.

September 11, a date uniquely etched in our minds forever, has captured my attention both personally and professionally. Personally, my husband is an airline pilot. Professionally, I have been pondering about workplace safety, preparedness and emergency planning.

September 11 brought with it an unparalleled incidence rate for work-related fatalities. I am uncertain if employers could ever be prepared for this magnitude of violence. I do feel the events of 9-11 increased the awareness of employee safety and emergency planning. Planning ahead can assist business and industry in limiting injuries and damages as well as returning to normal operations more quickly.

I would like to provide information that employers and employees may use to prepare and evaluate a workplace preparedness plan.

The Federal Emergency Management Agency (FEMA) and the American Red Cross provide a step-by-step approach to emergency planning, responses and recovery for employers of all sizes. The following summarizes some of the information from the FEMA/American Red Cross guide entitled “Emergency Management Guide for Business & Industry”.

What Is an Emergency and Emergency Management?

An emergency is any unplanned event that can cause death or significant injury to employees, customers or the public; or that can shut down business, disrupts operations, cause physical or environmental damage, or threaten the facility’s financial standing or public image. Obviously, numerous events can be “emergencies,” including but not limited to fire, biological...
Emergency Management Guide for Business & Industry

exposure, chemical spill, flood, tornado, winter storm, or civil disturbance.

Emergency management is the process of preparing for, responding to and recovering from an emergency. It is a dynamic process. Planning, though critical, is not the only component. Training, conducting drills, testing equipment and coordinating activities with the community are other important functions.

The Planning Process

The planning process is very important. Key steps include establishing a planning team; analyze capabilities and hazards; developing the plan; and implementing the plan.

The Planning Team

The size of the team depends on the facility’s operations, requirements and resources. A group is recommended as it encourages participation, increases the amount of time and energy members can give and provides a broad range of knowledge and expertise. The planning team may have a chair, active members and advisors. Support from management is key.

Analyze Capabilities and Hazards

This step entails gathering information about current capabilities and about possible hazards and emergencies, and then conducting a vulnerability analysis to determine the facility’s capabilities for handling emergencies. Consider the following questions:

- **Where do we stand right now?** Review current plans and policies. Meet with outside groups to learn about potential hazards and available resources for responding to them.
- **What codes and regulations apply to us?** Identify and review applicable federal, state, and local regulations such as occupational safety and health regulations; environmental regulations; fire codes; transportation regulations; zoning regulations; and corporate policies.
- **What are the critical products, services, and operations that may need backup systems?** Review company products and services and the facilities and equipment needed to produce them as well as products and services provided by suppliers, especially sole source vendors. Determine lifeline services such as electrical power, water, sewer, gas, telecommunications, and transportation and operations, equipment and personnel vital to the continued functioning of the facility.
- **What are our internal resources and capabilities?** The following may be necessary in an emergency:
  1. Personnel — fire brigade, hazardous materials response team, emergency medical services, security, emergency management group, evacuation team, public information officer (one way to increase response capabilities is to identify employee skills that might be useful in an emergency)
  2. Equipment — fire protection, communications, first aid, emergency supplies, warning systems, emergency power, decontamination
  3. Facilities — emergency operating center, media briefing area, shelter, first aid station, sanitation facilities
  4. Organizational capabilities — training, evacuation plan, employee support system
  5. Backup systems or arrangements to provide payroll, communications, production, customer services, shipping/receiving, information systems, support, emergency power, and recovery support.
- **What are external resources that could be necessary in an emergency?** In some cases, formal agreements are needed to define the facility’s relationship. External resources may include local Emergency Management Office; Fire Department; Hazardous Materials Response Organization; Emergency Medical Services; Hospitals; Police; Community Service Organizations; Utilities; Contractors; Suppliers of Emergency Equipment; Insurance Carriers (consider meeting with insurance carriers to review all policies).
- **Conduct A Vulnerability Analysis**
  The next step is to assess the vulnerability of your facility — the probability and potential impact of each emergency. The FEMA Guide provides a Vulnerability Analysis Chart to guide you through this process. You may access the complete guide from FEMA or at http://www.fema.gov/library/bizi.htm. Consider potential emergencies that could affect your facility. Examine emergencies that could occur within your facility and the community. Look at:
- **Historical data.** What types of emergencies have occurred in the area? Fires, severe weather, hazardous material spills, transportation accidents, earthquakes, tornados, utility outages and terrorism.
- **Geographic data.** What can happen as a result of the facility’s location? Keep in mind proximity to: flood plains; companies that produce, store, use, or transport hazardous materials; major transportation routes and airports; nuclear power plants.
- **Technological data.** What could result from a process or system failure? Possibilities include: fire, explosion, hazardous materials incident, safety system failure, telecommunications failure, computer system failure, power failure, heating/cooling system failure, emergency notification system failure.
- **Human Error.** What emergencies can be caused by employee error? Are employees trained to work safely? Do they know what to do in an emergency? **Human error is the single largest cause of workplace emergencies and can result from poor training, poor maintenance, carelessness,**
misconduct, substance abuse, and fatigue.

Physical data. What types of emergencies could result from the design or construction of the facility. Does the physical facility enhance safety? Consider the physical construction of the facility, hazardous processes or byproducts, facilities for storing combustibles, layout of equipment, lighting, evacuation routes and exits, and proximity of shelter areas.

Regulatory data. What emergencies or hazards are you regulated to deal with? Analyze each potential emergency from beginning to end. Next estimate the likelihood of each emergency's occurrence. Assessing the potential impact on humans (death and injury); property (losses and damages); business (loss of market share). Do you have the necessary resources and capabilities to respond to each and every type of emergency you have identified?

The Plan
The written plan should contain:

- **Executive summary** (purpose, policy, key personnel, authority, types of emergencies and response operations)
- **Emergency management elements** (directions, communications, life safety, property protection, community outreach, recovery, restoration, and logistics). These elements are the foundation for the emergency procedures you will follow to protect personnel and equipment and resume operations
- **Emergency response procedures** (spell out how the facility will respond to emergencies, use specific checklists for different situations if possible)
- **Support documents** (wallet-sized emergency call lists, building and site maps, resource lists including equipment, supplies, services that could be needed)

**In an emergency, all personnel should know:**
- What is my role?
- Where should I go?

The Development Process
Identify challenges and prioritize activities. Determine specific goals and list of tasks.

**Write the plan.** Determine writing assignments and format. Determine the most appropriate format for each section. Establish a schedule for the first draft, review, second draft, tabletop exercise, final draft, printing, and distribution.

**Establish a training schedule.** Have one person or department responsible for developing a training schedule for your facility.

**Coordinate with outside organizations including other corporate offices.** Meet periodically with local government and community organizations.

**Review and revise the plan**
Distribute plan to team members. Revise as needed.

**Seek final approval**
Arrange a briefing for the chief executive officer, plant manager, and management and obtain written approval. **Distribute the plan.**

**Implement the Plan**
Implementation means more than simply exercising the plan during an emergency. It means acting on recommendations made during the vulnerability analysis, integrating the plan into company operations, training employees, and evaluating the plan.

- Integrate the plan into company operations. Emergency planning must become part of the corporate culture. Look for opportunities to build awareness; to educate and train personnel; to test procedures; to involve all levels of management, all departments and the community in the planning process; and to make emergency management part of what personnel do on a day-to-day basis.
- Conduct training, drills and exercises. Everyone who works at or visits the facility requires some form of training. Considerations: assign responsibility for developing a training plan and consider the training and information needs for employees, contractors, visitors, managers and those with an emergency response role identified in the plan. Determine for a 12-month period:
  - Who will be trained?
  - Who will do the training?
  - What training activities will be used?
  - When and where each session will take place?
  - How the session will be evaluated and documented?

Training can take many forms, orientation and education sessions; tabletop exercise; walk-through drill; functional drills; evacuation drill; or full-scale exercise.

**Evaluate and Modify the Plan**
Conduct a formal audit of the entire plan at least once a year. In addition to a yearly audit, evaluate and modify the plan at these times:

- After each training drill or exercise
- After each emergency
- When personnel or their responsibilities change
- When the layout or design of the facility changes
- When policies or procedures change
  Remember to inform personnel on changes to the plan.

The complete “Emergency Management Guide for Business & Industry” developed by FEMA and the American Red Cross can be found at http://www.fema.gov/library/biz.htm

**Source:** Federal Emergency Management Agency website at http://www.fema.gov/
New OSHA Recordkeeping Rule

The Occupational Safety and Health Administration (OSHA) has issued a revised rule to improve the system employers use to track and record workplace injuries and illnesses. The rule can be found in the Code of Federal Regulations (CFR), specifically 29 CFR Part 1904. The final rule is effective January 1, 2002.

According to OSHA, the new rule improves employee involvement, creates simpler forms, provides clearer regulatory requirements, and allows employers more flexibility for using computer to meet OSHA regulatory requirements.

There are three new recordkeeping forms:

1. **OSHA Form 300** — Log of Work-Related Injuries and Illnesses. The 300 form is on legal sized paper replacing the oversized 200 log.
2. **OSHA Form 301** — Injury and Illness Incident Report. This form includes more data about how the injury or illness occurred.
3. **OSHA Form 300A** — Summary of Work-Related Injuries and Illnesses. This is a separate form updated to make it easier to calculate incidence rates.

The following information summarizes some of the key provisions of the rule. The new rule:

- Requires annual summary to be posted for three months instead of one.
- Requires certification of the summary by a company executive.

The rule also protects employee privacy by:

- Prohibiting the entering of employee names on Form 300 for certain types of injuries and illnesses. For example: sexual assaults, HIV infections, and mental illness.
- Providing employers the right not to describe the nature of sensitive injuries where the employee’s identity would be known.
- Giving employee representatives access only to the portion of Form 301 which contains no personal identifiers.
- Requiring employers to remove employees’ names before providing the data to personal not provided access right under the rule.

The revised rule to improve the system employers use to track and record workplace injuries and illnesses is effective January 1, 2002.
Compliance Directive for Bloodborne Pathogens Standard

The compliance directive guides OSHA’s safety and health inspection officers in enforcing the standard that covers occupational exposure to blood and other potentially infectious materials, and ensures consistent inspection procedures are followed. It updates an earlier directive issued in 1999 and incorporates changes mandated by the Needlestick Safety and Prevention Act passed in November 2000.

The directive implements changes made to the standard that focus on the requirement that employers select safer needle devices as they become available and involve employees in identifying and choosing those devices. The standard now also requires most employers to maintain a log of injuries from contaminated sharps.

The directive highlights the major new requirements of the standard including: (i) evaluation and implementation of safer needle devices as part of the re-evaluation of appropriate engineering controls during an employer’s annual exposure control plan; (ii) documentation of the involvement of non-managerial, frontline employees in choosing safer devices; and (iii) establishment and maintenance of a sharps injury log for recording injuries from contaminated sharps.

Compliance officers are reminded that no one safer medical device is appropriate for all situations; employers must consider and implement devices that are appropriate, commercially available and effective. The directive also includes detailed instructions on inspections of multi-employer worksites, including employment agencies, personnel services, home health services, physicians and healthcare professionals in independent practices, and independent contractors.

Also included in the directive are engineering control evaluation forms, a web site resource list, a model exposure control plan which incorporates the most current guidelines from the Centers for Disease Control regarding management of occupational exposure to the hepatitis B and C viruses, and the HIV virus.


Source:
http://www.osha.gov/media/ashnews/nov01/trade-20011128.html

Source(s): Iowa-Illinois Safety Council, presentation on 11/28/01.
Iowa Occupational Safety and Health Division of Consultation, presentation on 11/09/01.

<table>
<thead>
<tr>
<th>Old Rule</th>
<th>New Rule</th>
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<tbody>
<tr>
<td>Any aggravation of a pre-existing condition by a workplace event or exposure makes the case work-related</td>
<td>Significant aggravation of a pre-existing condition by a workplace event or exposure makes the case work-related</td>
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</tbody>
</table>

Exceptions to presumption of work relationship:
- Member of the general public
- Symptoms arising on premises totally due to outside factors
- Parking lot/Recreational facility

Exceptions to presumption of work relationship:
- Member of the general public
- Symptoms arising on premises totally due to outside factors
- Voluntary participation in wellness program
- Eating, drinking and preparing one’s own food
- Personal tasks outside working hours
- Personal grooming, self-medication, self-infliction
- Motor vehicle accident in parking lot/access road during commute
- Cold or flu
- Mental illness unless employee voluntarily presents a medical opinion stating that the employee has a mental illness that is work-related.

New event or exposure, new case

Aggravation of a case where signs or symptoms have not resolved is a continuation of the original case

Restricted work activity occurs if the employee:
- Cannot work a full shift
- Cannot perform all of his or her normal job duties, defined as any duty he or she would be expected to do throughout the calendar year.

Restricted work activity occurs if the employee:
- Cannot work a full shift
- Cannot perform all of his or her routine job functions, defined as any duty he or she regularly performs at least once a week.

Restricted work activity limited to the day of injury makes case recordable

Restricted work activity limited to the day of injury does not make case recordable

Day counts:
- Count workdays
- No cap on count

Day Counts:
- Count Calendar days
- 180 day cap on count

Medical treatment does not include:
- Visits to MD for observation only
- Diagnostic procedures
- First aid

Medical treatment does not include:
- Visits to MD for observation and counseling only
- Diagnostic procedures (including administration of prescription medication for diagnostic purposes)
- First aid

First Aid list in the Bluebook was a list of examples and not comprehensive

First Aid list in regulation is comprehensive. Any other procedure is medical treatment.

2 doses prescription med - Medical Treatment (MT)
Any dosage of OTC med - First Aid (FA)
2 or more hot/cold treatments - MT
Drilling a nail - MT
Butterfly bandage/Steri-Strip - MT

Posting - post annual summary during month of February

Posting - Post annual summary from Feb 1 to April 30

Sources:
- Iowa—Illinois Safety Council, presentation on 11/28/01.
- Iowa Occupational Safety and Health Division of Consultation, presentation on 11/09/01.

The American Society of Safety Engineers (ASSE) has published a new, general standard for safety, health and environmental training. The standard will enable safety professionals to follow consistent training criteria. Approved by the American National Standards Institute (ANSI), it applies to both the public and private sectors.

ANSI Standard, Z490.1, “Criteria for Accepted Practices in Safety, Health and Environmental Training,” is a voluntary standard that covers all facets of training. It addresses the “How to questions” including: how to develop, deliver, evaluate and manage training and training programs.

The standard is the first of its kind to provide a basic body of knowledge designed to train employees as well as safety and health officers. It provides guidance to assist safety, health and environmental professionals in initiating programs and provides a benchmark for employees to evaluate in-house and contracted training.

According to ASSE, Z490.1 takes elements of accepted practices in the training industry and combines them with accepted practices from the safety, health and environmental fields. The standard provides a training model that is transferable to virtually any industry, as well as a benchmark for companies and government agencies in evaluating their training programs.

ASSE points out that compliance with this standard does not assure compliance with governmental regulations or organizational policies, or vice versa. The Z490 Committee is soliciting public input that may suggest revisions to the standard.

The Z490.1 Standard may be purchased through ASSE. You may contact them at 847/699-2929 or at the following website: http://www.asse.org/

**Expert providing answers:** John Patramanis, Reporting Chief, Iowa Division of Labor, Des Moines, IA

**Question:** What OSHA log do I post in 2002?

**Answer:** You must post the summary portion of the OSHA 200 log during February 2002. You are posting the summary of injuries and illnesses that occurred during the year 2001. The posting requirement is for one month. Do not post the new Form 300A this year.

**Question:** Is skin glue considered first-aid or medical treatment?

**Answer:** Skin-glue or Derma-bond is not listed as first-aid, thus its use by a physician or other medical professional would constitute medical treatment, making the case recordable.

**Question:** An employee was injured and was required to be away from work. The employee had vacation scheduled during the time away and decided to take the vacation since it was prepaid. How do I count the days away from work?

**Answer:** Count consecutive calendar days away from work including vacation, holidays, lay off or other days. Begin counting the day after the injury or illness occurred. You may stop counting days of restricted work activity or days away from work for the case once the total of either or the combination of both reaches 180 days. Employers may consider requesting specific return-to-work dates from medical providers.

**Readers may direct questions to:** WORKSAFE IOWA, Kimberly J. Gordon, RN, MA, COHN-S at 319.335.4423 or via e-mail at kimberly-gordon@uiowa.edu

**SOURCE:** American Society of Safety Engineers ANSI Standard Z490.1-2001 Accepted Practices in Safety, Health, and Environmental Training
### Upcoming Occupational Health Courses

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<th>Course</th>
<th>Date</th>
<th>Location</th>
<th>Details/Contact Information</th>
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<tr>
<td><strong>Occupational Hearing Conservationist Certification and Recertification Courses</strong></td>
<td>March 6, 7 &amp; 8, 2002</td>
<td>University of Iowa Oakdale Hall, Iowa City, IA</td>
<td>The Occupational Hearing Conservationist Certification course is planned for March 6, 7 &amp; 8, 2002. In addition, a one-day Recertification Course will be offered on March 7. A CAOHC-certified course director will teach the courses. For more information or a registration form, contact Jennifer Clougherty, College of Nursing, The University of Iowa, Iowa City, IA. Telephone 319/335-7119, Fax 319/335-7129, e-mail <a href="mailto:Jennifer-clougherty@uiowa.edu">Jennifer-clougherty@uiowa.edu</a></td>
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<tr>
<td><strong>4th Annual Occupational Health Symposium</strong></td>
<td>March 13 &amp; 14, 2002</td>
<td>Iowa Memorial Union, The University of Iowa, Iowa City, IA</td>
<td>This symposium will provide current information on health and safety in the workplace. It will also provide important resources and networking opportunities necessary for keeping current in occupational health. Details will be forthcoming.</td>
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<tr>
<td><strong>Agricultural Occupational Health Training Program (Session 1)</strong></td>
<td>April 24-26, 2002</td>
<td>The University of Iowa, Oakdale Hall, Iowa City, IA</td>
<td>The aim of this course is to provide basic information and skills to enable the health care professional to function as a practitioner in the prevention of occupational illnesses and injuries in the farm community. For information and registration form contact Kay Mohling at 319/335.4219</td>
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<tr>
<td><strong>NIOSH-Approved Spirometry Training for Workers Screening Course</strong></td>
<td>May 30 &amp; 31, 2002</td>
<td>The University of Iowa, Oakdale Hall, Iowa City, IA</td>
<td>This NIOSH-approved course is designed to provide a comprehensive theoretical framework combined with practical training necessary to conduct spirometry testing and screening for workers. Enrollment is limited to 10. For further information on any of the above programs contact Kimberly J. Gordon, RN, MA, COHN-S Telephone: 319/335-4423 E-mail: <a href="mailto:kimberly-gordon@uiowa.edu">kimberly-gordon@uiowa.edu</a></td>
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<tr>
<td><strong>Ergonomics In The Workplace</strong></td>
<td>March 12, 2002</td>
<td>Iowa Memorial Union, The University of Iowa, Iowa City, IA</td>
<td>A one-day course designed to provide information regarding ergonomics in the workplace for health and safety professionals. Details will be forthcoming.</td>
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<td>Occupation/Health Services</td>
<td>Clinic/center</td>
<td>Location</td>
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<tr>
<td>Tri-State Occupational Health Medical Associates Clinic</td>
<td>John Deere Health Care</td>
<td>Dubuque, IA</td>
<td>(563) 582-2525</td>
</tr>
<tr>
<td>Trimark Corporate Health Services Trinity Regional Medical Center</td>
<td>Genesis Medical Center</td>
<td>Quad Cities</td>
<td>(309) 764-9675</td>
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<tr>
<td>Work Fitness Center</td>
<td>UI HealthWorks</td>
<td>University of Iowa Health Care North Liberty, IA</td>
<td>(319) 665-2111</td>
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The Workplace Health and Safety Report is published quarterly by WORKSAFE IOWA for members of its Occupational Medicine Associates Network. WORKSAFE IOWA is an occupational and environmental health outreach program of the Department of Occupational and Environmental Health, College of Public Health, The University of Iowa. For more information on the WORKSAFE IOWA Occupational Medicine Associate in your area, please refer to the list at left.

Editor: Kimberly J. Gordon, RN, MA, COHN-S

World Wide Web
http://www.public-health.uiowa.edu/worksafe